

2025-2026

# CATALOG



**PIKES PEAK**  
STATE COLLEGE



# PIKES PEAK STATE COLLEGE

## Thank you for your interest in Pikes Peak State College.

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

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 866-411-7722.

### Main Locations

#### Centennial Campus

5675 South Academy Boulevard  
Colorado Springs, CO 80906

#### Downtown Campus

100 West Pikes Peak Avenue  
Colorado Springs, CO 80903

#### Rampart Range Campus

2070 Interquest Pkwy  
Colorado Springs, CO 80921

#### Center for Healthcare Education and Simulation Campus

1850 Cypress Semi Drive  
Colorado Springs, CO 80921

### Additional Locations

The following additional locations are Higher Learning Commission (HLC) approved locations where students can earn 50% or more of the credits required to complete a degree or certificate. Pikes Peak State College also offers classes at other locations, including other high schools, military sites, and clinical sites.

Colorado Springs Early College  
Concurrent enrollment students only  
4405 N. Chestnut Street, Suite D  
Colorado Springs, CO 80907

Harrison High School  
Concurrent enrollment students only  
2755 Janitell Road  
Colorado Springs, CO 80906

Falcon High School  
Concurrent enrollment students only  
10255 Lambert Road  
Peyton, CO 80831

Sierra High School  
Concurrent enrollment students only  
2250 Jet Wing Drive  
Colorado Springs, CO 80916

Liberty High School  
Concurrent enrollment students only  
8720 Scarborough Drive  
Colorado Springs, CO 80920

Black Forest Fire Rescue  
Fire Science students only  
11445 Teachout Road  
Colorado Springs, CO 80908

### Military Sites

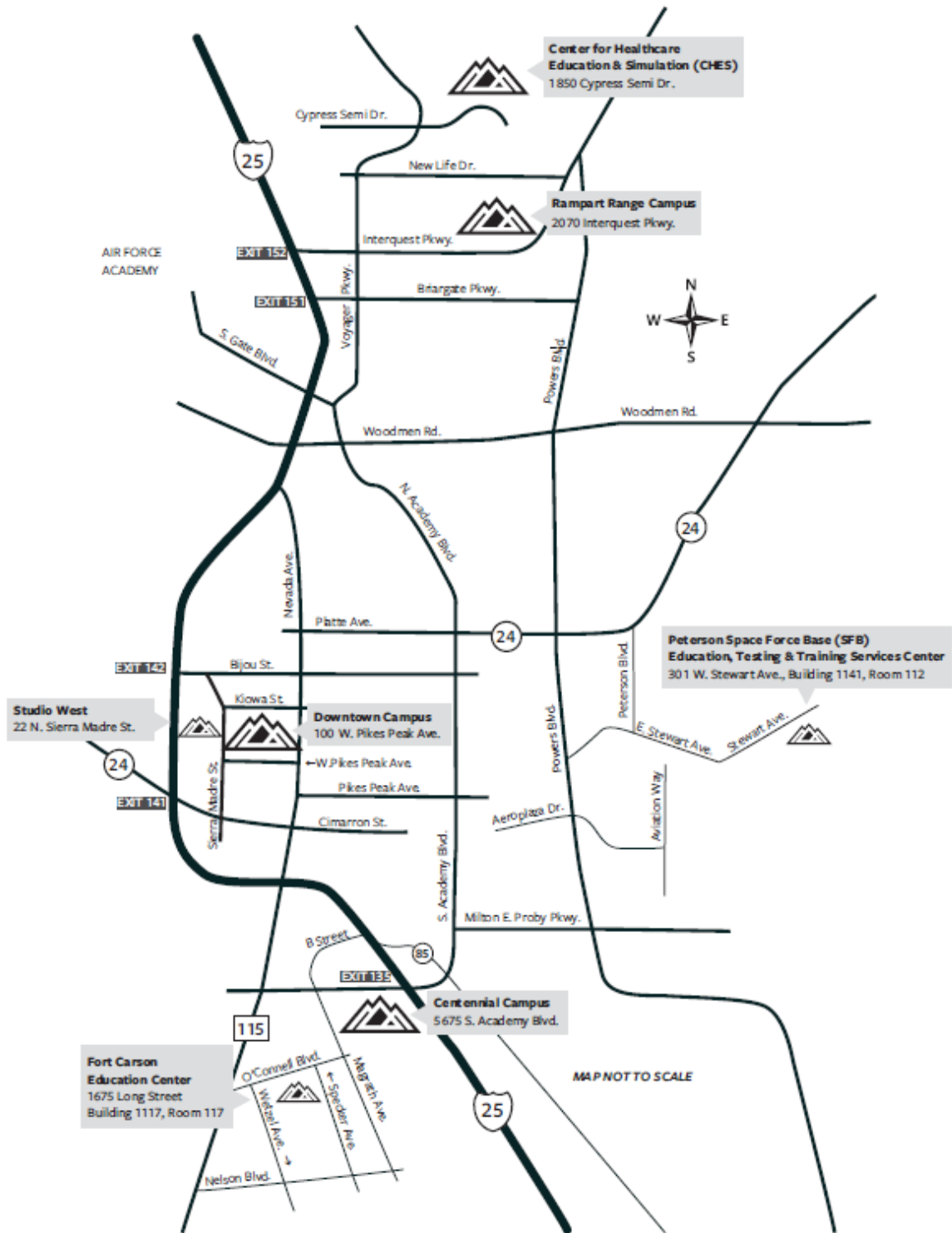
Fort Carson Education Center  
Building 1117, Room 117  
1675 Long Street  
Fort Carson, CO 80913  
719-502-4200

Peterson Space Force Base (SFB)  
Education, Testing, and Training Services Center  
301 West Stewart, Building 1141, Room 112  
Peterson SFB, CO 80914

### Contact Us

Pikes Peak State College Call Center  
719-502-2000 or 800-456-6847  
719-358-2453 [video phone for hearing impaired]  
[www.pikespeak.edu](http://www.pikespeak.edu)

# Campus Map



Pikes Peak State College has four campuses to serve the north, central and south areas of the city. They offer an array of academic programs, and other student services. Rampart Range Campus offers most general education courses, with an emphasis on those required for science, engineering, and math fields. CHES Campus (Center for Healthcare Education & Simulation) offers state-of-the-art healthcare simulation rooms for our health sciences programs. Downtown Campus offers most general education courses, with an emphasis in fine arts and creative fields. Centennial Campus offers all academic disciplines, as well as the occupational and technical programs.

## About this Catalog

### Accreditation

The College is accredited by the Higher Learning Commission, an institutional accreditation agency recognized by the U.S. Department of Education.

### 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 PPSC website. This catalog takes effect at the beginning of each academic year's summer registration.

### Nondiscrimination Statement



Pikes Peak State College (PPSC) does not discriminate on the basis of sex, gender, race, color, age, creed, national or ethnic origin, ancestry, physical or mental disability, familial or marital status, veteran or military status, pregnancy status or related conditions, religion, genetic information, sexual orientation, sex characteristics, sex stereotypes, gender identity, gender expression, or any other protected class in connection with employment, admission, or educational activities and programs as required by local, state, and federal laws (also known as "civil rights laws"). PPSC prohibits sex discrimination and sexual harassment in any education program or activity that it operates, as required by Title IX and its regulations, including in admission and employment. PPSC will take appropriate steps to ensure the lack of English language skills will not be a barrier to admission and participation in vocational education programs. Individuals affiliated with PPSC or Colorado Community College System (CCCS) shall not retaliate against any person who opposes discrimination, harassment, or retaliation, or participates in any complaint or investigation process.

All personnel at PPSC are committed to non-discrimination and follow the Colorado Community College System's Prohibition of Discrimination, Harassment, or Retaliation Policy (BP 19-60) and Civil Rights and Sexual Misconduct Resolution Process Procedure (SP 19-60a) that can be located at: <https://cccs.edu/about/governance/policies-procedures/>.

Inquiries about Title IX or other civil rights violations may be referred to PPSC's Title IX/Equal Opportunity Coordinators, the U.S. Department of Education's Office for Civil Rights, or both. To report information about conduct that may constitute sex discrimination or other forms of discrimination, contact Title IX/EO Coordinator Kim H. Hennessy, Vice President for Human Resource Services, (719) 502-2600, [Kim.Hennessy@PikesPeak.edu](mailto:Kim.Hennessy@PikesPeak.edu), or visit <https://www.pikespeak.edu/administration-operations/human-resource-services/civil-rights-sexual-misconduct/> for more reporting options.

# TABLE OF CONTENTS

---

All About PPSC .....	5
Getting Started .....	11
Tuition and Fees.....	13
Academic Standards.....	16
Student Conduct .....	24
Services for Students.....	40
Student Experience & Leadership .....	44
Services for the Community .....	46
Military, Veteran, and Family Members.....	47
Educational Programs .....	49
Degree & Program Requirements.....	53
Associate of Arts Degrees (AA).....	53
Associate of Science Degrees (AS) .....	83
Associate of General Studies Degrees (AGS).....	93
Associate of Applied Science Degrees (AAS) and Certificates .....	94
Associate of Engineering Science Degree.....	173
Bachelor of Applied Science Course of Study.....	174
Bachelor of Science in Nursing Course Completion Program.....	177
Course Descriptions.....	179
College Administrative Staff .....	307
Faculty & Staff.....	308
Campus Directory.....	322
Index .....	324

# ALL ABOUT PPSC

## 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
PPSC All Student Handbook.....	6
Planning for a Bachelor's Degree/Transfer Programs.....	6
Career and Technical Education Programs.....	6
Locations and Facilities.....	6
Visit Us.....	7
Use of College Facilities.....	7

## History of the College

Pikes Peak State 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 Campus in central Colorado Springs in 1986 and the Rampart Range Campus in the north end of the city in 1998.

In April of 2022, Gov. Polis signed a bill officially changing the name of the institution to Pikes Peak State College. The new name reflected an expansion into four-year degrees and a more aspirational posture.

Today, PPSC 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. PPSC offers more than 200 certificate and degree programs in transfer liberal arts and sciences areas and career and technical education.

Currently, Pikes Peak State College helps over 17,000 to 18,000 students each year begin their education, advance their careers, and enrich their lives.

## Vision Statement

Students succeed at Pikes Peak State 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 consequences of alcohol and drug violations on page 34
- 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.pikespeak.edu](http://www.pikespeak.edu).
- the graduation rates for the College are available on the Student Right to Know webpage: <https://www.pikespeak.edu/administration-operations/disclaimers-legal-notice/right-to-know.php>.

## 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](http://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.

## PPSC All Student Handbook

The PPSC 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/](http://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 State 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 State 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 PPSC'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 State 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. PPSC'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 State 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 State 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

Pikes Peak State College serves the educational needs of the greater Colorado Springs community through four campuses strategically located in the south, central, and north areas of the city. These campuses provide accessible opportunities for students to achieve their educational goals, offering academic programs and resources tailored to meet diverse needs. With Mountain Metro bus service and an inter-campus shuttle connecting the northern locations, students can easily access any campus from anywhere in the city, ensuring that higher education remains within reach for all.

### CENTENNIAL CAMPUS

5675 South Academy Boulevard  
Colorado Springs, CO 80906  
719-502-2000  
Toll Free: 800-456-6847  
Video Phone for Hearing Impaired 719-358-2453

The Centennial Campus, located in southern Colorado Springs, serves as a hub for programs in the Business, Technology, and Public Service Division as well as the Technical and Professional Studies Division. It offers a full array of student services, including admissions, academic advising, financial aid, records, testing, a bookstore, Military and Veterans Programs, tutoring, Accessibility Services, TRIO Student Support Services, and career services.

Key facilities include a modern learning commons and library, a theater, lecture halls, computer labs, a community food pantry, a child development center, and science, career, and technical laboratories. Meeting and conference rooms are also available to support both academic and community needs.

Centennial Campus is home to the Student Experience and Leadership Office, encompassing the Student Government Association, the Sustainability Office, the fitness center, and various student clubs. The campus also features the Grove and other dedicated student-focused spaces designed to enhance campus life.

Parking is available in lots C, D, and E, with ADA-designated parking in Lot A and additional wheelchair-accessible spaces conveniently located near most building entrances. Fully accessible to individuals with disabilities, the campus is equipped with resources and support through Accessibility Services. Mountain Metro public bus service ensures easy connectivity from all parts of Colorado Springs, making the campus an accessible and welcoming destination for the entire community.

### DOWNTOWN CAMPUS

100 West Pikes Peak Avenue  
Colorado Springs, CO 80903

The Downtown Campus is located in the heart of Colorado Springs, just minutes from I-25 via the Bijou Exit (142). It serves as a vibrant center for programs within the Arts, Humanities, and Social Sciences Division. The campus features specialized facilities, including music practice rooms, the Marie Walsh Sharpe Creative Commons (studio art space), and Studio West - an art gallery and performing arts venue for theatre and dance.

The Downtown Learning Commons provides comprehensive student services, including admissions, academic advising, financial aid, testing, tutoring, a food pantry, and Accessibility Services. Students can also connect with the Student Experience

and Leadership Office, which offers events, activities, and engagement opportunities to enrich campus life.

Parking is available on the third level (P3) of the Palmer Center Garage, conveniently located across the street from the campus beneath the Antlers Hotel. Students and visitors can validate parking in the Learning Commons on the first floor of the north building. Additional metered street parking is available nearby, and free overflow parking can be found behind Studio West. ADA-designated spaces are located near building entrances for accessibility. Mountain Metro public bus service has a designated stop in front of the campus, allowing access to the campus from all parts of Colorado Springs.

## **RAMPART RANGE CAMPUS**

2070 Interquest Pkwy  
Colorado Springs, CO 80921

The Rampart Range Campus, located in northern Colorado Springs, is easily accessible via the InterQuest Parkway Exit (153) off I-25. Serving as a vibrant hub for programs within the Science, Engineering, and Math Division, this campus combines comprehensive student support services with state-of-the-art facilities to promote academic and personal success.

Students benefit from a wide range of services, including admissions, academic advising, a bookstore, career services, Accessibility Services, TRIO Student Support Services, financial aid, library resources, Military and Veterans Programs, testing, and records. The campus also fosters a vibrant student community through the Student Experience and Leadership Office, which offers various campus life activities and engagement opportunities.

The Delta Dental Oral Health Career Center, located at Rampart Range, is a premier facility for training future dental professionals. Featuring state-of-the-art dental labs, modern equipment, and real-world clinical opportunities, it serves as the home for PPSC's Dental programs, equipping students with the skills and environment needed to excel in high-demand oral health careers.

Convenient parking is available throughout the campus, with ADA-designated spaces located near building entrances for accessibility. The campus is a stop for the Mountain Metro public bus service. PPSC also provides a free shuttle to the Center for Healthcare Education & Simulation (CHES), ensuring seamless connectivity for students across PPSC's locations

## **Center for Healthcare Education and Simulation (CHES)**

1850 Cypress Semi Drive  
Colorado Springs, CO 80921

The Center for Healthcare Education & Simulation (CHES) in northeast Colorado Springs is a premier campus designed to prepare students for careers in healthcare. As part of the Health Sciences Division, CHES offers a state-of-the-art learning environment where students gain immersive, hands-on experience using the latest healthcare technology.

CHES features advanced simulation labs, fully equipped medical classrooms, and cutting-edge resources that provide students with realistic training scenarios. These facilities ensure graduates are well-prepared with the skills and expertise needed to excel in high-demand healthcare fields.

Although direct access to services such as academic advising, financial aid, and tutoring is limited at CHES, students can easily connect with these resources through virtual meetings or by visiting other PPSC campuses. The campus also promotes

collaboration through modern learning spaces designed to facilitate meaningful interactions between peers and faculty.

Convenient on-site parking includes ADA-designated spaces near building entrances for accessibility. A free shuttle service connects CHES to the Rampart Range Campus, providing students with seamless access to additional resources and programs. CHES embodies PPSC's commitment to excellence in healthcare education, empowering future professionals to thrive in a growing and essential industry.

## **Visit Us**

We're excited to welcome visitors to Pikes Peak State College and show prospective students around our campuses. To schedule a tour at any of our locations, give us a call at 719-502-2000 or toll-free at 866-411-7722, or visit [pikespeak.edu/visit-campus](http://pikespeak.edu/visit-campus).

## **Use of College Facilities**

If an external group would like to use facilities on one of our campuses, please contact Events Management at the Centennial Campus by calling 719-502-2333 or visiting [pikespeak.edu/use-of-facilities](http://pikespeak.edu/use-of-facilities). This webpage provides detailed information about requirements, costs, and how to submit a request.



# ACADEMIC CALENDAR

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

## Summer 2025 [202610]

### Important Dates

March 10 Registration Begins  
 July 15 Graduation Application Deadline

### Holidays/Special Days

May 26 Memorial Day Holiday, Campuses Closed  
 June 19 Juneteenth, Campuses Closed  
 July 4 Independence Day Holiday, Campuses Closed

### Full Semester 10 Week Term [F10]

May 29 Last Day to Register  
 May 27 Classes Begin  
 June 5 Drop Date  
 July 22 Withdraw Date  
 August 3 Classes End

### 1st Bi-semester [BI1]

May 26 Last Day to Register  
 May 27 Classes Begin  
 June 2 Drop Date  
 June 23 Withdraw Date  
 June 30 Classes End

### 2nd Bi-semester [BI2]

June 30 Last Day to Register  
 July 1 Classes Begin  
 July 7 Drop Date  
 July 28 Withdraw Date  
 August 3 Classes End

### Weekend Start [WKC]

June 1 Last Day to Register  
 May 30 Classes Begin  
 June 9 Drop Date  
 July 21 Withdraw Date  
 August 3 Classes End

### 1st Tri-semester [TR1]

May 26 Last Day to Register  
 May 27 Classes Begin  
 May 29 Drop Date  
 June 13 Withdraw Date  
 June 18 Classes End

### 2nd Tri-semester [TR2]

June 18 Last Day to Register  
 June 19 Classes Begin  
 June 23 Drop Date  
 July 7 Withdraw Date  
 July 11 Classes End

### 3rd Tri-semester [TR3]

July 11 Last Day to Register  
 July 12 Classes Begin  
 July 14 Drop Date  
 July 29 Withdraw Date  
 August 3 Classes End

### Colorado Online 10 Week Term [CZ2]

May 29 Last Day to Register  
 May 27 Classes Begin  
 June 5 Drop Date  
 July 22 Withdraw Date  
 August 3 Classes End

### Colorado Online 7 Week Term [CZ4]

June 18 Last Day to Register  
 June 16 Classes Begin  
 June 23 Drop Date  
 July 24 Withdraw Date  
 August 3 Classes End

### Military Session I [M11]

June 8 Last Day to Register  
 June 9 Classes Begin  
 June 16 Drop Date  
 July 22 Withdraw Date  
 August 3 Classes End

## Fall 2025 [202620]

### Important Dates

March 10	Registration Begins
November 15	Graduation Application Deadline

### Holidays/Special Days

September 1	Labor Day Holiday, Campuses Closed
September 2	Campuses Open - No classes
November 26	Campuses Open - No classes
November 27	Thanksgiving Holiday, Campuses Closed
November 28-30	Campuses Open - No classes
Dec 25-Jan 1	Campuses Closed

### Full Semester 15 Week Term [F15]

August 20	Last Day to Register
August 18	Classes Begin
September 3	Drop Date
November 13	Withdraw Date
December 7	Classes End

### Full Semester 12 Week Term [F12]

September 9	Last Day to Register
September 10	Classes Begin
September 22	Drop Date
November 19	Withdraw Date
December 7	Classes End

### 1st Bi-semester [BI1]

August 17	Last Day to Register
August 18	Classes Begin
August 25	Drop Date
September 30	Withdraw Date
October 12	Classes End

### 2nd Bi-semester [BI2]

October 12	Last Day to Register
October 13	Classes Begin
October 20	Drop Date
November 25	Withdraw Date
December 7	Classes End

### Weekend Start [WKC]

August 24	Last Day to Register
August 22	Classes Begin
September 8	Drop Date
November 17	Withdraw Date
December 7	Classes End

### Late Start [LAT]

September 23	Last Day to Register
September 24	Classes Begin
October 6	Drop Date
November 24	Withdraw Date
December 7	Classes End

### 1st Tri-semester [TR1]

August 17	Last Day to Register
August 18	Classes Begin
August 22	Drop Date
September 15	Withdraw Date
September 23	Classes End

### 2nd Tri-semester [TR2]

September 23	Last Day to Register
September 24	Classes Begin
September 29	Drop Date
October 21	Withdraw Date
October 28	Classes End

### 3rd Tri-semester [TR3]

October 28	Last Day to Register
October 29	Classes Begin
November 3	Drop Date
December 1	Withdraw Date
December 7	Classes End

### CO Online 15 Week [CZ1]

August 20	Last Day to Register
August 18	Classes Begin
September 3	Drop Date
November 13	Withdraw Date
December 7	Classes End

### CO Online 10 Week [CZ2]

September 24	Last Day to Register
September 22	Classes Begin
October 2	Drop Date
November 21	Withdraw Date
December 7	Classes End

### CO Online 1st Bi-semester [CZ4]

August 20	Last Day to Register
August 18	Classes Begin
August 25	Drop Date
September 25	Withdraw Date
October 5	Classes End

### CO Online 2nd Bi-semester [CZ5]

October 15	Last Day to Register
October 13	Classes Begin
October 20	Drop Date
December 1	Withdraw Date
December 7	Classes End

### Military Session I [MI1]

August 24	Last Day to Register
August 25	Classes Begin
September 2	Drop Date
October 7	Withdraw Date
October 19	Classes End

### Military Session II [MI2]

September 12	Last Day to Register
September 13	Classes Begin
September 22	Drop Date
November 7	Withdraw Date
November 21	Classes End

### Military Session III [MI3]

September 19	Last Day to Register
September 20	Classes Begin
October 27	Drop Date
December 2	Withdraw Date
December 14	Classes End

## Spring 2026 [202630]

### Important Dates

October 27	Registration Begins
February 15	Graduation Application Deadline

### Holidays/Special Days

March 23-29	Spring Break, Campuses Open - No classes
May 16	Graduation Ceremony

### Full Semester 15 Week Term [F15]

January 22	Last Day to Register
January 20	Classes Begin
February 4	Drop Date
April 16	Withdraw Date
May 11	Classes End

### Full Semester 12 Week Term [F12]

February 8	Last Day to Register
February 9	Classes Begin
February 23	Drop Date
April 22	Withdraw Date
May 11	Classes End

### 1st Bi-semester [BI1]

January 19	Last Day to Register
January 20	Classes Begin
January 27	Drop Date
March 3	Withdraw Date
March 14	Classes End

### 2nd Bi-semester [BI2]

March 14	Last Day to Register
March 15	Classes Begin
March 25	Drop Date
April 29	Withdraw Date
May 11	Classes End

### Weekend Start [WKC]

January 25	Last Day to Register
January 23	Classes Begin
February 9	Drop Date
April 20	Withdraw Date
May 11	Classes End

### Late Start [LAT]

February 23	Last Day to Register
February 24	Classes Begin
March 6	Drop Date
April 27	Withdraw Date
May 11	Classes End

### 1st Tri-semester [TR1]

January 19	Last Day to Register
January 20	Classes Begin
January 26	Drop Date
February 16	Withdraw Date
February 23	Classes End

### 2nd Tri-semester [TR2]

February 23	Last Day to Register
February 24	Classes Begin
March 2	Drop Date
March 30	Withdraw Date
April 6	Classes End

### 3rd Tri-semester [TR3]

April 6	Last Day to Register
April 7	Classes Begin
April 13	Drop Date
May 4	Withdraw Date
May 11	Classes End

### CO Online 15 Week Term [CZ1]

January 22	Last Day to Register
January 20	Classes Begin
February 4	Drop Date
April 16	Withdraw Date
May 10	Classes End

### CO Online 10 Week Term [CZ2]

February 25	Last Day to Register
February 23	Classes Begin
March 5	Drop Date
April 24	Withdraw Date
May 10	Classes End

### CO Online 1<sup>st</sup> Bi-semester [CZ4]

January 22	Last Day to Register
January 20	Classes Begin
January 26	Drop Date
February 26	Withdraw Date
March 8	Classes End

### CO Online 2nd Bi-semester [CZ5]

March 25	Last Day to Register
March 23	Classes Begin
March 30	Drop Date
April 30	Withdraw Date
May 10	Classes End

### Military Session I [MI1]

January 25	Last Day to Register
January 26	Classes Begin
February 2	Drop Date
March 10	Withdraw Date
March 22	Classes End

### Military Session II [MI2]

February 13	Last Day to Register
February 14	Classes Begin
February 24	Drop Date
April 15	Withdraw Date
May 1	Classes End

### Military Session III [MI3]

February 8	Last Day to Register
February 9	Classes Begin
March 17	Drop Date
April 27	Withdraw Date
May 10	Classes End

### Military Session IV [MI4]

March 29	Last Day to Register
March 30	Classes Begin
April 6	Drop Date
May 12	Withdraw Date
May 24	Classes End

# GETTING STARTED

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## In This Section

Admissions Information .....	11
Admissions Procedure .....	11
Student Type .....	11
Registering for Classes .....	12

## Admissions Information

Pikes Peak State College is an open admission college meaning that students who are at least 17-years old are admitted to the college\*. Students under 17 can receive a waiver to attend PPSC. Admission to the college and declaring a major does not guarantee admission into a specific academic program.

\*Admission may be denied when any individual whose personal history and background indicates that his or her presence at the college would endanger the health, safety, welfare, or property of the college community or interfere with the orderly and effective performance of the college's functions; and/or any individual who has misrepresented his/her credentials or background.

F-1 visa international students have specific deadlines and requirements to apply for admission and an I-20. Visit [www.pikespeak.edu/international](http://www.pikespeak.edu/international) for more information.

## Admissions Procedure

Applying to PPSC is free and there are no essays or tests required. There is no application deadline, so students can apply at any time. Students who have attended or applied to PPSC in the last year remain active and do not need to reapply. Visit [www.pikespeak.edu/apply](http://www.pikespeak.edu/apply) to get started.

## Student Type

Students will be classified as one of the following student types upon admission to PPSC.

- High School Student:
  - A student currently in high school who is taking college level courses while in high school for dual credit (concurrent enrollment).
  - High school students will remain as an "H" student type until they graduate from high school or receive a high school equivalency. For more information on enrolling as a high school student visit [www.pikespeak.edu/hsp](http://www.pikespeak.edu/hsp).
- New First Time Anywhere:
  - A student who has never attended college since completion of high school or received a high school equivalency.
  - Students formerly coded as "High School" will become "New First Time Anywhere" once they graduate high school or receive a high school equivalency, and as long as they have completed a credit bearing class with a grade within the prior three terms, they will not need to reapply. For more information on enrolling as a new first time anywhere student visit [www.pikespeak.edu/admissions/enroll/prospective-students/new-student.php](http://www.pikespeak.edu/admissions/enroll/prospective-students/new-student.php).

- Transfer Student:
  - A student who has attended another college other than PPSC, prior to their planned start term, even if they did not complete a term at their prior college. For more information on enrolling as a transfer student visit [www.pikespeak.edu/admissions/enroll/prospective-students/transfer-student.php](http://www.pikespeak.edu/admissions/enroll/prospective-students/transfer-student.php).
- International Student Admit:
  - A student who is enrolled for credit at an accredited higher education institution in the U.S. on a temporary visa issued by PPSC (F1 and M1 visa holders), and who is not an immigrant (permanent resident with an I-51 or Green Card), or an undocumented immigrant, or a refugee. For more information on enrolling as an international student visit [www.pikespeak.edu/international](http://www.pikespeak.edu/international).
- Re-Admit:
  - A student who has previously attended PPSC (but not within the prior three terms). For more information on enrolling as a re-admit student visit [www.pikespeak.edu/admissions/enroll/prospective-students/returning-student.php](http://www.pikespeak.edu/admissions/enroll/prospective-students/returning-student.php).
- Guest Student:
  - A student who is attending a college or university other than PPSC (including other CCCS colleges) who intends to transfer their classes back to the other college or university. For more information on enrolling as a guest student visit [www.pikespeak.edu/admissions/enroll/prospective-students/visiting-summer-students.php](http://www.pikespeak.edu/admissions/enroll/prospective-students/visiting-summer-students.php).

## Readmission of military service member students

PPSC 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@pikespeak.edu](mailto:mvp@pikespeak.edu)) to begin the re-admission process.

Additionally, service members using VA Education benefits are provided additional protections under 38 U.S.C. §3691A(b) when service members receive orders to "perform a period of service..." (i.e., active duty, in active-duty training or state service) and cannot continue in their enrolled classes. If service members believe that they are protected under this law, they should contact the Department of Military and Veterans Programs (719-502-4100 or [mvp@pikespeak.edu](mailto:mvp@pikespeak.edu)) to determine options for the student.

## **Registering for Classes**

Students can register for classes for which they meet the prerequisite. Meeting with an Academic Advisor, placement testing, submitting an academic history form, and submitting transcripts from other colleges for transfer credit evaluation are all steps students can take ensure they are registering for the correct courses to meet their goal.

To learn more about the steps and resources for registering for classes, visit [www.pikespeak.edu/register](http://www.pikespeak.edu/register).

# TUITION AND FEES

## In This Section

Tuition.....	13
Colorado ASSET Bill.....	13
College Opportunity Fund (COF) .....	13
Western Undergraduate Exchange (WUE) Program .....	13
Tuition and Fees (2024-2025)* .....	13
Student Activity Fees .....	14
Residency Classification Appeals.....	14
Tuition Adjustment.....	14
Books.....	14
Financial Aid.....	14
American Opportunity Tax Credit.....	14
Earned Income Tax Credit/Child Tax Credit.....	15
Programs .....	15
Foundation Scholarships .....	15
Grants.....	15
Loans.....	15
Employment Opportunities .....	15

## 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 for more information.

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.pikespeak.edu/military/mil-instate-tuition>. Active-Duty on Title 10 orders will pay the military online rate of \$250 per credit hour. They must identify as active-duty when submitting their college application.

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 Student Services 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 students without lawful immigration status to receive in-state tuition.

To qualify as an ASSET student, the student must be a Colorado high school graduate who attended a Colorado high school for at least one year before graduation or was physically present in Colorado for at least one year immediately preceding the date the student successfully completed a high school equivalency examination in Colorado; and has been physically present in Colorado for at least 12 consecutive months prior to enrolling into a Colorado institution.

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 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 COF stipend, will be applied to students who qualify for in-state tuition and have lawful presence in the US, to include DACA, ASSET, and students on visas. High school concurrent enrollment 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 \$116 per credit hour.

Failure to sign up and authorize COF will result in the loss of this stipend. To sign up go to [cof.college-assist.org](http://cof.college-assist.org). Students can authorize their COF via their student portal.

Estimated Per Credit Hour Base Tuition Calculation 2024-2025	
Total estimated base in-state tuition	\$285.10
Minus estimated College Opportunity Fund Stipend	\$116.00
Student's estimated share of in-state tuition	\$169.10

## 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 Student Services.

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 (2024-2025)\*

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

The in-state tuition rate for 2024-2025 is \$169.10 per credit hour after COF (see above). The out-of-state tuition rate for 2024-2025 is \$694.10 per credit hour. There are some courses that have higher tuition rates. Please refer to the tuition and fee chart at [www.pikespeak.edu/paying-college/tuition-fees/](http://www.pikespeak.edu/paying-college/tuition-fees/) for more information.

Student fees.

The student fee rate for 2024-2025 is \$16.58 per credit hour plus a \$17.15 registration fee, and a \$10.00 Bus Pass Fee.

### Course fees.

Some courses have extra fees ranging from \$3.00 per credit hour to \$3,550.00 per course. Refer to [www.pikespeak.edu/paying-college/tuition-fees/](http://www.pikespeak.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 2025-2026 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 are associated with enrollment in the college and/or campus and 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 PPSC Institutional Fee Plan.

## Residency Classification Appeals

Out-of-state students pay higher tuition than in-state students. If you are classified as out-of-state but believe you qualify for in-state tuition or reduced WUE tuition, you may submit an applicable online form online at [www.pikespeak.edu/admissions/colorado-residency/index.php?utm\\_source=gecko&utm\\_medium=email&utm\\_campaign=residency](http://www.pikespeak.edu/admissions/colorado-residency/index.php?utm_source=gecko&utm_medium=email&utm_campaign=residency). If your reclassification request is denied, you must either drop your classes by the drop date or pay out-of-state tuition.

**Deadline for Residency Reclassification:** The final deadline to request residency reclassification for any semester is the day before the next full semester begins. For example, if you are seeking reclassification for the fall semester, you must submit your request no later than the day before spring semester starts.

**Appeal Process:** To challenge the ruling on a residency classification, students may appeal to the Tuition Classification Review Committee. Email [residency@pikespeak.edu](mailto:residency@pikespeak.edu) for details.

**General Requirements for Colorado Residency:** To qualify for Colorado residency, a student (or the student's parent/legal guardian if the student is under 23 by the start of the term), must:

- Have lived in CO for the immediate 12 months prior to the start of the semester.
- Intend to stay in CO for the near future.
- Have filed Colorado state income tax returns as a Colorado resident.
- Have a Colorado driver's license.

For more details on Colorado residency laws, visit [higher.ed.colorado.gov/students/preparing-for-college/residency-requirements](http://higher.ed.colorado.gov/students/preparing-for-college/residency-requirements).

## Tuition Adjustment

To receive a tuition refund or adjustment, students must drop classes by the drop date listed in the class schedule and course catalog. No refunds or adjustments will be made after the drop date except in rare cases of documented emergency circumstances. This request criteria and required forms are available online. Each situation will be reviewed by a multidisciplinary committee to ensure the student's request aligns with the college's request criteria. If the request does not meet outlined criteria, the request may be denied. All students are responsible for understanding the ramifications of submitting this request. It is, therefore, encouraged that students contact

relevant departments prior to submitting a request. 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 PPSC insignia items are also available at all three campus bookstores.

Textbooks may be purchased from our bookstore online at [ppsc.bncollege.com](http://ppsc.bncollege.com). Course material information in accordance with the College Opportunity and Affordability Act is available at [ppsc.bncollege.com](http://ppsc.bncollege.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 daily. If eligible, we can pay you wholesale value for your books. This is available online at [ppsc.bncollege.com](http://ppsc.bncollege.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 State 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 return information may also be transferred automatically from the IRS if the student has filed an electronic tax return at least two weeks prior to doing the FAFSA. This application is available at [studentaid.gov/](http://studentaid.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 Student Services or review this information online at [www.pikespeak.edu](http://www.pikespeak.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 (AOTC) to help pay for college expenses.

The American Opportunity Tax Credit is available to a broad range of taxpayers, including many with higher incomes and those who owe no tax. It includes required course materials on the list of qualifying expenses and allows the credit to be claimed for four post-secondary education years. 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.

### **Earned Income Tax Credit/Child Tax Credit**

The Earned Income Tax Credit (EITC) is a refundable federal income tax credit for low to moderate income working individuals and families. 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 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](http://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 Student Services or online at [www.pikespeak.edu/financial-aid](http://www.pikespeak.edu/financial-aid) describes each of these programs.

### **Foundation Scholarships**

The Pikes Peak State College Foundation provides scholarship support to many PPSC students each year. Go to [www.pikespeak.edu/scholarships](http://www.pikespeak.edu/scholarships) for more information about available scholarships and how to apply. Questions can be directed to [scholarships@pikespeak.edu](mailto:scholarships@pikespeak.edu).

### **Grants**

- Colorado Student Grants (CSG)
- Federal Pell Grants (PELL)
- Federal Supplemental Educational Opportunity Grants (FSEOG)
- Iraq and Afghanistan Service Grants (IASG)

### **Loans**

- Federal Direct Stafford Student Loans (subsidized and unsubsidized)
- Federal Direct Parent Loans (PLUS)
- [Studentloans.gov](http://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

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## In This Section

Maximum Course Load .....	16
Change of Major/Program .....	16
Credit by Examination.....	16
Transfer to PPSC .....	16
International Transcript Evaluations.....	16
Transcript Requests .....	17
Grading System .....	17
Grading Options .....	19
Grade Changes .....	20
How to Calculate Your GPA .....	20
Prerequisite Courses .....	20
Repeated Courses .....	20
Academic Renewal .....	20
Academic Progress .....	21
Academic Concerns.....	21
Credits in Residence.....	22
Term Academic Honors .....	22
Graduation Honors .....	22
Application for Certificate or Degree.....	22
Graduation Ceremony .....	22
Assessment of Student Learning.....	22
Research Activities .....	23

## 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 Executive 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. Additionally, Students using military or veteran education benefits should confirm how changing their major might impact funding eligibility. 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.pikespeak.edu/records/change-of-major](http://www.pikespeak.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 faculty/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 PPSC

All credits earned at regionally accredited colleges or universities, including PPSC, or other approved educational institutions, may be applied toward fulfilling PPSC program requirements. Some programs may have requirements/guidelines regarding age of courses, especially technical or science-related coursework. Please refer to your specific program for time limits'

- Courses in which a grade of C- or above was earned will be accepted in transfer when the courses are applicable to PPSC programs and in accordance with PPSC requirements. Credit will be transferred only from an official transcript from the originating institution.

Students who have credits they wish to transfer to PPSC that can replace a substandard grade earned at PPSC 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 PPSC will still appear on the student's official transcripts. Other institutions receiving a PPSC 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 PPSC 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 State College (PPSC). Students who plan to study a program at PPSC 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 PPSC. 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 PPSC to be accepted for transfer.
- Some programs may have requirements/guidelines regarding the age of courses, especially technical or science-related coursework (students are advised to check with their specific programs for time limits).
- PPSC 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 PPSC 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 PPSC 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 State College  
Attn: Records Office, Box C-8  
5675 S. Academy Blvd.  
Colorado Springs, CO 80906

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

A complete list of approved NACES members can be found at [www.naces.org](http://www.naces.org).

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

Educational Credential Evaluators, Inc.

Website: [www.ece.org](http://www.ece.org)

Email: [eval@ece.org](mailto:eval@ece.org)

World Education Services

Phone: (800) 361-3106

Website: [www.wes.org](http://www.wes.org)

Josef Silny & Associates

Phone: (305) 273-1616

Website: [www.jsilny.com](http://www.jsilny.com)

## Transcript Requests

PPSC 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 Parchment by creating a Parchment account if one does not yet exist and completing the order information. 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. Transcript request instructions and costs can be found online at [www.pikespeak.edu/records/request-transcripts](http://www.pikespeak.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, term dates, credits in residence and honors designations.

### DEFINITIONS

*Attempted Grades:* Grade 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:* Grade for Developmental Education courses.

*Earned Grades:* Grade 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:*

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: 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. The College 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 certain 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.

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

Pikes Peak State College (PPSC) offers two options for auditing – (1) Regular audit and (2) Veteran audit. Complete information related to the enrollment process for course audits can be found at [pikespeak.edu/audit](http://pikespeak.edu/audit). General Information about auditing a course at Pikes Peak: By auditing a course, a student may participate in course activities but does not receive a formal transcript grade and will not receive academic credit. To request a course audit, students must submit a request through the audit website by the deadline listed in the course schedule. Audited courses are not eligible for the College Opportunity Fund stipend. Students who wish to audit a class must meet all course specific pre-requisites. Some courses are excluded from auditing. See the website for full details on which courses are excluded. Please note that the audit option applies only to PPSC courses and does not include Colorado Consortium classes. Additionally, audited courses do not meet the credit hour requirements for financial aid, Department of Defense or VA Education benefits and may not be applied to certificates or degrees.

Specific Information about each audit program: (1) Regular Audit - Students will be responsible for the full in-state or out-of-state tuition. (2) Veteran audit – Veterans may audit one class per semester at PPSC for no cost to the veteran while funding is available. Veterans who want to audit a class under this program must submit a request through the audit website. Each request will be evaluated by Admissions and veteran students will be registered 1-2 days prior to the start of the semester if funding and class space are available.

#### 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 division Associate Dean.

Military personnel and emergency management officials who are required to go TDY or perform a period of service (i.e. Active duty, in active-duty training or state service) in the middle of a term should contact their instructor for special consideration. Documentation of official assignment is required and must be approved by the Vice President for Instructional Services. If an Incomplete Grade is not viable for your TDY circumstances, meet with Military and Veterans Programs to discuss other options.

Incomplete Grade-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 the following time frames: Army = 180 days, Navy = 180, Air/Space Force 12 months or school policy, Marines = 6 months, Coast Guard = 6 months.

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 passing grades awarded only for developmental courses. The A, B, and C indicate the level of satisfactory/passing performance. Developmental Grades will not be included in a student's GPA, or count towards attempted credits.

### **F/D, F/F**

These are not passing grades awarded only for developmental courses. The D and F indicate the level of unsatisfactory performance. Developmental Grades will not be included in a student's GPA, or count toward attempted 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 PPSC. (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 State 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:** 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 executive dean and approval by the Vice President for Instructional Services. 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. Students will be responsible for the full tuition and fees. PPSC students may choose to audit classes on a space-available basis if they meet the prerequisite for the course. Some courses are excluded from auditing. See [www.pikespeak.edu/admissions/enroll/prospective-students/audit-class.php](http://www.pikespeak.edu/admissions/enroll/prospective-students/audit-class.php) for full details.

Veterans may audit one class per semester at PPSC for no cost to the veteran while funding and space is available.

## 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 division Executive Dean or Associate Dean. If no resolution or satisfactory explanation, then:

Review by the Vice President for Instructional Services or a designee for final resolution.

An Incomplete (I) grade may be removed when the remaining class assignments 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 executive 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.

## Prerequisite Courses

Prerequisite courses are defined as a condition of enrollment that a student is required to meet to demonstrate readiness for enrollment in a course or program. A prerequisite course must be completed successfully to enroll in the course which follows. Successful completion is defined as earning a grade of "C" or better. Placement test results can also be used to meet prerequisite skill levels.

## 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 PPSC 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.
- 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 State College are required to meet with an academic advisor prior to submitting a request for Academic Renewal.

### PPSC 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.pikespeak.edu/appeal](http://www.pikespeak.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 Progress

### Application

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

### Basis

This procedure concerns the admission and enrollment of students at CCCS and establishes a procedure for student load, time status, late registration, and academic renewal.

### Procedure

#### Academic Standing

Academic Standing describes a student's successful progression with respect to maintaining progress toward their degree or certificate program. Academic Standing applies to all students who have completed 9 or more credits at a CCCS College. Academic Standing shall be applied consistently and uniformly within each College. Colleges will determine Academic Standing following the posting of the majority of term grades for each semester, and academic standing may be recalculated based on late or adjusted grades. For students who have completed fewer than 9 credit hours, the College will monitor satisfactory academic progress through an Academic Alert process. These students are not subject to Academic Standing.

Academic Standing values include the following:

- "Initial Standing" – Student has completed fewer than 9 cumulative credit hours with a cumulative GPA greater than or equal to 2.00 for all classes completed.
- "Academic Alert" – Student has completed fewer than 9 cumulative credits with a cumulative GPA less than 2.00 for all classes completed.
- "Good Standing" – Student has completed at least 9 cumulative credit hours and has a cumulative GPA greater than or equal to 2.00 for all classes completed.
- "Performance Support" – Student has completed at least 9 cumulative credit hours and has a cumulative GPA less than 2.00 for all classes completed. This value was previously referred to as "Academic Probation."
  - o By the conclusion of the Performance Support term, the student must raise their cumulative GPA to at least 2.00. If this condition is met, the student returns to Good Standing. Otherwise, the student will be Performance Improving or on Academic Suspension as outlined below.
- "Returning Support" – Student is returning from Academic Suspension.
  - o By the conclusion of the Returning Support term, the student must raise their cumulative GPA to at least 2.00. If this condition is met, the student returns to Good Standing. Otherwise, the student will be Performance Improving or on Academic Suspension as outlined below.
- "Performance Improving" – If a student on Performance Support or Returning Support earns a term GPA of at least 2.00 for all classes completed during the term but fails to raise their cumulative GPA to at least 2.00 for all classes completed, the student will be allowed to attend the next term as Performance Improving. This value was previously referred to as "Probation Continuing."
  - o As long as the student continues earning a term GPA of at least 2.00 during each term, they will be permitted to continue attending. The student will remain on Performance Improving until the cumulative GPA is at least 2.00, at which time they will return to Good Standing.

- o If the student does not earn a term GPA of at least 2.00 while on Performance Improving, they will be placed on Academic Suspension.
- "Academic Suspension" – If a student on Performance Support, Returning Support or Performance Improving earns a term GPA of less than 2.00 for all classes completed during the term, the student will be suspended and will not be allowed to enroll at the College issuing the suspension for the next term unless an appeal is approved. The student may be dropped from all registered courses for an upcoming term at the College based on the College's procedures.

#### Academic Suspension:

All academic suspensions are for one term only. If a student who has served a suspension wishes to return, the student will be allowed to re-enroll only after meeting with an academic advisor. The student will be placed on Returning Support for their return semester. Students suspended from one College are not suspended from other Colleges within the System.

#### Appeals Process:

Students placed on Academic Suspension will be notified of their status and given the opportunity to appeal. Students must appeal their suspension based on procedures developed by the College issuing the suspension in order to continue enrolling at that College. Each College's appeal process should incorporate an element where the student demonstrates what has changed and why they will perform better in the future. Appeal consideration will be based on statements and documentation as submitted by the student. College processes for approving or denying appeals must be based upon objective factors.

If the College approves an appeal, appeals for subsequent Academic Suspensions should address why the student was unsuccessful on the prior appeal, and what additional measures have been taken to ensure success.

If the student's suspension appeal is approved, the student will be placed on Performance Support.

If the student's suspension appeal is not approved, the student may be dropped from all courses registered for in upcoming terms at the College, based on the College's procedures.

## Academic Concerns

Any student who wishes to pursue an academic 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 (via the academic concern form) and meet with the Department Chair (in the case of an adjunct instructor) or Executive 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 Executive Dean.

If the student contests the Executive Dean's decision, they can contact the Vice President for Instructional Services. The student should provide documentation of everything that the student wants considered in the decision. The Executive 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. 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

PPSC 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

P grades and grades for Developmental Education coursework are not included in the GPA Calculation. Students must complete a minimum of six (6) eligible credit hours in the term in order 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 PPSC 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 [pikespeak.edu/admissions/records/graduation/index.php](http://pikespeak.edu/admissions/records/graduation/index.php).

### Auto-Conferral

Mid-way through the Fall and Spring semesters, the Records Office will research records of students who have attended PPSC 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 PPSC. Awards will be posted at the end of the semester.

## Graduation Ceremony

Each May, PPSC 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 Experience & Leadership 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 2025 ceremony will include eligible participants who graduated Summer 2024, Fall 2024 and anticipated graduates in Spring 2025.

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. PPSC's assessment framework reflects the vision of the College as stated in the 2023-2028 Strategic Plan and aligns with regional and programmatic accreditation standards. With the support from divisional dean leadership 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, PPSC voted to adopt the following statewide gPATHWAYS 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.

PPSC's philosophy of general education aligns with the Colorado Community College System (CCCS) State Board Policy on Associate Degrees (SP 9-30A) 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 the student's area of emphasis; and it is intended to impart common knowledge, intellectual concepts, and attitudes which every educated person should possess." PPSC 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 PPSC's assessment of student learning framework can be found at [www.pikespeak.edu/about/assessment/](http://www.pikespeak.edu/about/assessment/).

## Research Activities

PPSC 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. PPSC'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, v) any research is conducted in an ethical manner and in compliance with established standards, and vi) all private information will be handled with confidentiality. Students seeking to conduct such research may not solicit subject participation or begin data collection until they have obtained clearance by the PPSC IRB. For additional information, please contact the Chair of the PPSC IRB at [patricia.grandieu@pikespeak.edu](mailto:patricia.grandieu@pikespeak.edu).



# STUDENT CONDUCT

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## In This Section

Code of Student Behavioral Expectations and Responsibilities (Code).....	24
Student Disciplinary Procedure .....	26
Student Complaint Procedure.....	29
Civil Rights and Sexual Misconduct Resolution Process .....	31
Academic Honesty .....	34
Classroom Attendance Procedure .....	34
Conduct in College Buildings .....	34
Restricted Attendance.....	34
Alcohol and Drug Policies.....	34
Smoking on College Grounds.....	35
Title IX Protections Against Harassment .....	36
Accommodations for Student Pregnancy or Related Conditions	36
Firearms on Campus .....	36
Parking and Traffic Regulations.....	37
Behavioral Intervention Team (BIT) .....	38
Campus Police Department .....	38
Sex Offender Information .....	39
Emergency Notification System .....	39
Annual Security Report.....	39

## Code of Student Behavioral Expectations and Responsibilities (Code)

The College considers the behavior described in the following subsections as inappropriate and in opposition to the values of the College community. These responsibilities apply to all students, including continuing education. The College encourages and expects students, faculty, and staff to engage as active bystanders and report to College officials incidents that involve the following behaviors. Any student found to have violated or to have attempted to violate the following responsibilities may be subject to the conditions, restrictions, and outcomes outlined in SP 4-30a, Student Behavior Expectations and Responsibilities Resolution Procedure.

The following section is organized alphabetically by violation followed by an explanation.

**Abuse of Conduct Process:** Abuse or interference with College processes, including conduct and academic integrity meetings:

- Falsification, distortion, or misrepresentation of information.
- Failure to provide, destroying, or concealing information during an investigation of an alleged Code violation.
- Attempting to discourage an individual's proper participation in, or use of, the campus conduct system.
- Inappropriately influencing any member of the campus community with conduct authority prior to, during, and/or following a campus conduct proceeding.
- Influencing or attempting to influence another individual to commit an abuse of the campus conduct process.

**Academic Integrity:** 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 outcomes as set forth in the Student Behavioral Expectations and Responsibilities Resolution Procedure.

- **Cheating:** The act of using or attempting to use an examination or other academic work, material, information, or study aids which are not permitted by the instructor. Cheating includes, but is not limited to:
  - Using books, notes, or calculators or copying from or conversing with others during examinations (unless such external aids are permitted by the instructor).
  - Having someone else do research, write papers, or take examinations for someone else.
  - Submitting work completed in one class to fulfill an assignment in another class without prior approval from the instructor(s).
  - Stealing, distributing, selling, and buying tests or having someone take an exam on someone else's behalf.
- **Fabrication:** The invention of material or its source and its use as an authority in academic work. Fabrication includes, but is not limited to:
  - Inventing the data for a scientific experiment.
  - Inventing the title and author of a publication to use the invented publication as a source.
  - Knowingly attributing material to an incorrect source.
- **Plagiarism:** The act of using someone else's work without giving proper credit to the original source. The work can be written, artistic, musical, language, symbols, or media. Reusing one's own prior work without proper citation (or approval of instructor) is also plagiarism.
- **Aiding and Abetting:** It is a violation of this Code to actively assist another in violating the Code or covering up the violation after the fact.

**Alcohol/Drugs:** Use, being under the influence, manufacturing, possession, cultivating, distribution, purchase, or sale of alcohol and/or drugs (illegal and/or dangerous or controlled substance) and/or alcohol/drug paraphernalia 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.

**Animals/Pets:** Animals are not permitted on campus except as permitted by law or as specifically approved by the College.

- Please see SP 4-120b, regarding Student Disability Services for information related to service animals and emotional support animals.
- Please see the appropriate handbook for regulations and processes for animals and pets in student housing, where applicable.

**Bullying/Non-physical abuse:** Bullying includes repeated and/or severe aggressive or negative actions or behaviors intentionally or reasonably likely to intimidate, hurt, control, or diminish another person, physically, mentally, or emotionally. Bullying may include direct or indirect communications in verbal or nonverbal form and specifically includes bullying by electronic means (e.g., cyberbullying).

For more information and compliance, see SP19-10, Bullying/Violence/Firearms on Campus.

**Damage and Destruction:** Reckless and/or unauthorized damage to, or destruction of, College property or the individual property of another, regardless of intention. Damage or destruction of community, public, or private property.

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

- Collusion: Action with another or others to violate the Code.
- Falsification: Knowingly furnishing or possessing false, falsified, or forged materials, documents, accounts, records, identification, or financial instruments, including electronic forgery and/or manipulation.

**Discrimination and Harassment:** Discrimination is any distinction, preference, advantage, or detriment given to a person based on one or more actual or perceived protected classes. Harassment is a form of discrimination that includes Quid Pro Quo and Hostile Environment.

- Hostile Environment occurs when a person is subjected to verbal or physical conduct based on a protected class that is sufficiently severe, persistent or pervasive, and objectively offensive to alter the conditions of a person's employment or unreasonably interfere with a person's ability to participate in or benefit from CCCS educational programs or activities, from both a subjective and objective viewpoint.
- Quid Pro Quo is a type of sexual harassment that exists when an employee conditions the provision of an aid, benefit, or service on an individual's participation in unwelcome sexual conduct, such as unwelcome sexual advances, requests for sexual favors, or other verbal or physical conduct of a sexual nature.
- Sexual harassment includes, but is not limited to, dating violence, domestic violence, stalking, and sexual assault.
- For more information and how to file a complaint regarding discrimination or harassment, including sexual misconduct, see SP 19-60, Civil Rights and Sexual Misconduct Resolution Process.

**Disruptive Behavior:** Engaging in any 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.

**Endangerment or Defacement:** Conduct that is detrimental to the College, and/or to community safety. Examples include, but are not limited to, slamming doors, throwing chairs, and/or defacing of College property or property of others.

**Failure to Comply:**

- Failure to comply with or follow 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.
- Failure to comply with or follow the directives and/or sanctions imposed under CCCS policies and procedures.
- Failure to identify oneself to College officials, acting in their official capacity, when requested to do so.

**Fire Safety:** Violation of federal, state, local, or campus fire policies including, but not limited to:

- Intentionally, recklessly, or negligently causing a fire that damages the College, individual property, or causes injury.
- Failure to evacuate a College owned, operated, or controlled facility during a fire alarm.
- Improper use of College fire safety equipment.
- Tampering with or improperly engaging a fire alarm or fire detection/control equipment while on College property. Such action may result in a criminal action.

**Gambling:** Gambling as prohibited by the laws of the State of Colorado. Gambling may include, but is not limited to, raffles,

lotteries, sports pools, and online betting activities. Participation in illegal gambling activities 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.

**Harm to individuals:** Intentionally or unintentionally causing physical harm, threatening to cause harm, endangering the health and/or safety of any individual, or demonstrating violent behavior.

- Violent Behavior includes any act or threat of physical, verbal or psychological aggression, or the destruction or abuse of property by any individual.
- A threat is defined as direct or indirect, verbal or non-verbal conduct (including those made in person, by mail, over the telephone, by email, or by other means) intended to result or reasonably resulting in intimidation, harassment, harm, fear or endangerment of the safety of another person or property.
- For more information and compliance, see SP 19-10, Bullying/Violence/Firearms on Campus.

**Hazing:** Defined as an act that endangers the psychological, emotional, intellectual, and/or physical health and/or safety of a student, or that destroys or removes public or private property, for the purpose of initiation, admission into, affiliation with, or as a condition for continued membership in a group, team, or organization. Additionally, any act that places a student in a subservient role within an organization is considered hazing. Participation or consensual cooperation by the individual(s) being hazed does not excuse the violation. Failing to intervene to prevent, failing to discourage, and failing to report those acts may also violate this code.

**Indecent Exposure:** Deliberately and publicly exposing one's intimate body parts, public urination, defecation, and public sex acts.

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

**Rioting:** Causing, inciting, or participating in any disturbance that presents a clear and present danger to self or others, causes physical harm to others, or results in damage and/or destruction of property.

**Theft:** Obtaining, retaining or exercising control over property of another without authorization, or by threat or deception, with the purpose and/or effect of depriving the person(s) to whom the property belongs of its use or benefit.

**Tobacco Violation:** Smoking and the use of tobacco and related products, including electronic smoking, where contrary to applicable laws or policies established by the College. This includes smoking inside buildings or in areas where smoking is posted as prohibited.

**Trademark Violation:** Unauthorized use, including misuse, of the College or organizational names and images without the express written consent of the institution or organization.

**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 the 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. For more information, see SP 4-32, Student Email Acceptable Use.

**Unauthorized Access and Entry:** Unauthorized access to any College facility, including misuse of keys, cards, restricted access areas, or unauthorized possession, duplication or use of other individual's means of access to any College facility; failing to provide a timely report of a lost College identification card or key; misuse of access privileges to College premises or unauthorized entry to or use of facilities, including trespassing, propping, or unauthorized use of alarmed doors for entry into or exit from a College facility.

**Violation of Laws, Directives and Signage:** Violating any municipal, county, state or federal laws, or executive orders, or violating any public health orders in a manner that adversely impacts the health and well-being of the campus environment and those on campus.

**Weapons Violation:** Possession, use, or distribution of explosives (including fireworks and ammunition), guns (including air, BB, paintball, facsimile weapons, and pellet guns), or other weapons or dangerous objects, such as arrows, axes, machetes, nunchaku, throwing stars, or knives with a blade of longer than three (3) inches. This includes the unauthorized storage of any item that falls within the category of a weapon, including storage in a vehicle parked on College property, other than what is expressly permitted by law.

- Possession of an instrument designed to look like a firearm, explosive, or dangerous weapon is also prohibited by this policy.
- Intentionally or recklessly using and/or possessing a weapon or any other item in such a way that would intimidate, harass, injure, or otherwise interfere with the learning and working environment of the College shall face increased consequences.
- Students are prohibited from carrying firearms on campus, including all buildings and grounds, except under limited exceptions. Those with a valid concealed carry permit may carry concealed firearms only in campus parking areas, in accordance with state law. Students enrolled in academic programs that involve firearms may use and carry them for approved educational purposes.
- For more information and compliance, see SP 19-10, Bullying/Violence/Firearms on Campus.

**Violation of course, program, or activity rules:** Violation of established rules as contained in courses, programs activities, regulations, or guidelines and established by departments, regulatory boards, or licensing bodies, including all Housing and Residential Education policies, as applicable.

#### Group Violations

A student group or organization and its officers and membership may be held collectively and individually responsible when violations of this Code occur by the organization or its member(s), including the following conditions:

- Violation(s) take place at organization-sponsored or co-sponsored events, whether sponsorship is formal or implied.
- Violation(s) have received the consent or encouragement of the organization or of the organization's leaders or officers.
- Violation(s) were known or should have been known to the membership or its officers.

Conduct meetings for student groups or organizations shall also follow the Student Behavioral Expectations and Responsibilities Resolution Procedure. In any such action, individual determinations as to responsibility will be made and restrictions, conditions, and outcomes may be assigned collectively and individually, and will be proportionate to the involvement of each

individual and the organization. Procedures will begin with communication to the President or leadership of said organization.

## Amnesty

Assisting an individual by calling for help in an alcohol or drug-related emergency means neither the person who calls for help, nor the person who needs help will be subject to formal investigation nor receive a formal conduct record for their behavior. Students seeking assistance under these provisions may be required to meet with the SSAO and to complete educational, counseling, or other requirements aimed at addressing health and safety concerns. The requirements will be informal or on a deferred basis.

The student must fully comply with reporting to appropriate College officials for amnesty to be considered.

## 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 readmission 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 readmission 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.cccs.edu/about-cccs/state-board/policies-procedures/](http://www.cccs.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, extracurricular 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 Complaint Procedure**

#### Reference

Board Policy 4-31; SP 4-31a

#### Application

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

#### Basis

This Student Complaint Procedure is intended to allow students an opportunity to present a complaint 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 complaint under System Procedure (SP) 19-60, Civil Rights Sexual Misconduct Resolution Process. If the basis of the claim is a violation of the Code of Student Behavioral Expectations and Responsibilities, the student must file a complaint under SP 4-

### 30a, Behavioral Expectations and Responsibilities Resolution Procedure.

#### Definitions

"Student(s) Issuing the Complaint" includes an active student per SP 4-10a who is subject to alleged violation or inequity as it applies to Board Policies, System Procedures, or College Procedures.

"Complaint" is a claim addressing an objectionable offense.

"Person/Entity Responding to a Complaint" includes a person/entity whose alleged conduct is the subject of a complaint. For purposes of this procedure, this 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.

"Preponderance of the Evidence" is the standard of proof that shows more likely than not that a violation occurred, based on what a reasonable person would consider.

"Senior Student Affairs Officer (SSAO)" is the College employee (PPSC's Dean of Students) designated by the College President to oversee student affairs and address student complaints under this procedure. The SSAO may delegate this responsibility to another person. \*Note: Previously referred to as Chief Student Services Officer (CSSO); other Policies and Procedures may also refer to this role as CSSO.

#### Procedure

##### Scope of Student Complaint and Filing Complaint:

An objectionable offense that may be included in a student complaint is any alleged action which violates or inequitably applies Board Policies, System Procedures and/or College Procedures.

The following matters are not subject to review under this procedure:

- 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 and Sexual Misconduct Resolution Process.

Students must submit all complaints in writing to the SSAO. The student issuing the complaint should describe the alleged incident(s), when and where it occurred, any previous efforts to resolve the issue(s) with a description of the discussion and the manner of communication made in the course of each effort, the desired remedy sought and include any supporting documents. The supporting documents should be referenced within the body of the complaint.

The complaint should be signed by the student issuing the complaint and submitted via hand delivery, certified mail, or email to the SSAO. The complaint must contain the name and all contact information of the student issuing the complaint. All complaints shall be made as promptly as possible after the occurrence, so that the SSAO can more effectively address the reported concerns. A delay in reporting may result in the loss of relevant evidence and witness testimony and may affect the ability of the SSAO to substantiate the allegations.

False reporting could lead to referral under SP 4-30a.

#### Student Complaint Process:

The SSAO shall determine whether the student complaint can be addressed or not under this SP:

- If the complaint addresses an objectionable offense covered under this procedure, the SSAO shall give written notice of the complaint to both the student issuing the complaint and the person/entity responding to the complaint via personal delivery, certified mail, or emailing the parties.
- If the SSAO determines the complaint is not subject to review under this procedure, they shall inform the student filing the complaint of this decision in writing.

#### Informal Resolution:

The student filing the complaint is encouraged to resolve the issue with the party/entity responding to the complaint through an informal process as facilitated by the SSAO. If the complaint cannot be informally resolved or the student issuing the complaint chooses not to informally resolve it, the SSAO will formally investigate the complaint and issue a decision.

#### Formal Investigation:

The SSAO will request meetings with each of the parties involved. If the complaint is against the SSAO, the College President will designate someone to perform the duties of the SSAO under this procedure.

Both parties will be given the opportunity to discuss the allegations of the complaint and may offer any documentation, witnesses, or other materials in support of the complaint. If any party is not cooperative or responsive, the SSAO may make a determination based on the information available.

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

In meeting with the SSAO or designee, the parties are responsible for presenting their own information. The parties have the opportunity to be advised by an individual of their choice, at their expense, at any stage of the process and to be accompanied by that individual at any meeting or hearing. An individual who chooses to advise a party may only consult and advise the party they are working with; they may not speak for the student being represented at any meeting or hearing. The SSAO may remove or dismiss an individual who chooses to advise a party and becomes disruptive or who does not abide by the restrictions on their participation.

#### Decision:

Based on the preponderance of evidence, the SSAO shall issue a written decision to both the parties and make a recommendation(s) to resolve the issue(s) in accordance with Board Policies and System Procedures. The parties shall be advised of their right to appeal the decision, subject to the grounds below, by filing an appeal with the SSAO within ten (10) business days of the decision.

#### Appeal:

In the event of an appeal, the SSAO shall give written notice to both parties via personal delivery, certified mail, or email. The party responding to the appeal shall be given five (5) business days to submit a response in writing unless additional time is needed per the consent of the SSAO. All appeals and any responses to the appeal are then forwarded to the appeals officer or committee for initial review to determine if the appeal meets the limited grounds and was timely filed within ten (10) business days. The original decision will stand if the appeal is not timely filed or does not meet the appealable grounds as described below, and the decision is final.

The original decision is presumed to have been decided reasonably and appropriately. The ONLY grounds for appeal are as follows:

1. 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.
2. 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
3. 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 appeals officer determines a procedural error occurred that significantly impacted the outcome of the decision, the appeals officer shall return the complaint to the SSAO with instructions to convene a new investigation or the appeals officer shall otherwise cure the procedural error. In rare cases, where the procedural error cannot be cured by the SSAO, in cases of bias, the appeals officer or committee may order a new investigation by a different individual acting in the place of the designated SSAO. The results of a reconvened investigation cannot be appealed. The results of a new investigation can be appealed once, on the applicable grounds for appeals.

If the appeals 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 appeals officer shall conduct or request appropriate additional steps (such as requesting the SSAO to reconsider in light of new evidence only) and/or modify the findings accordingly.

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

#### Retaliation

It is a violation of this procedure to engage in retaliation, such as taking educational action, against any person who makes a complaint or because of the person's participation, or perceived participation, in any aspect of this procedure. Retaliation includes acts to intimidate, threaten, coerce, or discriminate against any individual for the purposes of interfering with any right or privilege provided by this procedure.

#### 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.



## Civil Rights and Sexual Misconduct Resolution Process

### Reference

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

### 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 PPSC 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 PPSC 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. Concerned persons who have witnessed a civil rights violation may also report their concerns to PPSC To report a concern

- Contact PPSC’s Title IX/EO Coordinator, or
- Fill out PPSC’s online report form at <https://www.pikespeak.edu/administration-operations/human-resource-services/civil-rights-sexual-misconduct>

PPSC employees, unless deemed a confidential resource by law, have an ethical obligation to promptly report any incidents they are aware of concerning civil rights violations. Reports should be made within 24 hours unless there is reasonable justification for delay.

Upon receipt of any complaint, the Title IX/EO Coordinator will follow SP 19-60a to review the complaint.

### Confidentiality

Any person who reports concerns of civil rights violations should not assume that confidentiality or anonymity can be protected in connection with making a report to PPSC employees. Confidential resources may be found at <https://www.pikespeak.edu/administration-operations/human-resource-services/civil-rights-sexual-misconduct/confidential-resources.php>

If a reported incident is confirmed to pose a substantial threat of bodily harm or danger to members of the campus community, CCCS must issue immediate emergency notifications and/or timely warnings. CCCS will make every effort to ensure that a Complainant’s name and other identifying information is not disclosed, while still providing adequate information for community members to make safety decisions in light of the danger.

### Preliminary Steps and Timeline

Upon receipt of a complaint, the Title IX/EO Coordinator will review the complaint to determine

- Whether the complainant is participating or attempting to participate in a CCCS program or activity;
- Whether there is an identifiable respondent;
- Whether the Respondent is participating in CCCS educational programs or activities, or is employed by CCCS;
- Whether there is jurisdiction over the alleged conduct; and
- Whether the complaint alleges sufficient information, if proven, 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. This preliminary review process will typically be completed within 7-14 days of receiving the information necessary to evaluate the complaint.

If, after reviewing the above factors, the Title IX/EO Coordinator determines not to proceed with the complaint, the Title IX/EO Coordinator will dismiss the complaint and inform the Complainant of this decision and discuss other options for addressing the reported concerns. If the Title IX/EO Coordinator determines to proceed with 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 PPSC 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 educational, living, 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 PPSC 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 investigator may be the Title IX/EO Coordinator. 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). The parties will be provided with sufficient details of the allegations (such as identity of parties, nature of the conduct, and date/location of the incident, if known). All parties and other witnesses or participants in the investigation process will be provided written notice of the date, time, location, participants, and purpose of any interview or meeting with sufficient time to prepare to participate.

If a matter involves sex-based harassment with a student as a party, special procedures shall apply. For all other civil rights cases, the investigator shall review the investigation file and make a determination 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 investigator must consider all relevant evidence, except for any privileged information (unless waived) or treatment records (unless specific, written consent is obtained). Evidence of the Complainant's prior sexual predisposition or behavior is not relevant, except to prove that someone other than the Respondent committed the alleged conduct or to prove consent concerning prior specific acts between the parties. The investigator shall issue a Final Investigation Report.

### 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.

### Special Procedures for Sex-Based Harassment Involving a Student Party

Upon issuance of the preliminary investigation report, the parties will be given an opportunity to submit questions to the investigator to be asked to the parties and witnesses. The investigator will determine whether proposed questions are relevant and not otherwise impermissible. The investigator must explain any decision to exclude a question and provide the party with an opportunity to clarify or revise a question that is initially deemed impermissible because it is unclear or harassing.

Questions deemed relevant and not otherwise impermissible by the investigator must be asked during follow up meetings, along with any additional question from the investigator. The follow up meetings will be recorded or transcribed, and the recording or transcription will be provided to the parties. The parties will have five (5) calendar days to review and submit additional follow up questions to the investigator. If additional relevant and not otherwise impermissible questions are submitted, the investigator will conduct additional follow up meetings to ask the questions, and record or transcribe the meetings and make them available to the parties. The investigator has the discretion to conduct additional meetings, as necessary, or proceed to the determination process.

The follow up questioning stage of the process is usually completed within 20-30 days.

The Title IX/EO Coordinator will assemble a panel, including the investigator, to review the investigation file and make a determination as to whether or not, based on a preponderance of the evidence, the alleged behavior took place and whether that behavior constitutes sex-based harassment. In reaching this determination, the panel must consider all relevant evidence, except for any privileged information (unless waived) or treatment

records (unless specific, written consent is obtained). Evidence of the Complainant's prior sexual predisposition or behavior is not relevant, except to prove that someone other than the Respondent committed the alleged conduct or to prove consent concerning prior specific acts between the parties. The panel has the discretion to ask any additional questions of parties and witnesses, including questions regarding credibility. The panel shall issue a Final Investigation Report, typically within 14 days of the determination.

#### Final Investigation Report

The Final Investigation Report in all civil rights cases shall include a description of the allegations, information about the policies and procedures used to evaluate the allegations, evaluation of the relevant and permissible evidence, 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.

#### Notice of Findings

Once a Determination Report is received 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. A copy of the Final Investigation Report shall be attached to the Notice of 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 five (5) calendar days of service of the decision. 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 five [5] 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:

1. A procedural irregularity occurred that would change the outcome. The written appeal shall specify the procedural error and how it impacted the outcome of the decision.
2. The Title IX/EO Coordinator, investigator, or decision-maker had a conflict of interest or bias for or against a party that would change the outcome. The written appeal shall specify the conflict or bias and how it impacted the outcome of the decision.
3. New evidence became available that would change the outcome and that was not reasonably available at the time the decision was made. 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, conflict of interest, or bias.

If the appellate officer determines there is new evidence that substantially impacts the original findings, 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.

The appeal process typically takes 14-21 days.

#### 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 faculty, disciplinary action will be in compliance with BP 3-20, Due Process for Faculty: <https://cccs.edu/about/governance/policies-procedures/bp-3-20-due-process-for-faculty/>.
- 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 4-30 and SP 4-30a, Student Discipline: <https://cccs.edu/about/governance/policies-procedures/sp-4-30a-student-behavioral-expectations-and-responsibilities-resolution-procedure/>.
- 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/about/governance/policies-procedures/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 PPSC community, re-assignment to another class section (including the option for an online section), suspension, expulsion, a "Cease Communications" directive, or a "No Trespass" directive.
- For PPSC 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 PPSC 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 violation, to prevent future reoccurrence, and to remedy the effects of the violation.

### Student Privacy

The outcome of a PPSC 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 PPSC observes the legal requirements to disclose the records detailed in SP 19-60.

### Outside Reporting

In addition to reporting to PPSC, 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](mailto:dora_CCRD@state.co.us)  
Web: [www.colorado.gov/pacific/dora/civil-rights](http://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: [www.eeoc.gov/field-office/denver/location](http://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, studios, laboratory, or any other instructional space. Failure to do so is grounds for disciplinary action, including suspension or expulsion from Pikes Peak State 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 do not plagiarize, cheat, falsify, or illegally access college records or academic work. You are expected to read, understand, and follow the Code of Student Behavioral Expectations and Responsibilities (Code).

Academic dishonesty is defined as the unauthorized use of assistance with the 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 use of electronic data sources (including the internet, phone texting, computer instant messaging, smart devices such as the smartwatch or any form of artificial intelligence) for any written or spoken graded content is strictly prohibited unless explicitly permitted in writing by the instructor. Students must demonstrate knowledge, understanding, independence, and integrity in their academic work
- 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, unless directed by the instructor
- illegitimate possession and 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 hearing impaired 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 devices (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 Executive 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 SP 4-30a Student Behavioral Expectations and Responsibilities Resolution Procedure.

## **Alcohol and Drug Policies**

### Drug & Alcohol Abuse Prevention Program

PPSC is a Community College governed by the State Board for Community Colleges and Occupational Education (Board). Board

Policy 19-30, Drug-Free Schools, requires the College to comply with the Drug-Free Schools and the following Drug & Alcohol Abuse Prevention Program and System Procedure 19-30a sets the procedures the College follows regarding Drug-Free Schools. In addition, CCCS System Procedure SP 4-30a, Student Behavioral Expectations and Responsibilities Resolution, prohibits “use, being under the influence, manufacturing, possession, cultivating, distribution, purchase, or sale of alcohol and/or drugs (illegal and/or dangerous or controlled substance) and/or alcohol/drug paraphernalia 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.

#### Standard of Conduct

In compliance with the Drug-Free Schools and Communities Act Amendment of 1989, PPSC prohibits the unlawful manufacture, dispensation, possession, use, or distribution of a controlled substance (illicit drugs and alcohol) of any kind and in any amount, including marijuana. 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. A student or employee who violates this policy will be subject to both criminal sanctions and College sanctions.

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

#### Legal Sanctions for Violations of the Standards of Conduct

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 \$50 up to \$10,000,000 and/or life imprisonment. The exact penalty assessed depends upon the nature and the severity of the individual offense. For a list of legal drug and alcohol sanctions, visit SP 19-30a’s Appendix A.

#### Penalties Which May Be Imposed by the College

Students and/or employees who violate the Drug-Free Schools and Communities Act will be subject to disciplinary action pursuant to the applicable student policies and procedures. Students and/or employees who violate the Drug-Free Schools and Communities Act Amendments of 1989 (Public Law 101-226) will be subject to disciplinary action pursuant to the applicable student policies and procedures. Students found to have violated or have attempted to violate policies regarding alcohol and other drugs may be subject to the conditions, restrictions, and outcomes outlined in SP 4-30a. The sanctions include, but are not limited to, a requirement to complete appropriate rehabilitation or re-entry program, discipline up to and including expulsion for students and termination for employees, and/or referral to authorities for prosecution.

#### Employees

Compliance with drug and alcohol policies is a condition of employment for all PPSC 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 Student Experience & Leadership Office at the Centennial Campus

#### Alcohol

Pikes Peak State 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. PPSC prohibits the possession of alcohol beverages on campus-controlled property without valid use permits or permission of the College.

#### PPSC 2024 Annual Security Report

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 State 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.”

#### 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 State College campuses must be open and accessible to the general public to fulfill the role and mission of the College. 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 PPSC 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 campuses.

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

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

Smoking marijuana products is prohibited on all PPSC 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 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 Campus Designated Smoking Area

- West side near the ramp exit/entrance

## Title IX Protections Against Harassment

Pikes Peak State College is firmly committed to maintaining a work and learning environment where students, faculty, and staff are treated with dignity and respect. In any education program or activity it operates, PPSC prohibits discrimination against students on the basis of sex, sexual orientation, gender identity or expression, marital status, or pregnancy and related conditions, as required by Title IX and its regulations. As such, all members of the College community have the responsibility to be aware of what behaviors constitute a violation, to be responsible for their own actions, and to help create an environment free of harm.

The College prohibits the following acts:

- Harassment: a form of discrimination that involves unwelcome physical or verbal conduct or any communication directed at an individual or group because of their membership or perceived membership in a protected class
- Hostile Environment: when a person is subjected to harassment that unreasonably interferes with an employee's work performance, denies or limits any person's ability to participate in or benefit from an education program or activity, or creates an intimidating, hostile, or offensive working or educational environment.
- Quid Pro-Quo: a type of harassment that exists when submission to the harassing conduct is explicitly or implicitly

made a term or condition of employment or education, or when submission to or objection to the harassing conduct is used as a basis for employment or educational decisions.

- Sexual Assault: an offense classified as a forcible or nonforcible sex offense that includes rape, fondling, incest, and statutory rape.
- Domestic Violence: any act or threatened act of violence upon a person with whom the actor is or has been involved in an intimate relationship.
- Dating Violence: violence committed by a person who is or has been in a social relationship of a romantic or intimate nature with the victim.
- Stalking: engaging in a course of conduct directed at a specific person that would cause a reasonable person to fear for the person's safety, or the safety of others, or suffer substantial emotional distress.

The College has designated Kim Hennessy, Executive Director of Human Resource Services as its Title IX Coordinator. Inquiries and/or complaints regarding Title IX may be made by e-mail, [Kim.Hennessy@PikesPeak.edu](mailto:Kim.Hennessy@PikesPeak.edu), or by calling (719) 502-2600. For more information on reporting, visit <https://www.pikespeak.edu/administration-operations/human-resource-services/civil-rights-sexual-misconduct/>.

## Accommodations for Student Pregnancy or Related Conditions

Students and employees can inquire about or request reasonable modifications for pregnancy or related conditions by contacting the Title IX/EO Coordinator. Reasonable modifications may include, but are not limited to:

- Breaks during class to express breast milk, breastfeed, or attend to health needs associated with pregnancy or related conditions, including eating, drinking, or using the restroom
- Intermittent absences to attend medical appointments
- Access to online or homebound education
- Changes in schedule or course sequence
- Extensions of time for coursework and rescheduling of tests and examinations
- Allowing a student to sit or stand or carry or keep water nearby.
- Counseling
- Changes in physical space or supplies (for example, access to a larger desk or a footrest)
- Elevator access
- Other changes to policies, practices, or procedures

For more information about the college's policy regarding pregnancy or related conditions, please visit [pikespeak.edu/pregnancy-accommodations](http://pikespeak.edu/pregnancy-accommodations) or contact the Title IX/EO Coordinator.

## Firearms on Campus

On July 1, 2024, a new state law went into effect. This law, Senate Bill 24-131, prohibits carrying firearms on all Colorado Community College System campuses, which includes all PPSC buildings and campus grounds, unless a limited exception applies. This ban applies to all individuals, including students, employees, guests, and visitors, including those who hold a valid permit for concealed carry.

Where Firearms are Permitted: Individuals who carry a firearm in accordance with a valid concealed carry permit may only carry firearms in parking areas. The law continues to permit PPSC police and authorized security personnel to carry and use firearms on campus.

CCCS System Procedure SP 19-10 further clarifies that possession of a weapon is strictly prohibited except where authorized by law. Possession of a weapon is defined in Colorado Revised Statutes (C.R.S., Title 18, Article 12). The only CCCS employees that are authorized to carry firearms are:

1. Persons conducting and participating in an approved program of instruction in College curriculum which requires access to such equipment as an integral part of the instructional program;
2. Certified Peace Officers;
3. Persons granted permission at the discretion of the Chancellor or College President for specific purposes; and,
4. Persons carrying a firearm as authorized by law.

Any concerns about possession of an unauthorized firearm should be reported immediately to PPSC Campus Police or local law enforcement.

What you can do:

To comply with the new law, students, employees, guests and visitors should leave firearms at home or keep them properly secured in their vehicles while on campus. Firearms stored in vehicles must be appropriately locked and out of plain view as required by law, including House Bill 24-1348 which states:

- The act prohibits knowingly leaving a handgun in an unattended vehicle unless the handgun is stored in a locked hard-sided container that is placed out of plain view and the container is in a locked vehicle, the locked trunk of the locked vehicle, or a locked recreational vehicle.

Refer to the full text of HB 24-1348 for complete information on safe firearm storage.

Violations of Weapons Laws and Policies: Violations of State law or the college firearms policy may result in criminal prosecution and disciplinary action for weapons violations. Per CCCS SP 4-30a, Appendix A, weapons violations include:

- Possession, use, or distribution of explosives (including fireworks and ammunition), guns (including air, BB, paintball, facsimile weapons, and pellet guns), or other weapons or dangerous objects, such as arrows, axes, machetes, nunchaku, throwing stars, or knives with a blade of longer than three (3) inches. This includes the unauthorized storage of any item that falls within the category of a weapon, including storage in a vehicle parked on College property, other than what is expressly permitted by law.
- Possession of an instrument designed to look like a firearm, explosive, or dangerous weapon is also prohibited by this policy.
- Intentionally or recklessly using and/or possessing a weapon or any other item in such a way that would intimidate, harass, injure, or otherwise interfere with the learning and working environment of the College shall face increased consequences.
- Students are prohibited from carrying firearms on campus, including all buildings and grounds, except under limited exceptions. Those with a valid concealed carry permit may carry concealed firearms only in campus parking areas, in accordance with state law. Students enrolled in academic programs that involve firearms may use and carry them for approved educational purposes.
- For more information and compliance, see SP 19-10, Bullying/Violence/Firearms on Campus.

Questions should be directed to the Department of Campus Police.

## Parking and Traffic Regulations

The Pikes Peak State College Centennial Campus, Rampart Range Campus, and the Center for Healthcare Education & Simulation (CHES) will provide open parking in all general lots, supported by a student fee paid at registration.

Centennial Campus: Parking is available in lots C, D, and E. Motorcycles may be parked in the designated marked areas in lots C, D, and E.

Free Visitor and Future Student Parking is available in lots C, D, and E lots.

Rampart Range Campus: Parking is available in lots 1, 2, 3, 4, and 5. Motorcycles may be parked in the designated area in lot 2.

Center for Healthcare Education & Simulation (CHES): Students should park in the main lots in spaces that are not designated for accessibility or Campus Police. Designated parking on the southeast side of the building is for staff and faculty only.

Downtown Campus: Students may park in the Antlers garage for free, but a parking pass/hang tag is *required*. Students may also park in the lot behind Studio West only with a parking pass/hangtag. Students are not permitted to park in the parking lots near the campus that are not designated at PPSC parking, to include: the St. Mary's Cathedral parking lot, the Pikes Peak Library District parking lot, or parking areas of other nearby businesses. Parking passes can be obtained at no cost from the Downtown Campus front desk, Monday through Friday, 8:00 AM to 12:00 PM and 1:00 PM to 5:00 PM. To receive your pass, you must also show have your student or employee ID, license plate number, and a copy of your class schedule (either digital or printed).

Speed Limits: Speed limits on campus are 15-25 m.p.h. on Perimeter Road and Rampart Road unless otherwise posted, and 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.

Accessible Parking: Only vehicles identified as belonging to persons with disabilities and displaying state issued handicapped placards/license plates may park in the ADA designated parking areas.

Special Wheelchair Only: These spaces are reserved for use by those persons who use wheelchairs. Parking spaces are marked for "Wheelchair Only."

Centennial Campus: The accessible parking areas are in the North Lot with additional spaces available behind the Child Development Center.

Rampart Range Campus: The accessible parking areas are in lots 1, 2, and 3 with additional spaces available by the T Building.

Downtown Campus: The accessible parking area is in the faculty lot between the PDO-N and PDO-S buildings. Additional metered spaces are available in front of the PDO-S building.

Center for Healthcare Education and Simulation (CHES): Accessible parking spaces are available on either side of the main entrance.

Mopeds and Bicycles: Parking for these vehicles is available at the Centennial Campus outside the main entrance to A Building by A-262, 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 the Campus Police Department for safekeeping.

**Overnight Parking:** Overnight parking is prohibited at any Pikes Peak State College campus without prior written authorization from the Campus Police Department. Overnight Parking Waiver forms can be found online at: [www.pikespeak.edu/administration-operations/campus-police/forms.php](http://www.pikespeak.edu/administration-operations/campus-police/forms.php). Vehicles left overnight without prior authorization are subject to the Colorado Revised Statute abandoned vehicle law, C.R.S. 42-4-1803. Vehicles abandoned for 48 hours or more are subject to towing at the owner's expense. Vehicles left overnight may also be towed at the owner's expense prior to the 48-hour period if they pose a hazard or interfere with the operations of the college or any event scheduled on college property.

**Accidents:** Colorado law requires all accidents be reported to the proper authorities immediately. Pikes Peak State College campuses are State property, not private property. All accidents occurring on PPSC Campuses are subject to state law and must be reported to the Campus Police Department at 719-502-2900. Failure to report a traffic accident occurring on campus can result in criminal charges as per C.R.S. 42-4-1601 through 42-4-1606. In the event of an emergency, call 911.

**Traffic and Parking Violations:** The Campus Police Department 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-110 at Centennial Campus or S-102 at Rampart Range Campus, 8:00 a.m. to 5:00 p.m., Monday-Friday. The registered owner of the vehicle or identified user of the vehicle shall be held liable for all violations.

**Campus Citation Appeal:** If a person wishes to appeal a campus citation, he or she must submit a statement in writing before the tenth working day from the date of the citation. An appeal form is available in room A-100 at Centennial Campus, in room N-106 at Rampart Range Campus, and online at: [www.pikespeak.edu/administration-operations/campus-police/forms.php](http://www.pikespeak.edu/administration-operations/campus-police/forms.php).

A Police Sergeant will review the first appeal and have it mailed back to the appropriate person. If the appeal has been denied, a second appeal may be filed with the Chief of Police or his designee. The decision of the Chief of Police or his designee is final.

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

**Safety Escort Service:** Upon request, PPSC Campus Police officers will provide safety escorts between campus buildings and parking lots, including between the Downtown Campus and the Antlers parking garage, during times when the buildings are open. Anyone who wishes an escort may call the Campus Police office at 719-502-2900 or stop by Centennial Campus room A-100, Downtown Campus S-101, Rampart Range Campus N-106, or CHES room 105A.

## Behavioral Intervention Team (BIT)

PPSC'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.

PPSC'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 PPSC community. PPSC'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. PPSC 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 PPSC 's BIT takes all reports seriously. The earlier we know something is going on, the sooner we can help.

## What Happens When I Make a Report?

- The BIT immediately receives the report. The reporter will be contacted if more information is needed.
- BIT assesses the level of risk and threat for each concern and creates an appropriate intervention for the student.
- Intervention and resources are provided to support the student.
- Within the boundaries of privacy laws, updates may be provided to the reporter.

## How Do I Make a Report?

You may make a report at [www.pikespeak.edu/concern](http://www.pikespeak.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.

## Campus Police Department

### Emergencies and Crime Reporting

For emergencies, dial 911 from any campus or mobile phone. When calling 911 from a campus phone, it is not necessary to dial '9' first – simply dial 911. 911 should not be used for non-emergencies.

All emergencies and suspected criminal actions must be promptly reported to the Campus Police Department. 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 Colorado State Legislature has granted authority to commissioned officers of the Campus Police Department to enforce all laws and regulations. Officers work in cooperation with State and local law enforcement agencies.



## Sex Offender Information

Information concerning persons who are required by Colorado law to register as sex offenders, including registered sex offenders who are enrolled, employed, or volunteering at Pikes Peak State College, may be obtained from:

Colorado Springs Police Department  
705 South Nevada Avenue  
Colorado Springs 80903  
Phone: (719) 444-7000

El Paso County Sheriff's Office  
210 South Tejon Avenue  
Colorado Springs, Colorado 80903  
Phone: (719) 520-7100

Colorado Bureau of Investigation, Convicted Sex Offender Site  
([apps.colorado.gov/apps/dps/sor/search-agreement.jsf](https://apps.colorado.gov/apps/dps/sor/search-agreement.jsf))

## Emergency Notification System

PPSC uses an Emergency Notification System (ENS) to send emergency alerts and messages to the College community. Emergency notifications are sent via text, email, and voice messaging. Registered students and employees are automatically subscribed into this system using the contact information on file with the College. Anyone from the community can also sign up to receive PPSC emergency notifications.

For more information on the College's ENS, or to sign up to receive emergency notifications, go to [www.pikespeak.edu/administration-operations/emergency-management/index.php](http://www.pikespeak.edu/administration-operations/emergency-management/index.php).

Emergency Response Guide: Classrooms and work areas are equipped with Emergency Response Guides (ERGs), that list the most common types of emergencies and provide step-by-step guidance on specific actions to take during any particular emergency.

## Annual Security Report

The Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act (aka the Clery Act) requires colleges and universities that participate in federal financial aid programs to keep and disclose information about crime on and near their campuses. The U.S. Department of Education monitors compliance.

As part of Clery Act Compliance, PPSC issues an Annual Security Report (ASR). To access the current PPSC ASR, go to: [www.pikespeak.edu/administration-operations/campus-police/security-reports.php](http://www.pikespeak.edu/administration-operations/campus-police/security-reports.php).

# SERVICES FOR STUDENTS

## In This Section

Accessibility Services .....	40
Advising and Testing .....	41
Testing Centers .....	41
Campus Police Department.....	41
Career Services .....	41
Child Care .....	41
Computer Labs.....	41
Copy Center .....	42
Information Technology Support Services .....	42
Learning Commons.....	42
Mental Health Counseling .....	42
Ombuds .....	42
Records & Registrar.....	42
Educational Opportunity Center TRIO .....	43
TRIO Student Support Services .....	43
Transfer Events .....	43
Tutoring Services.....	43

## Accessibility Services

**Centennial • A-130 • 719-502-3333**

**Downtown • S201 • 719-502-3333**

**Rampart Range • S-129 • 719-502-3333**

[accessibilityservices@pikespeak.edu](mailto:accessibilityservices@pikespeak.edu)

Accessibility Services (AS) strives to create an accessible environment by determining 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:

- assistive technology
- alternative testing arrangements
- advocacy training
- readers/scribes for accommodative testing
- text in alternate formats
- interpreting services (American Sign Language)

It is the responsibility of ADA-qualified students to self-identify by meeting with Accessibility Service Specialists to go through an interactive process to request accommodations and support. Documentation about the nature and extent of their disability may be requested if needed but is not initially required. All information shared is kept confidential and will be used to plan for reasonable and appropriate services and accommodations.

Requesting accommodations from faculty/instructors or staff from other departments prior to meeting with AS does not imply accommodations have been granted or that the college has been informed of your disability status. Accommodation requests are evaluated individually through an interactive process. This process is an extensive conversation involving a review and analysis of documentation and circumstances which can be lengthy. Therefore, students are encouraged to connect with Accessibility Services early to allow time to provide supported accommodations in a timely manner. Students can schedule an appointment to request accommodations at any time during the semester. However, accommodations will not be retroactively provided. The college is not obligated to provide or continue to provide

accommodations that are/were approved by a different institution.

Accommodations provided in the academic environment may or may not be implemented at internships, clinical sites, or in the workplace.

It is the student's responsibility to self-advocate for approved accommodations by providing the Notification of Accommodations to their instructors. You are welcome to contact Accessibility Services for support or assistance with self-advocating for your academic needs.

Accommodations will not be approved or granted if the student does not meet the definition of a qualifying disability as defined in the Americans with Disabilities Act (ADA) and determined through the Accessibility Services interactive process review.

**Provisional Accommodations:** Accessibility Services does not support provisional accommodations. Students who are accommodated on a temporary medical or for a temporary physical injury will be required to provide documentation to be granted accommodations for the semester. Updated documentation may be requested depending on the student's current condition and need for continued accommodations.

**Testing Accommodations:** Some certification testing or licensure boards have specific processes for students requesting testing accommodation. Please check with your program area regarding the process to request accommodations for any professional certification or licensure testing that is not administered by the college. Documentation accepted by and accommodations granted by PPSC Accessibility Services may or may not be accepted by testing agencies or other higher education institutions

**Assistive Technology (AT) Lab:** The Assistive Technology Lab is located at the Centennial Campus in A130. The lab utilizes computer-assistive technology such as screen readers, voice recognition, alternative input/output devices, and screen magnification. Training opportunities to learn how to use assistive technology are offered. Please call AS (719-502-3333) to schedule an appointment with a team member.

**Interpreting Services.** Interpreting services are available for our Deaf and Hard of Hearing students. For more information or to request an ASL interpreter, please call 719-502-3026 or 719-428-9541 or complete the Interpreter Request Form [www.pikespeak.edu/student-support/accessibility-services/interpreter-request-form.php](http://www.pikespeak.edu/student-support/accessibility-services/interpreter-request-form.php).

**Student Code.** All students, with or without a disability, must adhere to the Pikes Peak State College Code.

## Advising and Testing

**Centennial • A-121 • 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.pikespeak.edu/advising](http://www.pikespeak.edu/advising), or one of our Advising & Testing offices, which are available at all PPSC campuses.

### Academic Advising

- Advising to help with decision-making, goal setting, and choosing a college course of study
- 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.pikespeak.edu/records/change-of-major](http://www.pikespeak.edu/records/change-of-major)

## Testing Centers

**Centennial • A-121 • 719-502-3370**  
**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 the English as a Second Language (ESL) program 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 computers at the Centennial and Rampart Range 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 at 719-502-3333.

Please call either of the Testing Centers for additional information.

## Campus Police Department

**Centennial • A-100 • 719-502-2900**  
**Downtown • S101 • 719-502-2900**  
**Rampart Range • N-106 • 719-502-2900**  
**Center for Healthcare Education & Simulation • 105A • 719-502-2900**

The Campus Police Department has offices at all campuses. The officers at all campuses can be reached via telephone at 719-502-2900. Emergency calls should be directed to 911 with a follow-up call to 719-502-2900 when the situation allows. The Campus Police Department is staffed by full-time and part-time sworn police officers who have been commissioned as 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.

## Career Services

**Centennial • A-316 • 719-502-2360**

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

### Explore Careers

- Unsure where to start? We have many resources to help discover the educational path for you. Meet with a Career Advisor or start with some resources to support you in your exploration.

### Career Services

- Let our Career Advisors help you with formatting your resume and working on your interview skills to help land your dream job.

### Job Search

- Looking for a job? Our Handshake technology can help connect you to a job on campus or out in the community

Set up an appointment by visiting us in room A-316 at the Centennial Campus, calling us at (719) 502-2360, emailing [career@pikespeak.edu](mailto:career@pikespeak.edu), or through Navigate.

## Child Care

The Child Development Center located at the Centennial Campus offers comprehensive educational childcare services for children in partnership with the Community Partnership for Child Development (CPCD; Head Start). CPCD is an award-winning early childhood education agency with over 65 classrooms in Colorado Springs and the surrounding area. Using a robust curriculum and trained staff, your child will thrive and grow in a quality learning environment. Find out more about us at [www.cpcdheadstart.org](http://www.cpcdheadstart.org).

## Computer Labs

**Centennial • 719-502-2442**  
**Downtown • 719-502-2443**  
**Rampart Range • 719-502-2408**

ITSS computer labs at the Centennial, the Downtown, 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.pikespeak.edu/computer-services/](http://www.pikespeak.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 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 N201a, this computer lab is equipped with 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 4:00 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.

## Information Technology Support Services

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

**Downtown • S109 • 719-502-4800**

**Rampart Range • E-204 • 719-502-4800**

**Center for Healthcare Education & Simulation • 105 • 719-502-4800**

The Information Technology Support Services (ITSS) department 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 a computer account and an e-mail address.

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

Free Wi-Fi access is available at all campuses.

The Self-Help Service Desk can be reached 24/7 via telephone at 1-888-800-9198 or online at <http://help.pikespeak.edu>.

## Learning Commons

**Centennial • A-200 • 719-502-2400**

**Downtown • S-100 • 719-502-2318**

**Rampart Range • N-200 • 719-502-2440**

[www.pikespeak.edu/library](http://www.pikespeak.edu/library)

The Learning Commons provides a supportive learning and study environment for students at the Centennial, Downtown, and the Rampart Range Campuses. Services provided at each location include Tutoring Services, Computer Labs, Research Support, Study Rooms, and Library Services. Tutoring and Library services are also available at the CHES campus. Library and Research Support resource materials include electronic databases, 150,000+ eBooks, online subject-specific research guides, print materials and Inter-Library Loan services.

## Reference and Research Service

Our professional reference and research librarians serve within the college's Learning Commons 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 and creates online research subject guides and videos. Reference librarians and peer research tutors are available for research assistance in-person and virtually. The reference staff also provides classroom-based research and information literacy instruction.

## Mental Health Counseling

**Centennial • A-141**

**Downtown • S129**

**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, 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, call 911 or go to your nearest emergency room. If you are on campus during normal business hours, you can call Campus Police at 719-502-2900. View additional mental health resources at [pikespeak.edu/counseling-center](http://pikespeak.edu/counseling-center).

## Ombuds

**Centennial • B-200 • 719-502-2006**

The PPSC Student Ombuds is a neutral person available to assist students who are seeking resolution to problems or concerns relating to their educational experience at PPSC. The Ombuds can help students navigate college organizational structure and bureaucracy and assist with understanding of policies and procedures. For additional information call 719-502-2006 or email [ombuds@pikespeak.edu](mailto:ombuds@pikespeak.edu).

## Records & Registrar

**Centennial • A-107 • 719-502-3000**

**Downtown • S100 • 719-502-3000**

**Rampart Range • S-102 • 719-502-3000**

All records of enrollment at PPSC are kept in Student Services. Students may view their records and ask to have information corrected or kept private. Transcripts are available upon request through Parchment. Transcript request instructions can be found online at [www.pikespeak.edu/records/request-transcripts](http://www.pikespeak.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. The form is located at [www.pikespeak.edu/records/request-transcripts](http://www.pikespeak.edu/records/request-transcripts).

All students attending classes at PPSC 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 <https://studentprivacy.ed.gov/ferpa/>.

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

## Educational Opportunity Center TRIO

### Centennial • A-110 • 719-502-3028

EOC TRIO 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.

## TRIO Student Support Services

### Centennial • A-130 • 719-502-3222

### Downtown • S126 (by appointment)

### Rampart Range • S-102f (by appointment)

[www.pikespeak.edu/student-support-services](http://www.pikespeak.edu/student-support-services)

The TRIO Student Support Services 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
- Career planning and exploration
- Success coaching
- Free Application for Federal Student Aid (FAFSA) and scholarship assistance
- Course selection and academic advising
- Transfer advising and other four-year college and university campus tours
- Skill-building workshops and pre-semester conferences
- Cultural events and field trips

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.pikespeak.edu/student-support/TRIO](http://www.pikespeak.edu/student-support/TRIO).

### Requirements

You are eligible to apply to receive services from TRIO as long as you meet one or more of the following Federal Requirements: First generation, low-income, or have a disability.

## Transfer Events

### All Campuses • 719-502-3232

Representatives from other colleges and universities regularly visit Pikes Peak State College to meet with students who plan to transfer after receiving an associate degree from PPSC. The schedules are available online.

## Tutoring Services

### Centennial • A300 • 719-502-3400

### Downtown Campus • Virtual Appointments

### Rampart Range • N200 • 719-502-3190

### Center for Healthcare Education & Simulation • Virtual Appointments

[www.pikespeak.edu/learning-commons/tutoring](http://www.pikespeak.edu/learning-commons/tutoring)

The mission of our Tutoring Services 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 [the Learning Commons](#). Tutoring resources include the following:

- Drop-in and appointment-based tutoring for many subjects, including math, writing, and sciences
- Live and asynchronous online writing support

Students seeking tutoring and other academic support services should:

- 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 appointment-based or asynchronous. More information about tutoring services at the Learning Commons can be found on our website.

# STUDENT EXPERIENCE & LEADERSHIP

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## In This Section

Student Activities & Programs.....	44
Multipurpose Areas.....	44
Student ID Cards.....	44
Office of Sustainability.....	44
Recreation and Wellness.....	45
PPSC Clubs and Organizations.....	45
Student Government Association.....	45

## Student Experience & Leadership

**Centennial • A-205 • 719-502-2522**

**Downtown • South Building, First Floor • 719-502-2538**

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

## Student Activities & Programs

Student Experience & Leadership creates spaces for building community and belonging through campus programs, events, clubs, organizations, and virtual platforms. Through collaborative programming, leadership and personal growth development, we aim to empower students to become active participants in creating a more inclusive, just, and liberated campus community. The Student Experience & Leadership office offers a full schedule of cultural, wellness, arts, and topical events aimed at enriching the student experience on campus. These events are either stand-alone or co-curricular, teaming up with faculty to enhance learning outside of the classroom. Lifestyle activities include personal growth-focused, career readiness, and lifestyle planning programs. Student activities include a focus on inclusive programming such as Hispanic Heritage Month, Domestic Violence Awareness Month, LGBTQIA+ History Month, Native American History Month, Black History Month, Women's History Month, Sexual Assault Awareness Month, Asian, and Native Hawaiian, and Pacific Islander History Month. Current events are covered with a wide range of speakers, panels, forums, trainings, and workshops. The Student Experience & Leadership office invites your ideas and participation. Please call 719-502-2522 or email sel@pikespeak.edu for more information.

## Multipurpose Areas

Centennial Campus houses a multipurpose area, called The Grove, where students, faculty, and staff can host trainings, workshops, meetings, and wide variety of activities to build community. When The Grove is not in use for a program, this facility serves as a space comfort and concentration where students can find a lounge area, study space, TV, music, and games. The Student Experience & Leadership office at the Centennial Campus is located in an office next to The Grove. These spaces are located in the Aspen Building on the second floor and the Student Experience & Leadership office in room A-205.

The Downtown Studio and Rampart Range Campuses each house student space for lounges, study areas, games, and student activities. The Student Lounge area at the Rampart Range Campus is located on the second floor next to the Student Experience & Leadership office. The Student Experience & Leadership office located on the second floor in room S-207 at the Rampart Range Campus. The Student Experience & Leadership desk at the Downtown Studio Campus is located on the first floor of the South Building in the Learning Commons.

Mission Statement: Student Experience & Leadership is dedicated to fostering an inclusive campus environment where every student feels valued, empowered, connected, and affirmed. We are committed to promoting diversity, equity, inclusion, belonging, justice, and leadership in all aspects of the student experience. Our mission is to create opportunities for meaningful engagement, cultivate a sense of community, and support the holistic development of all students.

## Student ID Cards

Every PPSC student needs a photo Student Identification Card. A properly validated Student ID Card enables students to use the library to check out materials, use the computer lab, print from the computers, and, depending on the student's program, allow them to do their practicum hours. The Student Identification Card for students at the Downtown Studio Campus allow them access to the building outside of operational hours until the building closes. The Student Identification Card also entitles students to free or reduced admission to student plays, dances, events, and other activities; as well as discounts to shopping and restaurants. Thanks to Student Fees, the Student ID also serves as their Mountain Metro Transit Bus Pass to incentives students to use public transportation to campuses and around town.

Students may obtain a Student ID Card after enrolling in classes of their first semester at PPSC. Students can obtain their Student ID Card by having a copy of their schedule and visiting the Student Leadership & Experience front desks at the Centennial and Rampart Range Campuses or if you are a student at the Downtown Studio Campus you may obtain your Student ID Card from the Student Experience & Leadership desk location there. This ID is valid for the student's entire career at PPSC. If the ID Card is lost, students can obtain a replacement ID for a charge. Proof of enrollment to PPSC is required for all new and replacement IDs.

Other Photo ID's: The Student Experience & Leadership office will also produce special IDs for nursing practicum students, Police Academy, Emergency Medical Tech, or if a special arrangement is made with a department.

## Office of Sustainability

**Centennial • A-201 • 719-502-2530**

The Office of Sustainability at Pikes Peak State College utilizes the framework of the 2030 Global Sustainable Development Goals as a guide to creating priorities to educate and advance causes of local organizations, important movements of our planet, & prosperity for current and future generations desires to work collaboratively with other local colleges and our Colorado Springs community we hope to ensure sustainability across our college campuses, communities, and the state. The Office of Sustainability works with students, faculty, and staff in addressing the sustainability challenges of the 21st century. With an increase in environmental issues the Office of Sustainability addresses these current issues through lifelong learning, transformative action, and innovative leadership. Sustainability explores the connections between economic prosperity, social equity, and environmental health. These concepts and practices prepare students to address society's most pressing problems and give them a competitive advantage in applying for jobs.

Pikes Peak State 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 State College.

Our mission is to foster a culture of resource conservation, social equity, and environmental stewardship at PPSC. The Green Campus Fee of \$0.39 per credit hour supports a sustainability coordinator and operating budget.

#### Our Services

- **Employment & Development:** We provide employment opportunities for all students and develop them to be sustainability ambassadors across our campuses.
- **Engagement:** We partner with staff and faculty to plan events, activities, and educational opportunities such as trainings and workshops.
- **Academic:** 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.
- **Community Outreach:** We partner with community organizations and local institutions of higher education to mutually exchange resources and opportunities.

To learn more and get involved, visit our website: [www.pikespeak.edu/sustainability](http://www.pikespeak.edu/sustainability) or email [sustainability@pikespeak.edu](mailto:sustainability@pikespeak.edu). The Office of Sustainability is located at the Centennial Campus in the Centennial Building in room C-201.

## Recreation and Wellness

### Centennial • A-262 • 719-502-2555

The Office for Recreation and Wellness is located at the Centennial Campus Fitness Center on the Aspen Building room A-262. The Fitness Center is a state-of-the-art cardiovascular/weight training facility with fully functional training areas. 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, college employees, and employee family members as long as academic classes are not taking place. Student membership is covered by student fees and faculty, staff, and employee family memberships are paid semesterly. Open gym activities include basketball, volleyball and spike ball. The recreation program includes monthly challenges, intramural sports, sport clubs, wellness events, and outdoor equipment rentals. The office schedules and coordinates the Fitness Center gymnasium, track and soccer field.

A student ID is required to gain access to the facility. On the first visit members will register, sign waivers, and go through a brief orientation. It is the policy of the Office of Recreation and Wellness and the PPSC Fitness Center to promote health and wellness while encouraging members to engage in safe conduct while participating in Recreation and Wellness services, activities, and events while utilizing recreational facilities. Accordingly, in addition to encouraging members to use good judgment, the Office of Recreation and Wellness has adopted this policy and authorized the Fitness Center to approve rules designed to encourage safe behavior on the part of current members of the Fitness Center. If you have any questions, please contact office at 719-502-3514 or email [RecAndWellness@pikespeak.edu](mailto:RecAndWellness@pikespeak.edu).

## PPSC Clubs and Organizations

PPSC Clubs & Organizations provide students with opportunities to engage, learn, and lead in topics they are interested or passionate about while developing lifelong organizational and leadership skills. If there's something students are passionate, driven, and interested in that currently is not offered as a club or an organization, students are encouraged to gather a group of five or more students and an advisor to start their club or organization! Clubs and organizations are open to all enrolled students. Some are geared towards specific academic, vocational programs, shared identities, hobbies, and a vast majority of interests. Organizations may have membership dues and grade-point-average (GPA) requirements.

We currently have 20 student clubs and organizations available on campus and are expanding! Some are active relative to an academic professional area such as Phi Theta Kappa Honor Society (PTK), Phi Beta Lambda (PBL)/Future Business Leaders Association, Culinary Club, and the Student Nurse Council to name a few. Others are related to affinity and Shared identities such as the Student Veteran Organization (SVO), Queer Empowerment, Neurodiversity Club, Black Student Union, and Latino Alliance to name a few. Involvement in clubs and organizations is a great way to meet students, to learn and practice leadership skills, build professional networks, gain a sense of belonging, and have fun at PPSC!

## Student Government Association

PPSC's Student Government Association (SGA) at Pikes Peak State College is the official representative voice for the student body. They seek to create an environment of growth and success through the guidance and development of character and by promoting change in favor of the student's interests, needs, and welfare. Participation in the Student Government Association is a great way to strengthen leadership skills, social development, and advocacy. Student leaders work on various issues affecting students and allocate student activity fees to enhance campus life. The Student Government Association is composed of the president, vice president, three senators and a State Student Advisory Council representative. Twice a month SGA has a Joint Session meeting that is open to the public. As a member of the PPSC community, you can come to these meetings with any topics or concerns you would like to discuss.

Elections are held during spring term. The executive officers and senators are elected during spring term. All elections are done via an online ballot through student emails.

# SERVICES FOR THE COMMUNITY

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## In This Section

Activities and Events.....	46
Workforce Development.....	46
The Studio West Art Gallery.....	46
eXtra Music 102.1 FM.....	46
PPSC -tv.....	46

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, PPSC 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:

- Hispanic Heritage Month
- Domestic Violence Awareness Month
- LGBTQIA+ History Month
- Living History Series
- Native American History Month
- Black History Month, Women's History Month
- Sexual Assault Awareness Month
- Asian, and Native Hawaiian, and Pacific Islander History Month

For more information, call the Student Experience & Leadership Office at 719-502-2522.

## 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.

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 [www.pikespeak.edu/workforce-development](http://www.pikespeak.edu/workforce-development), or call the Workforce Development Division at 719-502-2404.

For more information, contact our office at 719-502-2404 or email [contactce@pikespeak.edu](mailto:contactce@pikespeak.edu).

## The Studio West Art Gallery

The Gallery is located 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.

## eXtra Music 102.1 FM

Students in the Broadcasting and Electronic Media program at Pikes Peak State College can be heard in Colorado Springs on 102.1 FM or anywhere in the world streaming online at [pikespeak.edu/eXtraMusic](http://pikespeak.edu/eXtraMusic).

eXtra Music 102.1 FM is commercial free, student-powered maximum variety with 80's Flashbacks, 90's Retro Rewinds, 2000's Throwbacks and only the best alternative music of today.

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

eXtra Music 102.1 FM is on the air 24 hours a day, seven days a week, 365 days a year.

For more information, call 719-502-4102.

## PPSC-TV

You can see the results of all the hard work Broadcasting and Electronic Media students put into their video work on PPSC-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 PPSC programs, showcases of student and artist works, public service announcements, and promotional announcements of interest to PPSC students and community members. Viewers get a peek inside student life at PPSC, get community news and information, and encapsulations of PPSC activities and events.



# MILITARY, VETERANS, AND FAMILY MEMBERS

## In This Section

Military and Veteran Affiliated Students.....	47
Active Duty and Family Members /Guard and Reserve.....	47
Veterans / GI Bill® Benefit Users .....	48
Veterans Upward Bound .....	48

## Military and Veteran Affiliated Students

**Centennial • C222 • 719-502-4100**

**Rampart Range • S102f • 719-502-4500**

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

**Peterson Space Force Base (PSFB) • Education, Testing & Training Services Center • Building 1141 • Room 112 • 719-502-4300**

**Shriever Space Force Base (SSFB) and United States Air Force Academy (USAFA) • contact our PSFB office to schedule an appointment on site**

Website: [pikespeak.edu/admissions/military](http://pikespeak.edu/admissions/military)

Email: [mvp@pikespeak.edu](mailto:mvp@pikespeak.edu)

PPSC's Department of Military & Veterans Programs (MVP) 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 State 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, MVP provides:

- 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 PPSC 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 [www.pikespeak.edu/military/instate-tuition](http://www.pikespeak.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 PSFB Education Centers, providing you an all but one-stop shop to get started at PPSC. USAFA and SSFB are by appointment only.

- Application, advising, placement testing, registration, and other college services
- Tuition Assistance-- ArmyIgnitEd, 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.pikespeak.edu/mycaa](http://www.pikespeak.edu/mycaa)
- CLEP and DSST Testing
- Joint Service Transcript Evaluation (active duty)—Prior Learning Assessment (PLA)
- Student Agreement/Evaluated Degree Plan preparation
- On post/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
- Active duty and veterans who self-identify on their college application or submit a request for benefit use will have their joint service transcripts (JST) automatically ordered and evaluated for college credits that satisfy degree requirements—after the drop date of their classes during their first semester.

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 for assistance with completing the application process, placement testing or exemption based on prior college, academic advising, and course enrollment.
- Register for PPSC classes. If you need developmental courses, you must take a placement test to justify the courses for Tuition Assistance. More information available at [www.pikespeak.edu/placement](http://www.pikespeak.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).
- Army Tuition Assistance users must create an ArmyIgnitED account, select an Education Path, and complete the admissions and registration processes through PPSC. Step-by-step instructions provided at [www.pikespeak.edu/admissions/military/benefits/TA.php](http://www.pikespeak.edu/admissions/military/benefits/TA.php)

### Active-Duty Spouses—My Career Advancement Account Scholarship (MyCAA)

- Spouses of Active Duty Servicemembers may be eligible for a MyCAA scholarship. Learn more about MyCAA eligibility, apply, and request your Education and Training Plan at [www.pikespeak.edu/admissions/military/benefits/mycaa.php](http://www.pikespeak.edu/admissions/military/benefits/mycaa.php)

### Tuition Assistance (TA) Request Deadlines

- Army / Air Force / Space Force – TA requests must be submitted for approval no later than seven (7) days prior to start of term per class.
- Navy /Coast Guard – TA requests must be submitted for approval no later than fourteen (14) days prior to start of term per class.
- Marines—TA requests must be approved prior to the start of term date for the class.
- Colorado National Guard – See application instructions and deadlines [dmva.colorado.gov/tuition-assistance](http://dmva.colorado.gov/tuition-assistance)

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

## Veterans / GI Bill® Benefit Users

**Centennial • C222 • 719-502-4100**

**Rampart Range • S102f • 719-502-4500**

**[mvp@pikespeak.edu](mailto:mvp@pikespeak.edu)**

### GI Bill® Education

All students intending to use their GI Bill® benefits for the first time at PPSC 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 PPSC. 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 PPSC submitting your enrollment to the U.S. Department of Veterans Affairs (VA) for payment. Briefing schedules and registration are available on our website at [pikespeak.edu/briefing](http://pikespeak.edu/briefing).

### Services Available

- Assistance with applying for benefits
- School Certifying Officials (PPSC employees who act as liaisons to the VA)
- Veteran to Veterans
- Textbook Lending Library
- 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 VA Education Benefits

- Follow the steps in the VA Education Benefits User checklist at [www.pikespeak.edu/admissions/military/benefits/va-benefits-user-checklist.php](http://www.pikespeak.edu/admissions/military/benefits/va-benefits-user-checklist.php).

## Using GI Bill® Education Benefits at PPSC

- Monitor your student email for School Certifying Official communication.
- Follow the steps in the VA Education Benefits User checklist at [www.pikespeak.edu/admissions/military/benefits/va-benefits-user-checklist.php](http://www.pikespeak.edu/admissions/military/benefits/va-benefits-user-checklist.php).

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 [www.benefits.va.gov/gibill](http://www.benefits.va.gov/gibill).

## Veterans Upward Bound

**Centennial • C220 • 719-502-4020**

**[vub@csupueblo.edu](mailto:vub@csupueblo.edu)**

### Veteran/GI Bill® Benefit User Orientation

The Veterans Upward Bound (VUB) program offers free workshops, classes and advising to qualified veterans and active-duty military members. The classes offered are English, math, Spanish, computer skills and career counseling. All class materials are provided by VUB. VUB staff members can provide enrollment assistance for financial aid, scholarships, admission applications and campus tours. Emphasis is on low-income and first-generation students. VUB classes do not count for college credit but prepare the student to transition into college level academics.

# EDUCATIONAL PROGRAMS

## In This Section

Degree and Certificate Criteria .....	49
Degree Eligibility .....	50
College Preparatory Programs .....	50
Class Format Options .....	50
Prior Learning Assessment (PLA).....	51
Independent Study Courses.....	51
Service Learning .....	51
Options for Current High School Students .....	52
Concurrent Enrollment .....	52
Degree Start.....	52
Pivot.....	52
High School Student Records .....	52

## Degree and Certificate Criteria

Associate of Arts Degrees (AA) can be found on page 54.

Associate of Science Degrees (AS) can be found on page 83.

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 (AA) or Associate of Science (AS) 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 Dance, Environmental Sustainability Studies, World Language, Humanities, 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 General Studies Degree (AGS) can be found on page 93.

Associate of Applied Sciences Degrees (AAS) and Certificate programs are designed for entry to the workforce. These also include Career and Technical Education. Associate of Applied Sciences Degrees (AAS) and Certificate programs can be found on page 94.

Associate of Engineering Science Degree (AES) is designed for students who intend to pursue a four-year degree in an engineering field. Associate of Engineering Science Degree (AES) can be found on page 173.

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, PPSC 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 PPSC 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.

All degree programs include some General Education courses, which contribute to a student's holistic education but do not directly apply to a specific profession. All AA and AS degrees will include State Guaranteed General Education Transfer courses that are a part of the GT Pathways. These are guaranteed to transfer to every public Colorado college and university, if a student earns a C- or higher. These courses will apply to the GT Pathways requirements in AA, AS, and some bachelor's degree programs. See the GT Pathways Matrix at <https://cdhe.colorado.gov/students/attending-college/credit-transfer/guaranteed-transfer-gt-pathways-general-education> for more information.

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 PPSC may not then also apply for an AGS degree.

PPSC 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 PPSC in an identical or closely related program. However, students may appeal this decision.

## College Preparatory Programs

### Purpose and Goals

To maximize student success, PPSC provides college preparatory courses so students can be assured they are prepared to begin their course of study. Students enroll in college preparatory courses in mathematics and/or English to support their work in college-level courses as well as for personal enrichment.

Students who place into college prep courses in mathematics and/or English are encouraged to complete college preparatory courses within the first 30 semester credit hours. Students who have not completed college preparatory courses and have completed 30 or more semester credit hours are encouraged to meet with an academic advisor before registering for additional coursework.

### 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.

Students using Veterans Affairs education benefits should consult with Military and Veterans Programs for specific requirements prior to registering for these courses.

ENG 0094 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.

Students using Veterans Affairs education benefits should consult with Military and Veterans Programs for specific requirements prior to registering for these courses.

MAT 0300 Algebraic Literacy

## English as a Second Language Preparatory Program

### Centennial • 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 State College, visit our website at [www.pikespeak.edu/esl](http://www.pikespeak.edu/esl) or call 719-502-3535.

### Basic Level

ESL 0021	Basic Grammar	5
ESL 0031	Basic Listening & Speaking	4
ESL 0041	Basic Reading	<u>4</u>
		13

### Intermediate Level

ESL 0022	Intermediate Grammar	5
ESL 0032	Intermediate Listening & Speaking	4
or		
ESL 0042	Intermediate Reading	(4)
ESL 0052	Intermediate Composition	<u>4</u>
		13

### Advanced Level

ESL 0023	Advanced Grammar	5
ESL 0043	Advanced Reading	4
ESL 0053	Advanced Composition	<u>4</u>
		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 0011	Basic Pronunciation	3
ESL 0012	Intermediate Pronunciation	3

## Class Format Options

PPSC offers a variety of learning options for students including traditional (classroom-based), online, and alternate deliveries. Go to [www.pikespeak.edu/admissions/class-plans.php](http://www.pikespeak.edu/admissions/class-plans.php) to review options.

Online and alternative delivery classes meet the same class 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.

## Traditional Classes

Classroom-based face-to-face classes that meet on campus at pre-determined times.

## Online Classes

Classes are entirely online with no real-time expectations. Classes may be taken using computers at home or computers at PPSC. Internet access is required.

### CO Online (Sections CZ1, CZ2, CZ4, CZ5)

Courses are offered through a consortium of thirteen community colleges in Colorado. Students will register as a PPSC student, but an instructor may teach class from any of the thirteen colleges. For more information regarding CO Online classes go to [www.cccs.edu/colleges-programs/programs/online](http://www.cccs.edu/colleges-programs/programs/online).

### CO Online @ PPSC (Sections 1N1, 2N1, 3N1, etc.)

PPSC online class taught by PPSC instructors. If you are interested in registering for a CO Online @ PPSC Online class, look for sections with an N in the section number (for example, BUS 115-1N1).

1N\* sections are Full semester courses

2N\* sections are 1<sup>st</sup> Bi-Semester courses

3N\* sections are 2<sup>nd</sup> Bi-Semester courses

4N\* sections are Late Start courses

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

Part online, part in the classroom. Hybrid courses are courses that combine on-campus classroom instruction with online learning components and/or out-of-class activities. Hybrid learning is for students who wish to combine the flexibility of face-to-face instruction with activities such as online collaborative discussions, group projects, and/or other out-of-class assignments. In a Hybrid class, traditional face-to-face instruction will be reduced but not eliminated. Internet access is required for the online class activities.

If you are interested in registering for a Hybrid class, look for sections with an H in the section number (for example, BUS 115 1H1).

1H\* sections meet at Centennial Campus

2H\* sections meet at Rampart Range Campus

3H\* sections meet at the Downtown Studio Campus

9H\* sections meet at various Military installations

### Hyflex Classes

A highly flexible experience where the class is delivered entirely remotely in real-time, entirely in person in real-time, or a combination of the two. For Hyflex with Lab classes, lab will require in-person attendance.

### Remote Classes

Class will be taught in real-time with 100% remote delivery at pre-determined times. There is no scheduled in person attendance. Class will be 100% real-time live meetings delivered remotely via technology.

If you are interested in registering for a Remote Class, look for sections with a V in the section number (for examples, BUS 115 1V1).

1V\* sections are Full semester courses

2V\* sections are Bi-Semester courses

3V\* sections are Tri-Semester courses

4V\* sections are Late Start courses

## Prior Learning Assessment (PLA)

Students may earn credit for learning outside the classroom. Prior Learning Assessment must apply to a declared degree or certificate. Credit will be evaluated for:

- 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
- Institutional Challenge Exam: institutional exams developed by faculty that are typically the equivalent of a comprehensive final exam and may include a skills demonstration to assess mastery of the competencies required for the CCNS course being challenged
- 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)

PPSC 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.

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 institution to institution.

For more information, contact [priorlearning@pikespeak.edu](mailto:priorlearning@pikespeak.edu) or call 719-502-3000. Military and Veteran students, contact Department of Military & Veterans Programs at [mvp@pikespeak.edu](mailto:mvp@pikespeak.edu).

## Independent Study Courses

Extended learning options may be offered for students who cannot come to the PPSC 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 can be awarded for these courses.

Students receiving financial aid are cautioned to contact the Student Services Centers when registering for independent study courses.

## Service Learning

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 a formal academic course. For additional information and to see a current list of classes offered, visit <https://www.pikespeak.edu/academics/high-impact-learning/service-learning.php>.

## Options for Current High School Students

**Centennial • A-220 • 719-502-3111**

### Career Start

High school juniors and seniors may enroll in Career Start which provides career and technical training in the program areas listed below. Career Start is a cohort program that enrolls students into Pikes Peak State courses applicable to a career pathway for college and high school credit. Classes are in person on the Centennial Campus from 9-11:40 a.m., Monday through Friday and follow a Career Start specific calendar.

#### Career Start Programs

- Automotive Collision Technology
- Automotive Technology
- Behavioral Health
- Broadcasting and Electronic Media
- Building and Construction Technology
- Certified Nursing Assistant (CNA)
- Criminal Justice
- Culinary Arts
- Cybersecurity
- Diesel Technology
- Early Childhood Education
- Emergency Medical Technician
- Fire Science Technology
- Medical & Office Pathway (Records, Reception, and Billing and Coding)
- Multimedia Graphic Design
- Veterinary Assisting
- Welding
- Zoo Keeping Technology

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 PPSC 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 State College has articulation agreements with most local school districts. A transcription fee of \$10 per PPSC course is applicable. Articulated courses can apply toward corresponding degrees and certificates at Pikes Peak State College but are not designated as transfer courses to four-year colleges and universities. For more information, call PPSC High School Programs at 719-502-3111.

## Concurrent Enrollment

Concurrent Enrollment (CE) allows high school students to take college classes at PPSC and earn high school and college credit. Students enroll in courses for which they meet the prerequisites and are applicable to their future career and academic goals.

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). School districts under contract must pay for the tuition and may pay for fees and/or books for qualifying courses. Contact your high school counselor for more specific information. Home-schooled students are also welcome to participate with school district sponsorship. Contact the High School Programs Office at 719-502-3111 for more information.

### Degree Start

Degree Start is a program for junior and senior high school students majoring in transfer degrees at Pikes Peak State College. Students interested in Degree Start demonstrate their readiness to be successful in college level courses through placement testing. Classes are in person on the Centennial Campus from 9-11:40 a.m., Monday through Friday and follow the traditional college instructional calendar. Students should talk with their high school counselors to determine if Degree Start is a good fit to meet high school graduation requirements and to start earning college credits toward a transfer degree. For more information, contact High School Programs at 719-502-3111 or [hsp@pikespeak.edu](mailto:hsp@pikespeak.edu).

### Pivot

The Pivot Dropout Recovery program is an opportunity for students between the ages of 16-20 who have disengaged or are at risk of disengaging from their high schools to earn a high school diploma and college credits.

There are three criteria for identifying the ideal candidate:

- A student who expresses the desire to complete a high school diploma (rather than an equivalency diploma).
- A student who is at least 16 years old and who can earn enough high school credits to fulfill graduation requirements by 21 years of age.
- A student who has expressed some interest in post-secondary education or training.

School districts under contract with Pikes Peak State pay the costs of this program. Students taking part in Pivot need to be re-enrolled through a district program or school so that they may continue to add credits to a high school transcript. A school counselor supports the Pivot Success Coach with the development of a student success plan. Pivot students spend 100% of their school time on the college campus. For more information, contact High School Programs at 719-502-3111 or [hsp@pikespeak.edu](mailto:hsp@pikespeak.edu).

### High School Student Records

All students attending courses at PPSC are assumed to be independent, and therefore, information regarding their student records 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.pikespeak.edu/hsp](http://www.pikespeak.edu/hsp).

# DEGREE & PROGRAM REQUIREMENTS

## In This Section

Associate of Arts Degrees (AA).....	53
Associate of Science Degree (AS).....	83
Associate of General Studies Degree (AGS).....	93
Associate of Applied Science Degrees (AAS) and Certificates ....	96
Associate of Engineering Science Degree (AES).....	175
Bachelor of Applied Science Course of Study (BAS).....	176
Bachelor of Science in Nursing Course of Study (BSN).....	177
Other Programs and Courses of Study.....	178

## 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 State 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 State 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 PPSC 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 PPSC.*

### Written Communication

Six (6) credit hours	
ENG 1021	English Composition I: CO1 3
ENG 1022	English Composition II: CO2 3
OR	
ENG 1022	English Composition II: CO2 (3)
ENG 2001	English Composition III: CO3 (3)
or	
HIS 2765	Writing About History: CO3 (3)

### Oral Communication

Three (3) credit hours	
COM 1150	Public Speaking 3
COM 1250	Interpersonal Communication: SS3 3
COM 2300	Intercultural Communication: SS3 3

### Mathematics

Three (3) credit hours GT Pathways Mathematics course (MA1)	
GT-MA1:	MAT 1220, MAT 1230, MAT 1240, MAT 1260, MAT 1320, MAT 1340, MAT 1400, MAT 1420, MAT 1440, MAT 2410, MAT 2420, MAT 2430, MAT 2431, MAT 2520, MAT 2560, MAT 2561*

### 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 1110, ART 1111, ART 1112, ART 1113, COM 1300, COM 2400, DAN 1050, MUS 1020, MUS 1021, MUS 1022, MUS 1023, MUS 1025, THE 1005, THE 1008, THE 2011, THE 2012, THE 2015
GT-AH2:	HUM 1003, HUM 1015, HUM 1021, HUM 1022, HUM 1023, LIT 1015, LIT 2001, LIT 2002, LIT 2005, LIT 2011, LIT 2012, LIT 2021, LIT 2022, LIT 2025, LIT 2046, LIT 2058, LIT 2059*, LIT 2068
GT-AH3:	PHI 1011, PHI 1012, PHI 1013, PHI 1014, PHI 1015, PHI 1016, PHI 1041*, PHI 1042, PHI 2005, PHI 2013*, PHI 2014, PHI 2018, PHI 2020*
GT-AH4:	FRE 2011, FRE 2012, GER 2011, GER 2012, ITA 2011, ITA 2012, JPN 2011, JPN 2012, RUS 2011, RUS 2012, SPA 2011, SPA 2012
GT-SS1:	AGE 1102*, ECO 1001, ECO 2001, ECO 2002, ECO 2011, ECO 2045, PSC 1011, PSC 1025, PSC 1050, PSC 2005, PSC 2020, PSC 2025
GT-SS2:	GEO 1005, GEO 1006
GT-SS3:	AGR 2106*, ANT 1001, ANT 1003, ANT 1208*, ANT 2115, ANT 2125, ANT 2130, ANT 2550, COM 1250, COM 2220, COM 2300, CRJ 1010, JOU 1005, PSY 1001, PSY 1002, PSY 2105, PSY 2107, PSY 2221, PSY 2222, PSY 2331, PSY 2333, PSY 2440, PSY 2441, PSY 2552, PSY 2771, SOC 1001, SOC 1002, SOC 2005, SOC 2007, SOC 2016, SOC 2018, SOC 2020, SOC 2031, SOC 2037, WST 2000, WST 2200*, WST 2300*

### History

Three (3) credit hours GT Pathways History course (HI1)	
GT-HI1:	HIS 1110, HIS 1120, HIS 1210, HIS 1220, HIS 1310, HIS 1320, HIS 2000, HIS 2005, HIS 2015, HIS 2105, HIS 2110, HIS 2115, HIS 2125, HIS 2130, HIS 2135, HIS 2140, HIS 2145, HIS 2200, HIS 2210*, HIS 2300, HIS 2500, HIS 2510, HIS 2610

### 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 2140, ANT 1005, ANT 2315, AST 1110, AST 1120, BIO 1004, BIO 1005, BIO 1111, BIO 1112, BIO 2101, BIO 2102, BIO 2104, BIO 2108\*, BIO 2121, BIO 2124, CHE 1005, CHE 1011, CHE 1012, CHE 1111, CHE 1112, ENV 1111, GEO 1011, GEO 1012, GEY 1111, GEY 1112, GEY 1135, GEY 1155, MET 1050, PHY 1105, PHY 1107\*, PHY 1111, PHY 1112, PHY 2111, PHY 2112, SCI 1055, SCI 1056

GT-SC2: AST 1140, BIO 1003, BIO 1016, ENV 1010, GEY 1108, SCI 1105

### Electives

Twenty-three (23) credit hours selected from the AA approved course list can be found on page 54.

**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 PPSC.

Only six (6) elective credits are allowed in any combination of PED courses.

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.

Career and technical courses, whether taken at another institution or at PPSC, 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.

Courses numbered below 1000 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 State 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.

### Arts and Humanities

ARA 1011	Arabic Language I	5
ARA 1012	Arabic Language II	5
ARA 2011	Arabic Language III	3
ARA 2012	Arabic Language IV	3
ART 1002	Visual Concepts 2-D Design	3
ART 1003	3-D Design	3
ART 1005	Digital Art Foundations I	3

ART 1006	Digital Art Foundations II	3
ART 1110	Art Appreciation: AH1	3
ART 1111	Art History Ancient to Medieval: AH1	3
ART 1112	Art History Renaissance to 1900: AH1	3
ART 1113	Art History 1900 to Present: AH1	3
ART 1115	History of Photography	3
ART 1201	Drawing I	3
ART 1202	Drawing II	3
ART 1203	Figure Drawing I	3
ART 1205	Drawing for the Graphic Novel	3
ART 1301	Painting I	3
ART 1302	Painting II	3
ART 1307	Watercolor I	3
ART 1308	Watercolor II	3
ART 1401	Digital Photography I	3
ART 1405	Mixed Media I: Digital Arts	3
ART 1604	Jewelry & Metalwork I	3
ART 1605	Jewelry & Metalwork II	3
ART 1703	Ceramics I	3
ART 1704	Ceramics II Wheel Throwing	3
ART 1805	Stained Glass I	3
ART 1806	Stained Glass II	3
ART 2049	Mixed Media II: Digital Art	3
ART 2089	Capstone: Studio Art	1-6
ART 2201	Drawing III	3
ART 2202	Drawing IV	3
ART 2203	Advanced Figure Drawing	3
ART 2301	Painting III	3
ART 2302	Painting IV	3
ART 2307	Watercolor III	3
ART 2308	Watercolor IV	3
ART 2405	Portrait Photography	3
ART 2407	Landscape Photography	3
ART 2603	Jewelry and Metalwork III	3
ART 2604	Jewelry and Metalwork IV	3
ART 2703	Ceramics III Molding & Slip Casting	3
ART 2704	Ceramics IV	3
ART 2805	Stained Glass III	3
ART 2806	Stained Glass IV	3
ART 2901	Business of Visual Art	3
ART 2902	Marketing for Visual Arts	3
ASL 1121	American Sign Language I	5
ASL 1122	American Sign Language II	5
ASL 1123	American Sign Language III	5
ASL 1125	Fingerspelling	3
ASL 1135	Conversational ASL	2
ASL 2215	ASL Literature	3
ASL 2221	American Sign Language IV: AH4	3
ASL 2222	American Sign Language V: AH4	3
CHI 1011	Chinese Language I	5
DAN 1002	Feldenkrais Method for Performing Artists	3
DAN 1005	Hip Hop Dance I	1
DAN 1006	Hip Hop Dance II	1
DAN 1011	Modern Dance I	1
DAN 1012	Modern Dance II	2
DAN 1013	Modern Dance III	2
DAN 1014	Modern Dance IV	2
DAN 1017	Salsa I	1
DAN 1021	Jazz I	1
DAN 1022	Jazz II	2
DAN 1023	Jazz III	2
DAN 1024	Jazz IV	2
DAN 1025	Dance Appreciation: AH1	3
DAN 1031	Ballet I	1
DAN 1032	Ballet II	2
DAN 1033	Ballet III	2
DAN 1034	Ballet IV	2
DAN 1041	Ballroom Dance	1
DAN 1042	Ballroom Dance II	1



DAN 1043	Tap I	1	MUS 1025	History of Jazz: AH1	3
DAN 1044	Tap II	1	MUS 1026	History of Rock & Pop	3
DAN 1050	Dance History: AH1	3	MUS 1031	Music Class I	2
DAN 1051	Belly Dance I	1	MUS 1032	Music Class II	2
DAN 1052	Belly Dance II	1	MUS 1033	Music Class III	2
DAN 2011	Dance Composition & Improvisation I	3	MUS 1034	Music Class IV	2
DAN 2012	Dance Composition & Improvisation II	3	MUS 1041	Private Instruction	1
DAN 2021	Dance Performance I	2	MUS 1042	Private Instruction	1
DAN 2022	Dance Performance II	2	MUS 1043	Private Instruction	1
DAN 2024	Dance for Musical Theatre I	3	MUS 1044	Private Instruction	1
DAN 2025	Dance for Musical Theatre II	3	MUS 1051	Ensemble I	1
DAN 2051	Belly Dance III	1	MUS 1052	Ensemble II	1
DAN 2054	Methods of Teaching Dance	2	MUS 1053	Ensemble III	1
DAN 2055	Dance for Camera	2	MUS 1054	Ensemble IV	1
FRE 1001	Conversational French I	3	MUS 1067	Music Business I	3
FRE 1011	French Language I	5	MUS 2010	Music Theory III	3
FRE 1012	French Language II	5	MUS 2011	Music Theory IV	3
FRE 2011	French Language III: AH4	3	MUS 2012	Ear Training/Sight-Singing Lab III	1
FRE 2012	French Language IV: AH4	3	MUS 2013	Ear Training/Sight-Singing Lab IV	1
GER 1011	German Language I	5	MUS 2032	Music Class II	2
GER 1012	German Language II	5	MUS 2033	Music Class III	2
GER 2011	German Language III: AH4	3	MUS 2034	Music Class IV	2
GER 2012	German Language IV: AH4	3	MUS 2041	Private Instruction	2
HUM 1003	Introduction to Film Art: AH2	3	MUS 2042	Private Instruction	2
HUM 1015	World Mythology: AH2	3	MUS 2043	Private Instruction	2
HUM 1021	Early Civilization: AH2	3	MUS 2044	Private Instruction	2
HUM 1022	Medieval - Modern: AH2	3	MUS 2051	Ensemble I	1
HUM 1023	Modern World: AH2	3	MUS 2052	Ensemble II	1
ITA 1001	Conversational Italian I	3	MUS 2053	Ensemble III	1
ITA 1011	Italian Language I	5	MUS 2054	Ensemble IV	1
ITA 1012	Italian Language II	5	PHI 1011	Introduction to Philosophy: AH3	3
ITA 2011	Italian Language III: AH4	3	PHI 1012	Ethics: AH3	3
ITA 2012	Italian Language IV: AH4	3	PHI 1013	Logic: AH3	3
JPN 1001	Conversational Japanese I	3	PHI 1014	Comparative Religions: AH3	3
JPN 1011	Japanese Language I	5	PHI 1015	World Religions-West: AH3	3
JPN 1012	Japanese Language II	5	PHI 1016	World Religions-East: AH3	3
JPN 2011	Japanese Language III: AH4	3	PHI 1042	New Testament: AH3	3
JPN 2012	Japanese Language IV: AH4	3	PHI 2001	Social & Political Philosophy	3
LIT 1015	Introduction to Literature I: AH2	3	PHI 2005	Business Ethics: AH3	3
LIT 1021	Survey of World Mythology	3	PHI 2014	Philosophy of Religion: AH3	3
LIT 2001	World Literature to 1600: AH2	3	PHI 2018	Environmental Ethics: AH3	3
LIT 2002	World Literature after 1600: AH2	3	PHI 2050	Eastern Wisdom	3
LIT 2005	Race, Ethnicity, and Culture in U.S. Literature: AH2	3	PHO 1020	Fundamentals of Photography	3
LIT 2011	American Literature to Civil War: AH2	3	PHO 2005	Professional Digital Photo I	3
LIT 2012	American Literature after the Civil War: AH2	3	PHO 2026	Digital Workflow Management	3
LIT 2021	British Literature to 1770: AH2	3	PHO 2034	View Camera/Lighting Technique	3
LIT 2022	British Literature since 1770: AH2	3	RUS 1011	Russian Language I	5
LIT 2025	Introduction to Shakespeare: AH2	3	RUS 1012	Russian Language II	5
LIT 2035	Science Fiction	3	RUS 2011	Russian Language III: AH4	3
LIT 2046	Literature of Women: AH2	3	RUS 2012	Russian Language IV: AH4	3
LIT 2048	Native American Literature	3	SPA 1001	Conversational Spanish I	3
LIT 2055	Children's Literature: AH2	3	SPA 1002	Conversational Spanish II	3
LIT 2057	Literature & Film	3	SPA 1009	Spanish for Travelers	2
LIT 2058	Latinx Literature: AH2	3	SPA 1011	Spanish Language I	5
LIT 2068	Celtic Literature: AH2	3	SPA 1012	Spanish Language II	5
LIT 2069	Popular Literature & Culture	3	SPA 1014	Fast-Track Spanish I & II	5
MUS 1000	Music Theory Fundamentals I	3	SPA 1015	Spanish for the Professional I	3
MUS 1001	Music Theory Fundamentals II	3	SPA 2001	Conversational Spanish III	3
MUS 1005	Introduction to Computer Applications	3	SPA 2002	Conversational Spanish IV	3
MUS 1010	Music Theory I	3	SPA 2011	Spanish Language III: AH4	3
MUS 1011	Music Theory II	3	SPA 2012	Spanish Language IV: AH4	3
MUS 1012	Ear Training/Sight-singing I Lab	1	SPA 2015	Spanish for the Professional II	3
MUS 1013	Ear Training/Sight-singing II Lab	1	SPA 2061	Spanish Language for Heritage & Intermediate-Mid Speakers	3
MUS 1020	Music Appreciation: AH1	3	SPA 2062	Writing for Heritage & Intermediate-Mid Spanish Speakers	3
MUS 1021	Music History Medieval thru Classical: AH1	3	THE 1005	Theatre Appreciation: AH1	5
MUS 1022	Music History Early Romantic Period to the Present: AH1	3	THE 1011	Acting I	3
MUS 1023	Survey of World Music: AH1	3	THE 1012	Acting II	3

THE 1015	Stage Movement for Actors	3	BIO 1112	GenBio II: Ecology & Organismic Biology w/Lab: SC1	5
THE 1016	Technical Theatre	3	BIO 2101	Human Anatomy & Physiology I w/Lab: SC1	4
THE 1031	Theatre Production I	3	BIO 2102	Human Anatomy & Physiology II w/Lab: SC1	4
THE 1032	Theatre Production II	3	BIO 2103	Advanced Human Anatomy	2
THE 1035	Stage Makeup I	3	BIO 2104	Microbiology w/Lab: SC1	4
THE 1083	Internship	1-3	BIO 2116	Human Pathophysiology	4
THE 2011	Development of Theatre Greek-Renaissance: AH1	3	BIO 2121	Botany w/Lab: SC1	5
THE 2012	Development of Theatre Restoration to Modern: AH1	3	BIO 2124	Genetics: SC1	4
THE 2015	Playwriting: AH1	3	CHE 1005	Chemistry in Context w/Lab: SC1	5
THE 2020	Directing I	3	CHE 1011	Introduction to Chemistry I w/Lab: SC1	5
THE 2055	Intermediate Playwriting	3	CHE 1012	Introduction to Chemistry II w/Lab: SC1	5
<b>History</b>			CHE 1111	General College Chemistry I w/Lab: SC1	5
HIS 1110	The World: Antiquity-1650: HI1	3	CHE 1112	General College Chemistry II w/Lab: SC1	5
HIS 1120	The World: 1650-Present: HI1	3	CHE 2111	Organic Chemistry I w/Lab	5
HIS 1210	U.S. History to Reconstruction: HI1	3	CHE 2112	Organic Chemistry II w/Lab	5
HIS 1220	U.S. History since the Civil War: HI1	3	CSC 1005	Computer Literacy	3
HIS 1310	Western Civilization: Antiquity-1650: HI1	3	CSC 1019	Introduction to Programming: Programming Language)	3
HIS 1320	Western Civilization: 1650-Present: HI1	3	CSC 1020	Problem Solving With (Software Package)	3
HIS 2000	History of Science & Technology: HI1	3	CSC 1026	Game Design & Development	3
HIS 2005	Women in World History: HI1	3	CSC 1060	Computer Science I: (Language)	4
HIS 2015	20th Century World History: HI1	3	CSC 1061	Computer Science II: (Language)	4
HIS 2105	Women in U.S. History: HI1	3	CSC 2020	Introduction to Microsoft Visual Basic. NET	3
HIS 2110	African American History: HI1	3	CSC 2025	Computer Architecture/Assembly Language Programming	4
HIS 2115	American Indian History: HI1	3	CSC 2030	C Programming: Platform	3
HIS 2125	American Environmental History: HI1	3	CSC 2033	Object-Oriented Programming: (Language)	3
HIS 2130	History of the American West: HI1	3	CSC 2036	C# Programming	4
HIS 2135	Colorado History: HI1	3	CSC 2040	Java Programming	3
HIS 2140	Civil War Era in American History: HI1	3	CSC 2046	Mobile App Development :(Platform)	3
HIS 2145	U.S. History Since 1945: HI1	3	CSC 2067	Object-Oriented Analysis & Design	3
HIS 2200	History of Latin America: HI1	3	ENV 1010	Natural Disasters: SC2	3
HIS 2300	The Middle Ages: HI1	3	ENV 1111	Environmental Science w/Lab: SC1	4
HIS 2500	History of Islamic Civilization: HI1	3	GEO 1011	Physical Geography: Landforms w/Lab: SC1	4
HIS 2510	Modern Middle East: HI1	3	GEO 1012	Physical Geography: Weather, Climate & Ecosystems w/Lab: SC1	4
HIS 2610	History of Modern China: HI1	3	GEY 1108	Geology of U.S. National Parks: SC2	3
<b>Mathematics</b>			GEY 1111	Physical Geology w/Lab: SC1	4
MAT 1220	Integrated Math I: MA1	3	GEY 1112	Historical Geology w/Lab: SC1	4
MAT 1230	Integrated Math II: MA1	3	GEY 1135	Environmental Geology w/Lab: SC1	4
MAT 1240	Mathematics for the Liberal Arts: MA1	4	GEY 1155	General Oceanography with Lab: SC1	3
MAT 1260	Introduction to Statistics: MA1	3	HWE 1019	Skills & Methods of Teaching Fitness Instruction	3
MAT 1320	Finite Mathematics: MA1	4	HWE 1050	Human Nutrition	3
MAT 1340	College Algebra: MA1	4	HWE 1061	Fitness & Wellness	2
MAT 1400	Survey of Calculus: MA1	4	HWE 1062	Health & Wellness	3
MAT 1420	College Trigonometry: MA1	3	HWE 1064	Weight Management & Exercise	2
MAT 1440	Pre-Calculus: MA1	5	HWE 1068	Certified Personal Trainer Preparatory Course	3
MAT 2410	Calculus I: MA1	5	HWE 2060	Exercise, Nutrition & Body Composition	3
MAT 2420	Calculus II: MA1	5	HWE 2064	Health & Wellness Coaching	3
MAT 2430	Calculus III: MA1	4	MET 1050	General Meteorology w/Lab: SC1	4
MAT 2431	Calculus III with Engineering Applications: MA1	5	PHY 1105	Conceptual Physics w/Lab: SC1	4
MAT 2520	Discrete Mathematics: MA1	4	PHY 1111	Physics: Algebra-Based I w/Lab: SC1	5
MAT 2540	Linear Algebra	3	PHY 1112	Physics: Algebra-Based II w/Lab: SC1	5
MAT 2560	Differential Equations: MA1	3	PHY 2111	Physics: Calculus-Based I w/Lab: SC1	5
<b>Natural and Physical Sciences</b>			PHY 2112	Physics: Calculus-Based II w/Lab: SC1	5
AGY 2140	Introductory Soil Science: SC1	4	SCI 1055	Integrated Science I-Physics & Chemistry w/Lab: SC1	4
ANT 1005	Biological Anthropology w/Lab: SC1	4	SCI 1056	Integrated Science II-Earth & Life Sciences w/Lab: SC1	4
ANT 2315	Introduction to Forensic Anthropology: SC1	4	<b>Social and Behavioral Sciences</b>		
AST 1110	Planetary Astronomy w/Lab: SC1	4	ANT 1001	Cultural Anthropology: SS3	3
AST 1120	Stellar Astronomy w/Lab: SC1	4	ANT 1003	Introduction to Archaeology: SS3	3
AST 1140	Astronomy of Ancient Cultures: SC2	3	ANT 1101	Exploring Other Cultures I	3
BIO 1003	Principles of Animal Biology: SC2	3	ANT 2101	Exploring Other Cultures II	3
BIO 1004	Biology: A Human Approach: SC1	4	ANT 2115	Native Peoples of North America: SS3	3
BIO 1005	Science of Biology w/Lab: SC1	4	ANT 2125	Anthropology of Religion: SS3	3
BIO 1006	Basic Anatomy & Physiology	4	ANT 2130	Sex, Gender & Culture: SS3	3
BIO 1048	Basic Ecology	4	ANT 2218	Archaeology of the Bible	3
BIO 1111	GenBio I: Molecular & Cellular Biology w/Lab: SC1	5			

ANT 2317	Human Prehistory: SS3	3	ENG 1031	Technical Writing I: CO1	3
ANT 2545	Anthropology of Energy	3	ENG 1032	Technical Writing II	3
ANT 2550	Medical Anthropology: SS3	3	ENG 2001	English Composition III: CO3	3
CRJ 1010	Introduction to Criminal Justice: SS3	3	ENG 2005	Technical Editing	3
CRJ 1012	Procedural Criminal Law	3	ENG 2021	Creative Writing I: AH1	3
CRJ 1025	Policing Systems	3	ENG 2022	Creative Writing II	3
CRJ 1027	Crime Scene Investigation	3	ENG 2026	Fiction Writing	3
CRJ 1035	Judicial Function	3	ENG 2027	Poetry Writing	3
CRJ 1045	Correctional Process	3	ENG 2030	Creative Nonfiction	3
CRJ 2005	Principles of Criminal Law	3	ENG 2031	Literary Magazine	3
CRJ 2009	Criminal Investigation I	3	ENG 2035	Rhetoric & Propaganda	3
CRJ 2010	Constitutional Law	3	HIS 2765	Writing About History: CO3	3
CRJ 2016	Juvenile Law & Procedures	3	JOU 1005	Introduction to Mass Media: SS3	3
CRJ 2020	Human Relations & Social Conflict	3	JOU 1006	Media News & Reporting	3
CRJ 2025	Crisis Intervention	3	JOU 1021	Photojournalism	3
CRJ 2030	Criminology	3	JOU 2006	Intermediate Newswriting & Editing	3
CRJ 2031	Introduction to Forensic Science & Criminalistics	3	JOU 2015	Publications Production & Design	3
CRJ 2035	Delinquent Behavior	3	JOU 2025	New Media	3
CRJ 2036	Criminal Justice Research Methods	3	JOU 2031	Introduction to Public Relations	3
CRJ 2057	Victimology	3	JOU 2041	Feature & Magazine Writing	3
CRJ 2068	Criminal Profiling	3			
ECO 2001	Principles of Macroeconomics: SS1	3	<b>Other Approved Electives</b>		
ECO 2002	Principles of Microeconomics: SS1	3	ACC 2011	Intermediate Accounting I	4
ECO 2045	Environmental Economics: SS1	3	ACC 2012	Intermediate Accounting II	4
ETH 2024	Introduction to Chicano Studies	3	ACC 2016	Governmental & Not-for-Profit Accounting	3
GEO 1005	World Regional Geography: SS2	3	ACC 2026	Cost Accounting	3
GEO 1006	Human Geography: SS2	3	ACC 2087	Cooperative Education	3
JOU 1005	Introduction to Mass Media: SS3	3	BUS 1015	Introduction to Business	3
PSC 1011	American Government: SS1	3	BUS 2003	Introduction to International Business	3
PSC 1025	American State & Local Government: SS1	3	BUS 2016	Legal Environment of Business	3
PSC 1050	Current Political Issues: SS1	3	BUS 2017	Business Communication & Report Writing	3
PSC 2005	International Relations: SS1	3	BUS 2026	Business Statistics	3
PSC 2020	Introduction to Political Science: SS1	3	CIS 1004	Word Processing with Assistive Technology	3
PSC 2025	Comparative Government: SS1	3	CIS 1010	Introduction to Computing Technology: (Device)	1
PSY 1001	General Psychology I: SS3	3	CIS 1015	Introduction to Computer Information Systems	3
PSY 1002	General Psychology II: SS3	3	CIS 1018	Introduction to PC Applications	3
PSY 2105	Psychology of Gender: SS3	3	CIS 1024	Introduction to Operating Systems	3
PSY 2107	Human Sexuality: SS3	3	CIS 1028	Operating System: Using_____	3
PSY 2221	Social Psychology: SS3	3	CIS 1055	Complete Spreadsheets: (Software package)	3
PSY 2222	The Psychology of Death & Dying: SS3	3	CIS 2067	Management of Information Systems	3
PSY 2331	Positive Psychology: SS3	3	CIS 2089	Capstone	3
PSY 2332	Psychology of Adjustment	3	ECE 1011	Introduction to Early Childhood Education	3
PSY 2333	Health Psychology: SS3	3	ECE 1031	Guidance Strategies for Young Children	3
PSY 2440	Human Growth & Development: SS3	3	ECE 1045	Introduction to Early Childhood Education Techniques	3
PSY 2441	Child Development: SS3	3	ECE 1925	School Age Lab Techniques	3
PSY 2551	Child Abuse & Neglect	3	ECE 2051	Nutrition, Health & Safety	3
PSY 2552	Psychopathology: SS3	3	ECE 2061	Observation & Assessment of Young Children's Development, Learning, & Programs	1
PSY 2660	Introduction to Evolutionary Psychology	3	ECE 2079	Seminar	1-6
PSY 2661	Brain & Behavior	3	ECE 2089	Capstone: Early Childhood Education	5
PSY 2771	Psychology of Personality: SS3	3	ECE 2101	Working with Families & Communities	3
SOC 1001	Introduction to Sociology I: SS3	3	ECE 2371	Theories & Techniques of Social & Emotional Growth	3
SOC 1002	Introduction to Sociology II: SS3	3	ECE 2381	ECE Child Growth & Development	3
SOC 2005	Sociology of Family Dynamics: SS3	3	ECE 2411	Administration: Human Relations for Early Childhood Education	3
SOC 2007	Environmental Sociology: SS3	3	ECE 2601	The Exceptional Child	3
SOC 2016	Sociology of Gender: SS3	3	ECE 2615	Exceptional Child Lab Techniques	3
SOC 2018	Sociology of Diversity: SS3	3	ECE 2621	Curriculum Development: Methods & Techniques	3
SOC 2020	Sociology of Religion: SS3	3	ECE 2631	Language & Cognition for the Young Child	3
SOC 2031	The Sociology of Deviant Behavior: SS3	3	ECE 2641	Creativity & the Young Child	3
SOC 2037	Sociology of Death & Dying: SS3	3	ECE 2661	Science/Math & the Young Child	3
WST 2000	Introduction to Women's & Gender Studies: SS3	3	EDU 2211	Introduction to Education	3
			EDU 2341	Multicultural Education	3
			EDU 2611	Teaching, Learning & Technology	3
			EDU 2631	Teaching & Learning Online	3
			EGG 1020	Engineering Methodologies	3
			EGG 2020	Thermodynamics	3
			EGG 2050	Engineering Economics	3
<b>Written Communication</b>					
COM 1150	Public Speaking	3			
COM 1250	Interpersonal Communication: SS3	3			
COM 2220	Group Communication: SS3	3			
COM 2250	Organizational Communication	3			
COM 2300	Intercultural Communication: SS3	3			
ENG 1015	Technical English & Communication	3			
ENG 1021	English Composition I: CO1	3			
ENG 1022	English Composition II: CO2	3			

EGT 2303	Applied Dimension & Tolerance	3
EGT 2305	Geometric Dimension & Tolerance	3
EMS 1021	EMT Fundamentals	3
ENP 1005	Introduction to Entrepreneurship	3
FIN 2010	Principles of Finance	3
HPR 1013	AHA Heartsaver First Aid CPR & AED	0.5
HWE 1061	Fitness & Wellness	2
HWE 1062	Health & Wellness	3
HWE 1065	Introduction to Exercise Health Sciences	3
HWE 2060	Exercise, Nutrition & Body Composition	3
HWE 2063	Exercise Testing Prescription	3
MAN 2000	Human Resource Management I	3
MAN 2016	Small Business Management	3
MAN 2026	Principles of Management	3
MAN 2046	Critical Issues in Marketing & Management	3
MAR 2016	Principles of Marketing	3
MAR 2020	Principles of Advertising	3
MAR 2049	Strategic Marketing	3
MGD 1002	Introduction to Multimedia	3
MGD 1007	History of Design	2
MGD 1011	Adobe Photoshop I	3
MGD 1012	Adobe Illustrator I	3
MGD 1013	Adobe InDesign	3
MGD 1014	Typography I	3
MGD 1017	Introduction to Visual Communications	3
MGD 1020	Production Design	3
MGD 1034	Drawing for Illustrators	3
MGD 1041	Web Design I	3
MGD 1043	Motion Graphic Design I: (Software)	3
MGD 1064	Digital Video Editing I	3
MGD 1065	After Effects I	3
MGD 2013	Electronic Prepress	3
MGD 2021	Computer Graphics I	3
MGD 2042	Web Architecture: Open Source Design	3
NRE 2014	Environmental Issues & Ethics	3
PED 1002	Weight Training I	1
PED 1003	Weight Training II	2
PED 1010	Fitness Center Activity I	1
PED 1011	Fitness Center Activity II	1
PED 1012	Fitness Center Activity III	1
PED 1013	Fitness Center Activity IV	1
PED 1022	Step Aerobics	1
PED 1026	Cardio Kickboxing Aerobic I	1
PED 1029	Zumba	1
PED 1040	Body Sculpturing & Toning	1
PED 1041	Pilates Matwork I	1
PED 1042	Pilates Matwork II	1
PED 1043	Yoga I	1
PED 1044	Yoga II	1
PED 1051	Walking & Jogging	1
PED 1061	Tai Chi I	1
PED 1063	Martial Arts I	1
PED 2030	Volleyball I	1
PED 2031	Volleyball II	1
REC 1000	Introduction to Recreation	2
RTV 1000	Introduction to Electronic Media	3
RTV 2002	Advanced Television Production	3

# Associate of Arts Degrees and Courses of Study

## Anthropology

### Associate of Arts Degree with Designation

Recommended basic skills courses are

- College Readiness in English
- College Readiness for Quantitative Literacy for MAT 1260
- College Readiness for Algebra for MAT 1340

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 1021	English Composition I: CO1	3
ENG 1022	English Composition II: CO2	3
OR		
ENG 1022	English Composition II: CO2	(3)
ENG 2001	English Composition III: CO3	(3)
or		
HIS 2765	Writing About History: CO3	(3)

#### Mathematics

Three-four (3-4) credit hours

- GT - One GT Pathways course (GT-MA1); prefer MAT 1260, except:
  - University of Colorado, Denver requires either MAT 1260 or MAT 1340
  - Western State Colorado University requires MAT 1340

#### Arts and Humanities

Six (6) credit hours. Full list of requirements can be found on page 53.

- 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 53.

- GT - One GT Pathways History course (HI1)

#### Social and Behavioral Sciences

Six (6) credit hours. Full list of requirements can be found on page 53.

- 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 53.

- 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 53.

ANT 1001	Cultural Anthropology: SS3	3
ANT 1003	Introduction to Archaeology: SS3	3
ANT 1005	Biological Anthropology w/Lab: SC1	4
COM 1150	Public Speaking	3
or		
COM 1250	Interpersonal Communication: SS3	(3)
or		
COM 2300	Intercultural Communication: SS3	(3)
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 54.

#### Suggested Courses

ANT 1001	Cultural Anthropology: SS3	3
ANT 1003	Introduction to Archaeology: SS3	3
ANT 1005	Biological Anthropology w/Lab: SC1	4
ANT 1101	Exploring Other Cultures I	3
ANT 2101	Exploring Other Cultures II	3
ANT 2115	Native Peoples of North America: SS3	3
ANT 2218	Archaeology of the Bible	3
ECO 2001	Principles of Macroeconomics: SS1	3
GEO 1005	World Regional Geography: SS2	3
PSC 2020	Introduction to Political Science: SS1	3
PSY 1001	General Psychology I: SS3	3
PSY 1002	General Psychology II: SS3	3
SOC 1001	Introduction to Sociology I: SS3	3
SOC 1002	Introduction to Sociology II: SS3	3

#### Total Credit Hours

60

Additional information available on the Anthropology Department website at [www.pikespeak.edu/programs/anthropology](http://www.pikespeak.edu/programs/anthropology).

## Art - Art History

### Associate of Arts Degree with Designation

Recommended basic skills courses are

- College Readiness in English
- College Readiness for 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 1021	English Composition I: CO1	3
	or	
ENG 1031	Technical Writing I: CO1	(3)
ENG 1022	English Composition II: CO2	3
	OR	
ENG 1022	English Composition II: CO2	(3)
ENG 2001	English Composition III: CO3	(3)
	or	
HIS 2765	Writing About History: CO3	(3)

#### Mathematics

Three (3) credit hours

- GT - One GT Pathways course (GT-MA1), prefer MAT 1240

#### Arts and Humanities

Six (6) credit hours. Full list of requirements can be found on page 53.

- 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 53.

- GT - One GT Pathways History course (HI1)

#### Social and Behavioral Sciences

Six (6) credit hours. Full list of requirements can be found on page 53.

- 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 53.

- GT - Two GT Pathways Natural and Physical Sciences courses (SC1). One of these courses must have the required Laboratory (GT-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.

ART 1002	Visual Concepts 2-D Design	3
ART 1003	3-D Design	3
ART 1111	Art History Ancient to Medieval: AH1	3
ART 1112	Art History Renaissance to 1900: AH1	3
ART 1113	Art History 1900 to Present: AH1	3
ART 1201	Drawing I	3

#### Electives

Fourteen (14) credit hours selected from the AA approved course list on page 54. **60**

#### Total Credit Hours

Students planning to transfer to CSU-FC will be required to complete a 2000-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.pikespeak.edu/programs/art](http://www.pikespeak.edu/programs/art).

## Art - Studio Art

### Associate of Arts Degree with Designation

Recommended basic skills courses are

- College Readiness in English
- College Readiness for 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. Students interested in teacher licensure in Studio Art should contact their academic advisor at PPSC.

**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 1021	English Composition I: CO1	3
ENG 1022	English Composition II: CO2	3
OR		
ENG 1022	English Composition II: CO2	(3)
ENG 2001	English Composition III: CO3	(3)
or		
HIS 2765	Writing About History: CO3	(3)

**Mathematics**

Three (3) credit hours

- GT - One GT Pathways course (GT-MA1); prefer MAT 1240

**Arts and Humanities**

Six (6) credit hours. Full list of requirements can be found on page 53.

- 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 53.

- GT - One GT Pathways History course (HI1)

**Social and Behavioral Sciences**

Six (6) credit hours. Full list of requirements can be found on page 53.

- 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 53.

- 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 1002	Visual Concepts 2-D Design	3
ART 1003	3-D Design	3
ART 1111	Art History Ancient to Medieval: AH1	3
ART 1112	Art History Renaissance to 1900: AH1	3
ART 1201	Drawing I	3
ART 1202	Drawing II	3
or		
ART 1203	Figure Drawing I Studio Art course	(3) 3

**Electives**

Eight (8) credit hours selected from the AA approved course list on page 54.

**Total Credit Hours** **60**

Additional information available on the Art - Studio Art Department website at [www.pikespeak.edu/programs/art](http://www.pikespeak.edu/programs/art).

**Business****Associate of Arts Degree with Designation**

Recommended basic skills courses are

- College Readiness in English
- College Readiness for Algebra

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 1021	English Composition I: CO1	3
or		
ENG 1031	Technical Writing I: CO1	(3)
ENG 1022	English Composition II: CO2	3
OR		
ENG 1022	English Composition II: CO2	(3)
ENG 2001	English Composition III: CO3	(3)
or		
HIS 2765	Writing About History: CO3	(3)

**Mathematics**

Four (4) credit hours

MAT 1320	Finite Mathematics: MA1	4
or		
MAT 1340	College Algebra: MA1	(4)
or		
MAT 1400	Survey of Calculus: MA1	(4)

**Arts and Humanities**

Six (6) credit hours. Full list of requirements can be found on page 53.

PHI 2005	Business Ethics AH3	3
GT - One GT Pathways Arts and Humanities courses (AH1, AH2, AH3, AH4)		3

**History**

Three (3) credit hours. Full list of requirements can be found on page 53.

- GT - One GT Pathways History course (HI1)

**Social and Behavioral Sciences**

Six (6) credit hours GT Pathways Social and Behavioral Sciences courses

ECO 2001	Principles of Macroeconomics: SS1	3
ECO 2002	Principles of Microeconomics: SS1	3

**Natural and Physical Sciences**

Seven (7) credit hours. Full list of requirements can be found on page 53.

GT	- Two GT Pathways Natural and Physical Sciences courses (SC1), one must be with laboratory	7
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**Additional Required Courses**

Twenty-one to twenty-three (21-23) credit hours

ACC 1011	Introduction to Financial Accounting	3
	or	
ACC 1021	Accounting Principles I	(4)
ACC 1012	Introduction to Managerial Accounting	3
	or	
ACC 1022	Accounting Principles II	(4)
BUS 1015	Introduction to Business	3
BUS 2016	Legal Environment of Business	3
BUS 2017	Business Communication & Report Writing	3
BUS 2026	Business Statistics	3
COM 1150	Public Speaking	3

**Electives**

Five to seven (5-7) credit hours selected from the AA approved course list on page 54.

**Total Credit Hours** 60

Additional information available on the Business Department website at [www.pikespeak.edu/programs/business/business-program-options](http://www.pikespeak.edu/programs/business/business-program-options).

## Communication

### Associate of Arts Degree with Designation

Recommended basic skills courses are

- College Readiness in English
- College Readiness for Quantitative Literacy

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. The degree provides rhetorical and social scientific theory, tools, and techniques for analyzing, managing, and improving communication in every arena of professional and personal interaction. Courses may include public speaking, interpersonal and group communication, intercultural and organizational communication.

**Program Learning Outcomes**

Upon completion of the Communication degree program, students should be able to:

- Identify the unique characteristics of the field of Communication compared to other disciplines, such as psychology, sociology, and media studies
- Demonstrate verbal and nonverbal communication that reflect self-efficacy, adaptability, and professionalism in a variety of contexts

- Critique personal communication strengths and areas for improvement through self-reflection and peer feedback
- Compare diverse perspectives in interpersonal, organizational, and media-related settings
- Examine individual and cultural similarities and differences through effective intercultural communication
- Apply active listening and conflict management strategies in group settings

**Written Communication**

Six (6) credit hours

ENG 1021	English Composition I: CO1	3
	or	
ENG 1031	Technical Writing I: CO1	(3)
ENG 1022	English Composition II: CO2	3
	OR	
ENG 1022	English Composition II: CO2	(3)
ENG 2001	English Composition III: CO3	(3)
	or	
HIS 2765	Writing About History: CO3	(3)

**Mathematics**

Three (3) credit hours

- GT - One GT Pathways course (GT-MA1); prefer MAT 1240

**Arts and Humanities**

Six (6) credit hours. Full list of requirements can be found on page 53.

- 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 53.

- GT - One GT Pathways History course (HI1)

**Social and Behavioral Sciences**

Six (6) credit hours. Full list of requirements can be found on page 53.

GT	- Two GT Pathways Social and Behavioral Sciences course (SS1, SS2, SS3)	6
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**Natural and Physical Sciences**

Seven (7) credit hours. Full list of requirements can be found on page 53.

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. Full list of requirements can be found on page 53.

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 1150	Public Speaking	3
COM 1250	Interpersonal Communication: SS3	3
COM 2220	Group Communication: SS3	3
COM 2300	Intercultural Communication: SS3	3
	One (1) COM course	3



**Electives**

Eleven (11) credit hours selected from the AA approved course list can be found on page 54.

Please note: Additional COM courses beyond the 5 courses (15 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.pikespeak.edu/programs/communication](http://www.pikespeak.edu/programs/communication).

## Criminal Justice

### Associate of Arts Degree with Designation

Recommended basic skills courses are

- College Readiness in English
- College Readiness for Quantitative Literacy for MAT 1240 or MAT 1260
- College Readiness for Algebra for MAT 1340

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 PPSC.*

#### 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 1021	English Composition I: CO1	3
ENG 1022	English Composition II: CO2	3
OR		
ENG 1022	English Composition II: CO2	(3)
ENG 2001	English Composition III: CO3	(3)
or		
HIS 2765	Writing About History: CO3	(3)

#### Mathematics

Three-four (3-4) credit hours

- GT - One GT Pathways course (GT-MA1); prefer MAT 1260, except:
  - University of Colorado, Colorado Springs prefers MAT 1240
  - Colorado Mesa University requires either MAT 1240 or MAT 1340

- University of Northern Colorado requires MAT 1260

#### Arts and Humanities

Six (6) credit hours. Full list of requirements can be found on page 53.

- 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 53.

- |  |                                  |   |
|--|----------------------------------|---|
| SOC 1001   | 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 53.

- 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 1150	Public Speaking	3
or		
COM 1250	Interpersonal Communication: SS3	(3)
CRJ 1010	Introduction to Criminal Justice: SS3	3
CRJ 1025	Policing Systems	3
CRJ 1045	Correctional Process	3

Choose two (2) courses from the following

CRJ 1027	Crime Scene Investigation	3
CRJ 1035	Judicial Function	3
CRJ 2005	Principles of Criminal Law	3
CRJ 2009	Criminal Investigation I	3
CRJ 2030	Criminology	3
CRJ 2031	Introduction to Forensic Science & Criminalistics	3
CRJ 2035	Delinquent Behavior	3
CRJ 2036	Criminal Justice Research Methods	3
CRJ 2057	Victimology	3
CRJ 2068	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 2058	Computer Forensics	3
COM 2220	Group Communication: SS3	3
COM 2250	Organizational Communication	3
PSC 1011	American Government: SS1	3
PSC 1025	American State & Local Government: SS1	3
PSY 2107	Human Sexuality: SS3	3
PSY 2221	Social Psychology: SS3	3
PSY 2552	Psychopathology: SS3	3
PSY 2770	Introduction to Forensic Psychology	3
SOC 2031	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 54.

**Total Credit Hours** **60**

Additional information available on the Criminal Justice Department website at [www.pikespeak.edu/programs/criminal-justice](http://www.pikespeak.edu/programs/criminal-justice).

**Dance****Associate of Arts Degree with Designation**

Recommended basic skills courses are

- College Readiness in English
- College Readiness for 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 1021	English Composition I: CO1	3
	or	
ENG 1031	Technical Writing I: CO1	(3)
ENG 1022	English Composition II: CO2	3
	OR	
ENG 1022	English Composition II: CO2	(3)
ENG 2001	English Composition III: CO3	(3)
	or	
HIS 2765	Writing About History: CO3	(3)

**Mathematics**

Three (3) credit hours. One GT Pathways Mathematics course (GT-MA1).

Suggested Course

MAT 1240	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 53.

DAN 1050	Dance History: 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 2300	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 53.

**Additional Required Courses**

DAN 2011	Dance Composition & Improvisation I	3
DAN 2012	Dance Composition & Improvisation II	2
DAN 2021	Dance Performance I	2
DAN 2022	Dance Performance II	2
DAN 2054	Methods for Teaching Dance	2
DAN 2055	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**

Additional information available on the Dance Department website at [www.pikespeak.edu/programs/dance](http://www.pikespeak.edu/programs/dance).

## Early Childhood Education Teacher Preparation

### Associate of Arts Degree with Designation

Recommended basic skills courses are

- College Readiness in English
- College Readiness for 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 PPSC 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.

#### 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 1021	English Composition I: CO1	3
ENG 1022	English Composition II: CO2	3

#### Mathematics

Four (4) credit hours

MAT 1240	Mathematics for the Liberal Arts: MA1	4
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#### Arts and Humanities

Six (6) credit hours

ART 1110	Art Appreciation: AH1	3
MUS 1020	Music Appreciation: AH1	3
THE 1005	Theatre Appreciation: AH1	3
and		
LIT 1015	Introduction to Literature I: AH2	3
or		
LIT 2055	Children's Literature: AH2	(3)

#### History

Three (3) credit hours

HIS 1210	U.S. History to Reconstruction: HI1	3
HIS 1220	U.S. History since Civil War: HI1	3

#### Social and Behavioral Sciences

Six (6) credit hours

GEO 1005	World Regional Geography: SS2	3
PSY 1001	General Psychology: SS1	3

#### Natural and Physical Sciences

Eight (8) credit hours

SCI 1055	Integrated Science I-Physics & Chemistry w/Lab: SC1	4
SCI 1056	Integrated Science II-Earth & Life Sciences w/Lab: SC1	4

Students must pass with a C or higher BOTH SCI 1055 and SCI 1056 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 1011	Introduction to Early Childhood Education	3
ECE 1031	Guidance Strategies for Young Children	3
ECE 1045	Introduction to Early Childhood Education Techniques	3
ECE 2101	Working with Families & Communities	3
ECE 2381	ECE Child Growth & Development	3
ECE 2621	Curriculum Development: Methods & Techniques	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.pikespeak.edu/programs/early-childhood-education/ece-program-options](http://www.pikespeak.edu/programs/early-childhood-education/ece-program-options).

## Economics

### Associate of Arts Degree with Designation

Recommended basic skills courses are

- College Readiness in English
- MAT 1340 and MAT 1420  
or
- MAT 1340 and MAT 1440

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 1021	English Composition I: CO1	3
or		
ENG 1031	Technical Writing I: CO1	(3)
ENG 1022	English Composition II: CO2	3
OR		
ENG 1022	English Composition II: CO2	(3)
ENG 2001	English Composition III: CO3	(3)
or		
HIS 2765	Writing About History: CO3	(3)

**Mathematics**

Three (3) credit hours

MAT 1260	Introduction to Statistics: MA1	3
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**Arts and Humanities**

Six (6) credit hours. Full list of requirements can be found on page 53.

- GT - Two GT Pathways Arts and Humanities courses from two different categories (AH1, AH2, AH3, AH4)

Recommended

PHI 1012	Ethics	3
or		
PHI 2005	Business Ethics	(3)

**History**

Three (3) credit hours. Full list of requirements can be found on page 53.

- GT - 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)

**Natural and Physical Sciences**

Seven (7) credit hours. Full list of requirements can be found on page 53.

- GT - Two GT Pathways Natural and Physical Sciences courses (SC1, SC2), one must be with laboratory (SC1)

**Additional Required Course**

Eleven (11) credit hours

ECO 2001	Principles of Macroeconomics: SS1	3
ECO 2002	Principles of Microeconomics: SS1	3
MAT 2410	Calculus 1: MA1	5

**Electives**

Eighteen (18) credit hours selected from the AA approved course list can be found on page 54.

**Total Credit Hours** 60Additional information available on the Economics Department website at [www.pikespeak.edu/programs/economics](http://www.pikespeak.edu/programs/economics).

## Elementary Education Teacher Preparation

**Associate of Arts Degree with Designation**

Recommended basic skills courses are

- College Readiness in English
- College Readiness for 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 1021	English Composition I: CO1	3
ENG 1022	English Composition II: CO2	3

Note: Some educator preparation programs require a B- in ENG 1021 as an admission requirement. However, a C- or better meets the general education GT-CO1 requirement.

**Mathematics**

Six (6) credit hours

MAT 1220	Integrated Math I: MA1	3
MAT 1230	Integrated Math II: MA1	3

**Arts and Humanities**

Six (6) credit hours

LIT 2055	Children's Literature: AH2	3
One additional GT Pathways AH2 course		3

**History**

Three (3) credit hours

HIS 1210	U.S. History to Reconstruction: HI1	3
or		
HIS 1220	U.S. History Since the Civil War: HI1	(3)

**Social and Behavioral Sciences**

Six (6) credit hours

GEO 1005	World Regional Geography: SS2	3
or		
GEO 1006	Human Geography: SS2	(3)
PSC 1011	American Government: SS1	3

**Natural and Physical Sciences**

Eight (8) credit hours

SCI 1055	Integrated Science I-Physics & Chemistry w/Lab: SC1	4
SCI 1056	Integrated Science II-Earth & Life Sciences w/Lab: SC1	4

Students must pass with a C- or higher BOTH SCI 1055 and SCI 1056 to satisfy the GT Pathways science requirement.

**Additional Requirements**

Sixteen (16) credit hours

**Arts and Humanities**

Three (3) credit hours

ART 1110	Art Appreciation: AH1	3
or		
DAN 1025	Dance Appreciation: AH1	(3)
or		
MUS 1020	Music Appreciation: AH1	(3)
or		
THE 1005	Theatre Appreciation: AH1	(3)

**Social and Behavioral Sciences**

Three (3) credit hours

PSY 2441	Child Development: SS3	3
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**Field of Study**

Ten (10) credit hours

EDU 2088	Practicum II	1
	or Any other one-credit course	(1)
EDU 2211	Introduction to Education	3
EDU 2341	Multicultural Education	3
EDU 2611	Teaching, Learning, & Technology	3

**Electives**

Nine (9) 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.pikespeak.edu/programs/education/education-program-options](http://www.pikespeak.edu/programs/education/education-program-options).

**English****Associate of Arts Degree with Designation**

Recommended basic skills courses are

- College Readiness in English
- College Readiness for 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 English teachers, they will learn to promote literacy and thoughtful discourse 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 teacher licensure or literature, should contact their academic advisor at PPSC.

*Courses marked with an asterisk [\*] are not currently offered at PPSC.*

**Program Learning Outcomes**

Upon completion of the English 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 1021	English Composition I: CO1	3
ENG 1022	English Composition II: CO2	3
	OR	
ENG 1022	English Composition II: CO2	(3)
ENG 2001	English Composition III: CO3	(3)
	or	
HIS 2765	Writing About History: CO3	(3)

**Mathematics**

Three (3) credit hours

- GT - One GT Pathways course (GT-MA1); prefer MAT 1240

**Arts and Humanities**

Nine (9) credit hours. Full list of requirements can be found on page 53.

- 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 53.

- GT - One GT Pathways History course (HI1)

**Social and Behavioral Sciences**

Six (6) credit hours. Full list of requirements can be found on page 53.

- 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 53.

- 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 1150	Public Speaking	3
	or	
COM 1250	Interpersonal Communication: SS3	(3)
	or	
COM 2250	Organizational Communication	(3)
	Five GT Pathways Arts & Humanities Literature (LIT) courses within the GT- AH2 category.	15

At least four of the five LIT courses must be at the 2000-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 54.

**Recommended Courses**

ENG 2021	Creative Writing I: AH1	3
ENG 2022	Creative Writing II	3
HIS 1310	Western Civilization: Antiquity-1650: HI1	3
HIS 1320	Western Civilization: 1650-Present: HI1	3
HUM 1003	Introduction to Film Art: AH2	3
HUM 1015	World Mythology: AH2	3
PHI 1011	Introduction to Philosophy: AH3	3
PSY 2771	Psychology of Personality: SS3	3

**Total Credit Hours** 60

Additional information available on the English Department website at [www.pikespeak.edu/programs/english](http://www.pikespeak.edu/programs/english).

# Environmental Sustainability Studies

## Associate of Arts Course of Study

Recommended basic skills courses are

- College Readiness in English
- College Readiness for Quantitative Literacy

This interdisciplinary program studies the interconnections between social, economic, and environmental systems. The program seeks to understand the complex interactions and relationships humans have with the natural world. Students develop critical and systems thinking skills to analyze real-world problems and evaluate sustainable solutions. The program provides students with opportunities to learn in the field, engage with industry leaders, and work on real-world projects.

The curriculum in this program is designed to prepare students to transfer to a baccalaureate institution and complete a four-year degree in an environmental or sustainability related field of study. This program prepares students for a wide variety of careers, including conservation scientists, sustainability specialists, environmental planners, industrial ecologists, and compliance managers. While a baccalaureate or higher degree is recommended for those considering professional careers related to this field, earning the Associate degree will demonstrate achievement and support pursuit of entry-level employment.

### Program Learning Outcomes

Upon completion of the Environmental Sustainability Studies degree program, students should be able to:

- 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 worldviews, power structures, and experiences of individuals, groups, communities, or cultures, in historical or contemporary contexts

### Written Communication

Six (6) credit hours. Two GT Pathways English courses (CO1, CO2, CO3)

ENG 1021	English Composition I: CO1	3
ENG 1022	English Composition II: CO2	3
OR		
ENG 1022	English Composition II: CO2	(3)
ENG 2001	English Composition III: CO3	(3)

### Oral Communication

Three (3) credit hours

COM 1150	Public Speaking	3
COM 1250	Interpersonal Communication: SS3	3
COM 2300	Intercultural Communication: SS3	3

### Mathematics

Three to four (3-4) credit hours. One GT Pathways course (GT-MA1)

MAT 1240	Mathematics for the Liberal Arts: MA1	4
or		
MAT 1260	Introduction to Statistics: MA1	(3)
or		
MAT 1340	College Algebra: MA1	(4)

### Arts and Humanities

Six (6) credit hours. Full list of requirements can be found on page 53.

Two GT Pathways Arts and Humanities (AH1, AH2, AH3, AH4).

#### Required Course

PHI 2018	Environmental Ethics: AH3	3
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#### Suggested Course

PHI 2005	Business Ethics: AH3	3
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### History

Three (3) credit hours GT Pathways History course (HI1)

#### Suggested Courses

HIS 2000	History of Science & Technology: HI1	3
HIS 2115	American Indian History: HI1	3
HIS 2125	American Environmental History: HI1	3
HIS 2135	Colorado History: HI1	3

### Social and Behavioral Sciences

Nine (9) credit hours. Three (3) GT Pathways Social and Behavioral Science courses (SS1, SS2, SS3)

#### Required Courses

ECO 2045	Environmental Economics: SS1	3
SOC 2007	Environmental Sociology: SS3	3

One additional required GT Pathways course from Social and Behavioral Sciences (SS1, SS2, SS3)

ANT 1001	Cultural Anthropology: SS3	3
ANT 2115	Native Peoples of North America: SS3	3
ANT 1005	World Regional Geography: SS2	3
GEO 1006	Human Geography: SS2	3
PSC 1025	American State & Local Government: SS1	3
PSC 1050	Current Political Issues: SS1	3

### Natural and Physical Sciences

Eight (8) credit hours. Two (2) GT Pathways Natural and Physical Sciences courses (SC1, SC2), with two lab courses (SC1).

#### Required Courses

ENV 1111	Environmental Science w/Lab: SC1	4
GEO 1012	Physical Geography – Weather and Climate w/Lab: SC1	4

#### Additional Required Courses

Nine to thirteen (9-13) credit hours GT Pathways courses (SC1, SC2)

GEY 1108	Geology of U.S. National Parks: SC2	3
GEY 1111	Physical Geology w/Lab: SC1	4
GEY 1135	Environmental Geology w/Lab: SC1	4
GEY 1155	General Oceanography w/Lab: SC1	4

AND

Select one of the following

ENV 1010	Natural Disasters: SC2	3
GEO 1011	Physical Geography: Landforms w/Lab: SC1	4
MET 1050	General Meteorology w/Lab: SC1	4
PHY 1105	Conceptual Physics w/Lab: SC1	4
SCI 1055	Integrated Science I-Physics & Chemistry w/Lab: SC1	4
SCI 1056	Integrated Science II-Earth and Life Sciences w/Lab: SC1	4

AND

Select one of the following

BIO 1003	Principles of Animal Biology: SC2	4
BIO 1005	Science of Biology w/Lab: SC1	4
BIO 1111	GenBio I: Molecular & Cellular Biology w/Lab: SC1	5
BIO 1112	GenBio II: Ecology & Organismic Biology w/Lab: SC1	5
CHE 1005	Chemistry in Context w/Lab: SC1	5
CHE 1111	General College Chemistry I w/Lab: SC1	5
CHE 1112	General College Chemistry II w/Lab: SC1	5

### Electives

Other Suggested GT-Elective Courses

Eight to thirteen (8-13) credit hours

Any additional courses in the following areas: BIO, GEO, GEY listed above in the additional required area OR from the prefixes of ANT, ART, CHE, COM, ENG, ENV, HIS, JOU, LIT, PHY, POS, or SUS

**Total Credit Hours** **60**

## French

### Associate of Arts Degree with Designation

Recommended basic skills courses are

- College Readiness in English
- College Readiness for Quantitative Literacy

PPSC'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 1021	English Composition I: CO1	3
ENG 1022	English Composition II: CO2	3
OR		
ENG 1022	English Composition II: CO2	(3)
ENG 2001	English Composition III: CO3	(3)
or		
HIS 2765	Writing About History: CO3	(3)

### Mathematics

Three (3) credit hours

- GT - One GT Pathways course (GT-MA1); prefer MAT 1240

### Arts and Humanities

Nine (9) credit hours

FRE 2011	French Language III: AH4	3
FRE 2012	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 53.

- 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 53.

- 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 53.

- GT - Two GT Pathways Natural and Physical Sciences courses (SC1, SC2)

### Additional Required Courses

Ten (10) credit hours

FRE 1011	French Language I	5
FRE 1012	French Language II	5

FRE 1011 and/or FRE 1012 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 54. Suggested courses include 2000-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 1150 or COM 1250.

**Total Credit Hours** **60**

Additional information available on the French Department website at [www.pikespeak.edu/programs/french/index.php](http://www.pikespeak.edu/programs/french/index.php).

# Geography

## Associate of Arts Degree with Designation

Recommended basic skills courses are

- College Readiness in English
- College Readiness for Quantitative Literacy for MAT 1240 or MAT 1260
- College Readiness for Algebra for MAT 1340

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 1021	English Composition I: CO1	3
or		
ENG 1031	Technical Writing I: CO1	(3)
ENG 1022	English Composition II: CO2	3
OR		
ENG 1022	English Composition II: CO2	(3)
ENG 2001	English Composition III: CO3	(3)
or		
HIS 2765	Writing About History: CO3	(3)

### Mathematics

Three (3) credit hours

- GT - One GT Pathways course (GT-MA1); prefer MAT 1260, except:
  - Metropolitan State University of Denver requires either MAT 1260 or MAT 1340
  - University of Colorado Denver requires either MAT 1260 or MAT 1340

### Arts and Humanities

Six (6) credit hours. Full list of requirements can be found on page 53.

- 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 53.

- GT - One GT Pathways History course (HI1)

### Social and Behavioral Sciences

Six (6) credit hours. Full list of requirements can be found on page 53.

- GT - Two GT Pathways Social and Behavioral Sciences courses (SS1, SS3)

### Natural and Physical Sciences

Seven (7) credit hours. Full list of requirements can be found on page 53.

- GT - Two GT Pathways Natural and Physical Sciences courses (SC1, SC2), one must be with laboratory (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 1005	World Regional Geography: SS2	3
GEO 1006	Human Geography: SS2	3
GEO 1011	Physical Geography: Landforms w/Lab: SC1	4
GEO 1012	Physical Geography: Weather, Climate & Ecosystems w/Lab: SC1	4

### Electives

Fifteen (15) credit hours selected from the AA approved course list can be found on page 54.

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.pikespeak.edu/programs/geography](http://www.pikespeak.edu/programs/geography).

# History

## Associate of Arts Degree with Designation

Recommended basic skills courses are

- College Readiness in English
- College Readiness for Quantitative Literacy

Historians study the past (as it is described in written documents) 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 interested in teacher licensure in Social Studies should contact their academic advisor at PPSC; all others should follow the degree with designation in History.

#### 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 1021	English Composition I: CO1	3
ENG 1022	English Composition II: CO2	3
OR		
ENG 1022	English Composition II: CO2	(3)
ENG 2001	English Composition III: CO3	(3)
or		
HIS 2765	Writing About History: CO3	(3)

#### Mathematics

Three (3) credit hours

- GT - One GT Pathways course (GT-MA1); prefer MAT 1240

#### Arts and Humanities

Nine (9) credit hours. Full list of requirements can be found on page 53.

- GT - Three GT Pathways Arts and Humanities courses (AH1, AH2, AH3, AH4)

#### History

Three (3) credit hours GT Pathways History course (HI1)

HIS 1110	The World: Antiquity-1500: HI1	3
HIS 1310	Western Civilization: Antiquity-1650: HI1	3
<ul style="list-style-type: none"> <li>• University of Colorado Boulder requires either HIS 1310 or HIS 1320 to fulfill this requirement.</li> </ul>		

#### Social and Behavioral Sciences

Six (6) credit hours. Full list of requirements can be found on page 53.

- 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 53.

- 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 1150	Public Speaking	3
or		
COM 1250	Interpersonal Communication: SS3	(3)

HIS 1120	The World: 1500-Present: HI1	3
or		
HIS 1320	Western Civilization:1650-Present: HI1	(3)
HIS 1210	U.S. History to Reconstruction: HI1	3
HIS 1220	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 54.

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.pikespeak.edu/programs/history](http://www.pikespeak.edu/programs/history).

## Humanities

### Associate of Arts Course of Study

Recommended basic skills courses are

- College Readiness in English
- College Readiness for Quantitative Literacy

As a PPSC 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 1021	English Composition I: CO1	3
ENG 1022	English Composition II: CO2	3
OR		
ENG 1022	English Composition II: CO2	(3)
ENG 2001	English Composition III: CO3	(3)
or		
HIS 2765	Writing About History: CO3	(3)

**Oral Communication**

Three (3) credit hours

COM 1150	Public Speaking	3
or		
COM 1250	Interpersonal Communication: SS3	(3)
or		
COM 2300	Intercultural Communication: SS3	(3)

**Mathematics**

Three (3) credit hours

- GT - One GT Pathways course (GT-MA1); prefer MAT 1240

**Arts and Humanities / Social and Behavioral Sciences**

Fifteen (15) credit hours. Full list of requirements can be found on page 53.

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 1003	Introduction to Film Art: AH@	3
HUM 1015	World Mythology: AH2	3
HUM 1021	Early Civilizations: AH2	3
HUM 1022	Medieval - Modern: AH2	3
HUM 1023	Modern World: AH2	3

**GT-AH3**

PHI 1011	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 53.

**Electives**

Twenty-three (23) credit hours selected from the AA approved course list can be found on page 54.

**Suggested Courses**

ANT 1001	Cultural Anthropology: SS3	3
DAN 1011	Modern Dance I	1
DAN 1031	Ballet I	1
DAN 1050	Dance History: AH1	3
LIT 1015	Introduction to Literature I: AH2	3
LIT 2001	World Literature to 1600: AH2	3
LIT 2005	Race, Ethnicity, and Culture in U.S. Literature: AH2	3
PED 1043	Yoga I	1
PED 1061	Tai Chi I	1

**Total Credit Hours** 60Additional information available on the Humanities Department website at [www.pikespeak.edu/programs/humanities](http://www.pikespeak.edu/programs/humanities).**Journalism****Associate of Arts Degree with Designation**

Recommended basic skills courses are

- College Readiness in English
- College Readiness for 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 PPSC 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 PPSC 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 PPSC, 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 1021	English Composition I: CO1	3
ENG 1022	English Composition II: CO2	3
OR		
ENG 1022	English Composition II: CO2	(3)
ENG 2001	English Composition III: CO3	(3)
or		
HIS 2765	Writing About History: CO3	(3)

**Mathematics**

Three (3) credit hours. Any GT-MA1 course. Full list of requirements can be found on page 53.

**Preferred Courses**

MAT 1240	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 53.

### 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 53.

### Additional Required Courses

Twelve (12) credit hours

JOU 1005	Introduction to Mass Media: SS3	3
JOU 1006	Media News & Reporting	3
JOU 2025	New Media	3

Choose one of the following

JOU 1021	Photojournalism	3
JOU 2015	Publications Production & Design	3
JOU 2031	Introduction to Public Relations	3
JOU 2041	Feature & Magazine Writing	3

### Electives

Seventeen (17) credit hours selected from the AA approved course list. can be found on page 54. Electives CANNOT be additional JOU courses.

**Total Credit Hours** **60**

Additional information available on the Journalism Department website at [www.pikespeak.edu/programs/journalism](http://www.pikespeak.edu/programs/journalism).

## Music

### Associate of Arts Degree with Designation

Recommended basic skills courses are

- College Readiness in English
- College Readiness for 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). Students interested in teacher licensure in Music should contact their academic advisor at PPSC.

### 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 1021	English Composition I: CO1	3
ENG 1022	English Composition II: CO2	3
OR		
ENG 1022	English Composition II: CO2	(3)
ENG 2001	English Composition III: CO3	(3)
or		
HIS 2765	Writing About History: CO3	(3)

### Mathematics

Three (3) credit hours

- GT - One GT Pathways course (GT-MA1); prefer MAT 1240

### Arts and Humanities

Six (6) credit hours

MUS 1021	Music History Medieval thru Classical: AH1	3
MUS 1022	Music History Early Romantic Period to the Present: AH1	3

### History

Three (3) credit hours. Full list of requirements can be found on page 53.

- GT - One GT Pathways History course (HI1)

### Social and Behavioral Sciences

Six (6) credit hours. Full list of requirements can be found on page 53.

- GT - Two GT Pathways Social and Behavioral Sciences courses (SS1, SS2, SS3)

Note: CSU-Ft. Collins requires that one of these courses be PSY 1001

### Natural and Physical Sciences

Seven (7) credit hours. Full list of requirements can be found on page 53.

- 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 1010	Music Theory I	3
MUS 1011	Music Theory II	3
MUS 1012	Ear Training/Sight-singing I Lab	1
MUS 1013	Ear Training/Sight-singing II Lab	1
MUS 1031	Music Class I	2
MUS 1041	Private Instruction	1
MUS 1042	Private Instruction	1
MUS 1051	Ensemble I	1
MUS 1052	Ensemble II	1
MUS 2010	Music Theory III	3
MUS 2011	Music Theory IV	3

MUS 2012	Ear Training/Sight-Singing Lab III	1
MUS 2013	Ear Training/Sight-Singing Lab IV	1
MUS 2041	Private Instruction	1
MUS 2042	Private Instruction	1
MUS 2051	Ensemble I	1
MUS 2052	Ensemble II	1

**Electives**

Three (3) credit hours Music courses

**Total Credit Hours** 60

Additional information available on the Music Department website at [www.pikespeak.edu/programs/music](http://www.pikespeak.edu/programs/music).

## Philosophy

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### Associate of Arts Degree with Designation

Recommended basic skills courses are

- College Readiness in English
- College Readiness for 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 1021	English Composition I: CO1 (preferred)	3
	or	
ENG 1031	Technical Writing I: CO1	(3)
ENG 1022	English Composition II: CO2	3
	OR	
ENG 1022	English Composition II: CO2	(3)
ENG 2001	English Composition III: CO3	(3)
	or	
HIS 2765	Writing About History: CO3	(3)

**Mathematics**

Three (3) credit hours

- GT - One GT Pathways course (GT-MA1); prefer MAT 1240

**Arts and Humanities**

Six (6) credit hours. Full list of requirements can be found on page 53.

- 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 53.

- GT - One GT Pathways History course (HI1)

**Social and Behavioral Sciences**

Six (6) credit hours. Full list of requirements can be found on page 53.

- 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 53.

- 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 1011	Introduction to Philosophy: AH3	3
PHI 1012	Ethics: AH3	3
PHI 1013	Logic: AH3	3
	or	
PHI 2013*	Symbolic Logic: AH3	(3)

Choose two (2) courses from the following:

PHI 2005	Business Ethics: AH3	3
PHI 2014	Philosophy of Religion: AH3	3
PHI 2018	Environmental Ethics: AH3	3
PHI 2020*	Death & Dying: AH3	3

**Electives**

Fourteen (14) credit hours selected from the AA approved course list can be found on page 54.

**Total Credit Hours** 60

Additional information available on the Philosophy Department website at [www.pikespeak.edu/programs/philosophy](http://www.pikespeak.edu/programs/philosophy).

## Political Science

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### Associate of Arts Degree with Designation

Recommended basic skills courses are

- College Readiness in English
- College Readiness for 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. Students interested in teacher licensure in Social Studies should contact their academic advisor at PPSC.

**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 1021	English Composition I: CO1	3
ENG 1022	English Composition II: CO2	3
OR		
ENG 1022	English Composition II: CO2	(3)
ENG 2001	English Composition III: CO3	(3)
or		
HIS 2765	Writing About History: CO3	(3)

**Mathematics**

Three (3) credit hours

- GT - One GT Pathways course (MA1); prefer MAT 1260

**Arts and Humanities**

Six (6) credit hours. Full list of requirements can be found on page 53.

- 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 53.

- GT - One GT Pathways History course (HI1)

**Social and Behavioral Sciences**

Six (6) credit hours

ECO 2001	Principles of Macroeconomics: SS1	3
ECO 2002	Principles of Microeconomics: SS1	3

**Natural and Physical Sciences**

Eight (8) credit hours. Full list of requirements can be found on page 53.

- 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.

PSC 1011	American Government: SS1	3
PSC 2005	International Relations: SS1	3
PSC 2020	Introduction to Political Science: SS1	3
PSC 2025	Comparative Government: SS1	3

**Electives**

Sixteen (16) credit hours selected from the AA approved course list can be found on page 54.

Please note: Additional Political Science (PSC) 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 1005	World Regional Geography: SS2	3
GEO 1006	Human Geography: SS2	3
HIS	Any Approved History elective	3
PSC 1025	American State & Local Government: SS1	3
PSC 1050	Current Political Issues: SS1	3

**Total Credit Hours** **60**

Additional information available on the Political Science Department website at [www.pikespeak.edu/programs/political-science](http://www.pikespeak.edu/programs/political-science).

## Professional Writing & Communication

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**Associate of Arts Course of Study**

Recommended basic skills courses are

- College Readiness in English
- College Readiness for 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 1021	English Composition I: CO1	3
ENG 1022	English Composition II: CO2	3
OR		
ENG 1022	English Composition II: CO2	(3)
ENG 2001	English Composition III: CO3	(3)
or		
HIS 2765	Writing About History: CO3	(3)

**Oral Communication**

Three (3) credit hours

COM 1150	Public Speaking	3
COM 1250	Interpersonal Communication: SS3	3
COM 2300	Intercultural Communication: SS3	3

**Mathematics**

Three (3) credit hours

- GT - One GT Pathways course (GT-MA1); prefer MAT 1240

**Arts and Humanities / Social and Behavioral Sciences**

Fifteen (15) credit hours. Full list of requirements can be found on page 53.

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 1110	Art Appreciation: AH1	3
ART 1111	Art History Ancient to Medieval: AH1	3
ART 1112	Art History Renaissance to 1900: AH1	3
THE 1005	Theatre Appreciation: AH1	3

**GT-AH2**

HUM 1021	Early Civilization: AH2	3
HUM 1022	Medieval - Modern: AH2	3
HUM 1023	Modern World: AH2	3
LIT 1015	Introduction to Literature I: AH2	3
LIT 2001	World Literature to 1600: AH2	3
LIT 2002	World Literature after 1600: AH2	3
LIT 2021	British Literature to 1770: AH2	3
LIT 2022	British Literature since 1770: AH2	3

**GT-AH3**

PHI 1011	Introduction to Philosophy: AH3	3
PHI 1012	Ethics: AH3	3
PHI 1013	Logic: AH3	3

**GT-SS1**

ECO 2001	Principles of Macroeconomics: SS1	3
ECO 2002	Principles of Microeconomics: SS1	3

**GT-SS3**

JOU 1005	Introduction to Mass Media: SS3	3
PSY 1001	General Psychology I: SS3	3
PSY 1002	General Psychology II: SS3	3
SOC 1001	Introduction to Sociology I: SS3	3
SOC 1002	Introduction to Sociology II: SS3	3

**History**

One guaranteed transfer course from History (HI1)

HIS 1210	U.S. History to Reconstruction: HI1	3
HIS 1220	U.S. History since the Civil War: HI1	3
HIS 1310	Western Civilization: Antiquity-1650: HI1	3
HIS 1320	Western Civilization: 1650-Present: 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 53.

**Electives**

Twenty-three (23) credit hours selected from the AA approved course list can be found on page 54.

**Suggested Courses**

ENG 1031	Technical Writing I: CO1	3
ENG 2001	English Composition III: CO3	3
ENG 2021	Creative Writing I: AH1I	3
ENG 2022	Creative Writing II	3
ENG 2027	Poetry Writing	3
ENG 2030	Creative Nonfiction	3
JOU 1005	Introduction to Mass Media: SS3	3
JOU 1006	Media News & Reporting	3
JOU 2015	Publications Production & Design	3
JOU 2025	New Media	3
JOU 2031	Introduction to Public Relations	3
JOU 2041	Feature & Magazine Writing	3

**Total Credit Hours** 60Additional information available on the Professional Writing & Communication Department website at [www.pikespeak.edu/programs/english/english-program-options](http://www.pikespeak.edu/programs/english/english-program-options).**Psychology****Associate of Arts Degree with Designation**

Recommended basic skills courses are

- College Readiness in English
- College Readiness for Quantitative Literacy for MAT 1240 or MAT 1260
- College Readiness for Algebra for MAT 1340

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 State College. Students should note that graduate degrees are required for most professional positions in psychology.

NOTE: Psychology majors are advised to complete PSY 1001 and PSY 1002.

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 PPSC.*

**Written Communication**

Six (6) credit hours

ENG 1021	English Composition I: CO1	3
or		
ENG 1031	Technical Writing I: CO1	(3)
ENG 1022	English Composition II: CO2	3
OR		
ENG 1022	English Composition II: CO2	(3)
ENG 2001	English Composition III: CO3	(3)
or		
HIS 2765	Writing About History: CO3	(3)

**Mathematics**

Three (3) credit hours

- GT - One GT Pathways course (GT-MA1); prefer MAT 1260, except:
  - Colorado Mesa University requires either MAT 1240 or MAT 1340

**Arts and Humanities**

Six (6) hours. Full list of requirements can be found on page 53.

- 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 53.

- GT - One GT Pathways History course (HI1)

**Social and Behavioral Sciences**

Six (6) credit hours. Full list of requirements can be found on page 53. May not be PSY courses.

- 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 53.

- One GT Pathways Biology course (SC1). Course must have the required laboratory.
- One GT Pathways course (SC1, SC2)

**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 1150	Public Speaking	3
or		
COM 1250	Interpersonal Communication: SS3	(3)
PSY 1001	General Psychology I: SS3	3
PSY 1002	General Psychology II: SS3	3
Three (3) GT Pathways Psychology courses (SS3)		9

**Electives**

Ten-eleven (10-11) credit hours selected from the AA approved course list can be found on page 54.

**Total Credit Hours** 60**Behavioral Health Students Suggested Electives**

Only students who plan on transferring into the Behavioral Health Bachelor of Applied Science (BAS) at PPSC should take the following courses as their electives. Students planning on transferring as Psychology AA/AS majors to four-year institutions are advised not to take the following courses as they may affect transferability, though, students may contact their destination

college to inquire about transferability, if they are interested in the courses.

BEH 1001	MHCI: Mental Health Crisis and Intervention: Preparedness and Empathy	3
BEH 1030	Behavioral Health Case Management and Clinical Documentation	1
BEH 2030	Applied Therapeutic Communication Skills	3
PTE 1010	Introduction to Behavioral Health Care and Wellness	3

Additional information available on the Psychology Department website at [www.pikespeak.edu/programs/psychology](http://www.pikespeak.edu/programs/psychology).

## Public Health

### Associate of Arts Degree with Designation

Public health takes a population-based focus to health. Individuals in this field interpret community data to determine health needs and intervention priorities. Studying public health gives students the chance to encourage healthy lifestyles through raised awareness and education. Public health professionals contribute to a number of health initiatives and work with community leaders to plan, implement, and evaluate health education interventions. These include chronic and infectious disease awareness campaigns, vaccination programs, and family planning and prenatal care initiatives.

Although public health professionals often work for local, state or federal public health departments, federal agencies such as the NIH, CDC and branches of the armed forces also employ all types of public health workers. Private industrial companies, hospitals, pharmaceutical companies, and research institutions may also hire public health specialists to ensure health and safety standards. Voluntary health agencies, such as the American Cancer Society, the American Heart Association, and the Alzheimer's Association often employ public health professionals to run programs and assume administrative roles.

**Program Learning Outcomes**

Upon completion of the Public Health program, students should be able to:

- Summarize and apply foundational knowledge of the biological sciences
- Determine and apply appropriate cultural competency
- Interpret qualitative and quantitative data

*Courses marked with an asterisk [\*] are not currently offered at PPSC.*

**Written Communication**

Six (6) credit hours

ENG 1021	English Composition I: CO1	3
or		
ENG 1031	Technical Writing I: CO1	(3)
ENG 1022	English Composition II: CO2	3
OR		
ENG 1022	English Composition II: CO2	(3)
ENG 2001	English Composition III: CO3	(3)
or		
HIS 2765	Writing About History: CO3	(3)

**Mathematics**

Three (3) credit hours

MAT 1260	Introduction to Statistics: MA1	3
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**Arts and Humanities**

Six (6) credit hours. Full list of requirements can be found on page 53.

- 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 53.

- GT - One GT Pathways History course (HI1)

**Social and Behavioral Sciences**

Six (6) credit hours. Full list of requirements can be found on page 53.

PSY 1001	General Psychology I: SS3	3
PLUS any one of the following		
PSY 2220	Dynamics of Racism & Prejudice	3
PSY 2333	Health Psychology: SS3	3
PSY 2440	Human Growth & Development: SS3	3
PSY 2552	Psychopathology: SS3	3

**Natural and Physical Sciences**

Eight-ten (8-10) credit hours. Full list of requirements can be found on page 53.

BIO 1111	GenBio I: Molecular & Cellular Biology w/Lab: SC1	5
BIO 1112	GenBio II: Ecology & Organismic Biology w/Lab: SC1	5
OR		
Choose two of the following		
ANT 1005	Biological Anthropology w/Lab: SC1	4
BIO 1004	Biology: A Human Approach: SC1	4
BIO 1005	Science of Biology w/Lab: SC1	4

**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 toward graduation. Please check with the receiving institution to determine in which way these courses will be applied.

Choose ONE from

COM 1150	Public Speaking	3
COM 1250	Interpersonal Communication: SS3	3
COM 2300	Intercultural Communication: SS3	3

Choose ONE from

PHI 1012	Ethics: AH3	3
PHI 1013	Logic: AH3	3

Choose ONE from

ANT 2550	Medical Anthropology: SS3	3
BIO 1016	Introduction to Human Disease: SC2	3
PSY 2222	Psychology of Death and Dying: SS3	3
PSY 2333	Health Psychology: SS3	3
SOC 2037	Sociology of Death and Dying: SS3	3

Choose ONE course from MA1, SC1 or SC2

Recommended Courses

BIO 2104	Microbiology w/Lab: SC1	4
BIO 2116	Human Pathophysiology	4
ENV 1111	Environmental Science w/Lab: SC1	4

**Electives**

Fourteen to sixteen (14-16) credit hours

Choose in consultation with a program advisor at the receiving four-year institution.

**Total Credit Hours** 60

**Social Work Transfer****Associate of Arts Course of Study**

Recommended basic skills courses are

- College Readiness in English
- College Readiness for 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 are advised to consult with an advisor.

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:

- Evaluate 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 1021	English Composition I: CO1	3
ENG 1022	English Composition II: CO2	3
OR		
ENG 1022	English Composition II: CO2	(3)
ENG 2001	English Composition III: CO3	(3)
or		
HIS 2765	Writing About History: CO3	(3)

**Oral Communication**

Three (3) credit hours

Suggested Course

COM 1150	Public Speaking	3
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**Mathematics**

Three (3) credit hours

Required Course

MAT 1260	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 53.

**Social and Behavioral Sciences**

Nine (9) credit hours

PSC 1011	American Government: SS1	3
PSY 1001	General Psychology I: SS3	3
SOC 1001	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 53.

**Required Courses**

BIO 1005	Science of Biology w/Lab: SC1	4
	Four (4) credit hours from SC1 or SC2	4

**Additional Required Courses**

Eighteen (18) credit hours

SWK 1000	Introduction to Social Work	3
SWK 2010	Human Behavior in the Social Environment I	3
SWK 2020	Human Behavior in the Social Environment II	3
SWK 2050	Social Welfare in the U.S.	3
SWK 2222	Introduction to Social Work Practice	3
WST 2000	Introduction to Women's & Gender Studies: SS3	3

**Electives**

Three-four (3-4) credit hours selected from the AA approved course list

**Suggested Course**

SOC 2018	Sociology of Diversity: SS3	3
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**Total Credit Hours** 60

Additional information available on the Social Work Department website at [www.pikespeak.edu/programs/social-work](http://www.pikespeak.edu/programs/social-work).

## Sociology

**Associate of Arts Degree with Designation**

Recommended basic skills courses are

- College Readiness in English
- College Readiness for Quantitative Literacy for MAT 1240 or MAT 1260
- College Readiness for Algebra for MAT 1320 or MAT 1340

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 1021	English Composition I: CO1	3
	or	
ENG 1031	Technical Writing I: CO1	(3)
ENG 1022	English Composition II: CO2	3
	OR	
ENG 1022	English Composition II: CO2	(3)

ENG 2001 English Composition III: CO3 (3)

or

HIS 2765 Writing About History: CO3 (3)

**Mathematics**

Three (3) credit hours

- GT - One GT Pathways course (GT-MA1); prefer MAT 1260, except:
  - Colorado Mesa University prefers MAT 1240 or MAT 1340
  - University of Northern Colorado prefers MAT 1240 or MAT 1260

**Arts and Humanities**

Six (6) credit hours. Full list of requirements can be found on page 53.

- 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 53.

- GT - One GT Pathways History course (HI1)

**Social and Behavioral Sciences**

Six (6) credit hours. Full list of requirements can be found on page 53.

- GT - Two GT Pathways Social and Behavioral Sciences courses (SS1, SS2, SS3). Note: MUST not take additional SOC courses to fulfill this requirement.

**Natural and Physical Sciences**

Seven (7) credit hours. Full list of requirements can be found on page 53.

- GT - Two GT Pathways Natural and Physical Sciences courses (SC1, SC2)

**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 1150	Public Speaking	3
	or	
COM 1250	Interpersonal Communication: SS3	(3)
SOC 1001	Introduction to Sociology I: SS3	3
SOC 1002	Introduction to Sociology II: SS3	3
	Three (3) additional GT Pathways Sociology courses (SS3)	9

**Electives**

Eleven (11) credit hours selected from the AA approved course list can be found on page 54.

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.

**Total Credit Hours** 60

Additional information available on the Sociology Department website at [www.pikespeak.edu/programs/sociology](http://www.pikespeak.edu/programs/sociology).

# Spanish

## Associate of Arts Degree with Designation

Recommended basic skills courses are

- College Readiness in English
- College Readiness for Quantitative Literacy

PPSC'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 1021	English Composition I: CO1	3
ENG 1022	English Composition II: CO2	3
OR		
ENG 1022	English Composition II: CO2	(3)
ENG 2001	English Composition III: CO3	(3)
or		
HIS 2765	Writing About History: CO3	(3)

### Mathematics

Three (3) credit hours

- GT - One GT Pathways course (GT-MA1); prefer MAT 1240

### Arts and Humanities

Nine (9) credit hours

SPA 2011	Spanish Language III: AH4	3
SPA 2012	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 2011 or SPA 2012 should substitute other Arts and Humanities courses. Heritage speakers may want to substitute SPA 2061 and SPA 2062, if available.		

### History

Three (3) credit hours GT Pathways History course (HI1)

HIS 2200	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 53.

- 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 53.

- 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 1150	Public Speaking (recommended)	3
or		
COM 1250	Interpersonal Communication: SS3	(3)
SPA 1011	Spanish Language I	5
SPA 1012	Spanish Language II	5

PLEASE NOTE: SPA 1011 and/or SPA 1012 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 54. Suggested courses include 2000-level Spanish courses; courses outside the World Language department with content related to the Spanish-speaking world.

### Total Credit Hours

**60**

Additional information available on the Spanish Department website at [www.pikespeak.edu/programs/spanish/index.php](http://www.pikespeak.edu/programs/spanish/index.php).

# Theatre

## Associate of Arts Degree with Designation

Recommended basic skills courses are

- College Readiness in English
- College Readiness for 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. Students interested in teacher licensure in Theatre should contact their academic advisor at PPSC.

### 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

*Courses marked with an asterisk [\*] are not currently offered at PPSC.*

### Written Communication

Six (6) credit hours

ENG 1021	English Composition I: CO1	3
ENG 1022	English Composition II: CO2	3
OR		
ENG 1022	English Composition II: CO2	(3)
ENG 2001	English Composition III: CO3	(3)
or		
HIS 2765	Writing About History: CO3	(3)

### Mathematics

Three (3) credit hours

- GT - One GT Pathways course (GT-MA1); prefer MAT 1240

### Arts and Humanities

Six (6) credit hours

THE 1005	Theatre Appreciation: AH1	3
THE 2011	Development of Theatre Greek-Renaissance: AH1	3

Students planning to attend University of Colorado Boulder in Theatre should consult UCB Theatre advisors regarding THE 1005.

### History

Three (3) credit hours. Full list of requirements can be found on page 53.

- GT - One GT Pathways History course (HI1)

### Social and Behavioral Sciences

Six (6) credit hours. Full list of requirements can be found on page 53.

- 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 53.

- 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 1008	Theatre Script Analysis: AH1	3
THE 1011	Acting I	3
THE 1016	Technical Theatre	3
THE 2012	Development of Theatre Restoration to Modern: AH1	3
THE 2015	Playwriting: AH1	3

Choose one (1) course from the following:

THE 1031	Theatre Production I	3
THE 1032	Theatre Production II	3
THE 2031*	Theatre Production III	3
THE 2032 *	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 1150.

Students who plan to transfer to UCB may not take elective courses with a THE prefix.

**Total Credit Hours** **60**

Additional information available on the Theatre Department website at [www.pikespeak.edu/programs/theatre](http://www.pikespeak.edu/programs/theatre).

## World Languages

### Associate of Arts Course of Study

Recommended basic skills courses are

- College Readiness in English
- College Readiness for Quantitative Literacy

As a PPSC 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 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 1011 and 1012 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 1021	English Composition I: CO1	3
ENG 1022	English Composition II: CO2	3
OR		
ENG 1022	English Composition II: CO2	(3)
ENG 2001	English Composition III: CO3	(3)
or		
HIS 2765	Writing About History: CO3	(3)

#### Oral Communication

Three (3) credit hours

COM 1150	Public Speaking	3
or		
COM 1250	Interpersonal Communication: SS3	(3)
or		
COM 2300	Intercultural Communication: SS3	(3)

#### Mathematics

Three (3) credit hours

- GT - One GT Pathways course (GT-MA1); prefer MAT 1240

#### Arts and Humanities / Social and Behavioral Sciences

Fifteen (15) credit hours. Full list of requirements can be found on page 53.

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 2011	World Language III	3
WOL 2012	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 53.

#### Electives

Twenty-three (23) credit hours selected from the AA approved course list can be found on page 54.

Ten (10) credit hours

WOL 1011	World Language I	5
WOL 1012	World Language II	5

Thirteen (13) credit hours selected from the AA approved course list can be found on page 54. Suggested courses include 2000-level WOL courses and courses outside the chosen WOL department with content related to the WOL-speaking world.

**Total Credit Hours** **60**

WOL 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.pikespeak.edu/programs/world-languages](http://www.pikespeak.edu/programs/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, 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 PPSC.*

### Written Communication

Six (6) credit hours

ENG 1021	English Composition I: CO1	3
ENG 1022	English Composition II: CO2	3
OR		
ENG 1022	English Composition II: CO2	(3)
ENG 2001	English Composition III: CO3	(3)
or		
HIS 2765	Writing About History: CO3	(3)

### Oral Communication

Three (3) credit hours

COM 1150	Public Speaking	3
COM 1250	Interpersonal Communication: SS3	3
COM 2300	Intercultural Communication: SS3	3

### Mathematics

Three (3) credit hours

GT-MA1:	MAT 1220, MAT 1230, MAT 1240, MAT 1260, MAT 1320, MAT 1340, MAT 1400, MAT 1420, MAT 1440, MAT 2410, MAT 2420, MAT 2430, MAT 2431, MAT 2520, MAT 2560, MAT 2561*
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### History

Three (3) credit hours

GT-HI1:	HIS 1110, HIS 1120, HIS 1210, HIS 1220, HIS 1310, HIS 1320, HIS 2000, HIS 2005, HIS 2015, HIS 2105, HIS 2110, HIS 2115, HIS 2125, HIS 2130, HIS 2135, HIS 2140, HIS 2145, HIS 2200, HIS 2210*, HIS 2300, HIS 2500, HIS 2510, HIS 2610
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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 1110, ART 1111, ART 1112, ART 1113, COM 1300, COM 2400, DAN 1025, DAN 1050, MUS 1020, MUS 1021, MUS 1022, MUS 1023, MUS 1025, THE 1005, THE 1008, THE 2011, THE 2012, THE 2015
GT-AH2:	HUM 1003, HUM 1015, HUM 1021, HUM 1022, HUM 1023, LIT 1015, LIT 2001, LIT 2002, LIT 2005, LIT 2011, LIT 2012, LIT 2021, LIT 2022, LIT 2025, LIT 2046, LIT 2058, LIT 2059*, LIT 2068
GT-AH3:	PHI 1011, PHI 1012, PHI 1013, PHI 1014, PHI 1015, PHI 1016, PHI 1041*, PHI 1042, PHI 2005, PHI 2013*, PHI 2014, PHI 2018, PHI 2020*
GT-AH4:	FRE 2011, FRE 2012, GER 2011, GER 2012, ITA 2011, ITA 2012, JPN 2011, JPN 2012, RUS 2011, RUS 2012, SPA 2011, SPA 2012

### Social and Behavioral Sciences

Six (6) credit hours. Two GT Pathways courses from two different areas (SS1, SS2, SS3).

GT-SS1:	AGE 1102*, ECO 1001, ECO 2001, ECO 2002, ECO 2011, ECO 2045, PSC 1011, PSC 1025, PSC 1050, PSC 2005, PSC 2020, PSC 2025
GT-SS2:	GEO 1005, GEO 1006
GT-SS3:	AGR 2106*, ANT 1001, ANT 1003, ANT 1208*, ANT 2115, ANT 2125, ANT 2130, ANT 2550, COM 2300, CRJ 1010, JOU 1005, PSY 1001, PSY 1002, PSY 2105, PSY 2107, PSY 2221, PSY 2222, PSY 2331, PSY 2333, PSY 2440, PSY 2441, PSY 2552, PSY 2771, SOC 1001, SOC 1002, SOC 2005, SOC 2007, SOC 2016, SOC 2018, SOC 2020, SOC 2031, SOC 2037, WST 2000, WST 2200*, WST 2300*

### 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 2140, ANT 1005, ANT 2315, AST 1110, AST 1120, BIO 1004, BIO 1005, BIO 1111, BIO 1112, BIO 2101, BIO 2102, BIO 2104, BIO 2108*, BIO 2121, BIO 2124, CHE 1005, CHE 1011, CHE 1012, CHE 1111, CHE 1112, ENV 1111, GEO 1011, GEO 1012, GEY 1111, GEY 1112, GEY 1135, GEY 1155, MET 1050, PHY 1105, PHY 1107*, PHY 1111, PHY 1112, PHY 2111, PHY 2112, SCI 1055, SCI 1056
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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

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 PPSC.

Only six (6) elective credits are allowed in any combination of PED courses.

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.

Career and technical education courses, whether taken at another institution or at PPSC, 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.

Courses numbered below 1000 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 State 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 1260	Introduction to Statistics: MA1	3
MAT 1340	College Algebra: MA1	4
MAT 1400	Survey of Calculus: MA1	4
MAT 1420	College Trigonometry: MA1	3
MAT 1440	Pre-Calculus: MA1	5
MAT 2410	Calculus I: MA1	5
MAT 2420	Calculus II: MA1	5
MAT 2430	Calculus III: MA1	4
MAT 2431	Calculus III with Engineering Applications: MA1	5
MAT 2520	Discrete Mathematics: MA1	4
MAT 2560	Differential Equations: MA1	3

### Natural and Physical Sciences

AST 1110	Planetary Astronomy w/Lab: SC1	4
AST 1120	Stellar Astronomy w/Lab: SC1	4
BIO 1111	GenBio I: Molecular & Cellular Biology w/Lab: SC1	5
BIO 1112	GenBio II: Ecology & Organismic Biology w/Lab: SC1	5
BIO 2101	Human Anatomy & Physiology I w/Lab: SC1	4
BIO 2102	Human Anatomy & Physiology II w/Lab: SC1	4
BIO 2104	Microbiology w/Lab: SC1	4
BIO 2116	Human Pathophysiology	4
BIO 2121	Botany w/Lab: SC1	5
BIO 2124	Genetics: SC1	4
CHE 1111	General College Chemistry I w/Lab: SC1	5
CHE 1112	General College Chemistry II w/Lab: SC1	5
CHE 2111	Organic Chemistry I w/Lab	5
CHE 2112	Organic Chemistry II w/Lab	5
CSC 1005	Computer Literacy	3
CSC 1019	Introduction to Programming: Programming Language)	3
CSC 1020	Problem Solving with (Software Package)	3
CSC 1026	Game Design & Development	3
CSC 1060	Computer Science I (Language)	4
CSC 1061	Computer Science II (Language)	4
CSC 2025	Computer Architecture/Assembly Language Programming	4
CSC 2030	C Programming: Platform	3
CSC 2040	Java Programming	3
EGG 1020	Engineering Methodologies	3
EGG 1040	Engineering Projects	3
EGG 1060	Introduction to Engineering Computing	4
EGG 2011	Engr Mechanics I - Statics	3
EGG 2012	Engineering Mechanics II (Dynamics)	3
EGG 2020	Thermodynamics	3
EGG 2030	Mechanics of Solids	3
EGG 2050	Engineering Economics	3
EGT 1110	IDEA: Introduction to Design and Engineering Applications	3
ENV 1111	Environmental Science w/Lab: SC1	4
GEO 1011	Physical Geography: Landforms w/Lab: SC1	4
GEO 1012	Physical Geography: Weather, Climate &	4

	Ecosystems w/Lab: SC1	
GEY 1111	Physical Geology w/Lab: SC1	4
GEY 1112	Historical Geology w/Lab: SC1	4
GEY 1135	Environmental Geology w/Lab: SC1	4
GEY 1155	General Oceanography with Lab: SC1	3
MET 1050	General Meteorology w/Lab: SC1	4
PHY 1111	Physics: Algebra-Based I w/Lab: SC1	5
PHY 1112	Physics: Algebra-Based II w/Lab: SC1	5
PHY 2111	Physics: Calculus-Based I w/Lab: SC1	5
PHY 2112	Physics: Calculus-Based II w/Lab: SC1	5

## Associate of Science Degrees and Courses of Study

### Allied Health

#### Associate of Science Course of Study

Recommended basic skills courses are

- College Readiness in English
- College Readiness for Algebra

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 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 1021	English Composition I: CO1	3
ENG 1022	English Composition II: CO2	3
	OR	
ENG 1022	English Composition II: CO2	(3)
ENG 2001	English Composition III: CO3	(3)
	or	
HIS 2765	Writing About History: CO3	(3)

#### Oral Communication

Three (3) credit hours

COM 1150	Public Speaking	3
COM 1250	Interpersonal Communication: SS3	3
COM 2300	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 83.

**Suggested Course**

MAT 1340 College Algebra: MA1 4

**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 83.

**Suggested Courses**

BIO 1111	GenBio I: Molecular & Cellular Biology w/Lab: SC1	5
PHY 1111	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 84. Please see your advisor for help choosing your electives.

**Suggested Course**

BIO 2101	Human Anatomy & Physiology I w/Lab: SC1	4
BIO 2102	Human Anatomy & Physiology II w/Lab: SC1	4
BIO 2104	Microbiology w/Lab: SC1	4
CHE 1111	General College Chemistry I w/Lab: SC1	5

**Total Credit Hours** 60Additional information available on the Pre-Allied Health Department website at [www.pikespeak.edu/programs/allied-health](http://www.pikespeak.edu/programs/allied-health).

## Biology

### Associate of Science Degree with Designation

Recommended basic skills courses are

- College Readiness in English
- MAT 1340 and MAT 1420  
or
- MAT 1340 and MAT 1440

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 1021	English Composition I: CO1	3
or		
ENG 1031	Technical Writing I: CO1	(3)
ENG 1022	English Composition II: CO2	3
OR		
ENG 1022	English Composition II: CO2	(3)
ENG 2001	English Composition III: CO3	(3)
or		
HIS 2765	Writing About History: CO3	(3)

**Mathematics**

Four (4) credit hours

MAT 1340 College Algebra: MA1 or higher 4

**Arts and Humanities**

Six (6) credit hours. Full list of requirements can be found on page 85.

- 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 83.

- GT – One GT Pathways History course (HI1)

**Social and Behavioral Sciences**

Six (6) credit hours. Full list of requirements can be found on page 83.

- GT – Two GT Pathways Social and Behavioral Sciences courses (SS1, SS2, SS3)

**Natural and Physical Sciences**

Ten (10) credit hours

BIO 1111	GenBio I: Molecular & Cellular Biology w/Lab: SC1	5
CHE 1111	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 1112	GenBio II: Ecology & Organismic Biology w/Lab: SC1	5
CHE 1112	General College Chemistry II w/Lab: SC1	5
PHY 1111	Physics: Algebra-Based I w/Lab: SC1	5
or		
PHY 2111	Physics: Calculus-Based I with Lab: SC1	(5)

PHY 1112	Physics: Algebra-Based II w/Lab: SC1	5
or		
PHY 2112	Physics: Calculus-Based II with Lab: SC1	(5)

**Electives**

Five (5) credit hours selected from the AS approved course list can be found on page 84.

**Total Credit Hours** 60

Additional information available on the Biology Department website at [www.pikespeak.edu/programs/biology](http://www.pikespeak.edu/programs/biology).

## Chemistry

### Associate of Science Degree with Designation

Recommended basic skills courses are

- College Readiness in English
- MAT 1340 and MAT 1420  
or
- MAT 1340 and MAT 1440

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 1021	English Composition I: CO1	3
or		
ENG 1031	Technical Writing I: CO1	(3)
ENG 1022	English Composition II: CO2	3
OR		
ENG 1022	English Composition II: CO2	(3)
ENG 2001	English Composition III: CO3	(3)
or		
HIS 2765	Writing About History: CO3	(3)

**Mathematics**

Five (5) credit hours

MAT 2410	Calculus I: MA1	5
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**Arts and Humanities**

Six (6) credit hours. Full list of requirements can be found on page 83.

- 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 83.

- GT - One GT Pathways History course (HI1)

**Social and Behavioral Sciences**

Six (6) credit hours. Full list of requirements can be found on page 83.

- GT - Two GT Pathways Social and Behavioral Sciences courses (SS1, SS2, SS3)

**Natural and Physical Sciences**

Ten (10) credit hours

CHE 1111	General College Chemistry I w/Lab: SC1	5
CHE 1112	General College Chemistry II w/Lab: SC1	5

**Additional Required Courses**

Twenty-nine (29) credit hours

CHE 2111	Organic Chemistry I w/Lab	5
CHE 2112	Organic Chemistry II w/Lab	5
MAT 2420	Calculus II: MA1	5
MAT 2430	Calculus III: MA1	4
or		
MAT 2431	Calculus III with Engineering Applications: MA1	(5)
PHY 2111	Physics: Calculus-Based I w/Lab: SC1	5
PHY 2112	Physics: Calculus-Based II w/Lab: SC1	5

Note: Lecture and laboratory portions of Organic Chemistry, CHE 211/2111 and 212/2112, must not be taken in an online delivery format.

**Total Credit Hours** 65

Additional information available on the Chemistry Department website at [www.pikespeak.edu/programs/chemistry](http://www.pikespeak.edu/programs/chemistry).

## Computer Science

### Associate of Science Degree with Designation

Recommended basic skills courses are

- College Readiness in English
- MAT 1340 and MAT 1420  
or
- MAT 1340 and MAT 1440

This program prepares students for transfer to a four-year school to obtain a baccalaureate degree. It is highly recommended that you meet with an advisor from the Computer Science Department to ensure transferability of courses. 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

ENG 1021	English Composition I: CO1	3
or		
ENG 1031	Technical Writing I: CO1	(3)
ENG 1022	English Composition II: CO2	3
OR		
ENG 1022	English Composition II: CO2	(3)
ENG 2001	English Composition III: CO3	(3)
or		
HIS 2765	Writing About History: CO3	(3)

### Mathematics

Five (5) credit hours

Additional coursework might be required to meet prerequisite requirements for calculus. Prerequisite courses may apply toward elective credit hours.

MAT 2410	Calculus I: MA1	5
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### Arts and Humanities

Six (6) credit hours. Any two GT Pathways Arts and Humanities courses (AH1, AH2, AH3, AH4). Full list of requirements can be found on page 83.

### History

Three (3) credit hours. Any one GT Pathways History course (GT-HI1). Full list of requirements can be found on page 83.

### 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 83.

### Natural and Physical Sciences

Seven (7) credit hours. Select from GT-SC1/GT-SC2 courses; one must be with a laboratory (GT-SC1). 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

Twelve (12) credit hours. Courses must be selected in consultation with the advising offices to ensure that the courses taken are in the preferred programming language.

CSC 1060	Computer Science I: (Language)	4
CSC 1061	Computer Science II: (Language)	4
CSC 2025	Computer Architecture/Assembly Language Programming	4

### Electives

Fifteen (15) credit hours are required to complete the Associate Degree with Designation. Some four-year institutions require specific courses. Meet with the Computer Science Department to ensure transferability of elective courses.

**Total Credit Hours** 60

Additional information available on the Computer Science Department website at [www.pikespeak.edu/programs/computer-science](http://www.pikespeak.edu/programs/computer-science).

## Dietetics

### Associate of Science Course of Study

Recommended basic skills courses are

- College Readiness in English
- MAT 1340

Dietetics is the science of how food and nutrition affect human health. Careers in dietetics include Certified Dietary Manager, Certified Food Protection Professional (CDM, CFPP), Dietetic Technician Registered (DTR), and Registered Dietitian Nutritionist (RDN).

The Associate of Science in Dietetics prepares students to transfer to an ACEND® Accredited Bachelor or 3+2 Program. Students should note that a graduate degree and dietetic internship are required to become a Registered Dietitian Nutritionist.

### Program Learning Outcomes

Upon completion of the Dietetics degree program, students should be able to:

- Assess macro and micronutrient needs for individuals to improve health, prevent or delay disease
- Differentiate approaches to make recommendations to meet an individual's health and wellness goals
- Examine the physical, psychosocial, social, and cultural influences on food choices and other health behaviors
- Evaluate nutritional information for reliability and usefulness in analyzing claims

### Written Communication

Six (6) credit hours

ENG 1021	English Composition I: CO1	3
ENG 1022	English Composition II: CO2	3

### Oral Communication

Three (3) credit hours

COM 1150	Public Speaking	3
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### Mathematics

Three (3) credit hours

MAT 1260	Introduction to Statistics: MA1	3
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### Arts and Humanities

Six (6) credit hours

Choose two (2) GT Pathways Arts and Humanities courses from two different areas (AH1, AH2, AH3, AH4). Full list of requirements can be found on page 85.

### History

Three (3) credit hours

Choose one (1) GT Pathways History course (GT-HI1). Full list of requirements can be found on page 85.

### Social and Behavioral Sciences

Six (6) credit hours

Choose one (1) GT Pathways Social and Behavioral Sciences courses (SS1, SS2).	3	
PSY 1001	General Psychology I: SS3	3

### Natural and Physical Sciences

Thirteen (13) credit hours

BIO 1111	GenBio I: Molecular & Cellular Biology w/Lab: SC1	5
BIO 2101	Human Anatomy & Physiology I w/Lab: SC1	4
BIO 2102	Human Anatomy & Physiology II w/Lab: SC1	4

**Additional Required Courses**

Twenty (20) credit hours

BIO 2104	Microbiology w/Lab: SC1	4
CHE 1111	General College Chemistry I w/Lab: SC1	5
CHE 1112	General College Chemistry II w/Lab: SC1	5
HWE 1050	Human Nutrition	3
HWE 1055	Lifecycle Nutrition	3

**Total Credit Hours 60****Total Credit Hours 64**

Additional information available on the Dietetics Department website at [www.pikespeak.edu/programs/nutrition-and-dietetic-technology/dietetics.php](http://www.pikespeak.edu/programs/nutrition-and-dietetic-technology/dietetics.php).

## Environmental Science

### Associate of Science Course of Study

Recommended basic skills courses are

- College Readiness in English
- MAT 1340 or MAT 1420  
or
- MAT 1340 and MAT 1440

This degree will prepare students to find innovative and sustainable solutions to today's critical environmental challenges. Students who major in Environmental Science integrate biology, chemistry, geology, geography and mathematics with environmental law, policies, economics, and ethics for an interdisciplinary understanding of the Earth and sustainability. They will develop a deep understanding of scientific theory and know how to apply it in real-world settings. The study of environmental science prepares one for a variety of fields such as Environmental engineering techs, Environmental scientists, Geoscientists, Environmental science and protection techs, environmental science post-secondary teachers, Occupational health, and safety specialists. They may also work as a scientist, analyst, manager, instructor, researcher.

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 Environmental Science 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 1021	English Composition I: CO1	3
AND		
ENG 1022	English Composition II: CO2	3
OR		
ENG 1022	English Composition II: CO2	(3)
AND		
ENG 2001	English Composition III: CO3	(3)

**Mathematics**

Five (5) credit hours

MAT 2410	Calculus I: MA1	5
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**Arts and Humanities**

Six (6) credit hours

Required Course

PHI 2018	Environmental Ethics: AH3	3
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Recommended Course

- GT - One GT Pathways Arts and Humanities courses (AH1, AH2, AH4)

**History**

Three (3) credit hours

Select one of the following

HIS 2000	History of Science and Technology: HI1	3
HIS 2125	American Environmental History: HI1	3
HIS 2135	Colorado History: HI1	3
One (1) additional GT Pathway History (HI1) course		3

**Social and Behavioral Sciences**

Six (6) credit hours. Full list of requirements can be found on page 83.

- GT - Two GT Pathways Social and Behavioral Sciences courses (SS1, SS2, SS3)

Recommended Courses

COM 2300	Intercultural Communication: SS3	3
GT - One GT Pathways Social and Behavioral Sciences course (SS1, SS2, SS3)		3

**Natural and Physical Sciences**

Nineteen (19) credit hours

BIO 1111	GenBio I: Molecular & Cellular Biology w/Lab: SC1	5
CHE 1111	General College Chemistry I w/Lab: SC1	5
ENV 1111	Environmental Science w/Lab: SC1	4
AND		

Select one of the following

BIO 1112	GenBio II: Ecology & Organismic Biology w/Lab: SC1	5
CHE 1112	General College Chemistry II w/Lab: SC1	5

Additional Required Courses

Eleven (11) credit hours

GEO 1012	Physical Geography - Weather, Climate and Ecosystems w/Lab: SC1	4
MAT 1260	Introduction to Statistics: MA1	3

Select one of the following

GEY 1111	Physical Geology w/Lab: SC1	4
GEY 1112	Historical Geology w/Lab: SC1	4
GEY 1135	Environmental Geology w/Lab: SC1	4
MET 1050	General Meteorology w/Lab: SC1	4

**Electives**

Four (4) credit hours selected from the AS approved course list can be found on page 84.

BIO, CHE, ENV, or GEY

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.

**Total Credit Hours** 60

Additional information available on the Environmental Science Department website at [www.pikespeak.edu/academics/academic-divisions/natural-physical-sciences](http://www.pikespeak.edu/academics/academic-divisions/natural-physical-sciences).

## Geology

### Associate of Science Degree with Designation

Recommended basic skills courses are

- College Readiness in English
- MAT 1340 and MAT 1420  
or
- MAT 1340 and MAT 1440

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 1021	English Composition I: CO1	3
ENG 1022	English Composition II: CO2	3
OR		
ENG 1022	English Composition II: CO2	(3)
ENG 2001	English Composition III: CO3	(3)
or		
HIS 2765	Writing About History: CO3	(3)

#### Mathematics

Five (5) credit hours

MAT 2410	Calculus I: MA1	5
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#### Arts and Humanities

Six (6) credit hours. Full list of requirements can be found on page 83.

- 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 83.

- GT - One GT Pathways History course (HI1)

#### Social and Behavioral Sciences

Six (6) credit hours. Full list of requirements can be found on page 83.

- GT - Two GT Pathways Social and Behavioral Sciences courses (SS1, SS2, SS3)

#### Natural and Physical Sciences

Ten (10) credit hours

CHE 1111	General College Chemistry I w/Lab: SC1	5
CHE 1112	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 1111	Physical Geology w/Lab: SC1	4
GEY 1112	Historical Geology w/Lab: SC1	4
MAT 2420	Calculus II: MA1	5
PHY 2111	Physics: Calculus-based I w/Lab: SC1	5
PHY 2112	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 84.

**Total Credit Hours** 60

Additional information available on the Geology Department website at [www.pikespeak.edu/programs/geology](http://www.pikespeak.edu/programs/geology).

## Mathematics

### Associate of Science Degree with Designation

Recommended basic skills courses are

- College Readiness in English
- MAT 1340 and MAT 1420  
or
- MAT 1340 and MAT 1440

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 1021	English Composition I: CO1	3
or		
ENG 1031	Technical Writing I: CO1	(3)
ENG 1022	English Composition II: CO2	3
OR		
ENG 1022	English Composition II: CO2	(3)
ENG 2001	English Composition III: CO3	(3)
or		
HIS 2765	Writing About History: CO3	(3)

**Mathematics**

Five (5) credit hours

MAT 2410	Calculus I: MA1	5
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**Arts and Humanities**

Six (6) credit hours. Full list of requirements can be found on page 83.

- 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 83.

- GT - One GT Pathways History course (HI1)

**Social and Behavioral Sciences**

Six (6) credit hours. Full list of requirements can be found on page 83.

- GT - Two GT Pathways Social and Behavioral Sciences courses (SS1, SS2, SS3)

**Natural and Physical Sciences**

Seven (7) credit hours. Two GT Pathways Natural &amp; Physical Sciences courses (GT-SC1, GTSC2), one must be with laboratory (GT-SC1).

Please note: many receiving 4-year institutions prefer students to take PHY 2111 Calculus-based Physics I w/lab to fulfill part of this requirement.

Students should seek advising at their receiving institution for further recommendations.

**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 1150	Public Speaking	3
or		
COM 1250	Interpersonal Communication: SS3	(3)
or		
COM 2300	Intercultural Communication: SS3	(3)
CSC 1060	Computer Science I: (Language)	4
MAT 2420	Calculus II: MA1	5
MAT 2430	Calculus III: MA1	4
or		
MAT 2431	Calculus III with Engineering Applications: MA1	(5)

**Electives**

Ten - eleven (10-11) credit hours selected from the AS approved course list-can be found on page 84.

**Total Credit Hours** 60Additional information available on the Mathematics Department website at [www.pikespeak.edu/programs/mathematics](http://www.pikespeak.edu/programs/mathematics).**Medical Professional Track****Associate of Science Course of Study**

Recommended basic skills courses are

- College Readiness in English
- MAT 1340 and MAT 1420
- or
- MAT 1340 and MAT 1440

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 Medical Professional Track 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 1021	English Composition I: CO1	3
ENG 1022	English Composition II: CO2	3
OR		
ENG 1022	English Composition II: CO2	(3)
ENG 2001	English Composition III: CO3	(3)
or		
HIS 2765	Writing About History: CO3	(3)

**Oral Communication**

Three (3) credit hours

COM 1150	Public Speaking	3
COM 1250	Interpersonal Communication: SS3	3
COM 2300	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 83.

**Suggested Course**

MAT 2410	Calculus I: MA1	5
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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. 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 83.

#### Suggested Courses

BIO 1111	GenBio I: Molecular & Cellular Biology w/Lab: SC1	5
PHY 1111	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 1111	General College Chemistry I w/Lab: SC1	5
CHE 1112	General College Chemistry II w/Lab: SC1	5
PHY 1112	Physics: Algebra-Based II w/Lab: SC1	5

**Total Credit Hours** 60

Additional information available on the Pre-Med Professions Department website at [www.pikespeak.edu/programs/medical-professional](http://www.pikespeak.edu/programs/medical-professional).

## Physics

### Associate of Science Degree with Designation

Recommended basic skills courses are

- College Readiness in English
- MAT 1340 and MAT 1420  
or
- MAT 1340 and MAT 1440

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 PPSC.*

#### 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 1021	English Composition I: CO1	3
ENG 1022	English Composition II: CO2	3
OR		
ENG 1022	English Composition II: CO2	(3)
ENG 2001	English Composition III: CO3	(3)
or		
HIS 2765	Writing About History: CO3	(3)

#### Mathematics

Five (5) credit hours

MAT 2410	Calculus I: MA1	5
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#### Arts and Humanities

Nine (9) credit hours. Full list of requirements can be found on page 83.

- 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 83.

- GT - One GT Pathways History course (HI1)

#### Social and Behavioral Sciences

Three (3) credit hours. Full list of requirements can be found on page 83.

GT - One GT Pathways Social and Behavioral Sciences course (SS1, SS2, SS3)	3
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#### Natural and Physical Sciences

Ten (10) credit hours

PHY 2111	Physics: Calculus-Based I w/Lab: SC1	5
PHY 2112	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 1111	General College Chemistry I w/Lab: SC1	5
CSC 1060	Computer Science I: (Language)	4
or		
CHE 1112	General College Chemistry II w/Lab: SC1	(5)
MAT 2420	Calculus II: MA1	5
MAT 2430	Calculus III: MA1	4
or		
MAT 2431	Calculus III with Engineering Applications: MA1	(5)
MAT 2560	Differential Equations: MA1	3
or		
MAT 2561*	Differential Equations with Engineering Applications: MA1	(4)
or		
MAT 2562	Differential Equations with Linear Algebra	(4)
PHY 2113	Physics III: Calculus Based Modern Physics	3

**Total Credit Hours** 60

Note: If you choose to take one of these courses (MAT 2431, MAT 2561\*, MAT 2562), 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 or to the University of Northern Colorado must take CSC 1060 to fulfill this requirement.
- Students planning to transfer to Fort Lewis College or University of Colorado, Colorado Springs must take both CSC 1060 and CHE 1112.
- 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.pikespeak.edu/programs/physics](http://www.pikespeak.edu/programs/physics).

# Psychology

## Associate of Science Degree with Designation

Recommended basic skills courses are

- College Readiness in English
- College Readiness for Algebra

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 State College. Students should note that graduate degrees are required for most professional positions in psychology.

The Associate of Science degree is designed for students who want an emphasis in natural sciences, mathematics, computer science, 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 1021	English Composition I: CO1	3
or		
ENG 1031	Technical Writing I: CO1	(3)
ENG 1022	English Composition II: CO2	3
OR		
ENG 1022	English Composition II: CO2	(3)
ENG 2001	English Composition III: CO3	(3)
or		
HIS 2765	Writing About History: CO3	(3)

### Mathematics

Four (4) credit hours

MAT 1340	College Algebra: MA1	4
Or higher-level course in the Calculus sequence		

### Arts and Humanities

Six (6) credit hours. Full list of requirements can be found on page 83.

- 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 83.

- GT - One GT Pathways History course (HI1)

### Social and Behavioral Sciences

Six (6) credit hours. Full list of requirements can be found on page 83.

- GT - Two GT Pathways Social and Behavioral Sciences courses (SS1, SS2, SS3). May not be PSY courses.

### Natural and Physical Sciences

Ten (10) credit hours

BIO 1111	GenBio I: Molecular & Cellular Biology w/Lab: SC1	5
BIO 1112	GenBio II: Ecology & Organismic Biology w/Lab: SC1	5

### 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.

COM 1150	Public Speaking	3
or		
Any GT Pathways approved COM-prefix course (3)		
PSY 1001	General Psychology I: SS3	3
PSY 1002	General Psychology II: SS3	3
PSY 2221	Social Psychology: SS3	3

The University of Colorado Denver prefers COM 1150.

### Electives

Thirteen (13) credit hours selected from the AS approved course list can be found on page 84.

Students planning to transfer to University of Colorado Denver should complete both two-semester sequences of BIO 1111 and BIO 1112 and CHE 1111 and CHE 1112 at the community college; in addition, electives should not be any additional -Psychology courses.

**Total Credit Hours 60**

### Behavioral Health Students Suggested Electives

Only students who plan on transferring into the Behavioral Health Bachelor of Applied Science (BAS) at PPSC should take the following courses as their electives. Students planning on transferring as Psychology AA/AS majors to four-year institutions are advised not to take the following courses as they may affect transferability, though, students may contact their destination college to inquire about transferability, if they are interested in the courses.

BEH 1001	MHCI: Mental Health Crisis and Intervention: Preparedness and Empathy	3
BEH 1030	Behavioral Health Case Management and Clinical Documentation	1
BEH 2030	Applied Therapeutic Communication Skills	3
PTE 1010	Introduction to Behavioral Health Care and Wellness	3

Additional information available on the Psychology Department website at [www.pikespeak.edu/programs/psychology](http://www.pikespeak.edu/programs/psychology).

## 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

60 credit hours of course work acceptable toward the degree.

A cumulative grade point average of 2.0 (a C average).

At least 15 of these credit hours must be earned from PPSC.

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.

You must complete at least 30 hours of approved General Education Credits. At least 15 hours must be completed at PPSC.

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 1021	English Composition I: CO1	3
ENG 1022	English Composition II: CO2	3
ENG 1031	Technical Writing I: CO1	3

### Arts and Humanities (minimum 3 credit hours)

GT Pathways Arts and Humanities course (AH1, AH2, AH3, AH4)

or

ARA 1011	Arabic Language I	5
ARA 1012	Arabic Language II	5
ARA 2011	Arabic Language III	3
ART 1115	History of Photography	3
ASL 1121	American Sign Language I	5
ASL 1122	American Sign Language II	5
CHI 1011	Chinese Language I	5
FRE 1011	French Language I	5
FRE 1012	French Language II	5
GER 1011	German Language I	5
GER 1012	German Language II	5
ITA 1011	Italian Language I	5
ITA 1012	Italian Language II	5
JPN 1011	Japanese Language I	5
JPN 1012	Japanese Language II	5
RUS 1011	Russian Language I	5
RUS 1012	Russian Language II	5
SPA 1011	Spanish Language I	5
SPA 1012	Spanish Language II	5

### Mathematics (minimum 3 credit hours)

Any course 1000 level and over

### Social and Behavioral Sciences (minimum 3 credit hours)

GT Pathways Social and Behavioral Sciences courses (SS1, SS2, SS3)

or

COM 1150	Public Speaking	3
COM 1250	Interpersonal Communication: SS3	3
COM 2220	Group Communication: SS3	3
COM 2250	Organizational Communication	3
FIN 1060	Consumer Economics	3
PSY 2332	Psychology of Adjustment	3

### Natural and Physical Sciences (minimum 3 credit hours)

GT Pathways Natural and Physical Sciences course (SC1, SC2)

or

HWE 1050	Human Nutrition	3
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### 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 1015	Introduction to Business	3
CIS 1015	Introduction to Computer Information Systems	3
CIS 1018	Introduction to PC Applications	3
CSC 1005	Computer Literacy	3
CSC 1020	Problem Solving with (Software Package)	3

**Electives (30 credit hours). Any course 1000 and higher.**

## 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

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 PPSC. See specific degree program for additional requirements. Credits must have been earned within 10 years.

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.

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.

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.

A maximum of four (4) credit hours in any combination of PED activity courses.

Specific degree requirements are listed with each program in the next section of this catalog.

Courses numbered below 1000 normally may not apply toward degrees.

### Certificate Requirements

Satisfactory completion of a prescribed program of study with a cumulative grade point average of 2.0 (a C average).

A minimum of six (6) credit hours in the area of specialization earned from PPSC 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.

Courses numbered below 1000 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.

### Arts and Humanities

ARA 1011	Arabic Language I	5
ARA 1012	Arabic Language II	5
ARA 2011	Arabic Language III	3
ART 1110	Art Appreciation: AH1	3
ART 1111	Art History Ancient to Medieval: AH1	3
ART 1112	Art History Renaissance to 1900: AH1	3
ART 1115	History of Photography	3
ASL 1121	American Sign Language I	5
ASL 1122	American Sign Language II	5
CHI 1011	Chinese Language I	5
DAN 1043	Tap I	1
DAN 1044	Tap II	1
DAN 1050	Dance History: AH1	3
DAN 2054	Methods of Teaching Dance	2
DAN 2055	Dance for Camera	2
FRE 1001	Conversational French	3
FRE 1011	French Language I	5
FRE 1012	French Language II	5
FRE 2011	French Language III: AH4	3
FRE 2012	French Language IV: AH4	3
GER 1011	German Language I	5
GER 1012	German Language II	5
GER 2011	German Language III: AH4	3
GER 2012	German Language IV: AH4	3
HUM 1003	Introduction to Film Art: AH2	3
HUM 1015	World Mythology: AH2	3
HUM 1021	Early Civilization: AH2	3
HUM 1022	Medieval - Modern: AH2	3
HUM 1023	Modern World: AH2	3
ITA 1011	Italian Language I	5
ITA 1012	Italian Language II	5
ITA 2011	Italian Language III: AH4	3
ITA 2012	Italian Language IV: AH4	3
JPN 1001	Conversational Japanese I	3
JPN 1011	Japanese Language I	5
JPN 1012	Japanese Language II	5
JPN 2011	Japanese Language III: AH4	3
JPN 2012	Japanese Language IV: AH4	3
LIT 1015	Introduction to Literature I: AH2	3
LIT 2001	World Literature to 1600: AH2	3
LIT 2002	World Literature after 1600: AH2	3
LIT 2005	Race, Ethnicity, and Culture in U.S. Literature: AH2	3
LIT 2011	American Literature to Civil War: AH2	3
LIT 2012	American Literature after the Civil War: AH2	3
LIT 2021	British Literature to 1770: AH2	3
LIT 2022	British Literature since 1770: AH2	3
LIT 2046	Literature of Women: AH2	3
LIT 2058	Latinx Literature: AH2	3
LIT 2068	Celtic Literature: AH2	3
MUS 1000	Music Theory Fundamentals I	3
MUS 1005	Introduction to Computer Applications	3
MUS 1020	Music Appreciation: AH1	3
MUS 1021	Music History Medieval thru Classical: AH1	3
MUS 1022	Music History Early Romantic Period to the Present: AH1	3
PHI 1011	Introduction to Philosophy: AH3	3
PHI 1012	Ethics: AH3	3
PHI 1013	Logic: AH3	3
PHI 1014	Comparative Religions: AH3	3
PHI 1015	World Religions-West: AH3	3
PHI 1016	World Religions-East: AH3	3



PHI 1042	New Testament: AH3	3	CHE 1112	General College Chemistry II w/Lab: SC1	5
PHI 2005	Business Ethics: AH3	3	ENV 1111	Introduction to Environmental Science: SC1	4
PHI 2014	Philosophy of Religion: AH3	3	GEO 1011	Physical Geography: Landforms w/Lab: SC1	4
PHI 2018	Environmental Ethics: AH3	3	GEY 1108	Geology of U.S. National Parks: SC2	3
PHO 1043	Perception & Photography	3	GEY 1111	Physical Geology w/Lab: SC1	4
PHO 2005	Professional Digital Photo I	3	GEY 1112	Historical Geology w/Lab: SC1	4
RUS 1011	Russian Language I	5	GEY 1135	Environmental Geology w/Lab: SC1	4
RUS 1012	Russian Language II	5	HWE 1050	Human Nutrition	3
RUS 2011	Russian Language III: AH4	3	PHY 1111	Physics: Algebra-Based I w/Lab: SC1	5
RUS 2012	Russian Language IV: AH4	3	PHY 1112	Physics: Algebra-Based II w/Lab: SC1	5
SPA 1001	Conversational Spanish I	3	<b>Social and Behavioral Sciences</b>		
SPA 1002	Conversational Spanish II	3	ANT 1001	Cultural Anthropology: SS3	3
SPA 1009	Spanish for Travelers	2	ANT 1003	Introduction to Archaeology: SS3	3
SPA 1011	Spanish Language I	5	ANT 1101	Exploring Other Cultures I	3
SPA 1012	Spanish Language II	5	ANT 2101	Exploring Other Cultures II	3
SPA 1015	Spanish for the Professional I	3	ANT 2115	Native Peoples of North America: SS3	3
SPA 2011	Spanish Language III: AH4	3	ANT 2125	Anthropology of Religion: SS3	3
SPA 2012	Spanish Language IV: AH4	3	ANT 2130	Sex, Gender & Culture: SS3	3
THE 1005	Theatre Appreciation: AH1	3	CRJ 1010	Introduction to Criminal Justice: SS3	3
THE 2011	Development of Theatre Greek-Renaissance: AH1	3	ECO 2001	Principles of Macroeconomics: SS1	3
THE 2012	Development of Theatre Restoration to Modern: AH1	3	ECO 2002	Principles of Microeconomics: SS1	3
<b>History</b>			ECO 2045	Environmental Economics: SS1	3
HIS 1110	The World: Antiquity-1650: HI1	3	GEO 1005	World Regional Geography: SS2	3
HIS 1120	The World: 1650-Present: HI1	3	GEO 1006	Human Geography: SS2	3
HIS 1210	U.S. History to Reconstruction: HI1	3	JOU 1005	Introduction to Mass Media: SS3	3
HIS 1220	U.S. History since the Civil War: HI1	3	PSC 1011	American Government: SS1	3
HIS 1310	Western Civilization: Antiquity-1650: HI1	3	PSC 1025	American State & Local Government: SS1	3
HIS 1320	Western Civilization: 1650-Present: HI1	3	PSC 1050	Current Political Issues: SS1	3
HIS 2000	History of Science & Technology: HI1	3	PSC 2005	International Relations: SS1	3
HIS 2015	20th Century World History: HI1	3	PSC 2020	Introduction to Political Science: SS1	3
HIS 2115	American Indian History: HI1	3	PSY 1001	General Psychology I: SS3	3
HIS 2130	History of the American West: HI1	3	PSY 1002	General Psychology II: SS3	3
HIS 2135	Colorado History: HI1	3	PSY 1005	Psychology of Workplace Relationships	3
HIS 2140	Civil War Era in American History: HI1	3	PSY 2332	Psychology of Adjustment	3
HIS 2145	U.S. History Since 1945: HI1	3	PSY 2440	Human Growth & Development: SS3	3
HIS 2300	The Middle Ages: HI1	3	PSY 2771	Psychology of Personality: SS3	3
HIS 2500	History of Islamic Civilization: HI1	3	SOC 1001	Introduction to Sociology I: SS3	3
HIS 2510	Modern Middle East: HI1	3	SOC 1002	Introduction to Sociology II: SS3	3
HIS 2610	History of Modern China: HI1	3	SOC 2005	Sociology of Family Dynamics: SS3	3
<b>Mathematics</b>			SOC 2016	Sociology of Gender: SS3	3
MAT 1120	Math for Clinical Calculations	3	SOC 2018	Sociology of Diversity: SS3	3
MAT 1140	Career Math	3	SOC 2020	Sociology of Religion: SS3	3
MAT 1160	Financial Mathematics	3	SOC 2031	The Sociology of Deviant Behavior: SS3	3
MAT 1260	Introduction to Statistics: MA1	3	WST 2000	Introduction to Women's & Gender Studies: SS3	3
MAT 1340	College Algebra: MA1	4	<b>Written Communication</b>		
MAT 2430	Calculus III: MA1	5	COM 1150	Public Speaking	3
MAT 2431	Calculus III with Engineering Applications: MA1	5	COM 1250	Interpersonal Communication: SS3	3
<b>Natural and Physical Sciences</b>			COM 2220	Group Communication: SS3	3
ANT 1005	Biological Anthropology w/Lab: SC1	4	COM 2250	Organizational Communication	3
AST 1110	Planetary Astronomy w/Lab: SC1	4	ENG 1015	Technical English & Communication	3
AST 1120	Stellar Astronomy w/Lab: SC1	4	ENG 1021	English Composition I: CO1	3
BIO 1004	Biology: A Human Approach: SC1	4	ENG 1022	English Composition II: CO2	3
BIO 1005	Science of Biology w/Lab: SC1	4	ENG 1031	Technical Writing I: CO1	3
BIO 1006	Basic Anatomy & Physiology	4	ENG 1032	Technical Writing II	3
BIO 1048	Basic Ecology	4	<b>Other General Electives</b>		
BIO 1111	GenBio I: Molecular & Cellular Biology w/Lab: SC1	5	BUS 1015	Introduction to Business	3
BIO 1112	GenBio II: Ecology & Organismic Biology w/Lab: SC1	5	CIS 1015	Introduction to Computer Information Systems	3
BIO 2101	Human Anatomy & Physiology I w/Lab: SC1	4	CIS 1018	Introduction to PC Applications	3
BIO 2102	Human Anatomy & Physiology II w/Lab: SC1	4	CSC 1020	Problem Solving with (Software Package)	3
BIO 2104	Microbiology w/Lab: SC1	4	REC 1000	Introduction to Recreation	2
BIO 2124	Genetics: SC1	4			
CHE 1011	Introduction to Chemistry I w/Lab: SC1	5			
CHE 1012	Introduction to Chemistry II w/Lab: SC1	5			
CHE 1111	General College Chemistry I w/Lab: SC1	5			

# Associate of Applied Sciences Degree Programs and Certificates

## Accounting

### Associate of Applied Science Degree

Recommended basic skills courses are

- College Readiness in English
- College Readiness for 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 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 1018	Introduction to PC Applications	3
	or	
CSC 1005	Computer Literacy	(3)
COM 1150	Public Speaking	3
ECO 2001	Principles of Macroeconomics: SS1	3
ENG 1031	Technical Writing I: CO1	3
	or	
ENG 1021	English Composition I: CO1	(3)
MAT 1160	Financial Mathematics or higher	3
		<hr/> 15

#### Additional Required Courses

ACC 1001	Fundamentals of Accounting	3
ACC 1011	Introduction to Financial Accounting	3
ACC 1012	Introduction to Managerial Accounting	3
ACC 1015	Payroll Accounting	3
ACC 1025	Computerized Accounting	3
ACC 1031	Income Tax	3
	or	
ACC 1032	Tax Help Colorado	(2)
	and	
ACC 1033	Tax Help Colorado Practicum	(1)
ACC 2011	Intermediate Accounting I	4
ACC 2026	Cost Accounting	3
BUS 1015	Introduction to Business	3
BUS 2016	Legal Environment of Business	3
BUS 2017	Business Communication & Report Writing	3
CIS 1055	Complete Spreadsheets: (Software package)	3
Elective	Choose nine (9) hours from list below	9
		<hr/> 46

**Total Credit Hours**

**61**

#### Electives

ACC 1035	Spreadsheet Applications for Accounting	3
ACC 2012	Intermediate Accounting II	4
ACC 2016	Governmental & Not-for-Profit Accounting	3
ACC 2087	Cooperative Education	3
BUS 2026	Business Statistics	3
CIS 2067	Management of Information Systems	3
ECO 2002	Principles of Microeconomics: SS1	3
FIN 2010	Principles of Finance	3
MAN 2000	Human Resource Management I	3
MAN 2026	Principles of Management	3
MAR 2016	Principles of Marketing	3
PHI 1012	Ethics: AH3	3
PHI 2005	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:

- Use computer applications to perform accounting functions
- Use 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 1001	Fundamentals of Accounting	3
ACC 1011	Introduction to Financial Accounting	3
ACC 1012	Introduction to Managerial Accounting	3
ACC 1015	Payroll Accounting	3
ACC 1025	Computerized Accounting	3
BUS 1015	Introduction to Business	3
	or	
ACC 1032	Tax Help Colorado	(2)
	and	
ACC 1033	Tax Help Colorado Practicum	(1)
CIS 1018	Introduction to PC Applications	3
	or	
CSC 1005	Computer Literacy	(3)
CIS 1055	Complete Spreadsheets: (Software package)	3
MAT 1160	Financial Mathematics or higher	3
Elective	Choose three (3) hours from list below	3
		<hr/> 30

#### Electives

ACC 1031	Income Tax	3
ACC 1035	Spreadsheet Applications for Accounting	3
ACC 2087	Cooperative Education	3
BUS 2016	Legal Environment of Business	3
BUS 2017	Business Communication & Report Writing	3
COM 1150	Public Speaking	3
ENG 1031	Technical Writing I: CO1	3
	or	
ENG 1021	English Composition I: CO1	(3)
FIN 1060	Consumer Economics	3
MAN 1016	Principles of Supervision	3

## Bookkeeping

This certificate in bookkeeping 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 certificate program, students should be able to:

- Use 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 1015	Payroll Accounting	3
ACC 1011	Introduction to Financial Accounting	3
	or	
ACC 1001	Fundamentals of Accounting	(3)
BTE 1008	Ten-Key by Touch	1
	or	
BTE 1000	Computer Keyboarding	(1)
ACC 1025	Computerized Accounting	3
BUS 1015	Introduction to Business	3
CIS 1018	Introduction to PC Applications	3
	or	
CSC 1005	Computer Literacy	(3)
<b>Total Credit Hours</b>		<b>16</b>

## Finance and Banking

This certificate program provides students with a foundation of Accounting knowledge and skills as they pertain to the field of Finance and Banking.

### Program Learning Outcomes

Upon completion of the Finance and Banking certificate program, students should be able to:

- Perform each of the eight steps of the Accounting Cycle
- Apply basic managerial accounting concepts, including costing systems, budgets, and cost-volume-profit analysis
- Identify banking conventions including legal and ethical standards
- Use financial and banking knowledge to aid in organizational decision-making
- Apply the financial functions utilized by banking and investment institutions

ACC 1011	Introduction to Financial Accounting	3
ACC 1012	Introduction to Managerial Accounting	3
BUS 1015	Introduction to Business	3
CIS 1018	Introduction to PC Applications	3
	or	
CSC 1005	Computer Literacy	(3)
CIS 1055	Complete Spreadsheets: (Software package)	3
FIN 1050	Principles of Banking	3
FIN 1060	Consumer Economics	3
FIN 2010	Principles of Finance	3
MAT 1160	Financial Mathematics or higher	3
Elective	Choose three (3) hours from list below	3
<b>Total Credit Hours</b>		<b>30</b>

### Electives

ACC 1025	Computerized Accounting	3
ACC 1035	Spreadsheet Applications for Accounting	3
BTE 1008	Ten-Key by Touch	1
BUS 2016	Legal Environment of Business	3

BUS 2017	Business Communication & Report Writing	3
FIN 1015	Retail Banking	2
FIN 2040	Law & Banking Principles	2
FIN 2087	Cooperative Education	3
PHI 2005	Business Ethics: AH3	3

Additional information available on the Accounting Department website at [www.pikespeak.ed/programs/accounting](http://www.pikespeak.ed/programs/accounting).

## Allied Health

### Associate of Applied Science Degree

Recommended basic skills courses are

- College Readiness in English
- College Readiness for 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, I 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 1250	Interpersonal Communication: SS3	3
	or	
COM 2250	Organizational Communication	(3)
ENG 1031	Technical Writing I: CO1	3
	or	
ENG 1021	English Composition I: CO1	(3)
MAT 1140	Career Math	3
	or	
MAT 1160	Financial Mathematics	(3)
PSY 1001	General Psychology I: SS3	3
SPA 1001	Conversational Spanish	3
	or	
WOL	World Language Course	(3)
		<b>15</b>

### Additional Required Courses

EMS 1021	EMT Fundamentals	3
EMS 1022	EMT Medical Emergencies	4
EMS 1023	EMT Trauma Emergencies	2
EMS 1024	EMT Special Considerations	2
EMS 1070	EMT Clinical	1
HPR 1005	Orientation to Health Careers	3
HPR 1006	Customer Service in Healthcare	2
HPR 1008	Law & Ethics for Health Professionals	2
HPR 1011	CPR for Professionals	0.5
HPR 1020	Phlebotomy	4
HPR 1039	Medical Terminology	2
HPR 1045	Medical Record Terminology	2
HPR 2020	Advanced Phlebotomy	4
MOT 1025	Basic Medical Sciences I	3
MOT 1026	Basic Medical Sciences II	3
MOT 1027	Basic Medical Sciences III	3
NUA 1001	Nurse Aide Health Care Skills	4
NUA 1070	Nurse Assistant Clinical Experience	1
NUA 1071	Clinical: Advanced Nurse Aide	1
		<b>46.5</b>
<b>Total Credit Hours</b>		<b>61.5</b>

Additional information available on the Allied Health Department website at [www.pikespeak.edu/programs/Allied-Health](http://www.pikespeak.edu/programs/Allied-Health).

## Architectural Engineer / Construction Management

### Associate of Applied Science Degree

Recommended basic skills courses are

- College Readiness in English
- College Readiness for 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. 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 1018	Introduction to PC Applications	3
	or	
CSC 1005	Computer Literacy	(3)
COM 2250	Organizational Communication	3
ENG 1031	Technical Writing I: CO1 or higher	3
MAT 1140	Career Math or higher	3
	Choose three (3) hours from list below	3
		<u>15</u>

### Choose three (3) credit hours

PSY 1001	General Psychology I: SS3	3
PSY 1005	Psychology of Workplace Relationships	3
SPA 1001	Conversational Spanish I	3

### Additional Required Courses for all Emphasis Areas

1200	Print Reading Residential/Commercial	3
AEC 1220	Architectural Drawing Theory	4
AEC 1231	Residential Construction Drawing	4
AEC 1520	Construction Material & Systems	3
AEC 1600	Construction Practices & Documents	2
AEC 2300	Sustainable Building Systems	3
AEC 2700	International Building Codes	3
CAD 1104	CAD for Architecture	4
CAD 2220	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 1110	History of Architecture	3
AEC 1232	Commercial Construction Drawing	4
AEC 2230	Architectural Design & Development	4
AEC 2930	Professional Seminar & Portfolio	3
CAD 2221	Advanced Revit Architecture	3
		<u>17</u>

**Total Credit 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 2610	Construction Estimating	3
AEC 2630	Construction Scheduling	3
AEC 2650	Construction Project Management	3
AEC 2660	Construction Safety & Loss Prevention	2
AEC 2930	Professional Seminar & Portfolio	3
CAD 2221	Advanced Revit Architecture	3
		<u>17</u>

**Total Credit 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 2610	Construction Estimating	3
AEC 2630	Construction Scheduling	3
AEC 2930	Professional Seminar & Portfolio	3
BUS 1015	Introduction to Business	3
BUS 2016	Legal Environment of Business	3
MAR 1011	Principles of Sales	3
MAR 2016	Principles of Marketing	3
		21

**Total Credit Hours for Product Representative Degree Emphasis** **65**

#### Electives

AEC 1232	Commercial Construction Drawing	4
AEC 2080	Internship	3
AEC 2610	Construction Estimating	3
AEC 2630	Construction Scheduling	3
AEC 2660	Construction Safety & Loss Prevention	2
OSH 1311	30-HR Construction Safety	3

### 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 1110	History of Architecture	3
AEC 1200	Print Reading Residential/Commercial	3
AEC 1232	Commercial Construction Drawing	4
AEC 1520	Construction Material & Systems	3
AEC 2230	Architectural Design & Development	4

AEC 2700	International Building Codes	3
AEC 2930	Professional Seminar & Portfolio	3
<b>Total Credit Hours</b>		<b>23</b>

### 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 1200	Print Reading Residential/Commercial	3
AEC 1220	Architectural Drawing Theory	4
AEC 1231	Residential Construction Drawing	4
CAD 1104	CAD for Architecture	4
CAD 2220	Revit Architecture	3
<b>Total Credit Hours</b>		<b>18</b>

### 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 1200	Print Reading Residential/Commercial	3
AEC 1520	Construction Material & Systems	3
AEC 2610	Construction Estimating	3
AEC 2630	Construction Scheduling	3

AEC 2660 Construction Safety & Loss Prevention	2
AEC 2700 International Building Codes	3
AEC 2930 Professional Seminar & Portfolio	3
<b>Total Credit Hours</b>	<b>20</b>

Additional information available on the Architectural Engineer / Construction Management Department website at [www.pikespeak.edu/programs/architecture](http://www.pikespeak.edu/programs/architecture).

## Automotive Collision Technology

### Associate of Applied Science Degree

Recommended basic skills courses are

- College Readiness in English
- College Readiness for 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 1018 Introduction to PC Applications	3
COM 2250 Organizational Communication	3
MAT 1140 Career Math	3
Elective AAS General Education Elective course	6
	<b>15</b>

#### Additional Required Courses for all Emphasis Areas

ACT 1001 Introduction to Automotive Collision Technology	4
ACT 1011 Metal Welding & Cutting I	3
ACT 1021 Non-Structural Repair Preparation	3
ACT 1022 Panel Repair & Replacements	3
ACT 1023 Metal Finishing & Body Filling	3
ACT 1031 Structural Damage Diagnosis	3
ACT 1042 Surface Preparation I	2
ACT 1043 Spray Equipment Operation	2
ACT 1044 Refinishing I	2
ACT 1051 Plastics & Adhesives I	1
ACT 2032 Automotive Glass Repair	2
ACT 2051 Plastics & Adhesives II	1
	<b>29</b>

## Emphasis Areas

### Collision

ACT 1024 Replace Weld-On Exterior Panel	3
ACT 1032 Structural Damage Repair	3
ACT 1070 Automotive Collision Technology Lab Experiences I	4
ACT 1080 Automotive Collision Repair Internship Level I	2
ACT 1081 Automotive Collision Repair Level II Internship	2
ACT 2015 Paintless Dent Repair	3
ACT 2026 Production	4
	<b>21</b>
<b>Total Credit Hours for Collision Degree Emphasis</b>	<b>65</b>

### Customizing

ACT 1060 Custom Painting	3
ACT 1064 Hobbyist Paint & Body	4
ACT 1065 Automotive Body Customizing I	3
ACT 1066 Automotive Body Customizing II	3
ACT 1067 Automotive Body Customizing III	3
ACT 2011 Metal Welding & Cutting II	2
CAD 1100 Print Reading for Computer Aided Drafting	3
CAD 2455 SolidWorks/Mechanical	3
CAD 2456 Advanced SolidWorks	3
	<b>27</b>
<b>Total Credit Hours for Customizing Degree Emphasis</b>	<b>71</b>

### Estimating

ACT 1072 Automotive Collision Technology Lab Experiences III	4
ACT 1080 Automotive Collision Repair Internship Level I	2
ACT 1081 Automotive Collision Repair Level II Internship	2
ACT 2005 Estimating & Shop Management	3
ACT 2007 Customer Relations & Sales	2
ACT 2026 Production	4
	<b>17</b>
<b>Total Credit Hours for Estimating Degree Emphasis</b>	<b>61</b>

### Mechanical

ASE 1020 Basic Automotive Electricity	2
ASE 1023 Starting & Charging System	2
ASE 1040 Suspension & Steering I	2
ASE 1041 Suspension & Steering II	2
ASE 2021 Automotive & Diesel Body Electrical	2
ASE 2040 Suspension & Steering III	2
ASE 2065 Heating & Air Conditioning Systems	4
	<b>16</b>
<b>Total Credit Hours for Mechanical Degree Emphasis</b>	<b>62</b>

### Refinish

ACT 1060 Custom Painting	3
ACT 1071 Automotive Collision Technology Lab Experiences II	4
ACT 1080 Automotive Collision Repair Internship Level I	2
ACT 1081 Automotive Collision Repair Level II Internship	2
ACT 2026 Production	4
ACT 2043 Refinishing II	2
ACT 2044 Final Detail	2
	<b>19</b>
<b>Total Credit Hours for Refinish Degree Emphasis</b>	<b>63</b>

## 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 1001	Introduction to Automotive Collision Technology	4
ACT 1011	Metal Welding & Cutting I	3
ACT 1021	Non-Structural Repair Preparation	3
ACT 1022	Panel Repair & Replacements	3
ACT 1023	Metal Finishing & Body Filling	3
ACT 1024	Replace Weld-On Exterior Panel	3
ACT 1065	Automotive Body Customizing I	3
ACT 1066	Automotive Body Customizing II	3
ACT 1067	Automotive Body Customizing III	3
ACT 2011	Metal Welding & Cutting II	2
<b>Total Credit Hours</b>		<b>30</b>

### 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 1001	Introduction to Automotive Collision Technology	4
ACT 1021	Non-Structural Repair Preparation	3
ACT 1022	Panel Repair & Replacements	3
ACT 1031	Structural Damage Diagnosis	3
ACT 1080	Automotive Collision Repair Internship Level I	2
ACT 2005	Estimating & Shop Management	3
ACT 2007	Customer Relations & Sales	2
<b>Total Credit Hours</b>		<b>20</b>

### 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 1001	Introduction to Automotive Collision Technology	4
ACT 1011	Metal Welding & Cutting I	3
ACT 1021	Non-Structural Repair Preparation	3
ACT 1022	Panel Repair & Replacements	3
ACT 1023	Metal Finishing & Body Filling	3
ACT 1024	Replace Weld-On Exterior Panel	3
ACT 1080	Automotive Collision Repair Internship Level I	2
<b>Total Credit Hours</b>		<b>21</b>

### 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 1001	Introduction to Automotive Collision Technology	4
ACT 1021	Non-Structural Repair Preparation	3
ACT 1022	Panel Repair & Replacements	3
ACT 1042	Surface Preparation I	2
ACT 1051	Plastics & Adhesives I	1
ACT 2043	Refinishing II	2
ACT 2051	Plastics & Adhesives II	1
<b>Total Credit Hours</b>		<b>16</b>

### 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 1001	Introduction to Automotive Collision Technology	4
ACT 1042	Surface Preparation I	2
ACT 1043	Spray Equipment Operation	2
ACT 1081	Automotive Collision Repair Level II Internship	2
ACT 2044	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 1042	Surface Preparation I	2
ACT 1043	Spray Equipment Operation	2
ACT 1044	Refinishing I	2
ACT 1081	Automotive Collision Repair Level II Internship	2
ACT 2043	Refinishing II	2
ACT 2044	Final Detail	2
<b>Total Credit Hours</b>		<b>12</b>

### Remove & Install 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 Remove & Install 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 1001	Introduction to Automotive Collision Technology	4
ACT 1021	Non-Structural Repair Preparation	3
ACT 1022	Panel Repair & Replacements	3
ACT 2032	Automotive Glass Repair	2
<b>Total Credit Hours</b>		<b>12</b>

Additional information available on the Automotive Collision Technology Department website at [www.pikespeak.edu/programs/automotive-collision-technology](http://www.pikespeak.edu/programs/automotive-collision-technology).

## Automotive Technology

### Associate of Applied Science Degree

Recommended basic skills courses are

- College Readiness in English
- College Readiness for Quantitative Literacy

The Automotive Technology program leads to an interesting and challenging career in the repair, service, sales, and supply fields. The Automotive Technology Degree has a specific focus on automotive service and repair. Students also have the option to pursue a variety of automotive 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 1018	Introduction to PC Applications	3
COM 2250	Organizational Communication	3
MAT 1140	Career Math	3
Electives	AAS General Education Elective courses	6
		<b>15</b>

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.

#### Additional Required Courses

ASE 1002	Introduction to the Automotive Shop	2
ASE 1010	Automotive Brake Service I	2
ASE 1011	Automotive Brake Service II	2
ASE 1020	Basic Automotive Electricity	2
ASE 1023	Starting & Charging System	2
ASE 1030	General Engine Diagnosis	2
ASE 1032	Ignition System Diagnosis & Repair	2
ASE 1034	Automotive Fuel & Emissions Systems I	2
ASE 1040	Suspension & Steering I	2
ASE 1041	Suspension & Steering II	2
ASE 1050	Manual Drive Train & Axle Maintenance	2
ASE 1051	Automotive Manual Transmission/Transaxles & Clutches I	2
ASE 1052	Manual Transmission, Transaxles & Clutches II	2
ASE 1060	Automotive Engine Repair	2
ASE 1061	Automotive Engine Repair & Rebuild	3
ASE 2010	Automotive Power & ABS Brake Systems	2
ASE 2021	Automotive & Diesel Body Electrical	4
ASE 2031	Automotive Computers & Ignition Systems	2
ASE 2033	Auto Fuel Injection & Emissions Systems II	4
ASE 2035	Driveability & Diagnosis	2
ASE 2040	Suspension & Steering III	2
ASE 2050	Automatic Transmission/Transaxle Service	1
ASE 2065	Heating & Air Conditioning Systems	4
ASE 2182	Internship: General	2
		<b>54</b>

**Total Credit Hours** **69**

### 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 1002	Introduction to the Automotive Shop	2
ASE 1020	Basic Automotive Electricity	2
ASE 1023	Starting & Charging System	2
ASE 2065	Heating & Air Conditioning Systems	4
<b>Total Credit Hours</b>		<b>10</b>

### 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 1002	Introduction to the Automotive Shop	2
ASE 1020	Basic Automotive Electricity	2
ASE 1023	Starting & Charging System	2
ASE 2050	Automatic Transmission/Transaxle Service	1
ASE 2051	Automatic Transmission & Transaxle Repair	3
<b>Total Credit Hours</b>		<b>10</b>

### 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 1002	Introduction to the Automotive Shop	2
ASE 1010	Automotive Brake Service I	2
ASE 1011	Automotive Brake Service II	2
ASE 1020	Basic Automotive Electricity	2
ASE 1023	Starting & Charging System	2
ASE 2010	Automotive Power & ABS Brake Systems	2
<b>Total Credit Hours</b>		<b>12</b>

### 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 1002	Introduction to the Automotive Shop	2
ASE 1010	Automotive Brake Service I	2
ASE 1020	Basic Automotive Electricity	2
ASE 1023	Starting & Charging System	2
ASE 1032	Ignition System Diagnosis & Repair	2
ASE 1034	Automotive Fuel & Emissions Systems I	2
ASE 1040	Suspension & Steering I	2
ASE 1050	Manual Drive Train & Axle Maintenance	2
ASE 1051	Automotive Manual Transmission/Transaxles & Clutches I	2
ASE 1052	Manual Transmission, Transaxles & Clutches II	2
ASE 1060	Automotive Engine Repair	2
ASE 1061	Automotive Engine Repair & Rebuild	3
ASE 2010	Automotive Power & ABS Brake Systems	2
ASE 2021	Automotive & Diesel Body Electrical	4
ASE 2031	Automotive Computers & Ignition Systems	2
ASE 2033	Auto Fuel Injection & Emissions Systems II	4
ASE 2040	Suspension & Steering III	2
ASE 2065	Heating & Air Conditioning Systems	4
<b>Total Credit Hours</b>		<b>43</b>

### Electrical/Electronic Systems

The Electrical/Electronic Systems 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 Electrical/Electronic Systems 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 1002	Introduction to the Automotive Shop	2
ASE 1020	Basic Automotive Electricity	2
ASE 1023	Starting & Charging System	2
ASE 2021	Automotive & Diesel Body Electrical	4
ASE 2031	Automotive Computers & Ignition Systems	2
<b>Total Credit Hours</b>		<b>12</b>

### 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 1002	Introduction to the Automotive Shop	2
ASE 1020	Basic Automotive Electricity	2
ASE 1023	Starting & Charging System	2
ASE 1030	General Engine Diagnosis	2
ASE 1032	Ignition System Diagnosis & Repair	2
ASE 1034	Automotive Fuel & Emissions Systems I	2
ASE 1060	Automotive Engine Repair	2
ASE 1061	Automotive Engine Repair & Rebuild	3
ASE 2021	Automotive & Diesel Body Electrical	4
ASE 2031	Automotive Computers & Ignition Systems	2
ASE 2033	Auto Fuel Injection & Emissions Systems II	4
ASE 2035	Driveability & Diagnosis	2
<b>Total Credit Hours</b>		<b>29</b>

### 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 1002	Introduction to the Automotive Shop	2
ASE 1020	Basic Automotive Electricity	2
ASE 1023	Starting & Charging System	2
ASE 1060	Automotive Engine Repair	2
ASE 1061	Automotive Engine Repair & Rebuild	3
<b>Total Credit Hours</b>		<b>11</b>

### 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 1002	Introduction to the Automotive Shop	2
ASE 1020	Basic Automotive Electricity	2
ASE 1023	Starting & Charging System	2
ASE 1050	Manual Drive Train & Axle Maintenance	2
ASE 1051	Automotive Manual Transmission/Transaxles & Clutches I	2
ASE 1052	Manual Transmission, Transaxles & Clutches II	2
<b>Total Credit Hours</b>		<b>12</b>

### 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 1002	Introduction to the Automotive Shop	2
ASE 1020	Basic Automotive Electricity	2
ASE 1023	Starting & Charging System	2
ASE 1040	Suspension & Steering I	2
ASE 2040	Suspension & Steering III	2
<b>Total Credit Hours</b>		<b>10</b>

Additional information available on the Automotive Technology Department website at [www.pikespeak.edu/programs/automotive-technology](http://www.pikespeak.edu/programs/automotive-technology).

## Behavioral Health

### Associate of Applied Science Degree

Recommended basic skills courses are

- College Readiness in English
- College Readiness for Quantitative Literacy

The Associate of Applied Science (AAS) in Behavioral Health program is designed to equip students with the knowledge and practical skills necessary to make a positive impact on individuals and communities facing behavioral health challenges. This program blends academic coursework with applied training to prepare graduates for entry-level positions in the field of behavioral health and provide a solid foundation for further education in related fields.

#### Program Learning Outcomes

Upon completion of the Behavioral Health degree program, students should be able to:

- Demonstrate the ability to assess the behavioral health needs of individuals, taking into consideration cultural, social, and environmental factors.
- Exhibit strong communication and interpersonal skills, enabling effective collaboration with individuals, families, and interdisciplinary teams.
- Apply crisis intervention techniques and strategies to support individuals in times of distress.
- Recognize and respect the diverse cultural backgrounds and perspectives of individuals and integrate cultural competence into behavioral health practice.
- Adhere to ethical and legal standards in behavioral health.
- Maintain accurate and confidential client records in compliance with industry standards.

### Emphasis Areas

#### Mental Health and Social Work

The AAS degree in Behavioral Health with an emphasis on Mental Health and Social Work focuses on preparing students for careers in the mental health and social services sector. Course work provides foundational behavioral health knowledge as well as the ability to apply a wide array of concepts and skills within diverse behavioral health settings with a particular emphasis on understanding and addressing mental health issues. Graduates are prepared to work in various mental health settings, such as clinics, hospitals, community centers, and social service agencies.

#### General Education Courses

COM 2063	Conflict Resolution	1
ENG 1021	English Composition I: CO1	3
MAT 1260	Introduction to Statistics: MA1	3
PSY 1001	General Psychology I: SS3	3
PSY 1002	General Psychology II: SS3	3
PSY 2440	Human Growth & Development: SS3	3
PSY 2552	Psychopathology: SS3	3
SOC 1001	Introduction to Sociology I: SS3	3
SOC 2018	Sociology of Diversity: SS3	3
SOC 2031	The Sociology of Deviant Behavior: SS3	3
SWK 1000	Introduction to Social Work	3
SWK 1100	Social Welfare & Community Agencies	3
Total Credit Hours		34

#### Additional Required Courses

BEH 1001	Mental Health Crisis and Intervention: Preparedness & Empathy	3
BEH 1020	Cultural Competence in Behavioral Health	1.5
BEH 1030	Behavioral Health Case Management & Clinical Documentation	1
BEH 1040	Child, Adult, and Family Advocacy	1.5
BEH 1060	Registered Behavioral Technician Training	4
or		
BEH 1050	Peer Support Specialist Training	(4)
BEH 2001	Mental Health Crisis & Intervention: Advocacy, Intervention, & Resilience	3
BEH 2030	Applied Therapeutic Communication Skills	3
HPR 1000	Introduction to Health	3
HPR 1008	Law & Ethics for Health Professions	2
HPR 1038	Introduction to Medical Terminology	1
PTE 1010	Introduction to Behavioral Health Care & Wellness	3
PTE 1017	Theoretical Concepts of Psychiatric Care II	2
PTE 1020	Application of Behavioral Health Care & Wellness	5
		33
Total Credit for Mental Health and Social Work Emphasis		67

#### Addiction Recovery

The AAS degree in Behavioral Health with an emphasis on Addictions and Addiction Recovery focuses on careers as certified addiction technicians, peer recovery specialists, prevention specialists, or in residential treatment centers. Graduates are prepared to complete the remaining requirements to become Certified Addiction Technicians through the Colorado Department of Regulatory Agencies (DORA).

#### General Education Courses

COM 2063	Conflict Resolution	1
ENG 1021	English Composition I: CO1	3
MAT 1260	Introduction to Statistics: MA1	3
PSY 1001	General Psychology I: SS3	3
PSY 2440	Human Growth & Development: SS3	3
PSY 2552	Psychopathology: SS3	3
SOC 1001	Introduction to Sociology I: SS3	3
SOC 2018	Sociology of Diversity: SS3	3
SWK 1100	Social Welfare & Community Agencies	3
Total Credit Hours		25

#### Additional Required Courses

BEH 1001	Mental Health Crisis & Intervention: Preparedness & Empathy	3
BEH 2001	MHCI: Mental Health Crisis & Intervention: Advocacy, Intervention, & Resilience	3
BEH 2030	Applied Therapeutic Communication Skills	3
CSL 2046	Ethical Practice in Addiction Treatment	1
CSL 2048	Advanced Case Conceptualization	1
CSL 2050	Motivational Interviewing	1.5
CSL 2051	Pharmacology I for Addiction Counselors	1
CSL 2052	Advanced Pharmacology	1
CSL 2053	Cognitive Behavior Therapy	1
CSL 2054	Trauma Informed Care	1

CSL 2055	Infectious Diseases for Addiction Counselors	1
CSL 2056	Co-occurring Disorders	1
CSL 2058	Group Counseling Skills	1.5
CSL 2059	Advanced Professional & Ethical Practice	1
CSL 2061	Case Conceptualization & Documentation	1
CSL 2065	Culturally Informed Treatment	1
CSL 2068	Addiction Counseling Skills	1.5
CSL 2069	Principles of Addiction Treatment	1.5
HPR 1000	Introduction to Health	3
HPR 1008	Law & Ethics for Health Professions	2
HPR 1038	Introduction to Medical Terminology	1
PTE 1010	Introduction to Behavioral Health Care & Wellness	3
PTE 1017	Theoretical Concepts of Psychiatric Care II	2
PTE 1020	Application of Behavioral Health Care & Wellness	5
		<hr/>
		42

Total Credits for Addiction Recovery Emphasis

67

## Certificates

### Behavioral Health Assistant – Qualified BHA

The Behavioral Health Assistant – Qualified BHA Certificate helps prepare students to develop foundational behavioral health knowledge, including entry-level skills in therapeutic communication, case management and documentation, as well as crisis intervention.

Note: Upon successful completion of this certificate, individuals will obtain a Qualified Behavioral Health Assistant Micro-Credential as outlined by the Behavioral Health Administration.

#### Program Learning Outcomes

Upon completion of the Behavioral Health Assistant – Qualified BHA certificate program, students should be able to:

- Apply evidenced-based crisis intervention techniques (such as, active listening skills) in behavioral health settings
- Construct objective documentation records that adhere to ethical and legal standards

BEH 1001	Mental Health Crisis and Intervention: Preparedness and Empathy	3
BEH 1030	Behavioral Health Case Management and Clinical Documentation	1
BEH 2030	Applied Therapeutic Communication Skills	3
PTE 1010	Introduction to Behavioral Health Care & Wellness	3
		<hr/>
Total Credit Hours		10

### Behavioral Health Assistant II

The Behavioral Health Assistant II Certificate is designed to provide students the opportunity to explore how diverse cultural backgrounds and perspectives impact care given in behavioral health settings. In addition, this certificate provides experience in behavioral health crisis intervention and case management through documentation of services provided (including interventions, goals, progress, needs assessments, care coordination, etc.). The certificate includes a service-learning experience in a behavioral health setting.

#### Program Learning Outcomes

Upon completion of the Behavioral Health Assistant II certificate program, students should be able to:

- Apply culturally competent crisis intervention techniques in behavioral health settings

- Construct objective documentation records that adhere to ethical and legal standards
- Discuss how differences in diverse cultural backgrounds (such as, race, social class, age) impact individuals in behavioral health settings

BEH 1001	Mental Health Crisis & Intervention: Preparedness & Empathy	3
BEH 1030	Behavioral Health Case Management and Clinical Documentation	1
BEH 2030	Applied Therapeutic Communication Skills	3
PTE 1010	Introduction to Behavioral Health Care & Wellness	3
SOC 2018	Sociology of Diversity: SS3	3
SWK 1100	Social Welfare and Community Agencies	3
	Total Credit Hours	<hr/>
		16

### Behavioral Health Plus (Supplement)

The Behavioral Health Plus Certificate can be an addition to many degrees (e.g., Certified Nurse Aide, Medical Assistant, Criminal Justice, etc.). It is designed to prepare students to develop foundational behavioral health knowledge, entry-level crisis management, and de-escalation skills, which can be applied in a variety of settings.

#### Program Learning Outcomes

Upon completion of the Behavioral Health Plus (Supplement) certificate program, students should be able to:

- Identify the warning signs of mental health distress
- Distinguish mental health disorders in behavioral health settings

BEH 1001	Mental Health Crisis & Intervention: Preparedness & Empathy	3
SWK 1100	Social Welfare and Community Agencies	3
	Total Credit Hours	<hr/>
		6

### Patient Navigator

The Patient Navigator Certificate is designed to prepare individuals to provide support and guidance to clients in behavioral health settings. Additionally, students will learn about privacy, confidentiality, and ethics in healthcare. Students can gain skills to help clients navigate the healthcare setting.

#### Program Learning Outcomes

Upon completion of the Patient Navigator certificate program, students should be able to:

- Apply evidenced-based crisis intervention techniques (such as, active listening skills) in behavioral health settings
- Demonstrate basic healthcare skills (e.g., aseptic handwashing, cardiopulmonary resuscitation (CPR), vital signs)

BEH 1001	Mental Health Crisis & Intervention: Preparedness & Empathy	3
BEH 2030	Applied Therapeutic Communication Skills	3
HPR 1000	Introduction to Health	3
SOC 1001	Introduction to Sociology I: SS3	3
	Total Credit Hours	<hr/>
		12

### Addiction Recovery Assistant

The Addiction Recovery Assistant certificate is designed to provide students with skills to support individuals in their treatment of substance abuse or dependence. Students will develop legal and ethical decision-making skills, as well as client-centered skills.

Note: The curriculum includes the required course credits for the Certified Addiction Technician Certification.

## Program Learning Outcomes

Upon completion of the Addiction Recovery Assistant certificate program, students should be able to:

- Distinguish mental health disorders in behavioral health settings
- Demonstrate legal and ethical decision-making skills in addiction counseling
- Demonstrate client-centered skills to help individuals with substance abuse or dependence (such as, open-ended questions, paraphrases, and appropriate attentiveness and respect)
- Apply cultural competence in the treatment setting

BEH 1001	Mental Health Crisis & Intervention: Preparedness & Empathy	3
CSL 2046	Ethical Practice in Addiction Treatment	1
CSL 2050	Motivational Interviewing	1.5
CSL 2051	Pharmacology I for Addiction Counselors	1
CSL 2054	Trauma Informed Care	1
CSL 2058	Group Counseling Skills	1.5
CSL 2061	Case Conceptualization & Documentation	1
CSL 2065	Culturally Informed Treatment	1
CSL 2068	Addiction Counseling Skills	1.5
CSL 2069	Principles of Addiction Treatment	1.5
HPR 1000	Introduction to Health	3
HPR 1008	Law & Ethics for Health Professions	2
PSY 1001	General Psychology I: SS3	3
Total Credits Hours		<u>20</u>

## Broadcasting and Electronic Media

### Associate of Applied Science Degree

Recommended basic skills courses are

- College Readiness in English
- College Readiness for Quantitative Literacy

The AAS degree in BEM 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 BEM 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 Broadcasting & Electronic Media 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 1001	Cultural Anthropology: SS3	3
or		
SOC 1001	Introduction to Sociology I: SS3	(3)
or		
PSY 1001	General Psychology I: SS3	(3)
BUS 1015	Introduction to Business	3

CIS 1018	Introduction to PC Applications	3
or		
CSC 1005	Computer Literacy	(3)
COM 2250	Organizational Communication	3
or		
ENG 1021	English Composition I: CO1	(3)
MAT 1140	Career Math	<u>3</u>
		15

## Additional Required Courses

RTV 1000	Introduction to Electronic Media	3
RTV 1001	Radio Programming & Production I	3
RTV 1002	Beginning Television	3
RTV 1003	Writing for Television & Radio	3
RTV 1005	Basic Video Production	3
RTV 1006	Principles of Audio	3
RTV 1008	News & Sports Writing & Reporting	3
RTV 1010	Fundamentals of Podcasting	3
RTV 1011	Gaming, Vlogging, & Lifestyle Video Live Streaming	3
RTV 1082	Internship–Radio Station/Audio Production Company	4
or		
RTV 1083	Internship–Television Studio/Video Production Company	(4)
or		
RTV 1180	Internship–KEPC Radio	(4)
or		
RTV 1181	Internship–College ITV Studio	(4)
RTV 2001	Radio Programming & Production II	3
or		
RTV 2002	Advanced Television Production	(3)
RTV 2007	Broadcast Management	3
RTV 2016	Multi-Media Reporting	3
RTV 2080	Internship-TV Studio/Video Production II	3
or		
RTV 2083	Internship-Radio Station/Audio Production II	(3)
or		
RTV 2181	Internship in the News-KEPC Radio	(3)
or		
RTV 2182	Internship-KEPC Radio II	(3)
or		
RTV 2184	Internship in Telecommunications	(3)
Elective	Choose six (6) hours from list below	<u>6</u>
Total Credit Hours		49
		<u>64</u>

## Electives

MGD 1002	Introduction to Multimedia	3
MGD 1011	Adobe Photoshop I	3
MGD 1012	Adobe Illustrator I	3
MGD 1041	Web Design I	3
MGD 1064	Digital Video Editing I	3
MGD 1065	After Effects I	3
MGD 2011	Adobe Photoshop II	3
MGD 2012	Adobe Illustrator II	3
PHO 1001	Professional Photography I	3
PHO 1005	Photo & Computer Orientation	2
PHO 1020	Fundamentals of Photography	3
RTV 1003	Writing for Television & Radio	3
RTV 1004	Corporate Scriptwriting	3
RTV 1006	Principles of Audio	3
RTV 1082	Internship–Radio Station/Audio Production Company	4
RTV 1083	Internship–Television Studio/Video Production Company	4
RTV 1180	Internship–KEPC Radio	4
RTV 1181	Internship–College ITV Studio	4
RTV 2001	Radio Programming & Production II	3
RTV 2005	Advanced Video Production	3

RTV 2080	Internship–TV Studio/Video Production II	3
RTV 2083	Internship–Radio Station/Audio Production II	3
RTV 2181	Internship in the News–KEPC Radio	3
RTV 2182	Internship–KEPC Radio II	3
RTV 2184	Internship in Telecommunications	3
THE 1011	Acting I	3
THE 1040	Stage Dialects	1
THE 2004	Voice & Articulation I	2
THE 2016	Theatre Lighting & Design	3

- Create advanced video productions using industry standards
- Manage day-to-day radio and television station operations

MGD 1065	After Effects I	3
RTV 1002	Beginning Television	3
RTV 1003	Writing for Television & Radio	3
RTV 1005	Basic Video Production	3
RTV 1006	Principles of Audio	3
RTV 1011	Gaming, Vlogging, & Lifestyle Video Live Streaming	3
RTV 1083	Internship–Television Studio/Video Production Company	4
RTV 1181	Internship–College ITV Studio	4
RTV 2002	Advanced Television Production	3
RTV 2007	Broadcast Management	3
<b>Total Credit Hours</b>		<b>32</b>

## 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 1001	Radio Programming & Production I	3
RTV 1003	Writing for Television & Radio	3
RTV 1006	Principles of Audio	3
RTV 1008	News & Sports Writing & Reporting	3
RTV 1010	Fundamentals of Podcasting	3
RTV 1082	Internship–Radio Station/Audio Production Company	4
RTV 1180	Internship–KEPC Radio	4
RTV 2001	Radio Programming & Production II	3
RTV 2007	Broadcast Management	3
RTV 2083	Internship-Radio Sta/Audio Production II	3
<b>Total Credit Hours</b>		<b>32</b>

### 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

### Basic Radio and Audio Production

Students who elect to complete a Basic Radio and Audio 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 and Audio 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 1001	Radio Programming & Production I	3
RTV 1003	Writing for Television & Radio	3
RTV 1006	Principles of Audio	3
RTV 1010	Fundamentals of Podcasting	3
RTV 1180	Internship–KEPC Radio	4
RTV 2001	Radio Programming & Production II	3
<b>Total Credit Hours</b>		<b>19</b>

### Basic Television and Audio Production

Students who elect to complete a Basic Television and Audio 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 and Audio 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 1003	Writing for Television & Radio	3
RTV 1005	Basic Video Production	3
RTV 1181	Internship–College ITV Studio	4
RTV 1202	Television Studio Production	3
RTV 2002	Advanced Television Production	3
<b>Total Credit Hours</b>		<b>16</b>

Additional information available on the Broadcasting & Electronic Media Department website at [www.pikespeak.edu/programs/broadcasting-electronic-media](http://www.pikespeak.edu/programs/broadcasting-electronic-media).

## Building and Construction Technology

### Associate of Applied Science Degree

Recommended basic skills courses are

- College Readiness in English
- College Readiness for 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 1018	Introduction to PC Applications	3
or		
CSC 1005	Computer Literacy	(3)
COM 1150	Public Speaking	3
or		
COM 2250	Organizational Communication	(3)
ENG 1031	Technical Writing I: CO1	3
or		
ENG 1021	English Composition I: CO1	(3)
MAT 1140	Career Math	3
	Choose three (3) hours from list below	3
		<b>15-16</b>

#### Choose three (3) credit hours

PSY 1001	General Psychology I: SS3	3
PSY 1005	Psychology of Workplace Relationships	3
SPA 1001	Conversational Spanish I	3

## Emphasis Areas

### Carpentry Applications

AEC 1200	Print Reading Residential/Commercial	3
AEC 2610	Construction Estimating	3
AEC 2630	Construction Scheduling	3
AEC 2660	Construction Safety & Loss Prevention	2
AEC 2700	International Building Codes	3
CON 1020	Build Materials & Environmental Impact	3
CON 1042	International Residential Code (IRC)	4
CON 1057	National Center for Construction Education & Research Core	5
CON 1058	National Center for Construction Education & Research Carpentry I	6
CON 1059	National Center for Construction Education & Research Carpentry II	6
CON 1060	National Center for Construction Education & Research Carpentry III	6
CON 1061	National Center for Construction Education & Research Carpentry IV	6
CON 2007	Light Construction Equipment	3
CON 2080	Internship	2
or		
CON 2089	Capstone	(1)
OSH 1310	10-HR Construction Industry Standards	1
		<b>55</b>

#### Total Credit Hours for Carpentry Degree Emphasis

**70**

### Electrical Applications

AEC 1200	Print Reading Residential/Commercial	3
AEC 2660	Construction Safety & Loss Prevention	2
CON 1020	Build Materials & Environmental Impact	3
CON 1042	International Residential Code (IRC)	4
CON 1057	National Center for Construction Education & Research Core	5
CON 1062	National Center for Construction Education & Research Electrical I	6
CON 1063	National Center for Construction Education & Research Electrical II	6
CON 1064	National Center for Construction Education & Research Electrical III	6
CON 1065	National Center for Construction Education & Research Electrical IV	6
CON 2080	Internship	2
or		
CON 2089	Capstone	(1)
EIC 1860	National Electrical Code I	4
EIC 1861	National Electrical Code II	4
EIC 2817	Electrical Estimating/Costing	4
OSH 1310	10-HR Construction Industry Standards	1
		<b>55-56</b>

#### Total Credit Hours for Electrical Degree Emphasis

**70-71**

### Masonry Applications

AEC 1200	Print Reading Residential/Commercial	3
AEC 2610	Construction Estimating	3
AEC 2630	Construction Scheduling	3
AEC 2660	Construction Safety & Loss Prevention	2
AEC 2700	International Building Codes	3
CON 1020	Build Materials & Environmental Impact	3
CON 1042	International Residential Code (IRC)	4
CON 1052	National Center for Construction Education & Research Masonry I	6
CON 1053	National Center for Construction Education & Research Masonry II	6
CON 1054	National Center for Construction Education & Research Masonry III	6



CON 1055	National Center for Construction Education & Research Masonry IV	6
CON 1057	National Center for Construction Education & Research Core	5
CON 2007	Light Construction Equipment	3
CON 2080	Internship	1
or		
CON 2089	Capstone	(1)
OSH 1310	10-HR Construction Industry Standards	1
		<hr/>
		55
<b>Total Credit Hours for Masonry Degree Emphasis</b>		<b>70</b>

**Plumbing Applications**

AEC 1200	Print Reading Residential/Commercial	3
AEC 2660	Construction Safety & Loss Prevention	2
CON 1020	Build Materials & Environmental Impact	3
CON 1042	International Residential Code (IRC)	4
CON 1057	National Center for Construction Education & Research Core	5
CON 1066	National Center for Construction Education & Research Plumbing I	6
CON 1067	National Center for Construction Education & Research Plumbing II	6
CON 1068	National Center for Construction Education & Research Plumbing III	6
CON 1069	National Center for Construction Education & Research Plumbing IV	6
CON 2080	Internship	1
or		
CON 2089	Capstone	(1)
OSH 1310	10-HR Construction Industry Standards	1
PLU 2007	International Plumbing Code	4
PLU 2008	International Fuel Gas Code	4
PLU 2050	Plumbing Estimating & Costing	4
		<hr/>
		55
<b>Total Credit Hours for Plumbing Degree Emphasis</b>		<b>70</b>

**Certificates**

**Advanced Carpentry Applications**

This Advanced Carpentry 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 Advanced Carpentry 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 1200	Print Reading Residential/Commercial	3
AEC 2630	Construction Scheduling	3
AEC 2700	International Building Codes	3
CON 1060	National Center for Construction Education & Research Carpentry III	6
CON 1061	National Center for Construction Education & Research Carpentry IV	6

<b>Total Credit Hours</b>	<hr/>	<b>21</b>
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**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 1042	International Residential Code (IRC)	4
CON 1057	National Center for Construction Education & Research Core	5
CON 1058	National Center for Construction Education & Research Carpentry I	6
CON 1059	National Center for Construction Education & Research Carpentry II	6

<b>Total Credit Hours</b>	<hr/>	<b>21</b>
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**Advanced Electrical Applications**

This Advanced Electrical 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 Advanced Electrical 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 2660	Construction Safety & Loss Prevention	2
CON 1064	National Center for Construction Education & Research Electrical III	6
CON 1065	National Center for Construction Education & Research Electrical IV	6
EIC 1861	National Electrical Code II	4
EIC 2817	Electrical Estimating/Costing	4
<b>Total Credit Hours</b>		<b>22</b>

### 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 1057	National Center for Construction Education & Research Core	5
CON 1062	National Center for Construction Education & Research Electrical I	6
CON 1063	National Center for Construction Education & Research Electrical II	6
EIC 1860	National Electrical Code I	4
<b>Total Credit Hours</b>		<b>21</b>

### 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 1200	Print Reading Residential/Commercial	3
AEC 2610	Construction Estimating	3
AEC 2630	Construction Scheduling	3
CON 1054	National Center for Construction Education & Research Masonry III	6
CON 1055	National Center for Construction Education & Research Masonry IV	6
<b>Total Credit Hours</b>		<b>21</b>

### 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)

CON 1042	International Residential Code (IRC)	4
CON 1052	National Center for Construction Education & Research Masonry I	6
CON 1053	National Center for Construction Education & Research Masonry II	6
CON 1057	National Center for Construction Education & Research Core	5
<b>Total Credit Hours</b>		<b>21</b>

### Advanced Plumbing Applications

This Advanced Plumbing 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 Advanced Plumbing 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 2660	Construction Safety & Loss Prevention	2
CON 1068	National Center for Construction Education & Research Plumbing III	6
CON 1069	National Center for Construction Education & Research Plumbing IV	6
PLU 2008	International Fuel Gas Code	4
PLU 2050	Plumbing Estimating & Costing	4
<b>Total Credit Hours</b>		<b>22</b>

### 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 1057	National Center for Construction Education & Research Core	5
CON 1066	National Center for Construction Education & Research Plumbing I	6
CON 1067	National Center for Construction Education & Research Plumbing II	6
PLU 2007	International Plumbing Code	4
<b>Total Credit Hours</b>		<b>21</b>

Additional information available on the Building and Construction Technology Department website at [www.pikespeak.edu/programs/building-construction-technology](http://www.pikespeak.edu/programs/building-construction-technology).

## Business Administration

### Associate of Applied Science Degree

Recommended basic skills courses are

- College Readiness in English
- College Readiness for 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, or Management.

Two-year Associate of Applied Science degrees are available: the Business Management or the Administrative Assistant. 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 to schedule a personal appointment with a business program faculty advisor. Indicate your preferred campus.

This degree program is designed for students who wish to pursue a career in business with a specific area of emphasis.

Students not meeting a course prerequisite must have instructor permission to enroll and may need to take another course concurrently.

#### Program Learning Outcomes

Upon completion of the 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

The following General Education and Business Foundation courses are required for both AAS degrees. Completion of these 30 credits also earns the student a Business Foundation Certificate.

#### General Education Requirements

CIS 1018	Introduction to PC Applications	3
COM 1150	Public Speaking	3
ECO 2001	Principles of Macroeconomics: SS1	3
	or	
ECO 2002	Principles of Microeconomics: SS1	(3)
ENG 1021	English Composition I: CO1	3
MAT 1160	Financial Mathematics	3
		<hr/>
		15

#### Business Foundation course requirements

ACC 1001	Fundamentals of Accounting	3
	or	
ACC 1011	Introduction to Financial Accounting	(3)
BUS 1015	Introduction to Business	3
FIN 1060	Consumer Economics	3
MAN 1028	Human Relations in Organizations	3
MAR 1060	Customer Service	3
		<hr/>
		15

## Emphasis Areas

### Administrative Assistant

The Administrative Assistant 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 1002	Keyboarding Applications I	2
BTE 1008	Ten-Key by Touch	1
BTE 1011	Keyboarding Speedbuilding I	2
BTE 1066	Business Editing Skills	3
BUS 2017	Business Communication & Report Writing	3
CIS 1035	Complete Word Processing	3
CIS 1040	Microsoft Outlook	1
CIS 1055	Complete Spreadsheets: (Software package)	3
CIS 1065	Complete Presentation Graphics	3
MAN 2046	Critical Issues in Marketing & Management	3
Electives	Choose six (6) hours from list below	6
		<hr/>
		30
<b>Total Credit Hours for Administrative Assistant Emphasis</b>		<b>60</b>

#### Administrative Assistant Emphasis Electives

ACC 1015	Payroll Accounting	3
ACC 1025	Computerized Accounting	3
BTE 1087	Cooperative Education/Internship	3
CIS 1024	Introduction to Operating Systems	3
CIS 1045	Introduction to Desktop Database	3
CWB 1010	Introduction to Web Authoring	3

MAN 1016	Principles of Supervision	3
MAN 2000	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 1081	Internship	3
	or	
MAN 1016	Principles of Supervision	(3)
BUS 2016	Legal Environment of Business	3
BUS 2017	Business Communication & Report Writing	3
BUS 2026	Business Statistics	3
FIN 2010	Principles of Finance	3
MAN 2000	Human Resource Management I	3
MAN 2026	Principles of Management	3
MAN 2040	Strategic Management	3
MAN 2046	Critical Issues in Marketing & Management	3
MAR 2016	Principles of Marketing	3
		<hr/>
		30
<b>Total Credit Hours for Management Emphasis</b>		<b>60</b>

## 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 not meeting a course prerequisite must have instructor permission to enroll and may need to take another course concurrently.

#### 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 1002	Keyboarding Applications I	2
BTE 1008	Ten-Key by Touch	1
BTE 1011	Keyboarding Speedbuilding I	2
BTE 1066	Business Editing Skills	3
BUS 1015	Introduction to Business	3
BUS 2017	Business Communication & Report Writing	3
CIS 1035	Complete Word Processing	3
CIS 1040	Microsoft Outlook	1
CIS 1055	Complete Spreadsheets: (Software package)	3
CIS 1065	Complete Presentation Graphics	3
MAR 1060	Customer Service	3
Electives	Choose three (3) hours from list below	3
		<hr/>
		30
<b>Total Credit Hours</b>		<b>30</b>

#### Administrative Assistant Electives

ACC 1001	Fundamentals of Accounting	3
ACC 1011	Introduction to Financial Accounting	3
ACC 1015	Payroll Accounting	3
ACC 1025	Computerized Accounting	3
BTE 1087	Cooperative Education/Internship	3
CIS 1024	Introduction to Operating Systems	3
CIS 1045	Introduction to Desktop Database	3
CWB 1010	Introduction to Web Authoring	3

MAN 1016	Principles of Supervision	3	MAN 2000	Human Resource Management I	3
MAN 2000	Human Resource Management I	3	MAN 2026	Principles of Management	3
MAN 2046	Critical Issues in Marketing & Management	3	MAN 2040	Strategic Management	3
			MAN 2046	Critical Issues in Marketing & Management	3
			MAR 2016	Principles of Marketing	3
			<b>Total Credit Hours</b>		<b>30</b>

### 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 1001	Fundamentals of Accounting	3
	or	
ACC 1011	Introduction to Financial Accounting	(3)
BUS 1015	Introduction to Business	3
CIS 1018	Introduction to PC Applications	3
COM 1150	Public Speaking	3
ECO 2001	Principles of Macroeconomics: SS1	3
	or	
ECO 2002	Principles of Macroeconomics: SS1	(3)
ENG 1021	English Composition I: C01	3
FIN 1060	Consumer Economics	3
MAN 1028	Human Relations in Organizations	3
MAR 1060	Customer Service	3
MAT 1160	Financial Mathematics	3
<b>Total Credit Hours</b>		<b>30</b>

### 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 1081	Internship	3
	or	
MAN 1016	Principles of Supervision	(3)
BUS 2016	Legal Environment of Business	3
BUS 2017	Business Communication & Report Writing	3
BUS 2026	Business Statistics	3
FIN 2010	Principles of Finance	3

## Computer Aided Drafting and Design - Mechanical

### Associate of Applied Science Degree

Recommended basic skills courses are

- College Readiness in English
- College Readiness for 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, draftsperson, 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.

#### Program Learning Outcomes

Upon completion of the program Computer Aided Drafting-Mechanical, Mechanical Emphasis degree program, students should be able to:

- Develop and produce a technical engineering assembly drawing applying current industry standards for manufacturing
- Analyze part function and relationship to each other including tolerance of parts for assemblies while calculating and applying mating part conditions for a guaranteed assembly fit
- Develop and produce rapid prototypes using additive manufacturing technology and appropriate 3D printing material

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

Additional information available on the Business Department website at [www.pikespeak.edu/programs/business](http://www.pikespeak.edu/programs/business).

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.

#### Program Learning Outcomes

Upon completion of the program Computer Aided Drafting–Mechanical, Robotics & Automation Emphasis degree program, students should be able to:

- Interpret and produce industrial 2D working drawings and 3D models based on industry standards
- Use the SolidWorks software package to create advanced models, parts, assemblies, and related documents (e.g., bill of materials, parts lists)
- Produce parts and assemblies using additive manufacturing with 3D printing
- Construct, test, and troubleshoot electronic and digital circuits
- Solder electronic components on circuit boards
- Program, maintain, and troubleshoot robotic system
- Explain the architecture, hardware, programming languages, and input and output capabilities of microcontrollers
- Program a microcontroller to execute code
- Construct, test, and evaluate basic industrial control systems in robotic and automation technology

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 program Computer Aided Drafting–Mechanical, HVAC Emphasis degree program, students should be able to:

- Interpret and produce industrial 2D working drawings and 3D models based on industry standards
- Use the SolidWorks software package to create advanced models, parts, assemblies, and related documents (e.g., bill of materials, parts lists)
- Explain basic theory and components of refrigeration systems
- Calculate current, voltage, and power in AC and DC circuits
- Apply computations of circuit analysis and troubleshooting with basic test equipment
- Discuss basics of gas heating systems, operation of gas valves and burners, to include gas pipe system design
- Apply basic code requirements for heating systems
- Examine the operation of hot water heating systems, to include installation, maintenance, and repair

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 to enroll in the course.

#### General Education Courses

BUS 1015	Introduction to Business	3
or		
COM 1250	Interpersonal Communication: SS3	(3)
or		
PSY 1005	Psychology of Workplace Relationships	(3)
CIS 1018	Introduction to PC Applications	3
or		
CSC 1005	Computer Literacy	(3)
COM 2250	Organizational Communication	3
ENG 1031	Technical Writing I: CO1 or higher	3
MAT 1140	Career Math or higher	3
		<u>15</u>

#### Additional Required Courses (all emphasis areas)

CAD 1100	Print Reading for Computer Aided Drafting	3
or		
EGT 1100	Print Reading	(3)
CAD 1101	Computer Aided Drafting/2D I	3
or		
EGT 1101	Mechanical Design I	(3)
CAD 1102	Computer Aided Drafting/2D II	3
or		
EGT 1102	Mechanical Design II	(3)
CAD 2455	SolidWorks/Mechanical	3
CAD 2456	Advanced Solidworks	3
CAD 2458	Introduction to Creo Basics	3
EGT 2303	Technical Drafting III	3
EGT 2310	Mechanical Design III	3
		<u>24</u>

#### Emphasis Areas

##### HVAC

HVA 1002	Basic Refrigeration	4
HVA 1005	Electricity for HVAC/R	4
HVA 1010	Fundamentals of Gas Heating	4
HVA 1011	Piping Skills for HVAC	4
HVA 2047	Hot Water Heating Systems	4
Electives	Choose six (6) hours from technical electives	6
		<u>26</u>
<b>Total Credit Hours for HVAC Degree Emphasis</b>		<b>62</b>

##### Mechanical

CAD 2660	3D Printing/Additive Manufacturing	3
EGT 2305	Geometric Dimension & Tolerance	3
MAC 1000	Machine Shop Safety	1
MAC 1001	Introduction to Machine Shop	3
MTE 1130	Metrology	3
MTE 2330	Strengths of Materials	3
Electives	Choose nine (9) hours from technical electives	9
		<u>25</u>
<b>Total Credit Hours for Mechanical Degree Emphasis</b>		<b>61</b>

##### Robotics & Automation

ELT 1004	Electronic Assembly	3
ELT 1206	Fundamentals of DC/AC	4
ELT 1246	Digital Devices in Computers	3
ELT 2252	Motors & Controls	3
ELT 2358	Programmable Logic Controllers	3
ELT 2362	Introduction to Microcontrollers	3
ELT 2367	Introduction to Robotics	1
ELT 2368	Robotics Technologies	3
Electives	Choose three (3) hours from technical electives	3
		<u>26</u>
<b>Total Credit Hours for Robotics &amp; Automation Degree Emphasis</b>		<b>62</b>

**Technical Electives**

CAD 2080	Internship	3
CAD 2456	Advanced SolidWorks	3
CAD 2459	Advanced Creo	3
CAD 2460	Inventor I/Autodesk	3
CAD 2660	3D Printing/Additive Manufacturing	3
CAD 2661	Advanced 3D Printing	3
MAC 2005	Introduction to CNC Milling Operations	3
MAC 2006	CNC Milling Operations II	3
MAC 2040	CAD/CAM 2D	3
MAC 2041	CAD/CAM 2D Lab	3

**Engineering Technician**

This program prepares individuals to apply basic engineering principles and technical skills in support of engineers engaged in a wide variety of projects. Includes instruction in various engineering support functions for research, production, operations, and applications to specific engineering specialties.

**Program Learning Outcomes**

Upon completion of the Engineering Technician degree program, students should be able to:

- Interpret data to develop and produce documented solutions to well-defined engineering problems appropriate to the discipline using techniques, skills and modern tools of mathematics, science, engineering, and technology
- Explain mechanical properties of materials and their limitations in engineering design
- Explain the interaction between electronic devices and their applications in manufacturing processes used in the discipline
- Analyze and assist with the engineering design of systems, components, or processes appropriate to the discipline.

**General Education Courses**

COM 2200	Intrapersonal Communication	3
ENG 1031	Technical Writing I: CO1 or higher	3
MAT 1340	College Algebra: MA1 or higher	4
MAT 1420	College Trigonometry: MA1 or higher	3
PHY 1111	Physics: Algebra-Based I with Lab: SC1	5
		<hr/>
		18

**Additional Required Courses (all emphasis areas)**

CAD 2455	SolidWorks/Mechanical	3
CAD 2456	Advanced SolidWorks	3
EKG 1020	Engineering Methodologies	3
EGT 1100	Print Reading	3
EGT 1101	Mechanical Design I	3
EGT 1102	Mechanical Design II	3
EGT 1110	Introduction to Design and Engineering Applications	3
EGT 2303	Applied Dimension and Tolerance	3
EGT 2310	Mechanical Design III	3
ELT 1206	Fundamentals of DC/AC	4
ELT 1246	Digital Devices in Computers	3
ELT 2362	Introduction to Microcontrollers	3
ELT 2367	Introduction to Robotics	1
ELT 2368	Robotics Technologies	3
MAC 1000	Machine Shop Safety	1
MAC 1001	Introduction to Machine Shop	3
MTE 2330	Strength of Materials	3
		<hr/>
		48

Total Hours for Engineering Technician Degree 66

**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 American Society of Mechanical Engineering (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 1100	Print Reading for Computer Aided Drafting	3
	or	
EGT 1100	Print Reading	(3)
CAD 1101	Computer Aided Drafting/2D I	3
	or	
EGT 1101	Mechanical Design I	(3)
CAD 1102	Computer Aided Drafting/2D II	3
	or	
EGT 1102	Mechanical Design II	(3)
CAD 1101	Computer Aided Drafting/2D I	3
CAD 1102	Computer Aided Drafting/2D II	3
EGT 2303	Technical Drafting III	3
EGT 2310	Mechanical Design III	3
		<hr/>
<b>Total Credit Hours</b>		<b>15</b>

**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 2455	SolidWorks/Mechanical	3
CAD 2456	Advanced SolidWorks	3
		<hr/>
<b>Total Credit Hours</b>		<b>6</b>

## 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 1100	Print Reading for Computer Aided Drafting	3
or		
EGT 1100	Print Reading	(3)
CAD 1101	Computer Aided Drafting/2D I	3
or		
EGT 1101	Mechanical Design I	(3)
CAD 1102	Computer Aided Drafting/2D II	3
or		
EGT 1102	Mechanical Design II	(3)
<b>Total Credit Hours</b>		<b>9</b>

## 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 American Society of Mechanical Engineering (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 1100	Print Reading for Computer Aided Drafting	3
or		
EGT 1100	Print Reading	(3)
EGT 2305	Geometric Dimension & Tolerance	3
MAT 1140	Career Math or higher	3
MTE 1130	Metrology	3
<b>Total Credit Hours</b>		<b>12</b>

## CAD-Skills for Interiors

The CAD- Skills for Interiors Certificate is designed for students to learn 2D AutoCAD software as well as 3D SketchUp software to develop their computer aided drafting and interior design skills, to enhance their design process, and ability to portray design concepts creating rendered interior spaces. Students learn a variety of techniques and skills associated with interior building systems and assemblies, construction documents and details, and codes applicable to interior architecture. In addition, students are introduced to methods of communicating interior design

plans, elements, and ideas in 3D, through perspective drawing construction and quick sketch techniques, and practice rendering and illustration skills.

### Program Learning Outcomes

Upon completion of the CAD - Skills for Interiors certificate, students should be able to:

- Design interior projects to include floor plans, dimensions, elevations, sections, details, lighting, special features and finishes
- Create 2D design plans and 3D visualization models and presentations for interior design applications using AutoCAD and SketchUp software
- Produce construction documents using Autodesk AutoCAD software
- Apply various software modification techniques to produce drawings with enhanced lighting, materials, and finishes
- Develop digital presentation skills such as lighting, accessories, and reflectivity using various drafting software

CAD 1105	AutoCAD for Interiors	4
IND 2201	Graphic Communication	4
IND 2300	Interior Construction	4
<b>Total Credit Hours</b>		<b>12</b>

## Engineering Applications

The Engineering Applications certificate is designed for students to develop, design, and analyze solutions for technical engineering problems. Additionally, students learn the application of technologies and equipment used for engineering, manufacturing, and robotic automation.

### Program Learning Outcomes

Upon completion of the Engineering Applications certificate program, students should be able to:

- Explain the operation of various metal-cutting tools and their application as related to manufacturing processes
- Develop, design, and analyze solutions for real-world technical engineering problems using a human-centered design process within an interdisciplinary team
- Explain common terminology for programming methods used in robotics and automation
- Apply standard and Geometric Dimension & Tolerance (GD &T) dimensions to technical working drawings used in the discipline

EGT 1110	Introduction to Design and Engineering Applications	3
EGT 2303	Applied Dimension AND Tolerance	3
ELT 2368	Robotics Technologies	3
MAC 1000	Machine Shop Safety	1
MAC 1001	Introduction to Machine Shop	3
<b>Total Credit Hours</b>		<b>13</b>

## Engineering Fundamentals

The Engineering Fundamentals certificate is designed for students to learn the fundamental techniques and skills associated with engineering measurement, working drawings, electronic and digital circuits, and algebraic problem solving.

### Program Learning Outcomes

Upon completion of the Engineering Fundamentals certificate program, students should be able to:

- Interpret and apply the use of various engineering measuring tools



- Interpret mechanical and working drawing formats based on industry standards
- Develop drawing techniques utilizing two-dimensional CAD software used in the discipline
- Construct, test, and troubleshoot electronic and digital circuits
- Utilize algebraic techniques to solve application problems

EGT 1100	Print Reading	3
EGT 1101	Mechanical Design I	3
ELT 1206	Fundamentals of DC/AC	4
ELT 1246	Digital Devices in Computers	3
MAT 1340	College Algebra	4
<b>Total Credit Hours</b>		<b>17</b>

**Engineering Sciences**

The Engineering Sciences certificate is designed for students to apply scientific principles while analyzing relationships, limitations, and material properties in engineering design. Additionally, students will produce complex engineering drawings and the working models.

**Program Learning Outcomes**

Upon completion of the Engineering Sciences certificate program, students should be able to:

- Discuss and analyze today’s engineering design management models
- Analyze part functions and their relationship to each other
- Examine mechanical properties of materials and their limitations in engineering design
- Develop and produce complex engineering drawings and the working model, using a three- dimensional parametric software
- Apply physics concepts and equations to real-world problems and design challenges
- Apply chemistry principles to real world situations

CHE 1011	Introduction to Chemistry I with Lab: SC1	5
EGT 2310	Mechanical Design III	3
MTE 2330	Strength of Materials	3
PHY 1111	Physics: Algebra-Based I with Lab: SC1	5
<b>Total Credit Hours</b>		<b>16</b>

**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 2455	SolidWorks/Mechanical	3
CAD 2456	Advanced SolidWorks	3
CAD 2458	Introduction to Creo Basics	3
CAD 2459	Advanced Creo	3
CAD 2660	3D Printing/Additive Manufacturing	3
CAD 2661	Advanced 3D Printing	3
<b>Total Credit Hours</b>		<b>18</b>

**Principles of Engineering**

The Principles of Engineering certificate is designed for students to utilize engineering principles and apply the design process while developing scientific and engineering solutions. Additionally, students will learn the architecture, hardware, programming languages, and input/output capabilities of microcontrollers, and produce industrial 2D working drawings and 3D models.

**Program Learning Outcomes**

Upon completion of the Principles of Engineering certificate program, students should be able to:

- Interpret and produce industrial 2D working drawings and 3D models based on industry standards
- Program a microcontroller to execute the code
- Program a robot in a higher-level language to perform various tasks
- Interface with sensor circuits
- Develop solutions to elementary engineering problems using a systematic approach
- Utilize basic concepts of trigonometry to solve application problems

CAD 2455	SolidWorks/Mechanical	3
CAD 2456	Advanced SolidWorks	3
EKG 1020	Engineering Methodologies	3
EGT 1102	Mechanical Design II	3
ELT 2362	Introduction to Microcontrollers	3
ELT 2367	Introduction to Robotics	1
MAT 1420	College Trigonometry: MA1	3
<b>Total Credit Hours</b>		<b>19</b>

**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 1220	Architectural Drawing Theory	4
AEC 1231	Residential Construction Drawing	4
CAD 1104	CAD for Architecture	4
CAD 2220	Revit Architecture	3
CAD 2221	Advanced Revit Architecture	3
<b>Total Credit Hours</b>		<b>18</b>

### Professional CAD – Interior Design

The Professional CAD - Interior Design certificate is designed for students to learn advanced techniques using 2D AutoCAD and 3D Autodesk Revit software to enhance their computer aided drafting and interior design skills and increase their ability to portray design advanced concepts through the rendered interior spaces. Emphasis is placed on producing photorealistic 3-dimensional (3D) renderings and models that are specific to interior building elements and spaces through advanced modeling techniques such as advanced lighting, materials, and rendering techniques.

#### Program Learning Outcomes

Upon completion of the Professional CAD - Interior Design certificate, students should be able to:

- Design innovative interior projects to include floor plans, dimensions, elevations, sections, details, specification sheets, lighting, special features and finishes
- Produce construction documents (e.g., floor plans, elevations, sections, details, 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
- Apply materials, lighting, and cameras to generate walk-through presentations
- Produce presentation quality renderings of 3D interior design and spaces

CAD 1105	AutoCAD for Interiors	4
CAD 2227	Revit for Interiors	3
CAD 2228	Advanced Revit for Interiors	3
IND 2201	Graphic Communication	4
IND 2300	Interior Construction	4
<b>Total Credit Hours</b>		<b>18</b>

### 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 American Society of Mechanical Engineering (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 1100	Print Reading for Computer Aided Drafting	3
or		
EGT 1100	Print Reading	(3)
CAD 1101	Computer Aided Drafting/2D I	3
or		
EGT 1101	Mechanical Design I	(3)

CAD 1102	Computer Aided Drafting/2D II	3
or		
EGT 1102	Mechanical Design II	(3)
CAD 2455	SolidWorks/Mechanical	3
CAD 2458	Introduction to Creo Basics	3
EGT 2303	Technical Drafting III	3
EGT 2310	Mechanical Design III	3
MAT 1140	Career Math or higher	3
Electives	Choose six (6) hours from technical electives	6
<b>Total Credit Hours</b>		<b>30</b>

### Professional CAD - Robotics

The Professional CAD Robotics certificate is designed for students to learn a variety of techniques and skills associated with basic computer aided drafting skills using AutoCAD software, 2D CAD skills and progress to three-dimensional parameters using the 3D parametric software SolidWorks to focus on management of design data, advanced assembly, rendering, animation and dynamic simulation and testing a model assembly and leading to creating an advanced 3D solid model using 3D printing software. Additionally, students learn skills needed to program a robot in a higher-level language to perform various tasks, including the building and interfacing of sensor circuits to include write and debug code, program the microcontroller, acquire, and analyze sensor data, and use that data to control actuators, robotic work envelopes, programming, troubleshooting, and maintenance.

#### Program Learning Outcomes

Upon completion of the Professional CAD Robotics Certificate, students should be able to:

- Produce 2D printed/plotted drawings with AutoCAD software
- Interpret and produce industrial 2D working drawings and 3D models based on industry standards
- Use the SolidWorks software package to create advanced models, parts, assemblies, and related documents (e.g., bill of materials, parts lists)
- Produce parts and assemblies using additive manufacturing with 3D printing
- Construct, test, and troubleshoot electronic and digital circuits
- Solder electronic components on circuit boards
- Program, maintain, and troubleshoot robotic system
- Explain the architecture, hardware, programming languages, and input and output capabilities of microcontrollers
- Program a microcontroller to execute code

CAD 1100	Print Reading for Computer Aided Drafting	3
or		
EGT 1100	Print Reading	(3)
CAD 1101	Computer Aided Drafting/2D I	3
or		
EGT 1101	Mechanical Design I	(3)
CAD 1102	Computer Aided Drafting/2D II	3
or		
EGT 1102	Mechanical Design II	(3)
CAD 2455	SolidWorks/Mechanical	3
CAD 2456	Advanced SolidWorks	3
CAD 2660	3D Printing/Additive Manufacturing	3
ELT 1004	Electronic Assembly	3
ELT 1206	Fundamentals of DC/AC	4
ELT 1246	Digital Devices in Computers	3
ELT 2362	Introduction to Microcontrollers	3
ELT 2367	Introduction to Robotics	1
ELT 2368	Robotics Technologies	3
<b>Total Credit Hours</b>		<b>35</b>

## 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 2220	Revit Architecture	3
CAD 2221	Advanced Revit Architecture	3
<b>Total Credit Hours</b>		<b>6</b>

Additional information available on the Computer Aided Drafting and Design - Mechanical Department website at [www.pikespeak.edu/programs/computer-aided-drafting](http://www.pikespeak.edu/programs/computer-aided-drafting).

## Computer Information Systems

### Associate of Applied Science Degree

Recommended basic skills courses are

- College Readiness in English
- College Readiness for Quantitative 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 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:

- Explain Office application software to present ideas and information clearly in digital and oral formats
- Analyze information technology standards
- Demonstrate ethical and professional conduct
- Interact effectively with others on a project in a workgroup
- Demonstrate skills and tools necessary for current computing practices
- Design, implement, and query relational databases
- Present professionally for potential employment
- Illustrate customer service skills and techniques as an IT professional

### General Education Courses

CIS 1018	Introduction to PC Applications	3
or		
CSC 1005	Computer Literacy	(3)
COM 1150	Public Speaking	3
or		
COM 1250	Interpersonal Communication: SS3	(3)
CSC 1019	Introduction to Programming: (Programming Language)	3

ENG 1031	Technical Writing I: CO1	3
or		
ENG 1021	English Composition I: CO1	(3)
MAT 1140	Career Math	3
		<b>15</b>

### Additional Required Courses

BUS 2017	Business Communications & Report Writing	3
CIS 1015	Introduction to Computer Information Systems	3
CIS 1024	Introduction to Operating Systems	3
CIS 1035	Complete Word Processing (Software Package)	3
CIS 1055	Complete Spreadsheets: (Software package)	3
CIS 1065	Complete Presentation Graphics	3
CIS 2002	Automated Project Management	3
CIS 2023	Linux	3
CIS 2040	Database Design	3
CIS 2043	Introduction to Structured Query Language (SQL)	3
CIS 2063	PC Help Desk Skills	3
CIS 2068	Systems Analysis & Design I	3
CIS 2080	Internship	3
or		
CIS 2089	Capstone	(3)
CNG 1020	A+ Certification Preparation	3
CNG 1042	Introduction to Cloud Computing Concepts	3
CWB 2005	Client-side Scripting: (Software)	3
		<b>49</b>
<b>Total Credit Hours</b>		<b>64</b>

## 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
- Utilize basic to advance features for spreadsheet software
- Demonstrate Microsoft Outlook functions and applications
- Create presentation materials to enhance communication
- Demonstrate desktop publishing applications to produce internal business documents such as memos, agendas, press releases and fax cover sheets

CIS 1018	Introduction to PC Applications	3
CIS 1035	Complete Word Processing	3
CIS 1040	Microsoft Outlook	1
CIS 1045	Introduction to Desktop Database	3
CIS 1055	Complete Spreadsheets: (Software package)	3
CIS 1065	Complete Presentation Graphics	3
<b>Total Credit Hours</b>		<b>16</b>

### 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 and analyze hardware and software problems
- Configure computer to connect to network
- Illustrate customer service skills and techniques as an IT professional
- Attain knowledge for the CompTIA A+ certification examination

CIS 1018	Introduction to PC Applications	3
CIS 1024	Introduction to Operating Systems	3
CIS 2063	PC Help Desk Skills	3
CNG 1001	Networking Fundamentals	3
CNG 1004	Introduction to TCP/IP	3
CNG 1021	Computer Technician I: A+	4
<b>Total Credit Hours</b>		<b>19</b>

### 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
- Utilize high-level programming language to develop software applications
- Illustrate the complete development of a computer information systems

CIS 1045	Introduction to Desktop Database	3
CIS 2040	Database Design	3
CIS 2043	Introduction to Structured Query Language (SQL)	3
CIS 2068	Systems Analysis and Design I	3
CNG 1042	Introduction to Cloud Computing	3
CWB 2005	Client-side Scripting: (Software)	3
<b>Total Credit Hours</b>		<b>18</b>

### 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 1019	Introduction to Programming	3
CSC 1060	Computer Science I: (Language)	4
CSC 1061	Computer Science II: (Language)	4
CSC 2017	Advanced Python Programming	3

CSC 2025	Computer Architecture/Assembly Language Programming	4
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**Total Credit Hours** **18**

Additional information available on the Computer Information Systems Department website at [www.pikespeak.edu/programs/computer-information-systems](http://www.pikespeak.edu/programs/computer-information-systems).

## Computer Networking Technology

### Associate of Applied Science Degree

### Cisco Networking Technology

Recommended basic skills courses are

- College Readiness in English
- College Readiness for Algebra

The Associate of Applied Science Degree provides students with practical and relevant skills in the field of Computer Networking 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+, and Cisco Network Associate (CCNA). 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, cybersecurity 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 Cisco Certified Networking Technology degree program, students should be able to:

- Analyze, design, install, configure, document, and troubleshoot network and system hardware and operating systems
- 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
- Apply basic scripting for automation
- Utilization multiple operating systems both in the cloud and with on-premise hardware

### General Education Courses

CIS 1018	Introduction to PC Applications	3
or		
CSC 1005	Computer Literacy	(3)
COM 1250	Interpersonal Communication: SS3	3
or		
COM 1150	Public Speaking	(3)
ENG 1031	Technical Writing I: CO1	3
MAT 1340	College Algebra: MA1	4
SOC 2018	Sociology of Diversity: SS3	3
		<b>16</b>

### Additional Required Courses

CIS 2023	Linux	3
CNG 1020	A+ Certification Preparation	4
CNG 1024	Networking I: Network +	3
CNG 1032	Network Security Fundamentals	3

CNG 1042	Introduction to Cloud Computing Concepts	3
CNG 2012	Configuring Windows Server	4
CNG 2042	Cloud Computing	3
CNG 2057	Network Defense & Counter Measures	3
CNG 2060	Cisco Network Associate I	5
CNG 2061	Cisco Network Associate II	5
CNG 2062	Cisco Network Associate III	5
Electives	Choose three (3) hours from the list below	3
		<hr/>
		44
<b>Total Credit Hours</b>		<b>60</b>

**Electives**

Choose three (3) hours from any courses within the disciplines of BUS, CIS, CNG, CSC, CWB, DAT.

**Certificates**

**Cisco Networking Technology**

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 hands-on or simulation applications. Upon successful completion, the certificate 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 Networking Technology certificate program, students should be able to:

- Analyze, design, install, configure, document, and troubleshoot networks
- Demonstrate readiness for CISCO CCNA industry certification exam

CNG 1024	Networking I: Network +	3
CNG 1032	Network Security Fundamentals	3
CNG 2060	Cisco Network Associate I	5
CNG 2061	Cisco Network Associate II	5
CNG 2062	Cisco Network Associate III	5
		<hr/>
<b>Total Credit Hours</b>		<b>21</b>

**Computer Networking**

The Computer Networking 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+. 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.

**Program Learning Outcomes**

Upon completion of the Computer Networking certificate program, students should be able to:

- Utilize multiple operating systems both in the cloud and with on-premise hardware
- Analyze, design, install, configure, document, and troubleshoot network and system hardware and operating systems

CIS 2023	Linux	3
CNG 1024	Networking I: Network +	3
CNG 1032	Network Security Fundamentals	3
CNG 1042	Introduction to Cloud Computing Concepts	3
CNG 2012	Configuring Windows Server	4
CNG 2042	Cloud Computing	3
		<hr/>
<b>Total Credit Hours</b>		<b>19</b>

**Network+**

This certificate is designed to prepare students to build the skills necessary to test for CompTia Network + and Security + industry certification which certifies an IT professional's expertise in managing, maintaining, troubleshooting, installing, and configuring basic computer networks along with applying basic cybersecurity principles. Students entering this certificate program should have a good foundation in math and reading, as well as basic familiarity with Microsoft Windows. Students may be advised to take additional courses to prepare them for the certificate program.

Students not meeting a course prerequisite must have the instructor permission to enroll.

**Program Learning Outcomes**

Upon completion of the Network+ certificate program, students should be able to:

- Organize secure networks using appropriate network technology and protocols
- Analyze, design, install, configure, document, and troubleshoot network and system hardware and operating systems
- Describe the use of basic cryptography

CIS 2023	Linux	3
CNG 1020	A+ Certification Preparation	4
CNG 1024	Networking I: Network +	3
CNG 1032	Network Security Fundamentals	3
CNG 1042	Introduction to Cloud Computing Concepts	3
CNG 2012	Configuring Windows Server	4
CNG 2057	Network Defense & Counter Measures	3
		<hr/>
<b>Total Credit Hours</b>		<b>23</b>

Additional information available on the Computer Networking Department website at [www.pikespeak.edu/programs/computer-networking](http://www.pikespeak.edu/programs/computer-networking).

# Criminal Justice

## Associate of Applied Science Degree

Recommended basic skills courses are

- College Readiness in English
- College Readiness for Quantitative Literacy

The Criminal Justice Program at PPSC 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 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. PPSC offers one of the broadest ranges of course offerings in the nation.

An AAS degree from PPSC 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 PPSC graduates have advanced to become chiefs of police and sheriffs.

Students should realize, however, that a degree from PPSC 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 1018	Introduction to PC Applications	3
or		
CSC 1005	Computer Literacy	(3)
ENG 1031	Technical Writing I: CO1	3
or		
ENG 1021	English Composition I: CO1	(3)
ENG 1022	English Composition II: CO2	3
or		
COM 1150	Public Speaking	(3)
or		
PSC 1025	American State & Local Government: SS1	(3)

MAT 1140	Career Math	3
or		
MAT 1240	Mathematics for the Liberal Arts: MA1 or higher	(4)
PSY 2332	Psychology of Adjustment	3
Elective	AAS General Education Elective course	3
		<b>18-19</b>

### Additional Required Courses

CRJ 1010	Introduction to Criminal Justice: SS3	3
CRJ 1025	Policing Systems	3
CRJ 1035	Judicial Function	3
CRJ 1045	Correctional Process	3
CRJ 2005	Principles of Criminal Law	3
LEA 1018	Police Report Writing	3
Electives	Choose twenty-four (24) credit hours from list below	24
		<b>42</b>

### Total Credit Hours

**60-61**

### Electives

CRJ 1027	Crime Scene Investigation	3
CRJ 2009	Criminal Investigation I	3
CRJ 2020	Human Relations & Social Conflict	3
CRJ 2025	Crisis Intervention	3
CRJ 2030	Criminology	3
CRJ 2031	Introduction to Forensic Science & Criminalistics	3
CRJ 2035	Delinquent Behavior	3
CRJ 2057	Victimology	3
CRJ 2068	Criminal Profiling	3
CRJ 2080	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 1010	Introduction to Criminal Justice: SS3	3
CRJ 2030	Criminology	3
CRJ 2035	Delinquent Behavior	3
		<b>9</b>

### 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 1027	Crime Scene Investigation	3
CRJ 2009	Criminal Investigation I	3
CRJ 2031	Introduction to Forensic Science & Criminalistics	3
LEA 1018	Police Report Writing	3
<b>Total Credit Hours</b>		<b>12</b>

### 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 2020	Human Relations & Social Conflict	3
CRJ 2030	Criminology	3
CRJ 2035	Delinquent Behavior	3
CRJ 2068	Criminal Profiling	3
<b>Total Credit Hours</b>		<b>12</b>

### 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 1010	Introduction to Criminal Justice: SS3	3
CRJ 1035	Judicial Function	3
CRJ 2009	Criminal Investigation I	3
CRJ 2030	Criminology	3
<b>Total Credit Hours</b>		<b>12</b>

Additional information available on the Criminal Justice Department website at [www.pikespeak.edu/programs/criminal-justice](http://www.pikespeak.edu/programs/criminal-justice).

## Culinary Arts

### Associate of Applied Science Degree

Recommended basic skills courses are

- College Readiness in English
- College Readiness for 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 Readiness in English, College Readiness for Quantitative Literacy, CUA 1000, CUA 1001, 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 1015	Introduction to Business	3
CIS 1018	Introduction to PC Applications	3
or		
CSC 1005	Computer Literacy	(3)
ENG 1031	Technical Writing I: C01	3
MAT 1160	Financial Mathematics	3
PSY 1005	Psychology of Workplace Relationships	3
		<b>15</b>

### Emphasis Areas

#### Culinary Arts: Baking 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 Readiness in English, College Readiness for Quantitative Literacy,

CUA 1000, CUA 1001, 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: Baking 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 1000	Culinary Program Fundamentals	3
CUA 1001	Food Safety & Sanitation	2
CUA 1005	Food Service Concepts & Management Skills	3
CUA 1025	Introduction to Foods	4
CUA 1027	Soups, Sauces & Consommés	3
CUA 1045	Introduction to Baking	4
CUA 1050	Baking: Decorating & Presentation	3
CUA 1051	Baking: Intermediate Bread Preparation	3
CUA 1052	Individual Fancy Dessert Production	3
CUA 1053	Confectionaries & Petit Fours	3
CUA 1054	Introduction to the Business of Catering	3
CUA 1056	Nutrition for the Hospitality Professional	3
CUA 1061	Advanced Cake Decorating-Wedding Cakes	2
CUA 2036	Advanced Baking	2
CUA 2062	Purchasing for the Hospitality Industry	3
CUA 2081	Internship	4
		<hr/> 48

**Total Credit Hours for Baking and Pastry Degree Emphasis 63**

#### Culinary Arts: 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, garde 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 1000	Culinary Program Fundamentals	3
CUA 1001	Food Safety & Sanitation	2
CUA 1005	Food Service Concepts & Management Skills	3
CUA 1020	Wines & Spirits	2
CUA 1025	Introduction to Foods	4
CUA 1027	Soups, Sauces & Consommés	3
CUA 1029	Center of the Plate	4
CUA 1045	Introduction to Baking	4
CUA 1054	Introduction to the Business of Catering	3
CUA 1056	Nutrition for the Hospitality Professional	3
CUA 2010	Advanced Cuisine & Gardé Manger	4
CUA 2033	Advanced Line Prep & Cookery	4

CUA 2045	International Cuisine	2
CUA 2062	Purchasing for the Hospitality Industry	3
CUA 2081	Internship	4
		<hr/> 48

**Total Credit Hours for Culinary Arts Degree Emphasis 63**

#### Culinary Arts: 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 Readiness in English, College Readiness for Quantitative Literacy, CUA 1000, CUA 1001, 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: Food Service Management, 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 1000	Culinary Program Fundamentals	3
CUA 1001	Food Safety & Sanitation	2
CUA 1020	Wines & Spirits	2
CUA 1025	Introduction to Foods	4
CUA 1036	Alcohol & Bartending Management	2
CUA 1054	Introduction to the Business of Catering	3
CUA 1056	Nutrition for the Hospitality Professional	3
CUA 1057	Menu Planning	3
CUA 1190	Dining Room Management	4
CUA 2055	Supervision in the Hospitality Industry	3
CUA 2056	Marketing in the Hospitality Industry	3
CUA 2061	Cost Controls	3
CUA 2062	Purchasing for the Hospitality Industry	3
CUA 2063	Legal Aspects of Hospitality Management	3
CUA 2081	Internship	4
		<hr/> 45

**Total Credit Hours for Food Service Management Degree Emphasis 60**



## Culinary Arts: 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 Readiness in English, College Readiness for Quantitative Literacy, CUA 1000, CUA 1001, 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: Sustainability Management and Dietary Cuisine 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 1015	Introduction to Business	3
CIS 1018	Introduction to PC Applications	3
	or	
CSC 1005	Computer Literacy	(3)
ENG 1031	Technical Writing I: C01	3
ENV 1111	Environmental Science w/Lab: SC1	4
MAT 1160	Financial Mathematics	3
PSY 1005	Psychology of Workplace Relationships	3
		<hr/> 19

### Additional Required Courses

CUA 1000	Culinary Program Fundamentals	3
CUA 1001	Food Safety & Sanitation	2
CUA 1005	Food Service Concepts & Management Skills	3
CUA 1025	Introduction to Foods	4
CUA 1045	Introduction to Baking	4
CUA 1056	Nutrition for the Hospitality Professional	3
CUA 1057	Menu Planning	3
CUA 2045	International Cuisine	2
CUA 2061	Cost Controls	3
CUA 2062	Purchasing for the Hospitality Industry	3
CUA 2064	Sustainable Food Service Operations	3
CUA 2068	Vegetarian & Dietary Cuisine	3
CUA 2069	Dietary Baking	2
CUA 2081	Internship	4
		<hr/> 42
	<b>Total Credit Hours for Sustainability Management &amp; Dietary Cuisine Degree Emphasis</b>	<b>61</b>

## Certificates

Students will be required to have completed or demonstrated proficiency equivalent to the completion of College Readiness in English, College Readiness for Quantitative Literacy, CUA 1000, CUA 1001, 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.

### Culinary Arts: Advanced Culinary

#### Program Learning Outcomes

Upon completion of the Culinary Arts: Advanced Culinary certificate program, students should be able to:

- Demonstrate proper safety and sanitation practices required in the commercial kitchen
- Demonstrate proper knife care, handling, and usage
- Identify common kitchen equipment and demonstrate the proper use of and cleaning
- Demonstrate a variety of food preparation techniques and apply proper cooking methods
- Fulfill the duties and responsibilities of a cook's helper, prep cook, sauté cook, and cook's supervisor
- Identify and discuss ingredients, flavor combinations, utensils, and cooking methods that are used in a variety of cultural cuisines
- Discuss and demonstrate the appropriate use of ethnic products as they are applied to various cultural cuisines

CUA 1000	Culinary Program Fundamentals	3
CUA 1001	Food Safety & Sanitation	2
CUA 2010	Advanced Cuisine & Gardé Manger	4
CUA 2033	Advanced Line Prep & Cookery	4
CUA 2045	International Cuisine	2
	<b>Total Credit Hours</b>	<hr/> 15

### Culinary Arts: 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 Culinary Arts: 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 1000	Culinary Program Fundamentals	3
CUA 1001	Food Safety & Sanitation	2
CUA 1005	Food Service Concepts & Management Skills	3
CUA 1045	Introduction to Baking	4
CUA 1050	Baking: Decorating & Presentation	3
CUA 1051	Baking: Intermediate Bread Preparation	3
CUA 1052	Individual Fancy Dessert Production	3
CUA 1056	Nutrition for the Hospitality Professional	3

CUA 2036	Advanced Baking	2
CUA 2062	Purchasing for the Hospitality Industry	3
<b>Total Credit Hours</b>		<b>29</b>

### Culinary Arts: Baker Production

#### Program Learning Outcomes

Upon completion of the Culinary Arts: Baker Production certificate program, students should be able to:

- Demonstrate proper safety and sanitation practices required in the commercial kitchen
- Demonstrate proper knife care, handling, and usage
- Identify and use common baking and pastry equipment and demonstrate the proper use and cleaning
- Prepare a variety of baked goods and evaluate the qualities of a properly produced product
- Demonstrate the basic mixing methods used in rich and lean dough production
- Prepare and evaluate a variety of specialty desserts, dessert garnishes and accompaniment sauces

CUA 1000	Culinary Program Fundamentals	3
CUA 1001	Food Safety & Sanitation	2
CUA 1045	Introduction to Baking	4
CUA 1051	Baking: Intermediate Bread Preparation	3
CUA 2036	Advanced Baking	2
<b>Total Credit Hours</b>		<b>14</b>

### Culinary Arts: 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 1000	Culinary Program Fundamentals	3
CUA 1001	Food Safety & Sanitation	2
CUA 1005	Food Service Concepts & Management Skills	3
CUA 1025	Introduction to Foods	4
CUA 1027	Soups, Sauces & Consommés	3
CUA 1029	Center of the Plate	4
CUA 1045	Introduction to Baking	4
CUA 1056	Nutrition for the Hospitality Professional	3
CUA 2010	Advanced Cuisine & Gardé Manger	4
CUA 2033	Advanced Line Prep & Cookery	4
<b>Total Credit Hours</b>		<b>34</b>

### Culinary Arts: Culinary Production

#### Program Learning Outcomes

Upon completion of the Culinary Arts: Culinary Production certificate program, students should be able to:

- Demonstrate proper safety and sanitation practices required in the commercial kitchen

- Demonstrate proper knife care, handling, and usage
- Identify common kitchen equipment and demonstrate the proper use and cleaning
- Prepare and evaluate classical recipe preparations
- Prepare and evaluate a variety of stocks, soups, and sauces
- Explain how the composition and structure of meat, poultry, fish, and shellfish relates to selection and cooking methods

CUA 1000	Culinary Program Fundamentals	3
CUA 1001	Food Safety & Sanitation	2
CUA 1025	Introduction to Foods	4
CUA 1027	Soups, Sauces & Consommés	3
CUA 1029	Center of the Plate	4
<b>Total Credit Hours</b>		<b>16</b>

### Culinary Arts: Dietary Cuisine

#### Program Learning Outcomes

Upon completion of the Culinary Arts: Dietary Cuisine certificate program, students should be able to:

- Demonstrate the proper safety and sanitation practices required in the commercial kitchen
- Demonstrate proper knife care, handling, and usage
- Identify common kitchen equipment and demonstrate the proper use of and cleaning
- Describe methods for reducing the negative environmental impacts of foodservice operations
- Evaluate the sustainability of a foodservice operation and suggest cost-effective improvements
- Describe the various vegetarian diets and list the requirements for each of them
- Identify and evaluate nutritional needs for common health issues, and create recipes and menus to accommodate those needs
- Prepare a variety of dietary foods to include both savory and sweet products

CUA 1000	Culinary Program Fundamentals	3
CUA 1001	Food Safety & Sanitation	2
CUA 2064	Sustainable Food Service Operations	3
CUA 2068	Vegetarian & Dietary Cuisine	3
CUA 2069	Dietary Baking	2
<b>Total Credit Hours</b>		<b>36</b>

### Culinary Arts: 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 Culinary Arts: 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 1000	Culinary Program Fundamentals	3
CUA 1001	Food Safety & Sanitation	2
CUA 1005	Food Service Concepts & Management Skills	3
CUA 1020	Wines & Spirits	2
CUA 1025	Introduction to Foods	4

CUA 1054	Introduction to the Business of Catering	3
CUA 1056	Marketing in the Hospitality Industry	3
CUA 1190	Dining Room Management	4
CUA 2056	Marketing in the Hospitality Industry	3
CUA 2061	Cost Controls	3
CUA 2062	Purchasing for the Hospitality Industry	3
CUA 2063	Legal Aspects of Hospitality Management	3
<b>Total Credit Hours</b>		<b>36</b>

### Culinary Arts: Introduction

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: Introduction 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 1000	Culinary Program Fundamentals	3
CUA 1001	Food Safety & Sanitation	2
CUA 1005	Food Service Concepts & Management Skills	3
CUA 1025	Introduction to Foods	4
CUA 1038	Food & Beverage Service	2
CUA 1045	Introduction to Baking	4
<b>Total Credit Hours</b>		<b>21</b>

### Culinary Arts: Pastry

#### Program Learning Outcomes

Upon completion of the Culinary Arts: Pastry certificate program, students should be able to:

- Demonstrate proper safety and sanitation practices required in the commercial kitchen
- Demonstrate proper knife care, handling, and usage
- Describe the use of equipment, tools, and utensils commonly used in bakery production
- Explain the basic mixing methods used in pastry and baking production
- Prepare a variety of baked goods and evaluate the qualities of a properly produced product
- Produce a variety of individual desserts and demonstrate proper plating techniques
- Produce a variety of candies and confections to include caramels, brittles, gelatin and pectin based, meringue and chocolate confections

CUA 1000	Culinary Program Fundamentals	3
CUA 1001	Food Safety & Sanitation	2
CUA 1045	Introduction to Baking	4
CUA 1052	Individual Fancy Dessert Production	3
CUA 1053	Confectionaries & Petit Fours	3
<b>Total Credit Hours</b>		<b>15</b>

### Culinary Arts: Pastry Decorator

#### Program Learning Outcomes

Upon completion of the Culinary Arts: Pastry Decorator certificate program, students should be able to:

- Demonstrate proper safety and sanitation practices required in the commercial kitchen
- Demonstrate proper knife care, handling, and usage
- Identify common baking and pastry equipment and demonstrate the proper use and cleaning
- Explain the basic mixing methods used in pastry and baking production
- Prepare a variety of baked goods and evaluate the qualities of a properly produced product
- Prepare an assortment of icings and fondant to demonstrate proper piping techniques including swags, ruffles, various royal icing flowers, latticework, run outs, lace and filigree
- Prepare gum paste and create various flowers and decorations

CUA 1000	Culinary Program Fundamentals	3
CUA 1001	Food Safety & Sanitation	2
CUA 1045	Introduction to Baking	4
CUA 1050	Baking: Decorating & Presentation	3
CUA 2061	Cost Controls	3
<b>Total Credit Hours</b>		<b>14</b>

### Culinary Arts: Restaurant Manager

#### Program Learning Outcomes

Upon completion of the Culinary Arts: Restaurant Manager certificate program, students should be able to:

- Demonstrate proper safety and sanitation practices required in the commercial kitchen
- Demonstrate proper knife care, handling, and usage
- Identify common kitchen equipment and demonstrate the proper use of and cleaning
- Describe the hiring process from job posting, recruiting, onboarding, and training a successful employee
- List and discuss several management skills and personal qualities necessary to supervise successfully in a hospitality operation
- Perform calculations to determine food cost, labor cost, menu pricing, and budgeting
- Describe the purchasing process, various inventory systems, and the receiving and storage of food and beverage products

CUA 1000	Culinary Program Fundamentals	3
CUA 1001	Food Safety & Sanitation	2
CUA 2055	Supervision in the Hospitality Industry	3
CUA 2061	Cost Controls	3
CUA 2062	Purchasing for the Hospitality Industry	3
<b>Total Credit Hours</b>		<b>14</b>

### Culinary Arts: Restaurant Marketing

#### Program Learning Outcomes

Upon completion of the Culinary Arts: Restaurant Marketing certificate program, students should be able to:

- Demonstrate proper safety and sanitation practices required in the commercial kitchen
- Identify common kitchen equipment and demonstrate the proper use of and cleaning
- Develop commonly used methods of pricing menu items and apply the best method for an operation
- Identify and discuss basic elements of menu presentation, format, marketing, and design. Then create a menu applying these standards

- Describe and perform the duties of a host/hostess or expediter
- Set up a variety of tableside carts, prepare and serve a variety of tableside dishes
- Identify and discuss major marketing trends in the foodservice industry and differentiate between marketing and selling
- Describe advertising terms commonly used in foodservice applications within the advertising industry

CUA 1000	Culinary Program Fundamentals	3
CUA 1001	Food Safety & Sanitation	2
CUA 1057	Menu Planning	3
CUA 1190	Dining Room Management	4
CUA 2056	Marketing in the Hospitality Industry	3
<b>Total Credit Hours</b>		<b>15</b>

Additional information available on the Culinary Arts Department website at [www.pikespeak.edu/programs/culinary-arts](http://www.pikespeak.edu/programs/culinary-arts).

## Cybersecurity

### Associate of Applied Science Degree

Recommended basic skills courses are

- College Readiness in English
- College Readiness for Algebra

The Cybersecurity degree provides students with practical and relevant skills in the field of cybersecurity, information technology, and computer networking. Students completing the degree will be able to demonstrate knowledge of computer software, hardware, and cybersecurity risks. The Cybersecurity degree provides students foundation knowledge of cybersecurity 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 Cybersecurity degree program, students should be able to:

- Apply basic scripting for automation
- Organize secure networks using appropriate network technology and protocols
- Describe the use of basic cryptography
- Utilize multiple operating systems both in the cloud and with on-premises hardware
- Apply security principles and best practices to secure systems and maintain operations in the presence of risks and threats
- Create cybersecurity planning and management in an organization
- Build security policies and ethics compliance

#### General Education Courses

CIS 1018	Introduction to PC Applications	3
or		
CSC 1005	Computer Literacy	(3)
COM 1150	Public Speaking	3
or		
COM 1250	Interpersonal Communication: SS3	(3)
ENG 1031	Technical Writing I: CO1	3
or		
ENG 1021	English Composition I: CO1	(3)

MAT 1340	College Algebra: MA1	4
SOC 2018	Sociology of Diversity: SS3	3
		<b>16</b>

#### Additional Required Courses

CIS 2023	Linux	3
CNG 1020	A+ Certification Preparation	4
CNG 1024	Networking I: Network +	3
CNG 1031	Principles of Information Assurance	3
CNG 1032	Network Security Fundamentals	3
CNG 1042	Introduction to Cloud Computing Concepts	3
CNG 2042	Cloud Computing	3
CNG 2056	Vulnerability Assessment Level I	3
CNG 2057	Network Defense & Counter Measures	3
CNG 2059	Enterprise Security	4
CNG 2080	Internship	3
CSC 1019	Introduction to Programming: (Programming Language)	3
or		
DAT 1001	Introduction to Data Science	(3)
Electives	Choose six (6) hours from the disciplines of BUS, CIS, CNG, CSC, CWB, DAT	6
<b>Total Credit Hours</b>		<b>44</b>

#### Certificate

##### Cybersecurity

The Cybersecurity certificate prepares students for an entry level position in the fields of cybersecurity 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, cybersecurity 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 Cybersecurity certificate program, students should be able to:

- Organize secure networks using appropriate network technology and protocols
- Describe the use of basic cryptography
- Utilize multiple operating systems both in the cloud and with on-premise hardware
- Apply security principles and best practices to secure systems and maintain operations in the presence of risks and threats
- Create cybersecurity planning and management in an organization

CIS 2023	Linux	3
CNG 1024	Networking I: Network +	3
CNG 1032	Network Security Fundamentals	3
CNG 1042	Introduction to Cloud Computing Concepts	3
CNG 2042	Cloud Computing	3
CNG 2056	Vulnerability Assessment Level I	3
CNG 2057	Network Defense & Counter Measures	3
CNG 2059	Enterprise Security	4
<b>Total Credit Hours</b>		<b>25</b>

Additional information available on the Cybersecurity Department website at [www.pikespeak.edu/cybersecurity](http://www.pikespeak.edu/cybersecurity).

## Dental Assisting

### Associate of Applied Science Degree

Recommended basic skills courses are

- College Readiness in English
- College Readiness for 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 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](http://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 1018	Introduction to PC Applications	3
COM 1150	Public Speaking	3
	or	
COM 1250	Interpersonal Communication: SS3	(3)
	or	
COM 2250	Organizational Communication	(3)
ENG 1021	English Composition I: CO1	3
MAT 1140	Career Math	3
PSY 1001	General Psychology I: SS3	3
		<hr/> 15

#### Additional Required Courses

DEA 1011	Introduction to Dental Practices	1
DEA 1012	Dental Science I	3
DEA 1013	Dental Science II	3
DEA 1015	Infection Control	3
DEA 1016	Medical Emergencies in the Dental Office	2
DEA 1021	Principles of Clinical Practice	3
DEA 1022	Specialties of Dentistry	2
DEA 1023	Dental Materials I	3
DEA 1024	Dental Radiography	3
DEA 1031	Prevention & Nutrition in Dentistry	3
DEA 1033	Dental Materials II	3
DEA 1034	Advanced Dental Radiography	3
DEA 1035	Dental Office Management	2
DEA 1040	Dental Assisting National Board Review	1
DEA 1081	Clinical Internship I	1
DEA 1082	Clinical Internship II & Seminar	6
DEA 2011	Introduction to Expanded Functions	4
DEA 2021	Expanded Functions for Dental Auxiliary	4
		<hr/> 50
<b>Total Credit Hours</b>		<b>65</b>

All DEA coursework must have been taken in a CODA approved program within 5 years of admission.

## 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 1018	Introduction to PC Applications	3
DEA 1011	Introduction to Dental Practices	1
DEA 1012	Dental Science I	3
DEA 1013	Dental Science II	3
DEA 1015	Infection Control	3
DEA 1016	Medical Emergencies in the Dental Office	2
DEA 1021	Principles of Clinical Practice	3
DEA 1022	Specialties in Dentistry	2
DEA 1023	Dental Materials I	3
DEA 1024	Dental Radiography	3
DEA 1031	Prevention & Nutrition in Dentistry	3
DEA 1033	Dental Materials II	3
DEA 1034	Advanced Dental Radiography	3
DEA 1035	Dental Office Management	2
DEA 1040	Dental Assisting National Board Review	1
DEA 1081	Clinical Internship I	1
DEA 1082	Clinical Internship II & Seminar	6
ENG 1021	English Composition I: CO1	3
<b>Total Credit Hours</b>		<b>47-48</b>

Additional information available on the Dental Assisting Department website at [www.pikespeak.edu/programs/dental-assisting](http://www.pikespeak.edu/programs/dental-assisting).

## Dental Hygiene

### Associate of Applied Science Degree

Recommended basic skills courses are

- College Readiness in English
- College Readiness for Quantitative Literacy

A dental hygienist is a licensed healthcare professional who is skilled and an essential member of the dental health care team in the delivery of preventive dentistry. In the traditional role in the state of Colorado, a dental hygienist performs procedures such as:

- patient education
- oral prophylaxis
- patient data gathering for diagnosis and treatment planning
- fluoride treatment
- sealant application
- radiographic examination
- nutritional counseling
- periodontal diseases prevention and treatment
- treatment of handicapped, institutionalized, and other medically compromised patients
- administration of local anesthesia and nitrous oxide

In an expanded role of the dental hygienist training includes Interim Therapeutic Restorations (ITR).

Dental hygiene is a dynamic health care discipline with an excellent career outlook. Upon completion of an Associate of

Applied Science (A.A.S) degree in dental hygiene and successful completion of the National Board Dental Hygiene Examination (NBDHE) as well as regional clinical examination, graduates will become eligible to apply for a Registered Dental Hygienist licensure. Once licensed, a dental hygienist may be employed in a variety of settings which include:

- General Practice
- Periodontic Practice
- Pediatric Practice
- Independent Practice
- Public Health Setting

The Dental Hygiene program at Pikes Peak State College is a competitive 60-credit hour professional program administered through the Health Sciences division. To be considered for the Dental Hygiene program, candidates must complete 31-credit hours of pre-requisite course work and satisfy all application requirements prior to application submission. A minimum of 3 out of 4 science and 2 out of 5 Gen Ed prerequisite courses MUST be completed at the time of application to the Dental Hygiene program. A minimum of 19 credits of pre-requisite coursework and/or 24 credits of DEA coursework must be completed at the time of the application, with the remainder to be completed at the minimum satisfactory level (a "C" or higher) at the conclusion of the Spring semester. Accepted applicants who do not have all pre-requisite coursework completed at the time of application will be granted a conditional acceptance with the requirement of having to successfully complete the remainder of the pre-requisite coursework before enrolling in the dental hygiene (DEH) courses. Unsuccessful completion of the remainder of the pre-requisite courses will disqualify the candidate from enrolling in the dental hygiene courses and the student will be dropped from the program, even if they have been conditionally accepted. See the application requirements page for more specific information on the application process.

#### Program mission statement

The Dental Hygiene program at the Pikes Peak State College strives to provide high quality education by employing learner-centered, evidence-based curriculum that will produce competent and confident leaders in the dental hygiene field who will meet the needs of a culturally & ethnically diverse population. The program will cultivate life-long learners who will strive for ethical personal and professional excellence.

#### Dental Hygiene program vision

Pikes Peak State College's Dental Hygiene program will ensure student success by providing learner-centered, evidence-based curriculum that will produce highly competent and confident leaders in the dental hygiene field who will meet the needs of a culturally & ethnically diverse population.

#### Program goals/outcomes

The Dental Hygiene program at the Pikes Peak State College will:

1. Be the professional leader in administering a cutting-edge, evidence-based, interprofessional-minded, learner-centered program that will result in highly skilled, competent dental hygiene professionals who will meet the needs of a culturally & ethnically diverse population.
2. Recruit a diverse student body that is representative of the population at large.
3. Cultivate life-long learners who will strive for ethical personal and professional excellence.
4. Serve the Colorado Springs and greater El Paso County population by providing quality patient-centered dental hygiene care and oral care education.
5. Serve the dental professional community by providing leadership and resources for professional development.

6. Collaborate with other professional programs at the PPSC and other dental hygiene programs in the state.

#### Program values

Consistent with the PPSC values, the Dental Hygiene program values 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.

#### Program Learning Outcomes

Upon completion of the Dental Hygiene degree program, students should be able to:

- Establish dental hygiene diagnosis and treatment planning along with dental hygiene process of care in providing comprehensive, quality patient care
- Provide individualized, culturally competent patient educational services to promote health maintenance and disease prevention
- Plan and provide oral health programs to the public in collaboration with stakeholders and other health care professionals to promote oral and general health
- Examine the validity of foundational knowledge, information, products and/or techniques and their relevance to the practice of dental hygiene using evidence-based research
- Apply principles of ethical behavior in the decision-making process, and critical thinking skills as they pertain to the academic environment, research, patient care, and dental hygiene practice
- Report on professional responsibilities as it applies to the legal and regulatory concepts in the provision and/or support of oral health care services
- Record self-assessment to monitor knowledge and performance to foster personal and professional growth
- Practice cultural sensitivity and interpersonal communication skills required for effective collaboration with diverse population groups and other professionals in the health care system
- Report professional growth from participation in professional activities and continuing education

#### General Education Courses

BIO 2101	Human Anatomy & Physiology with Lab I: SC1	4
BIO 2102	Human Anatomy & Physiology with Lab II: SC1	4
BIO 2104	Microbiology with Lab: SC1	4
CHE 1009	General, Organic, and Biochemistry	4
COM 1150	Public Speaking	3
ENG 1021	English Composition I: CO1	3
HWE 2060	Human Nutrition	3
PSY 1001	General Psychology I: SS3	3
SOC 1001	Introduction to Sociology I: SS3	3
		<hr/> 31

#### Additional Required Courses

DEH 1001	Preclinical Dental Hygiene	2
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DEH 1002	Preclinical Dental Hygiene Lab	3
DEH 1003	Dental Anatomy and Histology	3
DEH 1004	Dental Radiology	3
DEH 1005	Introduction to Dental Hygiene	1
DEH 1011	Dental and Medical Emergencies	2
DEH 1022	Periodontics I	2
DEH 1023	Head and Neck Anatomy	1
DEH 1026	Dental Materials	2
DEH 1032	Applied Dental Pharmacology	2
DEH 1035	Pain and Anxiety Control for the Dental Hygienist	2
DEH 1050	Dental Lasers: Theory and Practice	1
DEH 1053	Clinical Theory of Dental Hygiene I	2
DEH 1070	Clinical Practice of Dental Hygiene I	4
DEH 1071	Clinical Practice of Dental Hygiene I-A	2
DEH 2004	Community Dental Health I	2
DEH 2013	General and Oral Pathology	3
DEH 2021	Ethics and Practice Management	2
DEH 2025	Community Dental Health II: Field Experience	1
DEH 2042	Periodontics II	2
DEH 2068	Clinical Theory of Dental Hygiene II	2
DEH 2070	Clinical Practice of Dental Hygiene II	6
DEH 2071	Clinical Practice of Dental Hygiene III	6
DEH 2082	Periodontics III	1
DEH 2085	Clinical Theory of Dental Hygiene III	2
		<hr/> 59
	Total Credit Hours	90

#### Acceptable Substitute Courses

CHE 1011	Introduction to Chemistry I with Lab: SC1	5
CHE 1012	Introduction to Chemistry II with Lab: SC1	5
COM 1250	Interpersonal Communication: SS3	3
COM 1260	Communication in Healthcare	3
COM 2300	Intercultural Communication: SS3	3
PSY 1002	General Psychology II: SS3	3
PSY 2221	Social Psychology: SS3	3
PSY 2333	Health Psychology: SS3	3
PSY 2440	Human Growth & Development: SS3	3
SOC 1002	Introduction to Sociology II: SS3	3
SOC 2018	Sociology of Diversity: SS3	3
ANT 1001	Cultural Anthropology: SS3	3

HWE 1050 Human Nutrition may be taken after acceptance into the program during the summer semester.

## Diesel Technology

### Associate of Applied Science Degree

Recommended basic skills courses are

- College Readiness in English
- College Readiness for 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 1018	Introduction to PC Applications	3
COM 2250	Organizational Communication	3
MAT 1140	Career Math	3
Elective	AAS General Education Elective course	6
		<u>15</u>

#### Additional Required Courses

DPM 1000	Introduction to Diesel Mechanics	2
DPM 1001	Diesel Shop Orientation	2
DPM 1003	Diesel Engines I	4
DPM 1005	Heavy Duty Powertrains I	3
DPM 1006	Diesel Fuel Systems	3
DPM 1020	Basic Heavy Duty Electricity	2
DPM 1021	Hydraulic Systems I	3
DPM 1022	Hydraulic Systems II	3
DPM 1026	Heavy Duty Starting & Charging	3
DPM 1040	Heavy Duty Steering & Suspension I	3
DPM 2003	Diesel Engines II	4
DPM 2005	Heavy Duty Powertrains II	3
DPM 2006	Heavy Duty Brakes I	3
DPM 2007	Heavy Duty Brakes II	3
	Heavy Duty Automatic Trans Diagnosis	1
DPM 2008		
DPM 2010	Diesel Air Induction & Exhaust	2
DPM 2022	Heavy Duty Lighting & Instrumentation	3
DPM 2023	Heavy Duty Body Electrical Systems	3
DPM 2040	Heavy Duty Steering & Suspension II	3
DPM 2064	Heavy Duty Heating & Ventilation	2
DPM 2065	Heavy Duty Air Conditioning Systems Service	3
		<u>58</u>
<b>Total Credit Hours</b>		<b>73</b>

## Certificates

### Diesel Brakes

The Diesel Brakes Certificate focuses on the students identifying and describing the many different types of diesel-powered vehicles. An emphasis is placed on being able to research information in maintenance manuals and parts manuals along with properly identifying and selecting mechanical fasteners for a

particular application. There will be specific coverage of precision fasteners, fuels, fluids as they relate to the diesel industry.

Further, there will be a focus on maintaining a safe and clean working heavy duty diesel shop. An emphasis is placed on the proper use and care for hand, electric, air and hydraulic tools safely. The certificate will cover how to clean equipment properly, how to handle and dispose of hazardous materials correctly, and how to apply mandated regulations. An emphasis is also placed on proper lifting equipment. The various braking systems incorporated in heavy duty trucks and heavy equipment including the diagnosis and service of hydraulic, mechanical, and electrical brake components will be covered with 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. This certificate will cover basic electrical theory, circuit designs, wiring methods, multimeter usage, and wiring diagrams including the demonstration of test procedures on electrical circuits.

#### Program Learning Outcomes

Upon completion of the Diesel Brakes certificate program, students should be able to:

- Diagnose, service, test, and repair air brakes on Heavy Trucks along with wet brakes used in the Equipment Industry (Brakes submerged in oil)
- Test, service, and repair electrical components associated with the electrical side air brake and wet brake systems. i.e., electric over hydraulic brakes

DPM 1000	Introduction to Diesel Mechanics	2
DPM 1001	Diesel Shop Orientation	2
DPM 1020	Basic Heavy Duty Electronics	2
DPM 2006	Heavy Duty Brakes I	3
DPM 2007	Heavy Duty Brakes II	3
	<b>Total Credit Hours</b>	<b>12</b>

### 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 1000	Introduction to Diesel Mechanics	2
DPM 1001	Diesel Shop Orientation	2
DPM 1006	Diesel Fuel Systems	3



DPM 2010 Diesel Air Induction & Exhaust	2
DPM 2022 Heavy Duty Lighting & Instrumentation	<u>3</u>
<b>Total Credit Hours</b>	<b>12</b>

### 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)

DPM 1000 Introduction to Diesel Mechanics	2
DPM 1001 Diesel Shop Orientation	2
DPM 1003 Diesel Engines I	4
DPM 2003 Diesel Engines II	<u>4</u>
<b>Total Credit Hours</b>	<b>12</b>

### 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

DPM 1000 Introduction to Diesel Mechanics	2
DPM 1001 Diesel Shop Orientation	2
DPM 1006 Diesel Fuel Systems	3
DPM 1020 Basic Heavy Duty Electronics	<u>2</u>
<b>Total Credit Hours</b>	<b>9</b>

### Heating and Air Conditioning

The Heating and Air Conditioning certificate is designed for students to learn to the basics of shop safety, common shop equipment and A/C recovery systems. Students learn about heavy equipment and vehicle electricity and how to read wiring diagrams. The major emphasis is on the diagnosis, troubleshooting and service of heavy equipment and truck heating and cooling systems along with their components.

#### Program Learning Outcomes

Upon completion of the Heating and Air Conditioning certificate program, students should be able to:

- Diagnose and service Heavy Equipment and Truck heating and air conditioning systems and their components
- Test, service, and repair the electrical systems associated with Truck and Equipment A/C systems

DPM 1000 Introduction to Diesel Mechanics	2
DPM 1001 Diesel Shop Orientation	2
DPM 1020 Basic Heavy Duty Electronics	2
DPM 2064 Heavy Duty Heating and Ventilation	2
DPM 2065 Heavy Duty Air Conditioning Systems Service	<u>3</u>
<b>Total Credit Hours</b>	<b>11</b>

### Hydraulics

The Hydraulics certificate is designed for students to learn to identify and describe the many different types of diesel-powered vehicles with instruction on the fundamentals of hydraulics and their applications in diagnosis, service, and testing along with safety measures. The certificate emphasizes being able to research information in maintenance manuals and parts manuals along with maintaining a safe (such as properly lifting equipment) and clean working heavy duty diesel shop by cleaning equipment properly, handling and disposing of hazardous materials correctly, and applying mandated regulations. There is also an emphasis placed on the proper use and care for hand, electric, air, and hydraulic tools safely. Specifically, the certificate will cover the repair, replacement, measurement, and adjustments of components including pumps, control valves, and cylinders along with basic electrical theory, circuit designs, wiring methods, multimeter usage, and wiring diagrams including the demonstration of test procedures on electrical circuits.

#### Program Learning Outcomes

Upon completion of the Hydraulics certificate program, students should be able to:

- Diagnose, service, test, and repair hydraulic components: pumps, motors, and actuators
- Test, service, and repair electrical components associated with the electrical side of hydraulic systems. i.e.: Electric over hydraulic systems

DPM 1000 Introduction to Diesel Mechanics	2
DPM 1001 Diesel Shop Orientation	2
DPM 1020 Basic Heavy Duty Electronics	2
DPM 1021 Hydraulic Systems I	3
DPM 1022 Hydraulic Systems I	<u>3</u>
<b>Total Credit Hours</b>	<b>12</b>

### 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 1000	Introduction to Diesel Mechanics	2
DPM 1001	Diesel Shop Orientation	2
DPM 1011	Cab & Electrical PMI	1.5
DPM 1012	Engine Systems PMI	1.5
DPM 2011	Drivetrain, Steering & Suspension Preventive Maintenance	1.5
DPM 2012	Brake System PMI	1.5
<b>Total Credit Hours</b>		<b>10</b>

Additional information available on the Diesel Technology Department website at [www.pikespeak.edu/programs/diesel-technology](http://www.pikespeak.edu/programs/diesel-technology).

## Early Childhood Education

### Associate of Applied Science Degree

Recommended basic skills courses are

- College Readiness in English
- College Readiness for 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 State 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 PPSC 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 1018	Introduction to PC Applications	3
or		
CSC 1005	Computer Literacy	(3)
COM 1150	Public Speaking	3
or		
COM 1250	Interpersonal Communication: SS3	(3)
ENG 1021	English Composition I: CO1	3
MAT 1160	Financial Mathematics	3
PSY 1001	General Psychology I: SS3	3
or		
PSY 2332	Psychology of Adjustment	(3)
or		
SOC 1001	Introduction to Sociology I: SS3	(3)
or		
SOC 2005	Sociology of Family Dynamics: SS3	(3)
		<u>15</u>

### Additional Required Courses (all emphasis areas)

ECE 1011	Introduction to Early Childhood Education	3
ECE 1031	Guidance Strategies for Young Children	3
ECE 1045	Introduction to Early Childhood Techniques	3
ECE 1111	Infant & Toddler Theory & Practice	3
ECE 2051	Nutrition, Health & Safety	3
ECE 2061	Observation & Assessment of Young Children's Development, Learning, & Programs	1
ECE 2101	Working with Families & Communities	3
ECE 2381	ECE Child Growth & Development	3
ECE 2401	Administration of Early Childhood Care & Education Programs	3
ECE 2411	Administration: Human Relations for Early Childhood Education	3
ECE 2601	The Exceptional Child	3
ECE 2621	Curriculum Development: Methods & Techniques	3
ECE 2641	Creativity & the Young Child	3
ECE Practicums Options		
Eight (8) credit hours		
ECE 1125	Introduction to Infant/Toddler Lab Techniques	3
ECE 1925	School Age Lab Techniques	3
ECE 2615	Exceptional Child Lab Techniques	3
AND		
ECE 2089	Capstone: Early Childhood Education	<u>5</u>
		45
<b>Total Credit Hours</b>		<b>60</b>

### 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 1011	Introduction to Early Childhood Education	3
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ECE 1031	Guidance Strategies for Young Children	3
ECE 1045	Introduction to Early Childhood Techniques	3
ECE 2051	Nutrition, Health, and Safety	3
ECE 2641	Creativity & the Young Child	3
HWE 1005	American Heart Association Heartsaver First Aid CPR and AED	0.5

**Total Credit Hours** 15.5

### 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 PPSC 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 1011	Introduction to Early Childhood Education	3
ECE 1031	Guidance Strategies for Young Children	3
ECE 1045	Introduction to Early Childhood Techniques	3
ECE 1111	Infant & Toddler Theory & Practice	3
ECE 2051	Nutrition, Health & Safety	3
ECE 2381	ECE Child Growth & Development	3
ECE 2401	Administration of Early Childhood Care & Education Programs	3
ECE 2411	Administration: Human Relations for Early Childhood Education	3
ECE 2601	The Exceptional Child	3
ECE 2621	Curriculum Development: Methods & Techniques	3
<b>Total Credit Hours</b>		<u>30</u>

### Early Childhood Assistant Teacher

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 Early Childhood Assistant Teacher 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 1011	Introduction to Early Childhood Education	3
or		
ECE 1031	Guidance Strategies for Young Children	(3)
ECE	Elective Course of Choice	3
<b>Total Credit Hours</b>		<u>6</u>

### Early Childhood Teacher

Students learn the necessary skills to seek employment at preschool programs in the state of Colorado.

#### Program Learning Outcomes

Upon completion of the Early Childhood Teacher 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 1011	Introduction to Early Childhood Education	3
ECE 1031	Guidance Strategies for Young Children	3
ECE 1045	Introduction to Early Childhood Techniques	3
ECE 2101	Working with Families & Communities	3
ECE 2381	ECE Child Growth & Development	3
ECE 2621	Curriculum Development: Methods & Techniques	3
<b>Total Credit Hours</b>		<u>18</u>

### 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 1111	Infant & Toddler Theory & Practice	3
ECE 1125	Introduction to Infant/Toddler Lab Techniques	3
ECE 2051	Nutrition, Health & Safety	3
ECE 2101	Working with Families & Communities	3
ECE 2381	ECE Child Growth & Development	3
ECE 2601	The Exceptional Child	3
<b>Total Credit Hours</b>		<u>18</u>

Additional information available on the Early Childhood Education Department website at [www.pikespeak.edu/programs/early-childhood-education](http://www.pikespeak.edu/programs/early-childhood-education).

# Emergency Medical Services

## Associate of Applied Science Degree

Recommended basic skills courses are

- College Readiness in English
- College Readiness for Quantitative Literacy

Pikes Peak State 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 1150	Public Speaking	3
ENG 1021	English Composition I: CO1	3
ENG 1022	English Composition II: CO2	3
MAT 1140	Career Math	3
PSY 1001	General Psychology I: SS3	3
		<hr/> 15

#### Additional Required Courses

BIO 1111	GenBio I: Molecular & Cellular Biology w/Lab: SC1	5
BIO 2101	Human Anatomy & Physiology I w/Lab: SC1	4
BIO 2102	Human Anatomy & Physiology II w/Lab: SC1	4
EMS 1021	EMT Fundamentals	3
EMS 1022	EMT Medical Emergencies	4
EMS 1023	EMT Trauma Emergencies	2
EMS 1024	EMT Special Considerations	2
EMS 1070	EMT Clinical	1
EMS 1081	EMT Internship I	1.5
EMS 1132	EMS IV/IO Therapy	2
EMS 1138	Basic EMS Simulation Lab	3
EMS 1140	Advanced EMS Simulation Lab	3
HPR 1006	Customer Service in Healthcare	2
HPR 1011	CPR for Professionals	0.5
HPR 1039	Medical Terminology	2
PSY 2441	Child Development: SS3	3
PSY 2552	Psychopathology: SS3	3
		<hr/> 45

Total Credit Hours for Emergency Medical Technician Degree Emphasis 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 2101 with a C or higher to apply. The application process includes the TEAS V for Allied Health exam.

#### General Education Requirements

BIO 2101	Human Anatomy & Physiology I w/Lab: SC1	4
BIO 2102	Human Anatomy & Physiology II w/Lab: SC1	4
ENG 1021	English Composition I: CO1	3
ENG 1022	English Composition II: CO2	3
PSY 1001	General Psychology I: SS3	3
		<hr/> 17

#### Additional Required Courses

EMS 2025	Fundamentals of Paramedic Practice	3
EMS 2026	Fundamentals of Paramedic Practice Lab	2
EMS 2027	Paramedic Special Considerations	3
EMS 2028	Paramedic Special Considerations Lab	2
EMS 2029	Paramedic Pharmacology	3
EMS 2030	Paramedic Pharmacology Lab	2
EMS 2031	Paramedic Cardiology	5
EMS 2032	Paramedic Cardiology Lab	1
EMS 2033	Paramedic Medical Emergencies	4
EMS 2034	Paramedic Medical Emergencies Lab	1
EMS 2035	Paramedic Trauma Emergencies	4
EMS 2036	Paramedic Trauma Emergencies Lab	1
EMS 2037	Paramedic Internship Preparation	2
EMS 2080	Paramedic Internship I	6
EMS 2081	Paramedic Internship II	6
		<hr/> 45

Total Credit Hours for Paramedic Degree Emphasis 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 program will build on the basic knowledge and skills of an EMT necessary to provide patient care. 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

ENG 1021	English Composition I: CO1	3
	or	
ENG 1022	English Composition II: CO2	(3)
	or	
PSY 1001	General Psychology I: SS3	(3)
EMS 1071	AEMT Clinical Internship	2
EMS 1125	AEMT Fundamentals	2
EMS 1127	AEMT Special Considerations	2
EMS 1129	AEMT Pharmacology	1
EMS 1132	EMS IV/IO Therapy	2
EMS 1133	AEMT Medical Emergencies	2
EMS 1135	AEMT Trauma Emergencies	2
HPR 1050	Basic EKG Interpretation	2
<b>Total Credit Hours</b>		<b>18</b>

**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 1021	EMT Fundamentals	3
EMS 1022	EMT Medical Emergencies	4
EMS 1023	EMT Trauma Emergencies	2
EMS 1024	EMT Special Considerations	2
EMS 1070	EMT Clinical	1
<b>Total Credit Hours</b>		<b>12</b>

**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, and program completion certification for increased visibility during job applications.

Program co-requisites: EMS 1021, EMS 1022, EMS 1023, EMS 1024, and EMS 1070 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, clinical environment, and simulated field environment
- Demonstrate successful peripheral intravenous (IV) access in the lab and clinical setting

EMS 1081	EMS Internship	1.5
EMS 1132	EMS IV/IO Therapy	2
EMS 1138	Basic EMS Simulation Lab	3
EMS 1140	Advanced EMS Simulation Lab	3
HPR 1006	Customer Service in Healthcare	2
HPR 1011	CPR for Professionals	0.5
HPR 1050	Basic EKG Interpretation	2
Elective	Choose one elective from below	3
<b>Total Credit Hours</b>		<b>17</b>

**Electives**

ENG 1021	English Composition I: CO1	3
ENG 1022	English Composition II: CO2	3
PSY 1001	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 1006	Basic Anatomy & Physiology	4
	or	
BIO 2101	Human Anatomy & Physiology I w/Lab: SC1	(4)
EMS 2025	Fundamentals of Paramedic Practice	3
EMS 2026	Fundamentals of Paramedic Practice Lab	2
EMS 2027	Paramedic Special Considerations	3
EMS 2028	Paramedic Special Considerations Lab	2
EMS 2029	Paramedic Pharmacology	3
EMS 2030	Paramedic Pharmacology Lab	2
EMS 2031	Paramedic Cardiology	5
EMS 2032	Paramedic Cardiology Lab	1
EMS 2033	Paramedic Medical Emergencies	4
EMS 2034	Paramedic Medical Emergencies Lab	1
EMS 2035	Paramedic Trauma Emergencies	4
EMS 2036	Paramedic Trauma Emergencies Lab	1

EMS 2037	Paramedic Internship Preparation	2
EMS 2080	Paramedic Internship I	6
EMS 2081	Paramedic Internship II	6
<b>Total Credit Hours</b>		<b>49</b>

Additional information available on the Emergency Medical Services Department website at [www.pikespeak.edu/programs/emergency-medical-services](http://www.pikespeak.edu/programs/emergency-medical-services).

## Fire Science Technology

### Associate of Applied Science Degree

Recommended basic skills courses are

- College Readiness in English
- College Readiness for 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 1018	Introduction to PC Applications	3
or		
CSC 1005	Computer Literacy	(3)
ENG 1021	English Composition I: CO1	3
ENG 1022	English Composition II: CO2	3
MAT 1140	Career Math or higher	3
PSC 1011	American Government: SS1	3
or		
PSY 1005	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 1001	Emergency Management	3
FST 1002	Principles/Emergency Services	3
FST 1003	Fire Behavior & Combustion	3
FST 1005	Building Construction for Fire Protection	3
FST 1006	Fire Prevention	3
FST 1009	Occupational Safety & Health for Fire	3
FST 2001	Instructional Methodology	3
FST 2002	Strategy & Tactics	3
FST 2003	Fire Hydraulics & Water Supply	3
FST 2009	Fire Protection Systems	3
FST 2059	Wildland Firefighting Strategy & Tactics	3
Elective	Choose twelve (12) hours from technical electives	12
		<u>45</u>

**Total Credit Hours for Fire Science Technology Degree Emphasis** **60**

#### Technical Electives

FST 1000	Firefighter I	9
FST 1007	Hazardous Materials Operations (Level I)	3
FST 1010	Job Placement & Assessment	3
FST 1060	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 1001	Emergency Management	3
FST 1009	Occupational Safety & Health for Fire	3
FST 2001	Instructional Methodology	3
FST 2005	Fire Investigation I	3
FST 2006	Fire Company Supervision & Leadership (Fire Officer I)	3
FST 2007	Firefighting Strategy & Tactics II	3
FST 2051	Legal Aspects of Fire Service	3
FST 2055	Fire Service Management	3
FST 2057	Fire Department Administration	3

FST 2058	Wildland Fire Incident Management & Operations	3
FST 2059	Wildland Firefighting Strategy & Tactics	3
Elective	Choose twelve (12) hours from technical electives	12
		45
<b>Total Credit Hours for Fire Service Management Degree Emphasis</b>		<b>60</b>

**Technical Electives**

FST 1000	Firefighter I	9
FST 1007	Hazardous Materials Operations (Level I)	3
FST 1010	Job Placement & Assessment	3
FST 1060	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 1000	Firefighter I	9
FST 1002	Principles/Emergency Services	3
FST 1003	Fire Behavior & Combustion	3
FST 1007	Hazardous Materials Operations (Level I)	3
FST 1010	Job Placement & Assessment	3
FST 1060	Candidate Physical Abilities Test Prep	3
<b>Total Credit Hours</b>		<b>24</b>

Additional information available on the Fire Science Technology Department website at [www.pikespeak.edu/programs/fire-science-technology](http://www.pikespeak.edu/programs/fire-science-technology).

**Fire Science Wildland**

**Associate of Applied Science Degree**

Recommended basic skills courses are

- College Readiness in English
- College Readiness for 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 (NWCWG)
- 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 1018	Introduction to PC Applications	3
or		
CSC 1005	Computer Literacy	(3)
ENG 1021	English Composition I: CO1	3
ENG 1022	English Composition II: CO2	3
MAT 1140	Career Math or higher	3
PSC 1011	American Government: SS1	3
or		
PSY 1005	Psychology of Workplace Relationships	(3)
		15

**Additional Required Courses**

EMP 1001	Principles of Emergency Management	3
FST 1003	Fire Behavior & Combustion	3
FST 1009	Occupational Safety & Health for Fire	3
FST 2002	Strategy & Tactics	3
FST 2058	Wildland Fire Incident Management & Organization	3
FST 2059	Wildland Firefighting Strategy & Tactics	3
FSW 1053	S-290 Intermediate Wildland Fire Behavior	2
PSM 2000	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.

# Health, Wellness, and Fitness

## Associate of Applied Science Degree

Recommended basic skills courses are

- College Readiness in English
- College Readiness for Quantitative Literacy

The Associate of Applied Science Health, Wellness, and Fitness is a gateway for students interested in a career in a health, wellness, and fitness field. The program emphasizes the fundamentals of exercise science, nutrition, and health and wellness promotion. The Health, Wellness, and Fitness degree is the educational pathway for a career in the health and fitness industry.

### Program Learning Outcomes

Upon completion of the Health, Wellness, and Fitness degree program, students should be able to:

- Conduct health, nutrition, and fitness for diverse populations.
- Design behavioral change strategies aimed at promoting healthier lifestyles.
- Design and implement exercise programs to all populations.
- Explain whole person health and how it differentiates based on genetics, race, gender, environment, and aging.
- Implement basic managerial skills, including technical, conceptual, interpersonal communication, and decision-making skills

### General Education Courses

BIO 1004	Biology: A Human Approach	4
or		
BIO 1111	GenBio I: Molecular & Cellular Biology w/Lab: SC1	(5)
COM 1150	Public Speaking	3
or		
COM 1250	Interpersonal Communication	(3)
or		
COM 2300	Intercultural Communication SS3	(3)
ENG 1021	English Composition I: CO1	3
or		
ENG 1031	Technical Writing I: CO1	(3)
MAT 1140	Career Math or higher	3
or		
MAT 1260	Introduction to Statistics: MA1	(3)
SOC 2018	Sociology of Diversity: SS3	3
		<u>16-17</u>

### Additional Required Courses

HWE 1005	AHA Heartsaver First Aid CPR & AED	0.5
HWE 1019	Skills and Methods of Teaching Fitness Instruction	3
HWE 1050	Human Nutrition	3
HWE 1061	Fitness and Wellness	2
HWE 1062	Health and Wellness	3
HWE 1064	Weight Management and Exercise	2
HWE 1065	Introduction to Exercise Health Sciences	3
HWE 1068	Certified Personal Trainer Prep Course	3
HWE 2060	Sports Nutrition and Body Composition	3
HWE 2064	Health and Wellness Coaching	3
MAR 1060	Customer Service	3
PSY 1001	General Psychology I SS3	3
Elective	Choose thirteen (13) hours from the list below	13
		<u>44.5</u>
<b>Total Credit Hours</b>		<b>60.5-61.5</b>

### Electives

BIO 1112	GenBio II: Ecology & Organismic Biology w/Lab: SC1	5
BIO 2101	Human Anatomy & Physiology I with lab SC1	4
BIO 2102	Human Anatomy & Physiology II with lab SC1	4
CHE 1011	Introduction to Chemistry with Lab: SC1	5
CHE 1111	General College Chemistry I with Lab: SC1	5
CHE 1112	General College Chemistry II with Lab: SC1	5
HPR 1017	Anatomical Kinesiology	3
HWE 2062	Physiology of Exercise	3
IHP 1000	Exploring Complementary Health	1
IHP 2050	Registered Yoga Teacher Training Level 200	10
IHP 2052	Mindfulness for Health and Wellness	2
MAR 1011	Principles of Sales	3
MAR 2016	Principles of Marketing	3
MAT 1340	College Algebra: MA1	4
PED 1002	Weight Training I	1
PED 1003	Weight Training II	2
PED 1010	Fitness Center Activity I	1
PED 1011	Fitness Center Activity II	1
PED 1040	Body Sculpting and Toning	1
PED 1041	Pilates I	1
PED 1042	Pilates II	1
PED 1043	Yoga I	1
PED 1044	Yoga II	1
PED 1061	Tai Chi I	1
PED 1063	Martial Arts I	1
PHI 1011	Introduction to Philosophy: AH3	3
PSY 2440	Human Growth and Development SS3	3
SPA 1001	Conversational Spanish I	3
SPA 1002	Conversational Spanish II	3

## Certificates

### Health and Wellness Coach Preparatory Program

The Health and Wellness Coach Preparatory Program certificate is designed to prepare students for a career in a health and wellness field. Students will develop skills on how to empower diverse populations to make healthy lifestyle changes that will optimize their health and wellbeing. Additionally, students will learn behavior change strategies and goal-setting techniques for adopting a healthier lifestyle, ethical cross-cultural communication skills, and to differentiate the health and wellness needs between race, ethnicity, social class, gender, age, ability status, and sexual identity.

### Program Learning Outcomes

Upon completion of the Health and Wellness Coach Preparatory Program certificate program, students should be able to:

- Assess an individual's health status
- Analyze factors that influence behavior change strategies
- Integrate communication strategies
- Construct a behavior change plan with goal setting techniques

COM 1250	Interpersonal Communication	(3)
or		
COM 2300	Intercultural Communication SS3	(3)
HWE 1005	AHA Heartsaver First Aid CPR & AED	0.5
HWE 1062	Health and Wellness	3
HWE 2064	Health and Wellness Coaching	3
MAR 1060	Customer Service	3
SOC 2018	Sociology of Diversity: SS3	3
Elective	Choose one (1) credit hour from the list below	<u>1</u>
<b>Total Credit Hours</b>		<b>16.5</b>



**Electives**

PED 1041	Pilates I	1
PED 1043	Yoga I	1
PED 1061	Tai Chi I	1

**Personal Trainer Preparatory Program**

The Personal Trainer Preparatory Program certificate is designed for students who seek a career in personal training. Students will develop the skills and knowledge for designing and implementing a safe and effective exercise programs for diverse populations. Additionally, students will learn behavior change strategies and goal-setting techniques for implementing a safe and effective exercise program, ethical cross-cultural communication skills, and how to differentiate the exercise needs between race, ethnicity, social class, gender, age, ability status, and sexual identity.

Upon successful completion of the program students will be eligible to take a national certification exam with the American Council on Exercise (ACE), American Aerobic Association International\International Sports Medicine Association (AAAI/AISM), National Strength and Conditioning Association (NSCA), or the National Academy of Sports Medicine (NASM).

**Program Learning Outcomes**

Upon completion of the Personal Trainer Preparatory Program certificate program, students should be able to:

- Assess an individual’s physical fitness status
- Apply behavior change strategies and goal-setting techniques for a safe and effective exercise program
- Describe the impact of physical activity on weight loss and management
- Design a safe exercise program for all populations
- Distinguish risk and legal ramifications pertaining to a personal trainer and injury prevention

HWE 1005	AHA Heartsaver First Aid CPR & AED	0.5
HWE 1019	Skills and Methods of Teaching Fitness Instruction	3
HWE 1062	Health and Wellness	3
HWE 1065	Introduction to Health and Exercise Science	3
HWE 1068	Certified Personal Trainer Prep Course	3
HWE 2060	Sports Nutrition and Body Composition	3
MAR 1060	Customer Service	3
<b>Total Credit Hours</b>		<b>18.5</b>

**Yoga Teacher Training Program**

The Yoga Teacher Training certificate is designed for students who seek a career as a Yoga instructor. Students will develop the skills and knowledge in the practice of Yoga with a focus in applicable anatomy, educational and physical requirements, and specific kinesthetic techniques necessary to become a professional Hatha Yoga instructor. Additionally, students will learn ethical cross-cultural communication skills, and how to differentiate the health-related modification needs for a diverse population.

**Program Learning Outcomes**

Upon completion of the Yoga Teacher Training Program certificate program, students should be able to:

- Teach classical Hatha Yoga poses (asanas)
- Perform classical Hatha Yoga poses (asanas)
- Implement the ethical responsibilities, scope of practice, and professionalism of a Hatha Yoga teacher
- Create necessary modifications to accommodate those with special limitations or conditions impacting their health and/or physical abilities

COM 1250	Interpersonal Communication	3
	or	
COM 2300	Intercultural Communication SS3	(3)
	or	
SOC 2018	Sociology of Diversity: SS3	(3)
MAR 1060	Customer Service	3
	or	
IHP 1000	Exploring Complementary Health	(1)
	or	
IHP 2052	Mindfulness for Health and Wellness	(2)
HWE 1005	AHA Heartsaver First Aid CPR & AED	0.5
IHP 2050	Registered Yoga Teacher Training Level 200	10
<b>Total Credit Hours</b>		<b>16.5</b>

Additional information available on the Health and Wellness Department website at [www.pikespeak.edu/programs/health-and-wellness](http://www.pikespeak.edu/programs/health-and-wellness).

## Heating, Air Conditioning and Refrigeration Technology

### Associate of Applied Science Degree

Recommended basic skills courses are

- College Readiness in English
- College Readiness for 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 1018	Introduction to PC Applications	3
or		
CSC 1005	Computer Literacy	(3)
COM 1250	Interpersonal Communication: SS3	3
ENG 1031	Technical Writing I: CO1	3
MAT 1140	Career Math	3
PSY 1005	Psychology of Workplace Relationships	3
		<u>15</u>

**Additional Required Courses**

HVA 1002	Basic Refrigeration	4
HVA 1005	Electricity for HVAC/R	4
HVA 1010	Fundamentals of Gas Heating	4
HVA 1011	Piping Skills for HVAC	4
HVA 1013	Refrigerant Recovery Training	1
HVA 1018	Customer Soft Skills (Customer Services & Ethics)	2
HVA 1032	Air Conditioning & Refrigeration Controls	4
HVA 1041	Sheet Metal Fabrication	2
or		
HVA 2080	Internship	(2)
HVA 1042	Residential Air Conditioning	4
HVA 2001	Heating for Commercial	3
HVA 2004	Direct Digital Controls	4
HVA 2006	Mechanical Codes	4
HVA 2033	Advanced Refrigeration	4
HVA 2041	Advanced Air Conditioning	3
HVA 2047	Hot Water Heating Systems	4
HVA 2062	Residential Heat Pump Service	2
		<u>53</u>
<b>Total Credit Hours</b>		<b>68</b>

**Certificates****Heating, Air Conditioning, and Refrigeration Digital Controls**

Students completing the Heating, Air Conditioning, and Refrigeration 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 Heating, Air Conditioning, and Refrigeration 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 1001	Survey of Electronics	3
HVA 2051	Building Automation I, Installer	4
HVA 2052	Building Automation II, Service	4
HVA 2053	Building Automation III, Advanced Operations	4
		<u>15</u>
<b>Total Credit Hours</b>		<b>15</b>

**HVAC Industry Upgrade**

The HVAC 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 HVAC 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 2001	Heating for Commercial	3
HVA 2004	Direct Digital Controls	4
HVA 2033	Advanced Refrigeration	4
HVA 2041	Advanced Air Conditioning	3
HVA 2062	Residential Heat Pump Service	2
HVA 2080	Internship	2
		<u>18</u>
<b>Total Credit Hours</b>		<b>18</b>

**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 1002	Basic Refrigeration	4
HVA 1005	Electricity for HVAC/R	4
HVA 1010	Fundamentals of Gas Heating	4
HVA 1011	Piping Skills for HVAC	4
HVA 1013	Refrigerant Recovery Training	1
HVA 1018	Customer Soft Skills (Customer Services & Ethics)	2
HVA 1032	Air Conditioning & Refrigeration Controls	4
HVA 1042	Residential Air Conditioning	4
HVA 1046	Residential Load Calculation & Duct Design	4
HVA 2006	Mechanical Codes	4
		<u>35</u>
<b>Total Credit Hours</b>		<b>35</b>

Additional information available on the Heating, Air Conditioning and Refrigeration Technology Department website at [www.pikespeak.edu/programs/hvac](http://www.pikespeak.edu/programs/hvac).

## Hospitality and Resort Management

### Associate of Applied Science Degree

Recommended basic skills courses are

- College Readiness in English
- College Readiness for Quantitative Literacy

This program will develop skills and industry knowledge in the key areas of hospitality, lodging, and resort management. Students will engage in theoretical and hands-on learning including managing property food service and lodging operations, facility management, event planning, department operations, hospitality law, human resources, customer relations, information systems and accounting principles.

#### Program Learning Outcomes

Upon completion of the Hospitality and Resort Management degree program, students should be able to:

- Calculate and determine inventory management systems, including purchasing and costing
- Identify and display 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
- Describe and explain the steps for recruitment and supervision of food service personnel
- Develop and evaluate a marketing plan based upon common marketing models and research methods
- Discuss and evaluate the legal aspects of hospitality management

#### General Education Courses

BUS 1015	Introduction to Business	3
CIS 1018	Introduction to PC Applications	3
	or	
CSC 1005	Computer Literacy	(3)
ENG 1031	Technical Writing I: CO1	3
	or	
ENG 1021	English Composition I: CO1	(3)
MAT 1160	Financial Mathematics	(3)
	or	
MAT 1260	Introduction to Statistics: MA1	(3)
PSY 1001	General Psychology I: SS3	3
	or	
PSY 1005	Psychology of Workplace Relationships	(3)
		<u>15</u>

#### Additional Required Courses

CUA 1001	Food Safety & Sanitation	2
CUA 1190	Dining Room Management	4
CUA 2055	Supervision in the Hospitality Industry	3
CUA 2056	Marketing in the Hospitality Industry	3
CUA 2061	Cost Controls	3
CUA 2062	Purchasing for the Hospitality Industry	3
CUA 2063	Legal Aspects of Hospitality Management	3
HOS 1005	Introduction to Management in the Hospitality Industry	3
	or	
CUA 1005	Food Service Concepts & Management Skills	(3)

HOS 1031	Planning for Special Events	3
HOS 1048	Introduction to Food and Beverage	3
HOS 2021	Basic Hotel & Restaurant Accounting	3
HOS 2031	Resort Facilities Management and Design	3
HOS 2051	Hotel Operations	3
HOS 2080	Internship	3
	or	
CUA 2081	Internship	(4)
MAR 1060	Customer Service	3
		<u>45-46</u>

#### Total Credit Hours

**60-61**

## Industrial Mechatronics Maintenance Technology

### Associate of Applied Science Degree

Industrial Mechatronics Maintenance Technicians are responsible for installing, maintaining, and repairing commercial and industrial machinery and systems in a commercial building or a manufacturing plant. Technicians ensure the proper operation of machinery and mechanical equipment by completing routine service and preventative maintenance requirements on all machines through testing, troubleshooting and problem-solving.

Students study the basic operations common to production equipment used in industry such as electricity, electronics, pneumatics, hydraulics, and mechanical power. Other skills include interpretation of working drawings, and a knowledge base of basic carpentry, plumbing, and safety in the workplace. Coursework is designed to prepare students for the National Institute of Metalworking Skills (NIMS) certificate exams.

#### Program Learning Outcomes

Upon completion of the Industrial Mechatronics Maintenance Technology degree program, students should be able to:

- Demonstrate safe work procedures
- Maintain industrial equipment and systems
- Troubleshoot industrial equipment and systems
- Repair and service industrial equipment and systems
- Communicate technical information
- Interpret working drawings for various industries
- Test and control common industrial processes through a variety of techniques and instruments (e.g., motors, generators, regulators, sensors, transducers)
- Construct, test, and troubleshoot electronic circuits
- Perform tests and operate machinery to ensure proper operation
- Adjust and calibrate equipment and machinery to optimal specifications
- Differentiate between the operations and function of various industrial circuits

#### General Education Courses

CIS 1018	Introduction to PC Applications	3
	or	
CSC 1005	Computer Literacy	(3)
COM 1150	Public Speaking	3
	or	
COM 2250	Organizational Communication	(3)
ENG 1031	Technical Writing I: CO1	3
	or	
ENG 1021	English Composition I: CO1	(3)
MAT 1140	Career Math	3

PSY 1001	General Psychology I: SS3	3	CON 1064	National Center for Construction Education & Research Electrical III	6
or					
PSY 1005	Psychology of Workplace Relationships	(3)			
or					
SPA 1001	Conversational Spanish I	(3)	CON 1065	National Center for Construction Education & Research Electrical IV	6
		<u>15</u>	OSH 1310	10-Hour Construction Industry Standards	<u>1</u>
					30

**Additional Required Courses**

CON 1057	National Center for Construction Education & Research Core	5
CON 1062	National Center for Construction Education & Research Electrical I	6
CON 1063	National Center for Construction Education & Research Electrical II	6
CON 1064	National Center for Construction Education & Research Electrical III	6
CON 1065	National Center for Construction Education & Research Electrical IV	6
CON 2080	Internship	1
EIC 2330	Instrument & Process Control II	4
ELT 1002	Soldering	1
ELT 1206	Fundamentals of DC/AC	4
ELT 1246	Digital Devices in Computers	3
ELT 2357	Sensors & Transducers	3
ELT 2358	Programmable Logic Controllers	3
ELT 2359	Advanced Programmable Logic Controllers	3
ELT 2362	Introduction to Microcontrollers	3
OSH 1310	10-Hour Construction Industry Standards	<u>1</u>
		55
		<u>70</u>

Total Credit Hours

**Certificates****Electrical**

Training provided through the Industrial Mechatronics Maintenance Technology, Electrical Certificate program prepares students for a career in the maintenance of large electrical, electronic, hydraulic, and pneumatic manufacturing systems. Students will develop skills to define, integrate, install, program, and maintain complex control systems. Coursework is designed to prepare students for the National Institute of Metalworking Skills (NIMS) certificate exams.

## Program Learning Outcomes

Upon completion of the Electrical certificate program students should be able to:

- Describe the correct use of electrical measurement equipment, including digital multimeters, oscilloscopes, and various power meters
- Differentiate between AC and DC circuitry, using standard mathematical constructs
- Explain basic electronic principles
- Install, troubleshoot, and maintain digital circuitry utilizing ladder logic
- Apply effective oral and written communication skills
- Work effectively in a team-based environment
- Create and modify original and existing Programmable Logic Controllers (PLC) programs
- Assemble and wire transformers and rotating machinery
- Identify industrial electrical hardware, codes, and various electrical/electronic systems

CON 1057	National Center for Construction Education & Research Core	5
CON 1062	National Center for Construction Education & Research Electrical I	6
CON 1063	National Center for Construction Education & Research Electrical II	6

**Electronics**

Training provided through the Industrial Mechatronics Maintenance Technology, Electronics Certificate program prepares students for a career in various entry-level positions in the field of electronics and other related technology industries including technical sales, manufacturing, and quality control. The certificate offers a broad range of electronics courses with emphasis on electronics-related analysis, operation, application, installation, and service. Coursework is designed to prepare students for the National Institute of Metalworking Skills (NIMS) certificate exams. Because most courses have prerequisites, students should consult with the Program Coordinator prior to enrolling.

## Program Learning Outcomes

Upon completion of the Electronics certificate program, students should be able to:

- Apply electrical safety procedures in the field or the laboratory
- Demonstrate proper soldering techniques and the safe use of standard hand tools and test instrumentation
- Analyze, maintain, troubleshoot and repair electrical or electronic equipment with a minimum of supervision
- Utilize technical and service manuals, to identify wiring, schematic, and printed circuit board diagrams
- Summarize concepts of matter and energy; and describe how the concepts relate to the components that generate, carry or control electricity
- Differentiate between basic electric, magnetic, and electromagnetic field relationships
- Identify electrical quantities, symbols, units, and principles; and explain their interrelationships and application
- Distinguish between series, parallel, and series-parallel DC, AC and RF networks
- Construct single time constant circuits, single and three-phase steady state AC circuits and RLC resonant circuits
- Design contemporary wireless communications system applications, operations, and analysis

CON 1057	National Center for Construction Education & Research Core	5
EIC 2330	Instrument & Process Control II	4
ELT 1002	Soldering	1
ELT 1206	Fundamentals of DC/AC	4
ELT 1246	Digital Devices in Computers	3
ELT 2357	Sensors & Transducers	3
ELT 2358	Programmable Logic Controllers	3
ELT 2359	Advanced Programmable Logic Controllers	3
ELT 2362	Introduction to Microcontrollers	3
OSH 1310	10-Hour Construction Industry Standards	<u>1</u>
	Total Credit Hours	30

## Interior Design

### Associate of Applied Science Degree

Recommended basic skills courses are

- College Readiness in English
- College Readiness for Quantitative Literacy

As a PPSC 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 1005	Digital Art Foundations I	3
	or	
MGD 1011	Adobe Photoshop I	(3)
ART 1110	Art Appreciation: AH1	3
	or	
ART 1201	Drawing I	(3)
COM 1150	Public Speaking	3
	or	
COM 1250	Interpersonal Communication: SS3	(3)
ENG 1031	Technical Writing I: CO1	3
	or	
ENG 1021	English Composition I: CO1	(3)
MAT 1140	Career Math or higher	3
	or	
Elective	AAS General Education Math course	(3)
		<u>15</u>

#### Additional Required Courses

CAD 1105	AutoCAD for Interiors	4
CAD 2227	Revit for Interiors	3
CAD 2228	Advanced Revit for Interiors	3
IND 1100	Interior Design Fundamentals	4
IND 1102	History of Interior Design	3
IND 2089	Capstone: Advanced Design	4
IND 2201	Graphic Communication	4
IND 2206	Interior Finishes	2
IND 2207	Interior Design II: Space Planning & Human Factors	3
IND 2208	Residential Design	4
IND 2211	Commercial Design II	4
IND 2300	Interior Construction	4
IND 2301	Interior Design III: Materials, Details, Codes & Specs	3
IND 2500	Introduction to Kitchen & Bath Design	3
IND 2701	Professional Practice for Interior Designers	2
IND 2702	IND Portfolio Presentations	3
Elective	Choose seven (7) hours from the list below	7
		<u>60</u>
<b>Total Credit Hours</b>		<b>75</b>

#### Electives

AEC 2300	Sustainable Building Systems	3
CAD 1110	Sketchup	3
CAD 2220	Revit Architecture	3
CAD 2221	Advanced Revit Architecture	3
IND 2078	Workshop: Design Portfolio	1
IND 2080	Internship	3
IND 2080	Internship	4
IND 2202	Perspective & Rendering Technique	3
IND 2209	Commercial Design I	2
IND 2210	Accessorizing	3
IND 2302	Lighting Design	3
IND 2703	Sustainable Design	3
IND 2704	Interior Design IV	3
MGD 1011	Adobe Photoshop I	3
MGD 1012	Adobe Illustrator I	3
MGD 1013	Adobe InDesign	3
MGD 1014	Typography	3

Additional information available on the Interior Design Department website at [www.pikespeak.edu/interior-design](http://www.pikespeak.edu/interior-design).

## Law Enforcement Academy

### Certificate

Recommended basic skills courses are

- College Readiness in English

The 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 745 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 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 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 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)
- Criminal and traffic code violations
- Employ appropriate arrest control techniques
- Drive a law enforcement vehicle under emergency or pursuit conditions
- Use police firearms effectively

LEA 1001	Basic Police Academy I	6
LEA 1002	Basic Police Academy II	12
LEA 1003	Basic Law Enforcement Academy III	2
LEA 1004	Basic Law Enforcement Academy IV	1
LEA 1005	Basic Law	8
LEA 1006	Arrest Control Techniques	3
LEA 1007	Law Enforcement Driving	3
LEA 1008	Firearms	3

PED 2058	LEA Physical Training I	1
PED 2059	LEA Physical Training II	1
<b>Total Credit Hours</b>		<b>40</b>

Additional information available on the Law Enforcement Academy Department website at [www.pikespeak.edu/programs/law-enforcement-academy](http://www.pikespeak.edu/programs/law-enforcement-academy).

## Machining Technology

### Associate of Applied Science Degree

Recommended basic skills courses are

- College Readiness in English
- College Readiness for 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 1018	Introduction to PC Applications	3
or		
CSC 1005	Computer Literacy	(3)
COM 2250	Organizational Communication	3
ENG 1031	Technical Writing I: CO1 or higher	3
MAT 1140	Career Math or higher	3
Three (3) additional credit hours from list below		3
		<b>15</b>

#### Select three (3) credit hours

BUS 1015	Introduction to Business	3
COM 1250	Interpersonal Communication: SS3	3
PSY 1005	Psychology of Workplace Relationships	3

### Emphasis Areas

#### Advanced Manufacturing

CAD 1100	Print Reading for Computer Aided Drafting	3
or		
MAC 1002	Print Reading for Machinists	(3)
CAD 2455	SolidWorks/Mechanical	3
CAD 2456	Advanced SolidWorks	3
CAD 2660	3D Printing/Additive Manufacturing	3
EGT 2305	Geometric Dimension & Tolerance	3
MAC 1000	Machine Shop Safety	1
MAC 1001	Introduction to Machine Shop	3
MAC 1010	Introduction to Engine Lathe	3
MAC 1011	Intermediate Engine Lathe	3
MAC 1020	Introduction to Milling Machine	3
MAC 1021	Intermediate Mill Machine	3
MAC 2005	Introduction to CNC Milling Operations	3
MAC 2006	CNC Milling Operations II	3
MAC 2040	CAD/CAM 2D	3
MAC 2041	CAD/CAM 2D Lab	3
MAC 2052	Practical Metallurgy	3
MTE 1130	Metrology	3
		<b>49</b>

**Total Credit Hours for Advanced Manufacturing Degree Emphasis 64**

#### Machining Technology

MAC 1000	Machine Shop Safety	1
MAC 1001	Introduction to Machine Shop	3
MAC 1002	Print Reading for Machinists	3
or		
CAD 1100	Print Reading for Computer Aided Drafting	(3)
MAC 1010	Introduction to Engine Lathe	3
MAC 1011	Intermediate Engine Lathe	3
MAC 1012	Advanced Engine Lathe	3
MAC 1020	Introduction to Milling Machine	3
MAC 1021	Intermediate Mill Machine	3
MAC 1022	Advanced Milling Machine Operations	3
MAC 2005	Introduction to CNC Milling Operations	3
MAC 2006	CNC Milling Operations II	3
MAC 2040	CAD/CAM 2D	3
MAC 2041	CAD/CAM 2D Lab	3
MAC 2045	CAD/CAM 3D	3
MAC 2046	CAD/CAM 3D Lab	3
MAC 2052	Practical Metallurgy	3
MTE 1130	Metrology	3
		<b>49</b>

**Total Credit Hours for Machining Technology Degree Emphasis 64**

**Recommended Technical Elective**

MAC 2080 Machining Internship 3

**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 1012	Advanced Engine Lathe	3
MAC 1022	Advanced Milling Machine Operations	3
MAC 2040	CAD/CAM 2D	3
MAC 2041	CAD/CAM 2D Lab	3
MAC 2045	CAD/CAM 3D	3
MAC 2046	CAD/CAM 3D Lab	3
MAC 2052	Practical Metallurgy	3
<b>Total Credit Hours</b>		<b>21</b>

**\*\*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 1100	Print Reading for Computer Aided Drafting	3
	or	
MAC 1002	Print Reading for Machinists	(3)
CAD 2455	SolidWorks/Mechanical	3
CAD 2456	Advanced SolidWorks	3
CAD 2660	3D Printing/Additive Manufacturing	3
EGT 2305	Geometric Dimension & Tolerance	3
MAC 1000	Machine Shop Safety	1
MAC 1001	Introduction to Machine Shop	3
MAC 1010	Introduction to Engine Lathe	3
MAC 1020	Introduction to Milling Machine	3
MAC 2005	Introduction to CNC Milling Operations	3
MAC 2006	CNC Milling Operations II	3
MAC 2040	CAD/CAM 2D	3
MAC 2041	CAD/CAM 2D Lab	3
MAC 2052	Practical Metallurgy	3
MTE 1130	Metrology	3
<b>Total Credit Hours</b>		<b>43</b>

**\*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 1000	Machine Shop Safety	1
MAC 1001	Introduction to Machine Shop	3
MAC 1002	Print Reading for Machinists	3
	or	
CAD 1100	Print Reading for Computer Aided Drafting	(3)
MAC 1010	Introduction to Engine Lathe	3
MAC 1011	Intermediate Engine Lathe	3
MAC 1020	Introduction to Milling Machine	3
MAC 1021	Intermediate Mill Machine	3
<b>Total Credit Hours</b>		<b>19</b>

**\*\*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 1100	Print Reading for Computer Aided Drafting	3
	or	
MAC 1002	Print Reading for Machinists	(3)
CAD 2455	SolidWorks/Mechanical	3
MAC 1000	Machine Shop Safety	1
MAC 1001	Introduction to Machine Shop	3

MAC 2052	Practical Metallurgy	3
MTE 1130	Metrology	3
<b>Total Credit Hours</b>		<b>16</b>

**\*\*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 2455	SolidWorks/Mechanical	3
CAD 2456	Advanced SolidWorks	3
CAD 2660	3D Printing/Additive Manufacturing	3
EGT 2305	Geometric Dimension & Tolerance	3
MAC 2005	Introduction to CNC Milling Operations	3
MAC 2006	CNC Milling Operations II	3
MAC 2040	CAD/CAM 2D	3
MAC 2041	CAD/CAM 2D Lab	3
<b>Total Credit Hours</b>		<b>24</b>

**\*\*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 2456	Advanced SolidWorks	3
MAC 1010	Introduction to Engine Lathe	3
MAC 1020	Introduction to Milling Machine	3
MAC 2040	CAD/CAM 2D	3
MAC 2041	CAD/CAM 2D Lab	3
<b>Total Credit Hours</b>		<b>15</b>

## 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 1000	Machine Shop Safety	1
MAC 1001	Introduction to Machine Shop	3
MAC 1010	Introduction to Engine Lathe	3
MAC 1020	Introduction to Milling Machine	3
MAC 2052	Practical Metallurgy	3
WEL 1006	Blueprint Reading for Welders & Fitters	4
<b>Total Credit Hours</b>		<b>17</b>

\*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.pikespeak.edu/programs/machining-technology](http://www.pikespeak.edu/programs/machining-technology).

## Medical Assistant

### Associate of Applied Science Degree

Recommended basic skills courses are

- College Readiness in English
- College Readiness for Quantitative Literacy

One Associate of Applied Science degree option and one certificate option are available. The area of Medical Assisting is 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 the program coordinator to enroll. Students must have a grade of C or better in all classes to pass program/certification requirements.

Internship courses (MAP 1083 and MAP 2080) 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 test, proof of measles, rubella and rubeola, proof of hepatitis B, current year flu vaccination, chickenpox (Varicella), a current tetanus, and COVID vaccinations if completed (may be required depending on site);
- Obtaining a physical exam by their private physician at their own cost;
- PPSC 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 AHA CPR-BLS certification; online certifications are not accepted.

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 PPSC 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 1020, HPR 2020, MAP 1083, MAP 2038, MAP 2040, and MAP 2080, or MOT 1081 and MOT 1082. See program advisor for details.

HPR 1039 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

Certificate or degree completion offers the student the opportunity to take the National Medical Assisting Registry Exam with American Medical Technologists (AMT) for certification as a Registered Medical Assistant (RMA).

The medical assistant certificate and degree programs utilize the Medical Assistant Exam Review Board (MAERB) guidelines for program/student assessments, 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 not meeting a course prerequisite must have permission of the program coordinator to enroll.

Program Prerequisite:

HPR 1011 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 1018	Introduction to PC Applications	3
or		
CSC 1005	Computer Literacy	(3)
COM 1150	Public Speaking	3
or		
COM 1250	Interpersonal Communication: SS3	(3)
or		
COM 2250	Organizational Communication	(3)
ENG 1031	Technical Writing I: CO1	3
or		
ENG 1021	English Composition I: CO1	(3)
MAT 1140	Career Math	3
or		
MAT 1160	Financial Mathematics	(3)
PSY 1001	General Psychology I: SS3	3
or		
PSY 1005	Psychology of Workplace Relationships	(3)
		<u>15</u>

#### Additional Required Courses

HPR 1008	Law & Ethics for Health Professionals	2
HPR 1039	Medical Terminology	2
HPR 1045	Medical Record Terminology	2
MAP 1010	Medical Office Administration	4
MAP 1020	Medical Office Financial Management	4
MAP 1050	Pharmacology for Medical Assistants	3
MAP 1083	Medical Assistant Internship	5
MAP 2038	Medical Assisting Laboratory	4
MAP 2040	Medical Assisting Clinical Skills	4
MAP 2069	Review for Medical Assistant National Examination	1
MOT 1015	Electronic Medical Office Records	3
MOT 1025	Basic Medical Sciences I	3
MOT 1026	Basic Medical Sciences II	3
MOT 1027	Basic Medical Sciences III	3
MOT 1036	Introduction to Clinical Skills	3
		<u>46</u>
<b>Total Credit Hours</b>		<b>61</b>

### Certificate

#### Medical 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 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 program prerequisite courses concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have permission of the program coordinator to enroll.

A list of clinical and administrative duties by the American Association of Medical Assistants are included at <https://www.aama-ntl.org/medical-assisting/what-is-a-medical-assistant>.

Additional Internship Prerequisites:

HPR 1011 CPR for Professionals or current active CPR (cardiopulmonary resuscitation) certification through American Heart Association approved training plan. Online CPR training certification is not accepted.

Program Prerequisites

CIS 1018	Introduction to PC Applications	3
or		
CSC 1005	Computer Literacy	(3)
ENG 1031	Technical Writing I: CO1	3
or		
ENG 1021	English Composition I: CO1	(3)
or		
COM 1150	Public Speaking	(3)
or		
COM 1250	Interpersonal Communication: SS3	(3)
or		
COM 2250	Organizational Communication	(3)

Program Requirements

HPR 1008	Law & Ethics for Health Professionals	2
HPR 1039	Medical Terminology	2
HPR 1045	Medical Record Terminology	2
MAP 1010	Medical Office Administration	4
MAP 1020	Medical Office Financial Management	4
MAP 1050	Pharmacology for Medical Assistants	3
MAP 2038	Medical Assisting Laboratory	4
MAP 2040	Medical Assisting Clinical Skills	4
MAP 2069	Review for Medical Assistant National Examination	1
MAP 2080	Internship	4
MOT 1025	Basic Medical Sciences I	3
MOT 1026	Basic Medical Sciences II	3
MOT 1027	Basic Medical Sciences III	3
MOT 1036	Introduction to Clinical Skills	3
		<u>42</u>
<b>Total Credit Hours</b>		<b>42</b>

Additional information available on the Medical Assistant Department website at [www.pikespeak.edu/programs/medical-assistant](http://www.pikespeak.edu/programs/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 2080) 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 PPSC 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 PPSC 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 2080) 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 1018	Introduction to PC Applications	3
or		
CSC 1005	Computer Literacy	(3)
HPR 1008	Law & Ethics for Health Professionals	2
HPR 1039	Medical Terminology	2
HPR 1045	Medical Record Terminology	2
MOT 1025	Basic Medical Sciences I	3
MOT 1026	Basic Medical Sciences II	3
MOT 1027	Basic Medical Sciences III	3
MOT 1050	Introduction to CPT Coding	2
MOT 1060	Introduction to ICD Coding	2
MOT 1061	Intermediate Coding	3
MOT 2040	Advanced Insurance Billing & Coding	3
<b>Total Credit Hours</b>		<b>28</b>

### Medical Office Administration

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 Office Administration program, students will also qualify for the Medical Coding Specialist certification.

#### Program Prerequisites

HPR 1011 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 Office Administration 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 1018	Introduction to PC Applications	3
or		
CSC 1005	Computer Literacy	(3)
ENG 1031	Technical Writing I: C01	3
or		
ENG 1021	English Composition I: C01	(3)
or		
COM 1150	Public Speaking	(3)
or		
COM 1250	Interpersonal Communication: SS3	(3)
or		
COM 2250	Organizational Communication	(3)

#### Program Requirements

HPR 1008	Law & Ethics for Health Professionals	2
HPR 1039	Medical Terminology	2
HPR 1045	Medical Record Terminology	2
MAP 1010	Medical Office Administration	4
MAP 1020	Medical Office Financial Management	4
MAP 2080	Internship	4
MOT 1015	Electronic Medical Office Records	3
MOT 1025	Basic Medical Sciences I	3
MOT 1026	Basic Medical Sciences II	3
MOT 1027	Basic Medical Sciences III	3
MOT 1036	Introduction to Clinical Skills	3
MOT 1050	Introduction to CPT Coding	2
MOT 1060	Introduction to ICD Coding	2
MOT 1061	Intermediate Coding	3
MOT 2040	Advanced Insurance Billing & Coding	3
<b>Total Credit Hours</b>		<b>43</b>

Additional information available on the Medical Office Technology Department website at [www.pikespeak.edu/programs/medical-reception-and-coding](http://www.pikespeak.edu/programs/medical-reception-and-coding).

## Multimedia Graphic Design

### Associate of Applied Science Degree

Recommended basic skills courses are

- College Readiness in English
- College Readiness for 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 1002). 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 1110	Art Appreciation: AH1	3
or		
ART 1113	Art History 1900to Present: AH1	(3)
COM 1150	Public Speaking	3
or		
COM 1250	Interpersonal Communication: SS3	(3)
or		
COM 2220	Group Communication: SS3	(3)
ENG 1031	Technical Writing I: CO1	3
or		
ENG 1021	English Composition I: CO1	(3)

MAT 1140	Career Math	3
or		
MAT 1160	Financial Mathematics	(3)
or		
MAT 1240	Mathematics for the Liberal Arts: MA1	(4)
Elective	AAS General Education Elective course	3
		<hr/> 15

#### Additional Required Courses

MGD 1002	Introduction to Multimedia	3
MGD 1009	Design & Color	3
or		
ART 1002	Visual Concepts 2-D Design	(3)
MGD 1011	Adobe Photoshop I	3
or		
ART 1005	Digital Art Foundations I	(3)
MGD 1012	Adobe Illustrator I	3
MGD 1013	Adobe InDesign	3
MGD 1014	Typography I	3
or		
MGD 1015	Typography & Layout	(3)
MGD 1017	Introduction to Visual Communications	3
or		
MGD 1020	Production Design	(3)
MGD 1034	Drawing for Illustrators	3
MGD 1041	Web Design I	3
MGD 1043	Motion Graphic Design I	3
or		
MGD 1065	After Effects I	(3)
MGD 2013	Electronic Prepress	3
MGD 2021	Computer Graphics I	3
MGD 2041	Web Design II	3
or		
MGD 2042	Web Architecture: Open Source Design	(3)
MGD 2089	Capstone	3
Elective	Choose eight (8) hours from list below	8
		<hr/> 50

#### Total Credit Hours

**65**

#### Electives

ART 1002	Visual Concepts 2-D Design	3
ART 1005	Digital Art Foundations I	3
ART 1110	Art Appreciation: AH1	3
ART 1111	Art History Ancient to Medieval: AH1	3
ART 1112	Art History Renaissance to 1900: AH1	3
ART 1113	Art History 1900 to Present: AH1	3
ART 1201	Drawing I	(3)
ART 1202	Drawing II	(3)
ART 1205	Drawing for the Graphic Novel	(3)
ART 1401	Digital Photography I	3
ART 1405	Mixed Media I: Digital Art	3
COM 1150	Public Speaking	3
COM 1250	Interpersonal Communication: SS3	3
COM 2220	Group Communication: SS3	(3)
JOU 1005	Introduction to Mass Media: SS3	3
MGD 1006	Creativity & Visual Thinking	3
MGD 1007	History of Design	2
MGD 1010	Lettering for Graphic Design	2
MGD 1015	Typography & Layout	3
MGD 1017	Introduction to Visual Communications	3
MGD 1032	Design & Color II	3
MGD 1037	Illustration I	3
MGD 1038	Illustration II	3
MGD 1043	Motion Graphic Design I: (Software)	3
MGD 1053	3-D Animation I	3
MGD 1056	Emergent Media Practices	3
MGD 1058	Introduction to User Experience/User Interface Design (UX/UI)	3
MGD 1064	Digital Video Editing I	3
MGD 1065	After Effects I	3

MGD 1078	Seminar/Workshop	3
MGD 1080	Internship	3
MGD 2001	Children’s Book Illustration	3
MGD 2002	Point of Purchase Packaging Design	3
MGD 2011	Adobe Photoshop II	3
MGD 2012	Adobe Illustrator II	3
MGD 2014	Typography II	3
MGD 2015	Painting for Illustrators	3
MGD 2022	Computer Graphics II	3
MGD 2035	Word & Image 1: Comics	3
MGD 2037	Illustration III	3
MGD 2038	Illustration IV	3
MGD 2041	Web Design II	3
MGD 2042	Web Architecture: Open Source Design	3
MGD 2058	User Experience/User Interface Design (UX/UI)	3
MGD 2059	Management & Production	3
MGD 2065	After Effects II	3
MGD 2068	Business for Creatives	3
PHO 1020	Fundamentals of Photography	3
PHO 2005	Professional Digital Photo I	3
RTV 1005	Basic Video Production	3
RTV 1006	Principles of Audio	3
RTV 2005	Advanced Video Production	3

**Certificates**

**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 1009	Design & Color	3
or		
ART 1002	Visual Concepts 2-D Design	(3)
MGD 1011	Adobe Photoshop I	3
or		
ART 1005	Digital Art Foundations I	(3)
MGD 1012	Adobe Illustrator I	3
MGD 2011	Adobe Photoshop II	3
PHO 1020	Fundamentals of Photography	3
or		
ART 1401	Digital Photography I	(3)
<b>Total Credit Hours</b>		<b>15</b>

**MGD User Experience/User Interface (UX/UI) Design**

With the MGD User Experience/User Interface (UX/UI) Design Certificate students practice using a variety of media and tools, including Adobe Illustrator, Content Management Systems (CMS), and widely used prototyping tools with a focus on creative solutions and innovative ideas to create simple design projects

related to the field. Additionally, students publish live websites using web editing software and File Transfer Protocol client as well as create wireframes, sitemaps, and design mock-ups. Students design effective and consistent User Interface (UI) and User Experience (UX), projects using CMS and other open-source tools, and develop software implementation project plans. Students construct product design assets and employ user testing to validate designs and optimize user experience. Students also create electronic and traditional portfolios and participate in mock interviews with industry professionals.

**Program Learning Outcomes**

Upon completion of the MGD User Experience/User Interface (UX/UI) Design certificate program, students should be able to:

- Construct digital product design solutions and patterns through software and other relevant media to be delivered to a development team
- Design a strategy, based on research, to solve identified problems
- Analyze the competitive environment
- Identify the audience characteristics to whom the products are marketed
- Design optimal solution(s) by constructing user journey flows, wire frames, hi-fidelity design files, and prototypes
- Create and implement strategies for user testing to assess design validity and optimized user experience

MGD 1006	Creativity and Visual Thinking	3
MGD 1012	Adobe Illustrator I	3
MGD 1017	Introduction to Visual Communications	3
MGD 1041	Web Design I	3
MGD 1058	Introduction to UI/UX(User Interface/User	
MGD 2042	Web Architecture: Open Source Design	3
MGD 2068	Business for Creatives	3
<b>Total Credit Hours</b>		<b>21</b>

**Multimedia Graphic Design: Design to Print**

With the Multimedia Graphic Design: 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 Multimedia Graphic Design: 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 1009	Design & Color	3
or		
ART 1002	Visual Concepts 2-D Design	(3)
MGD 1011	Adobe Photoshop I	3
or		
ART 1005	Digital Art Foundations I	(3)
MGD 1012	Adobe Illustrator I	3
MGD 1013	Adobe InDesign	3
MGD 1014	Typography I	3

MGD 2011	Adobe Photoshop II	2
or		
MGD 2012	Adobe Illustrator II	(3)
or		
MGD 2022	Computer Graphics II	(3)
MGD 2013	Electronic Prepress	3
MGD 2021	Computer Graphics I	3
<b>Total Credit Hours</b>		<b>24</b>

### Multimedia Graphic Design: Digital Illustration

With the Multimedia Graphic Design: Digital 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 Multimedia Graphic Design: Digital 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 1009	Design & Color	3
or		
ART 1002	Visual Concepts 2-D Design	(3)
MGD 1011	Adobe Photoshop I	3
or		
ART 1005	Digital Art Foundations I	(3)
MGD 1012	Adobe Illustrator I	3
MGD 1034	Drawing for Illustrators	3
MGD 1037	Illustration I	3
MGD 1038	Illustration II	3
MGD 2035	Word & Image 1: Comics	3
or		
MGD 2001	Children's Book Illustration	(3)
MGD 2037	Illustration III	3
<b>Total Credit Hours</b>		<b>24</b>

### Multimedia Graphic Design: Foundations

With the Multimedia Graphic Design: Foundations 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 Multimedia Graphic Design: Foundations 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 1002	Introduction to Multimedia	3
or		
ART 1002	Visual Concepts 2-D Design	(3)
MGD 1009	Design & Color	3
MGD 1011	Adobe Photoshop I	3
or		
ART 1005	Digital Art Foundations I	(3)
MGD 1012	Adobe Illustrator I	3
Elective	Choose three (3) credits from list below	3
<b>Total Credit Hours</b>		<b>15</b>

#### Electives

MGD 1013	Adobe InDesign	3
MGD 1014	Typography I	3
MGD 1017	Introduction to Visual Communications	3
MGD 1034	Drawing for Illustrators	3
MGD 1041	Web Design I	3

### Multimedia Graphic Design: Web Design

With the Multimedia Graphic Design: 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 Multimedia Graphic Design: 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 1009	Design & Color	3
or		
ART 1002	Visual Concepts 2-D Design	(3)
MGD 1011	Adobe Photoshop I	3
or		
ART 1005	Digital Art Foundations I	(3)
MGD 1012	Adobe Illustrator I	3
MGD 1041	Web Design I	3
MGD 1043	Motion Graphic Design I	3
or		
MGD 1065	After Effects I	(3)
MGD 2041	Web Design II	3
MGD 2042	Web Architecture: Open Source Design	3
<b>Total Credit Hours</b>		<b>21</b>

### 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 1009	Design & Color	3
or		
ART 1002	Visual Concepts 2-D Design	(3)
MGD 1011	Adobe Photoshop I	3
or		
ART 1005	Digital Art Foundations I	(3)
MGD 1043	Motion Graphic Design I: Software	3
MGD 1064	Digital Video Editing I	3
MGD 1065	After Effects I	3
RTV 1005	Basic Video Production	3
RTV 1006	Principles of Audio	3
<b>Total Credit Hours</b>		<b>21</b>

Additional information available on the Multimedia Graphic Design Department website at [www.pikespeak.edu/programs/multimedia-graphic-design](http://www.pikespeak.edu/programs/multimedia-graphic-design).

## Nursing

Pikes Peak State 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 PPSC 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 PPSC nursing program by downloading a copy from the PPSC nursing website at [www.pikespeak.edu/degrees-certificates/nursing/](http://www.pikespeak.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 PPSC 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, evidence-based, person-centered nursing care in a variety of healthcare settings to diverse patient populations across the lifespan
- Engage in critical thinking/clinical judgment to make person-centered care decisions
- Implement quality measures to improve patient care
- Participate in collaborative relationships with members of the interdisciplinary team, the patient, and the patient's support persons
- Use information management principles, techniques, and systems, and patient care technology to communicate, manage knowledge, mitigate errors, and support decision-making
- Provide leadership in a variety of healthcare settings for diverse patient populations
- Assimilate professional, legal, and ethical guidelines in practice as a professional nurse
- Promote a culture of caring to provide holistic, compassionate, culturally competent care

## Nursing: Registered Nurse

### Associate of Applied Science Degree with Licensed Practical Nurse Exit Option

Recommended basic skills courses are

- College Readiness in English
- College Readiness for Quantitative Literacy

The Registered Nursing program is an Associate of Applied Science degree. Nursing courses begin in either the fall or spring semester. The PPSC 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. PPSC 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 PPSC nursing website at [www.pikespeak.edu/degrees-certificates/nursing/](http://www.pikespeak.edu/degrees-certificates/nursing/).

### Prerequisite Courses

BIO 2101	Human Anatomy & Physiology I w/Lab: SC1	4
BIO 2104	Microbiology w/Lab: SC1	4
ENG 1021	English Composition I: C01	3
PSY 2440	Human Growth & Development: SS3	3
<b>Total Prerequisite Credits</b>		<b>14</b>

- 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 1001, NUA 1070 and NUA 1071 courses within the CCCS system.

**Nursing Curriculum****Year I First Semester**

BIO 2102	Human Anatomy & Physiology II w/Lab: SC1	4
MAT 1120	Math for Clinical Calculations	3
NUR 1009	Fundamentals of Nursing	6
NUR 1012	Basics Concepts of Pharmacology	2

**Year I Second Semester**

BIO 2116	Human Pathophysiology	4
NUR 1006	Medical & Surgical Nursing Concepts	7
NUR 1050	Maternal-Child Nursing	6

**Year II First Semester**

NUR 2006	Advanced Concepts of Medical-Surgical Nursing I	6.5
NUR 2011	Psychiatric-Mental Health Nursing	4
NUR 2012	Pharmacology II	2

**Year II Second Semester**

NUR 2016	Advanced Concepts of Medical-Surgical Nursing II	5
NUR 2030	Transition to Professional Nursing Practice	4
	Arts and Humanities or Social and Behavioral Sciences	3
	GT Pathways elective	
<b>Total Nursing Credits</b>		<b>56.5</b>
<b>Total Credits</b>		<b>70.5</b>

Students are eligible to apply to take the NCLEX-PN at the successful completion of the first year of nursing courses and NUR 1069 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 Readiness in English
- College Readiness for Quantitative Literacy

Pikes Peak State 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. PPSC nursing program maintains a competitive admission process. Students should complete the LPN to RN nursing program application to the PPSC nursing program after completing all prerequisites by downloading a copy from the PPSC nursing website at [www.pikespeak.edu/degrees-certificates/nursing/](http://www.pikespeak.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 2101	Human Anatomy & Physiology I w/Lab: SC1	4
BIO 2102	Human Anatomy & Physiology II w/Lab: SC1	4
BIO 2104	Microbiology w/Lab: SC1	4
ENG 1021	English Composition I: CO1	3
PSY 2440	Human Growth & Development: SS3	3
<b>Total Prerequisite Credits</b>		<b>18</b>

Must be completed prior to entry with a minimum grade of C

BIO 2116	Human Pathophysiology	4
MAT 1120	Math for Clinical Calculations	3
NUR 1089	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 PPSC website under nursing.

**Nursing Curriculum****Year II First Semester**

NUR 2006	Advanced Concepts of Medical-Surgical Nursing I	6.5
NUR 2011	Psychiatric-Mental Health Nursing	4
NUR 2012	Pharmacology II	2

**Year II Second Semester**

NUR 2016	Advanced Concepts of Medical-Surgical Nursing II	5
NUR 2030	Transition to Professional Nursing Practice	4
	Arts and Humanities or Social and Behavioral Sciences	3
	gtPathways elective	

<b>Total Nursing Credits</b>	<b>35.5</b>
<b>Total Credits including Prerequisites</b>	<b>53.5</b>
<b>With NUR transfer credits from prior LPN coursework</b>	<b>17</b>
<b>Total Credits</b>	<b>70.5</b>

Additional information available on the Nursing Department website at [www.pikespeak.edu/programs/nursing](http://www.pikespeak.edu/programs/nursing).

**Certificate****Nurse Aide**

Recommended basic skills courses are

- College Readiness in English

Prerequisite Courses

- HPR 1011 CPR for Professionals or Proof of Completion of CPR for Healthcare Professionals (BLS), American Heart Association (AHA) only

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 Nurse Aide 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 1001, NUA 1070 and NUA 1071 are eligible for a Program Completion Certificate from Pikes Peak State College.

A PPSC Program Certificate does not guarantee state licensure or the ability to legally practice as a Certified Nurse Aide. The PPSC 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 1001, students can anticipate up to 60 hours of hands-on clinical experience in NUA 1070 and NUA 1071. 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 1070 and NUA 1071 (Students under age 18 will be scheduled for a non-hospital clinical assignment for NUA 1071).



To register for the NUA program courses students must obtain an application from the NUA department. Students will be eligible to register once they have turned in their completed application packet to include the following information:

- Proof of immunization or positive 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 and completion of the COVID vaccination series
- Signed documentation of a physical exam administered by their private care physician at their own cost
- Current CPR for Healthcare Providers (BLS), American Heart Association (AHA) only
- PPSC 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 a NUA faculty advisor for information on specific disqualifiers.

For additional information/clarification please attend a NUA information session or review the information on power point on the NUA website.

**Program Learning Outcomes**

Upon completion of the Nurse Aide certificate program, students should be able to:

- Establish effective communication and interact competently with clients and the interdisciplinary team on a one-on-one basis
- Demonstrate sensitivity to clients' emotional, social, and mental health needs through skillful, directed interactions
- Discuss promoting and assisting clients to attain and maintain independence, recognizing each individual's capabilities in regard to ADLs, hygiene, grooming, nutrition, and elimination
- Demonstrate knowledge and skills that support and promote each client's rights as well as respect for the client as an individual
- Demonstrate appropriate observational and documentation skills needed in the assessment of clients' health, physical condition, and well-being
- Combine knowledge gained to function within the healthcare team in the nurse aide role
- Demonstrate proficiency in skills required by the State Board of Nursing (SBON) Chapter 11 Rules and Regulations for Approval of Nurse Aide Training Programs

**Required Courses**

NUA 1001	Nurse Aide Health Care Skills	4
NUA 1070	Nurse Assistant Clinical Experience	1
NUA 1071	Advanced Nurse Aide Clinical	1
<b>Total Credit Hours</b>		<b>6</b>

Additional information available on the Nursing Assistant Department website at [www.pikespeak.edu/nursing/nursing-assistant](http://www.pikespeak.edu/nursing/nursing-assistant).

## Paralegal/Legal Assistant

### Associate of Applied Science Degree

Recommended basic skills courses are

- College Readiness in English
- College Readiness for Quantitative Literacy for MAT 1240

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 State 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 State College. A "C" is defined as an overall course grade requiring a 70% or better. This includes grades designated as "Satisfactory" by Pikes Peak State 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 1021	English Composition I: CO1	3
ENG 1022	English Composition II: CO2	3
	or	
COM 1150	Public Speaking	(3)
MAT 1240	Mathematics for the Liberal Arts: MA1	4

PSC 1011	American Government: SS1	3
or		
PSC 1025	American State & Local Government: SS1	(3)
Elective	Choose six (6) hours level 1010 or higher (CRJ, LIT, ENG, PHI, POS, PSY, SOC)	6
		<u>19</u>

**Additional Required Courses**

PAR 1114	Computers & the Law	3
PAR 1115	Introduction to Law	3
PAR 1116	Torts	3
PAR 1117	Family Law	3
PAR 1118	Contracts	3
PAR 1125	Property Law	3
PAR 1127	Legal Ethics	3
PAR 2080	Internship	3
or		
PAR 2087	Cooperative Education	(3)
PAR 2201	Civil Litigation	3
PAR 2202	Evidence	3
PAR 2205	Criminal Law	3
PAR 2206	Business Organization Law	3
PAR 2208	Probate & Estates	3
PAR 2209	Constitutional Law	3
PAR 2213	Legal Research & Writing I	3
		<u>45</u>
<b>Total Credit Hours</b>		<b>64</b>

**Certificate****Legal Assistant**

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 State 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 State College. A "C" is defined as an overall course grade requiring a 70% or better. This includes grades designated as "Satisfactory" by Pikes Peak State College and the Colorado Community College System.

**Program Learning Outcomes**

Upon completion of the Legal Assistant certificate 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 of 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

PAR 1115	Introduction to Law	3
PAR 1116	Torts	3
PAR 1117	Family Law	3
PAR 1118	Contracts	3
PAR 1125	Property Law	3
PAR 1127	Legal Ethics	3
PAR 2080	Internship	3
or		
PAR 2087	Cooperative Education	(3)
PAR 2201	Civil Litigation	3
PAR 2202	Evidence	3
PAR 2205	Criminal Law	3
PAR 2209	Constitutional Law	3
PAR 2213	Legal Research & Writing I	3
<b>Total Credit Hours</b>		<b>36</b>

Additional information available on the Paralegal Department website at [www.pikespeak.edu/programs/paralegal](http://www.pikespeak.edu/programs/paralegal).

**Pharmacy Technician****Associate of Applied Science Degree**

Recommended basic skills courses are

- College Readiness in English
- College Readiness for 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 PPSC 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 PPSC 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 1005 or CIS 1018, College Readiness in English and College Readiness for 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 1055	Complete Spreadsheets: (Software package)	3
COM 2250	Organizational Communication	3
ENG 1021	English Composition I: CO1	3
MAT 1120	Math for Clinical Calculations	3
PSY 1005	Psychology of Workplace Relationships	3
		<hr/> 15

#### Additional Required Courses

CHE 1011	Introduction to Chemistry I w/Lab: SC1 or	5
BIO 1111	GenBio I: Molecular & Cellular Biology w/Lab: SC1	(5)
HPR 1011	CPR for Professionals	0.5
HPR 1039	Medical Terminology	2
HPR 1045	Medical Record Terminology	2
HWE 1050	Human Nutrition	3
PHT 1011	Introduction to Pharmacy	3
PHT 1012	Pharmacy Law	2
PHT 1014	Computer Skills for Pharmacy Technicians	1
PHT 1015	Pharmacology I	3
PHT 1016	Pharmacology II	3
PHT 1035	Pharmaceutical Calculations & Compounding Techniques	4
PHT 1040	Institutional Pharmacy	3
PHT 1041	Community Pharmacy	3
PHT 1070	Pharmacy Clinical: Institutional	4
PHT 1071	Pharmacy Clinical: Community	4
PHT 2050	Sterile Compounding & Aseptic Technique	2
PHT 2055	Advanced Pharmacy Practice	2
		<hr/> 46.5
<b>Total Credit Hours</b>		<b>61.5</b>

## Certificates

### Advanced Pharmacy Practice

Students must successfully complete the initial PPSC 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 1055	Complete Spreadsheets: (Software package)	3
HPR 1039	Medical Terminology	2
HPR 1045	Medical Record Terminology	2
PHT 2050	Sterile Compounding & Aseptic Technique	2
PHT 2055	Advanced Pharmacy Practice & Nontraditional Roles	2
<b>Total Credit Hours</b>		<hr/> <b>11</b>

### 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 2250	Organizational Communication	3
HPR 1011	CPR for Professionals	0.5
PHT 1011	Introduction to Pharmacy	3
PHT 1012	Pharmacy Law	2
PHT 1014	Computer Skills for Pharmacy Technicians	1
PHT 1015	Pharmacology I	3
PHT 1016	Pharmacology II	3
PHT 1035	Pharmaceutical Calculations & Compounding Techniques	4
PHT 1040	Institutional Pharmacy	3

PHT 1041	Community Pharmacy	3
PHT 1070	Pharmacy Clinical: Institutional	4
PHT 1071	Pharmacy Clinical: Community	4
<b>Total Credit Hours</b>		<b>33.5</b>

Additional information available on the Pharmacy Technician Department website at [www.pikespeak.edu/programs/pharmacy-technician](http://www.pikespeak.edu/programs/pharmacy-technician).

## Phlebotomy Certificate

Recommended basic skills courses are

- College Readiness in English

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 1020 and HPR 2020. 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 1020 and HPR 2020 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 and COVID vaccinations if completed (may be required depending on site);
- 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 PPSC approved criminal background investigation will not be able to enroll in the two phlebotomy courses, HPR 1020 and HPR 2020;
- 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 1020 and HPR 2020) 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 PPSC 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 1020 and HPR 2020.

## 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 1006	Customer Service in Healthcare	2
HPR 1008	Law & Ethics for Health Professions	2
HPR 1020	Phlebotomy	4
HPR 1039	Medical Terminology	2
HPR 1045	Medical Record Terminology	2
HPR 2020	Advanced Phlebotomy	4
<b>Total Credit Hours</b>		<b>16</b>

Additional information available on the Phlebotomy Department website at [www.pikespeak.edu/programs/phlebotomy](http://www.pikespeak.edu/programs/phlebotomy).

## Physical Therapist Assistant

### Associate of Applied Science Degree

Recommended basic skills courses are

- College Readiness in English
- College Readiness for 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 Therapist 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 2101	Human Anatomy and Physiology I: SC1	4
COM 1150	Public Speaking	3
ENG 1031	Technical Writing	3
	or	
ENG 1021	English Composition I: CO1	(3)
MAT 1140	Career Mathematics	3
PHY 1105	Conceptual Physics w/Lab: SC1	4
PSY 1001	General Psychology I: SS3	3
		20

**Additional Required Courses**

HPR 1017	Anatomical Kinesiology	3
HPR 1039	Medical Terminology	2
PTA 1010	Basic Patient Care in Physical Therapy	5
PTA 1015	Principles and Practice of Physical Therapy	2
PTA 1020	Modalities in Physical Therapy	5
PTA 1024	Rehab Principles of Medical I	2
PTA 1031	Professional Communications I	1
PTA 1034	Rehab Principles of Medical II	2
PTA 1040	Clinical Kinesiology	5
PTA 1041	Professional Communications II	1
PTA 2005	Psychosocial Issues in Health Care	2
PTA 2030	Orthopedic Assessment and Management Techniques	5
PTA 2040	Neurologic Assessment and Management Techniques	5
PTA 2051	Professional Communications III	1
PTA 2078	PTA Seminar	2
PTA 2080	PTA Internship I	4
PTA 2081	PTA Internship II	5
PTA 2082	PTA Internship III	5
		57
<b>Total Credit Hours</b>		<b>77</b>

Any PTA, HPR, PHY, MAT, and BIO coursework not taken within 10 years of admission needs program chair approval.

Additional information available on the Physical therapist assistants Department website at [www.pikespeak.edu/programs/physical-therapist-assistant](http://www.pikespeak.edu/programs/physical-therapist-assistant).

## Professional Photography

### Associate of Applied Science Degree

Recommended basic skills courses are

- College Readiness in English
- College Readiness for 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 and PHO 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 1110	Art Appreciation: AH1	3
COM 1150	Public Speaking	3
	or	
COM 1250	Interpersonal Communication: SS3	(3)
CIS 1018	Introduction to PC Applications	3
	or	
CSC 1005	Computer Literacy	(3)
ENG 1021	English Composition I: CO1	3
MAT 1140	Career Math	3
		15

**Additional Required Courses**

ART 1115	History of Photography	3
ART 2405	Portrait Photography	3
PHO 1020	Fundamentals of Photography	3
	or	
ART 1401	Digital Photography I	(3)
PHO 1043	Perception & Photography I	3
PHO 2005	Professional Digital Photo I	3
PHO 2026	Digital Workflow Management	3
PHO 2032	Professional Portraiture	3
PHO 2034	View Camera/Lighting Technique	3
PHO 2036	Product Photography	3
PHO 2037	Advanced Lighting Technique	3
PHO 2060	Events & Wedding Photography	3
PHO 2063	Digital Capture Processing III	3
PHO 2080	Internship	1
PHO 2081	Internship	1
PHO 2187	Business of Photography	3
PHO 2188	Portfolio & Career Exploration	3
Elective	Choose six (6) from the list below	6
		50

**Total Credit Hours**

**65**

**Electives**

ART 2407	Landscape Photography	3
PHO 2035	Architectural Photography	3
PHO 2066	Pro Digital Workflow: Software	3

**Certificates****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

ART 1401	Digital Photography I	3
	or	
PHO 1020	Fundamentals of Photography	(3)
PHO 1043	Perception & Photography I	3
PHO 2005	Professional Digital Photo I	3
PHO 2026	Digital Workflow Management	3
PHO 2063	Digital Capture Processing III	3
PHO 2066	Pro Digital Workflow: Software	3
PHO 2187	Business of Photography	3
PHO 2188	Portfolio & Career Exploration	3
<b>Total Credit Hours</b>		<b>24</b>

**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 1401	Digital Photography I	3
	or	
PHO 1020	Fundamentals of Photography	(3)

ART 2405	Portrait Photography	3
PHO 1043	Perception & Photography I	3
PHO 2005	Professional Digital Photo I	3
PHO 2026	Digital Workflow Management	3
PHO 2032	Professional Portraiture	3
PHO 2037	Advanced Lighting Technique	3
PHO 2060	Events & Wedding Photography	3
PHO 2187	Business of Photography	3
PHO 2188	Portfolio & Career Exploration	3
<b>Total Credit Hours</b>		<b>30</b>

**Real Estate Photography****Program Learning Outcomes**

Upon completion of the Real Estate Photography certificate program, students should be able to:

- Create a real estate business identity package including resumes, cover letters, promotional pieces, a print portfolio, and a website of professional-level interior and exterior real estate photographs.
- Use various lighting and post-production techniques required for real estate photography
- Use advanced camera, software, and lighting techniques common to real estate photography
- Convey a message through a visual medium in a way that reflects mastery of artistic composition
- 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

ART 1401	Digital Photography I	3
	or	
PHO 1020	Fundamentals of Photography	(3)
ART 2407	Landscape Photography	3
PHO 1043	Perception & Photography I	3
PHO 2005	Professional Digital Photo I	3
PHO 2026	Digital Workflow Management	3
PHO 2035	Architectural Photography	3
PHO 2037	Advanced Lighting Technique	3
PHO 2187	Business of Photography	3
PHO 2188	Portfolio & Career Exploration	3
<b>Total Credit Hours</b>		<b>27</b>

Additional information available on the Professional Photography Department website at [www.pikespeak.edu/programs/photography](http://www.pikespeak.edu/programs/photography).

**Radiologic Technology****Associate of Applied Science Degree**

Recommended basic skills courses are

- College Readiness in English
- College Readiness for Quantitative Literacy for MAT 1140
- College Readiness for Algebra for MAT 1340

This collaborative program offers the student the opportunity to earn an AAS Degree in Radiologic Technology.

The student will fulfill the PPSC residency requirements ideally with the pre-requisite courses. If any or all the pre-requisite courses are transferred to PPSC, 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 PPSC 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 2101	Human Anatomy & Physiology I w/Lab: SC1	4
BIO 2102	Human Anatomy & Physiology II w/Lab: SC1	4
ENG 1021	English Composition I: CO1	3
MAT 1140	Career Math	3
	or	
MAT 1340	College Algebra: MA1	(4)
PSY 1001	General Psychology I: SS3	3
		<u>17-18</u>

BIO 2101 and BIO 2102 must have been taken within 7 years of admission.

ENG 1021 must have been taken within 10 years of admission.

MAT 1340 or MAT 1140 must have been taken within 10 years of admission.

PSY 1001 must have been taken within 15 years of admission.

**Additional Required Courses**

RTE 1001	Introduction to Radiography	2
RTE 1011	Radiographic Patient Care	2
RTE 1021	Radiologic Procedures I	3
RTE 1022	Radiologic Procedures II	3
RTE 1041	Radiographic Equipment & Imaging I	3
RTE 1042	Radiographic Equipment & Imaging II	3
RTE 1081	Internship: Radiographic I	5
RTE 1082	Internship: Radiographic II	5
RTE 1083	Internship: Radiographic III	7
RTE 2021	Advanced Medical Imaging	3
RTE 2031	Radiation Biology/Protection	2
RTE 2081	Radiographic Internship IV	8
RTE 2082	Radiographic Clinical Internship V	8
RTE 2089	Capstone	3
		<u>57</u>
<b>Total Credit Hours</b>		<b>75</b>

**Electives**

(Please contact your Radiology Technologist advisor before applying these to the AAS degree.)

CHE 1111	General College Chemistry w/Lab: SC1	5
CSC 1005	Computer Literacy	3
HPR 1006	Customer Service in Healthcare	2
HPR 1008	Law & Ethics for Health Professions	2
HPR 1020	Phlebotomy	4
HPR 1039	Medical Terminology	2
HPR 1045	Medical Record Terminology	2
HPR 2020	Advanced Phlebotomy	4
MAP 1050	Pharmacology for Medical Assistants	3
NUA 1001	Nurse Aide Health Care Skills	4
NUA 1070	Nurse Aide Clinical Experience	1
NUA 1071	Advanced Nurse Aide Clinical	1
PHY 1111	Physics: Algebra-Based I w/Lab: SC1	5
PSY 2440	Human Growth & Development: SS3	3

Additional information available on the Radiologic Technology / PPSC Collaborative Program Department website at [www.pikespeak.edu/programs/radiologic-technology](http://www.pikespeak.edu/programs/radiologic-technology).

# Robotics and Automation Systems Technology

## Associate of Applied Science Degree

Recommended basic skills courses are

- College Readiness in English
- College Readiness for 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 1018	Introduction to PC Applications	3
	or	
CSC 1005	Computer Literacy	(3)
COM 2250	Organizational Communication	3
ENG 1031	Technical Writing I: CO1 or higher	3
MAT 1140	Career Math or higher	3
PSY 1005	Psychology of Workplace Relationships	3
		<u>15</u>

**Additional Required Courses**

CAD 1100	Print Reading for Computer Aided Drafting	3
CAD 1101	Computer Aided Drafting I/2D I	3
EIC 2330	Instrument & Process Control II	4
EIC 2340	Supervisory Control & Data Acquisition	4
EIC 2751	Fiber Optics Certification	1
EIC 2757	Lan Certification/Repair/Troubleshooting	1
ELT 1004	Electronic Assembly	3
ELT 1206	Fundamentals of DC/AC	4
ELT 1246	Digital Devices in Computers	3
ELT 2252	Motors & Controls	3
ELT 2266	Advanced Electronic Assembly	3
ELT 2357	Sensors & Transducers	3
ELT 2358	Programmable Logic Controllers	3
ELT 2359	Advanced Programmable Logic Controllers	3
ELT 2361	Microprocessors	3
ELT 2367	Introduction to Robotics	1
ELT 2368	Robotic Technologies	3
MAC 2040	CAD/CAM 2D	3
		<hr/>
		51

**Total Credit Hours****66****Electives**

CAD 2455	SolidWorks/Mechanical	3
ELT 2080	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 1100	Print Reading for Computer Aided Drafting	3
CAD 2455	SolidWorks/Mechanical	3
CAD 2456	Advanced SolidWorks	3
EIC 2340	Supervisory Control & Data Acquisition	4
EIC 2751	Fiber Optics Certification	1
EIC 2757	Lan Certification/Repair/Troubleshooting	1
ELT 1004	Electronic Assembly	3
ELT 1206	Fundamentals of DC/AC	4
ELT 1246	Digital Devices in Computers	3
ELT 2252	Motors & Controls	3
ELT 2266	Advanced Electronic Assembly	3

ELT 2358	Programmable Logic Controllers	3
ELT 2367	Introduction to Robotics	1
ELT 2368	Robotic Technologies	3
		<hr/>
<b>Total Credit Hours</b>		<b>38</b>

**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 1100	Print Reading for Computer Aided Drafting	3
EIC 2330	Instrument & Process Control II	4
EIC 2751	Fiber Optics Certification	1
EIC 2757	Lan Certification/Repair/Troubleshooting	1
ELT 1206	Fundamentals of DC/AC	4
ELT 1246	Digital Devices in Computers	3
ELT 2252	Motors & Controls	3
ELT 2357	Sensors & Transducers	3
ELT 2358	Programmable Logic Controllers	3
		<hr/>
<b>Total Credit Hours</b>		<b>25</b>

**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 2252	Motors & Controls	3
ELT 2358	Programmable Logic Controllers	3
		<hr/>
<b>Total Credit Hours</b>		<b>6</b>



### 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 2751	Fiber Optics Certification	1
EIC 2757	Lan Certification/Repair/Troubleshooting	1
ELT 1004	Electronic Assembly	3
ELT 1206	Fundamentals of DC/AC	4
ELT 1246	Digital Devices in Computers	3
<b>Total Credit Hours</b>		<b>12</b>

### 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 1100	Print Reading for Computer Aided Drafting	3
ELT 1004	Electronic Assembly	3
ELT 1206	Fundamentals of DC/AC	4
ELT 1246	Digital Devices in Computers	3
ELT 2266	Advanced Electronic Assembly	3
<b>Total Credit Hours</b>		<b>16</b>

### 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 2330	Instrument & Process Control II	4
EIC 2340	Supervisory Control & Data Acquisition	4
EIC 2751	Fiber Optics Certification	1
EIC 2757	Lan Certification/Repair/Troubleshooting	1
ELT 1206	Fundamentals of DC/AC	4
ELT 1246	Digital Devices in Computers	3
ELT 2357	Sensors & Transducers	3
ELT 2358	Programmable Logic Controllers	3
ELT 2367	Introduction to Robotics	1
ELT 2368	Robotic Technologies	3
<b>Total Credit Hours</b>		<b>27</b>

### Semiconductor Technology

In the Semiconductor Technology certificate program, students will learn the essential components of electronic circuits and related instruments. The fundamental processes, materials, and equipment for semiconductor manufacturing will also be introduced. Upon successful completion of the courses, students will be able to construct and troubleshoot common electronic circuits used in semiconductor manufacturing.

Recommended prerequisite course MAT 1140

#### Program Learning Outcomes

Upon completion of the Semiconductor Technology certificate program, students should be able to:

- Safely operate, construct, and test circuits using electronic equipment
- Construct circuits with resistors, inductors, and capacitors
- Explain the operation of an oscillator, common course, drain, and gate
- Construct and test transistor circuits
- Troubleshoot an electromechanical system
- Troubleshoot problems with power supply circuits, function generator circuits, alternating current (AC) and direct coupled (DC) amplifiers, circuit oscillator circuits, wave shaping circuits, Silicon-Controlled Rectifier (SCR) control circuits, Ramp generator circuits, Multivibrator circuits, and Relay circuits
- Describe the major steps, components, materials, and safety protocols in the semiconductor assembly and testing processes
- Use plasma principles to explain the desired results and sources of possible problems in plasma-enhanced semiconductor manufacturing processes

ELT 1206	Fundamentals of DC/AC	4
ELT 1234	Solid State Devices I	3
ELT 1235	Solid State Devices II	3
ELT 1236	Introduction to Transistors	2
ELT 1237	Advanced Transistors	3
ELT 1250	Electromechanical Troubleshooting	1
ELT 2205	Electronic Troubleshooting I	3
ELT 2206	Electronic Troubleshooting II	3
ELT 2235	Semiconductor Manufacturing I	3
ELT 2236	Semiconductor Manufacturing II	3
ELT 2437	Vacuum and Power RF Systems	3
<b>Total Credit Hours</b>		<b>31</b>

Additional information available on the Robotics & Automation Systems Technology Department website at [www.pikespeak.edu/programs/robotics-automation-technology](http://www.pikespeak.edu/programs/robotics-automation-technology).

# Sign Language Interpreter Preparation

## Associate of Applied Science Degree

Recommended basic skills courses are

- College Readiness in English
- College Readiness for Quantitative Literacy

The Sign Language Interpreter is a day-only, fall start 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. To be accepted into the program, students must demonstrate proficiency in American Sign Language by:

1. passing the proficiency test at 80%, or receiving a grade of "B" or above in both ASL 1121 and ASL 1122.

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, have completed all general education courses and 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. PPSC 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 Readiness in English, College Readiness for Quantitative Literacy, or placement scores of ENG 1021.

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 1001	Cultural Anthropology: SS3	3
CIS 1018	Introduction to PC Applications	3
	or	
CSC 1005	Computer Literacy	(3)
COM 1150	Public Speaking	3
ENG 1021	English Composition I: CO1	3
MAT 1140	Career Math	3
	or	
MAT 1240	Mathematics for the Liberal Arts: MA1 or higher	(3)
		<u>15</u>

### Additional Required Courses

ASL 1123	American Sign Language III	5
ASL 2215	ASL Literature	3
ASL 2221	American Sign Language IV: AH4	3
ASL 2222	American Sign Language V: AH4	3
IPP 1021	Aspects of Interpreting I	3
IPP 1022	Aspects of Interpreting II	3
IPP 1025	Oral Transliterating	2
IPP 1031	Text Analysis	3
IPP 1032	Interpretation Analysis	3
IPP 1045	Deaf People in Society	2
IPP 1047	Survey of Deaf Culture	3
IPP 2005	Educational Interpreting	4
IPP 2007	Specialized & Technical Communication	2
IPP 2025	English to ASL Interpreting	3
IPP 2027	ASL to English Interpreting	3
IPP 2029	Transliterating	3
IPP 2035	Advanced Interpreting	4
IPP 2079	Interpreter Seminar	3
IPP 2081	Internship	5
	<b>Total Credit Hours</b>	<u>75</u>

## 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 1123	American Sign Language III	5	MAT 1120	Math for Clinical Calculations	3
ASL 2221	American Sign Language IV: AH4	3	or		
IPP 1021	Aspects of Interpreting I	3	MAT 1140	Career Math	(3)
IPP 1045	Deaf People in Society	2	PSY 2440	Human Growth & Development	3
IPP 1047	Survey of Deaf Culture	3			21
<b>Total Credit Hours</b>		<b>16</b>			

Additional information available on the Sign Language Interpreter Preparation Department website at [www.pikespeak.edu/program/sign-language-interpreter](http://www.pikespeak.edu/program/sign-language-interpreter).

## Surgical Technology

### Associate of Applied Science Degree

Recommended basic skills courses are

- College Readiness in English
- College Readiness for 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 2101	Human Anatomy & Physiology I w/Lab: SC1	4
BIO 2102	Human Anatomy & Physiology II w/Lab: SC1	4
BIO 2104	Microbiology w/Lab: SC1	4
ENG 1031	Technical Writing I: CO1	3
or		
ENG 1021	English Composition I: CO1	(3)
or		
ENG 1022	English Composition II: CO2	(3)

#### Additional Required Courses

HPR 1045	Medical Record Terminology	2
STE 1000	Fundamentals of Surgical Technology	6
STE 1001	Surgical Technology Skills Lab	4
STE 1005	Pharmacology for the Surgical Technologist	2
STE 1010	Surgical Procedures I	3
STE 1015	Surgical Procedures II	3
STE 1020	Surgical Procedures III	3
STE 1081	Internship I	4
STE 1082	Internship II	4
STE 1083	Internship III	6
STE 2068	Surgical Technical Seminar	2
<b>Total Credit Hours</b>		<b>60</b>

All MAT and science coursework must have been taken within 7 years of admission.

## Certificate

### Sterile Processing Technology

The Sterile Processing Technology program is designed to prepare individuals for a crucial role in healthcare environments, focusing on the cleaning, sterilization, and assembly of surgical instruments, equipment, and supplies. This program offers comprehensive training in critical areas such as sterilization techniques, infection control, decontamination, surgical instrumentation processing, storage and inventory management, and essential documentation and record maintenance skills. Tailored for those aiming to ensure the highest standards of cleanliness and safety in operating rooms and surgical facilities, this program combines theoretical knowledge with practical skills, making it ideal for individuals seeking a specialized and impactful career in healthcare. Students are required to complete a 400-hour internship. Students enrolled in the Sterile Processing Technology program can pursue the following industry certification: Certified Registered Central Service Technician (CRCST).

#### Program Learning Outcomes

Upon completion of the Sterile Processing Technology Certification program, students should be able to:

- Disinfect, sanitize, and eliminate contaminants on surfaces and equipment through thorough cleaning protocols to maintain health standards
- Prepare and package materials and instruments in a manner that maintains sterility and ensures safety
- Sterilize and monitor equipment to destroy all microbial life forms, ensuring compliance with health and safety standards
- Maintain and inspect patient care instruments and equipment regularly to ensure safety, functionality, and the absence of wear or contamination
- Organize and manage sterile supplies and inventory levels for efficient retrieval, availability, and minimized waste
- Record and update sterilization cycles, maintenance procedures, and documentation to accurately reflect current practices and inventory levels
- Communicate and resolve effectively with customers to understand their needs and maintain high satisfaction by addressing concerns and queries

SPI 1000	Sterile Instrument Processing	4
SPI 1001	Sterile Instrument Lab Skills	4
SPI 1081	Internship: Sterile Processing	9
SPI 2079	Seminar	1
Total Credit Hours		18

Additional information available on the Surgical Technology Department website at [www.pikespeak.edu/programs/surgical-technology](http://www.pikespeak.edu/programs/surgical-technology).

## Veterinary Assistant

### Certificate

This program is designed for students wanting to complete a two semester Certificate in Veterinary Assistant 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.

#### 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 1002	Veterinary Medical Terminology	1
VET 1003	Veterinary Assistant Restraint & Handling	2
VET 1004	Assistant Large Animal Nursing	1
VET 1009	Applied Companion Animal Behavior	3
VET 1014	Vet Assistant Lab & Clinical Procedures	3
VET 1017	Veterinary Assistant Surgery & Nursing Care	2
VET 1020	Office Procedure & Relations	2
VET 1083	Internship	3
Total Credit Hours		17

Additional information available on the Veterinary Assistant Department website at [www.pikespeak.edu/programs/veterinary-technology](http://www.pikespeak.edu/programs/veterinary-technology).

## Welding

### Associate of Applied Science Degree

Recommended basic skills courses are

- College Readiness in English
- College Readiness for 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 2250	Organizational Communication	3
CSC 1005	Computer Literacy	3
MAT 1140	Career Math or higher	3
Elective	AAS General Education Elective course	6
		15

#### Additional Required Courses

WEL 1000	Safety for Welders	1
WEL 1006	Blueprint Reading for Welders & Fitters	4
WEL 1013	Oxyfuel & Plasma Cutting	2
WEL 1014	Oxyacetylene Welding	2
WEL 1021	Structural Welding I	3
WEL 1022	Structural Welding II	3
WEL 1024	Gas Tungsten Arc Welding I	4
WEL 1025	Introduction to Gas Metal Arc Welding	4
WEL 2024	Gas Tungsten Arc Welding II	4
WEL 2025	Advanced Gas Metal Arc Welding	4
Elective	Choose twenty-six (26) hours from list below	26
		57

#### Total Credit Hours

72

#### Electives

ACT 1011	Metal Welding & Cutting I	3
ACT 1024	Replace Weld-on Exterior Panel	3
ACT 2011	Metal Welding & Cutting II	3
MAC 1001	Introduction to Machine Shop	3
MAC 1010	Introduction to Engine Lathe	3
MAC 1020	Introduction to Milling Machine	3
MAC 2040	CAD/CAM 2D	3
MAC 2041	CAD/CAM 2D Lab	3
MAC 2052	Practical Metallurgy	3
WEL 1080	Internship	4
WEL 2000	Advanced CAD/CAM Cutting Process	4
WEL 2005	Introduction to Ornamental Iron	4
WEL 2030	Pipe Welding I	4
WEL 2031	Pipe Welding II	4
WEL 2050	Layout & Fabrication	4
WEL 2063	Applied Metal Properties	4
WEL 2064	Creative Welding	4
WEL 2080	Internship	4
WEL 2089	Capstone	4

## Certificates

### Basic Welding

This Basic 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 Basic 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 1140	Career Math	3
WEL 1000	Safety for Welders	1
WEL 1006	Blueprint Reading for Welders & Fitters	4
WEL 1013	Oxyfuel & Plasma Cutting	2
WEL 1014	Oxyacetylene Welding	2
WEL 1021	Structural Welding I	3
WEL 1022	Structural Welding II	3
WEL 1024	Gas Tungsten Arc Welding I	4
WEL 1025	Introduction to Gas Metal Arc Welding	4
<b>Total Credit Hours</b>		<b>26</b>

**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 1025	Introduction to Gas Metal Arc Welding	4
WEL 2025	Advanced Gas Metal Arc Welding	4
<b>Total Credit Hours</b>		<b>8</b>

**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 1024	Gas Tungsten Arc Welding I	4
WEL 2024	Gas Tungsten Arc Welding II	4
<b>Total Credit Hours</b>		<b>8</b>

**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 2030	Pipe Welding I	4
WEL 2031	Pipe Welding II	4
<b>Total Credit Hours</b>		<b>34</b>

**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 1021	Structural Welding I	3
WEL 1022	Structural Welding II	3
<b>Total Credit Hours</b>		<b>6</b>

Additional information available on the Welding Department website at [www.pikespeak.edu/welding](http://www.pikespeak.edu/welding).

# Zoo Keeping Technology

## Associate of Applied Science Degree

Recommended basic skills courses are

- College Readiness in English
- College Readiness for 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 PPSC 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 1003	Principles of Animal Biology: SC2	3
COM 1150	Public Speaking	3
ENG 1031	Technical Writing I: C01	3
	or	
ENG 1021	English Composition I: C01	(3)
ENV 1111	Environmental Science w/Lab: SC1	4

MAT 1120	Math for Clinical Calculations	3
	or	
MAT 1140	Career Math	(3)
		16

### Additional Required Courses

ZOO 1010	Introduction to Captive Animal Management	2
ZOO 1020	Biodiversity & Conservation	3
ZOO 1030	Animal Behavior	3
ZOO 1040	Introduction to Animal Training	2
ZOO 1080	Zoo Keeping Internship I	5
ZOO 1081	Zoo Keeping Internship II	5
ZOO 1320	Veterinary Zookeeping	4
ZOO 1410	Invertebrate Zoology	4
ZOO 1510	Fish Husbandry & Aquaria Management	4
ZOO 1610	Herpetology	4
ZOO 1710	Bird Husbandry	4
ZOO 1810	Mammal Husbandry	4
Electives	Choose five (5) hours from list below	5
		49
	<b>Total Credit Hours</b>	<b>65</b>

### Electives

OUT 1385	Scuba Diving	1
OUT 2002	Open Water Diver	1
ZOO 1110	Advanced Exhibitory Techniques	2
ZOO 1111	Adventures in Zoo Design	2
ZOO 1310	Zoonotic Preventative Medicine	3
ZOO 1210	Exhibit & Horticulture Design	4
ZOO 1811	Ungulates-The Hoofed Mammals	2
ZOO 1812	Pachyderms: Hippos, Rhinos & Elephants	2
ZOO 1813	Primates: Prosimians & Monkeys	3
ZOO 1814	Apes	2
ZOO 1815	Wild Cats-Conservation & Management	2
ZOO 1816	Wild Canid Conservation & Management	2
ZOO 1817	Bats: An Introduction	2
ZOO 2040	Animal Training in Action	2
ZOO 2080	Zoo Keeping Internship III	5
ZOO 2410	Aquatic & Terrestrial Invertebrate Husbandry	4
ZOO 2610	Reptile & Amphibian Husbandry	4

## Certificates

### Core Animal Care

The Core Animal Care 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 Core Animal Care 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 1010	Introduction to Captive Animal Management	2
ZOO 1110	Advanced Exhibitory Techniques	2
ZOO 1210	Exhibit & Horticulture Design for Zoo Exhibits	4
ZOO 1320	Veterinary Zookeeping	4
ZOO 1410	Invertebrate Zoology	4
ZOO 1510	Fish Husbandry & Aquaria Management	4

ZOO 1610	Herpetology	4
ZOO 2410	Aquatic & Terrestrial Invertebrate Husbandry	4
ZOO 2610	Reptile & Amphibian Husbandry	<u>4</u>
		32

Additional information available on the Zoo Keeping Technology Department website at [www.pikespeak.edu/programs/zoo-keeping-technology](http://www.pikespeak.edu/programs/zoo-keeping-technology).

## Associate of Engineering Science Degree (AES)

The Associate of Engineering Science (AES) degree is designed for students who want an emphasis in engineering, mathematics, physical sciences, and computer science, and who intend to transfer to a four-year engineering program.

### Mechanical Engineering

#### Associate of Engineering Science Degree

Recommended basic skills courses are

- College Readiness in English
- MAT 1340 and MAT 1440

The Associate of Engineering Science in Mechanical Engineering is the pathway for students interested in earning a bachelor's degree in mechanical engineering. To earn the AES in mechanical engineering, students must complete the following course requirements for a total of 64 semester credit hours. Because the requirements of various four-year receiving institutions vary significantly, it is highly recommended that students consult with an advisor and engineering faculty to ensure courses align with the specific requirements of the receiving institution.

Three courses in the Mechanical Engineering curriculum require prerequisite courses or knowledge: CHE 1111 requires completion of CHE 1011 or one year of high school chemistry; CSC 1060 requires completion of CSC 1019; CAD 2455 requires completion of CAD 1101. Students should talk with an advisor about completing these prerequisite courses or other placement options.

#### Program Learning Outcomes

Upon completion of the mechanical engineering degree program, students should be able to:

- Explain information presented in mathematical forms (e.g., equations, graphs, diagrams, tables, verbal descriptions)
- Convert information into and between various mathematical forms
- Interpret data using multiple mathematical forms
- Select appropriate methods or theoretical frameworks to solve problems
- Examine engineering scenarios and data to identify patterns, differences, similarities, limitations, or implications
- Develop a conclusion based on findings
- Apply appropriate engineering techniques, skills, models, and tools to analyze and solve problems
- Analyze the professional and ethical impacts of engineering solutions within economic, environmental, and social contexts

#### Written Communication

Three (3) credit hours. Any GT-CO1 or GT-CO2 course.

ENG 1021	English Composition I: CO1	3
ENG 1022	English Composition II: CO2	3
ENG 1031	Technical Writing I: CO1	3

#### Mathematics

Ten (10) credit hours

MAT 2410	Calculus I: MA1	5
MAT 2420	Calculus II: MA1	5

#### Arts and Humanities

Three (3) credit hours. Any GT-AH course.

PHI 2018	Environmental Ethics: AH3	3
or		
GT Pathways Arts and Humanities course (AH1, AH2, AH3, AH4)		(3)

#### Social and Behavioral Sciences

Three (3) credit hours. Any GT-SS course.

ECO 2001	Principles of Macroeconomics: SS1	3
or		
ECO 2002	Principles of Microeconomics: SS1	(3)
or		
GT - One GT Pathways Social and Behavioral Sciences course (SS1, SS2, SS3)		(3)

#### Natural and Physical Sciences

Fifteen (15) credit hours

CHE 1111	General College Chemistry I w/Lab: SC1	5
PHY 2111	Physics: Calculus-Based I w/Lab: SC1	5
PHY 2112	Physics: Calculus-Based II w/Lab: SC1	5

#### Additional Required Courses

Twenty-one to twenty-four (21-24) credit hours.

Note: If these credits are not required for the major at a receiving Colorado four-year institution, they will be applied to the bachelor's degree as elective credit towards graduation. However, additional credits over 64 may not transfer to all universities. Please check with the receiving institution to determine in which way these courses will be applied.

MAT 2430	Calculus III: MA1	4
or		
MAT 2431	Calculus III with Engineering Applications: MA1	(5)
MAT 2562	Differential Equations with Linear Algebra	4
or		
MAT 2540	Linear Algebra	(3)
and		
MAT 2560	Differential Equations: MA1	(3)
EGG 1040	Engineering Projects	(3)
or		
EGT 1110	Intro Design/Engineering Apps	(3)
EGG 1060	Engineering Computing	4
or		
CSC 1060	Computer Science I	(4)
EGG 2011	Engineering Mechanics I (Statics)	3
EGG 2012	Engineering Mechanics II (Dynamics)	3

#### Electives

Six to nine (6-9) credit hours

Note: Electives listed below have been articulated to various Colorado universities. Please check with other receiving institutions to determine their specific requirements.

BUS 2016	Legal Environment of Business	3
CAD 2455	SolidWorks/Mechanical	3
CAD 2456	Advanced Solidworks	3
CSC 1061	Computer Science II	4
EGG 1020	Engineering Methodologies	3
EGG 2020	Thermodynamics	3
EGG 2030	Mechanics of Solids	3
EGG 2041	Circuit Analysis I	4
PHY 2113	Physics III: Calculus-Based Modern Physics	3

Total Credit Hours 64





## Bachelor of Applied Science Course of Study

### Advanced Paramedic Practitioner

The Advanced Paramedic Practitioner BAS is designed to prepare currently certified paramedic for the field of critical care and community paramedicine. This degree path also serves as a pathway to licensure in Colorado. Education provided within the degree will fill the void of current psychiatric education in Emergency Medical System to meet a need within the healthcare system. The degree focuses on interpersonal and interdisciplinary relationships and self-reflection for continued personal growth.

Students must complete a complete an Associates of Applied Science degree with a minimum of 60 credits in Emergency Medical Services, Paramedic before applying to the BAS degree

#### Program Learning Outcomes

Upon completion of the Advanced Paramedic Practitioner degree program, students should be able to:

- Employ cognitive and technical skills to evaluate and synthesize complex ideas, concepts, and theories in a paramedic practitioner environment
- Utilize communication, collaboration, and clinical reasoning skills in professional paramedic practice
- Reflect critically on medical knowledge, research principles and methods to demonstrate mastery as a paramedic practitioner
- Use high level self-management skills to operate in complex and dynamic paramedic practitioner setting

#### General Education Requirements

BIO 2116	Human Pathophysiology	4
MAT 1260	Introduction to Statistics: MA1	3
SOC 2031	The Sociology of Deviant Behavior: SS3	3
<b>Total Credit Hours</b>		<b>10</b>

#### Upper Division BAS Course Requirements

EMS 3010	Clinical Assessment in the Behavior Setting	3
EMS 3011	Motivational Interviewing & De-escalation Techniques	3
EMS 3012	Trauma Informed Care & Assessment	3
EMS 3030	Community Advocacy & Outreach	3
EMS 3031	Community Assessment	3
EMS 4025	Fundamentals of Advanced Paramedic Practice	4
EMS 4030	Care & Prevention Development Strategies	3
EMS 4033	Advanced Paramedic Medical Care	3
EMS 4035	Advanced Paramedic Trauma Care	3
EMS 4089	Capstone	6
ESA 3000	Leadership for Emergency Executives	3
ESA 3005	Crisis Communication & Public Relations	3
ESA 3015	Elements of Emergency Service Administration	3
ESA 3025	Public Policy & Practical Applications in Emergency Services	3
ESA 4005	Public Health in Complex Emergencies	4
ESA 4020	Research & Design for Emergency Administration	3
		<b>51</b>
<b>Total Credit Hours</b>		<b>61</b>
<b>Total EMS Paramedic AAS Degree Credit Hours</b>		<b>62</b>
<b>Total BAS Degree Credit Hours</b>		<b>123</b>

## Behavioral Health

The Bachelor of Applied Science (BAS) in Behavioral Health program builds upon foundational knowledge to develop advanced practitioners in the field of behavioral health. This program combines in-depth academic coursework with extensive applied training to prepare graduates for leadership roles in diverse behavioral health settings. Students gain advanced skills in developing and implementing complex interventions, evaluating programs, and addressing ethical and policy challenges. The BAS program provides a comprehensive education for those seeking to make a significant impact in behavioral health and offers excellent preparation for graduate studies in related fields.

#### Program Learning Outcomes

Upon completion of the bachelor's degree in behavioral health, students should be able to:

- Integrate advanced theoretical knowledge and evidence-based practices to develop comprehensive behavioral health intervention plans
- Implement complex behavioral health interventions across diverse populations and settings
- Evaluate the effectiveness of behavioral health programs and interventions using appropriate research methods
- Design quality improvement strategies to enhance behavioral health service delivery
- Apply leadership and management principles to guide teams and organizations in behavioral health settings
- Formulate client-centered treatment plans incorporating trauma-informed care, cultural competence, and whole-person approaches
- Analyze complex ethical dilemmas and policy issues in behavioral health
- Propose solutions to ethical and policy challenges that adhere to professional standards and promote social justice

### Emphasis Areas

#### Mental Health and Wellness

The BAS degree in Behavioral Health with an emphasis on Mental Health and Wellness focuses on advanced skills in mental health assessment, intervention, and program management. Students gain in-depth knowledge of trauma-informed care, whole-person approaches, and leadership in mental health settings.

#### General Education Courses

BIO 1005	Science of Biology w/Lab: SC1	4
	or	
BIO 1006	Basic Anatomy and Physiology	(4)
PSY 2000	Research Methodology	4
PSY 2107	Human Sexuality: SS3	3
	or	
PSY 2105	Psychology of Gender: SS3	(3)
PSY 2112	Introduction to Addictive Behavior	2
PSY 2221	Social Psychology: SS3	3
PSY 2551	Child Abuse and Neglect	3
		<b>15</b>

#### Elective General Education Options

Select seven (7) credit hours		
COM 2064	Negotiation	3
CRJ 1045	Correctional Process	3
PSC 1011	American Government: SS1*	3
PSY 2111	Psychological Aspects of Abuse in Relationships	3
PSY 2220	Dynamics of Racism & Prejudice	3

PSY 2331	Positive Psychology: SS3	3
PSY 2333	Health Psychology: SS3	3
PSY 2770	Introduction to Forensic Psychology	3
SPA 1015	Spanish for the Professional I	3
SPA 2015	Spanish for the Professional II	3
Total Credit Hours		<u>26</u>

## Additional Required Courses

BEH 3001	Treatment of Mental Health within Existing Systems	3
BEH 3030	Behavioral Health Program and Case Management	2
BEH 3088	Behavioral Health Practicum	3
BEH 4020	Understanding Trauma and PTSD	3
BEH 4030	Whole Person Care	3
BEH 4040	Leadership & Management in Behavioral Health	3
BEH 4080	Mental Health Internship	5
CSL 2050	Motivational Interviewing I	1.5
CSL 2068	Addiction Counseling Skills	1.5
CSL 3050	Advanced Motivational Interviewing	2
Total Credit Hours		<u>27</u>

Total Credits for Mental Health and Social Work Emphasis 53

Total Credits for BEH AAS 67

[34 credits from BEH AAS were Gen Eds.]

Total BEH BAS Mental Health and Social Work Emphasis Credit Hours 120

\*MSC MSW requirement: Students who wish to obtain a master's in social work from Metro State College are required to take PSC 1011 American Government to meet one of the requirements for admission.

**Addiction Recovery**

The BAS degree in Behavioral Health with an emphasis in Addiction Recovery focuses on careers in addiction counseling. Graduates are prepared to complete the remaining requirements to become Certified Addiction Specialists (CAS) through the Colorado Department of Regulatory Agencies (DORA).

## General Education Courses

Twenty-four (24) credit hours

BIO 1005	Science of Biology w/Lab: SC1	4
or		
BIO 1006	Basic Anatomy and Physiology	(4)
CRJ 1010	Introduction to Criminal Justice: SS3	3
PSY 2000	Research Methodology	4
PSY 2107	Human Sexuality: SS3	3
or		
PSY 2105	Psychology of Gender: SS3	(3)
PSY 2221	Social Psychology: SS3	3
		<u>17</u>

## General Education Electives

Select seven (7) credit hours

COM 2060	Listening in a Workplace Communication Setting	3
COM 2064	Negotiation	1
CRJ 1045	Correctional Process	3
PSC 1011	American Government: SS1*	3
PSY 2111	Psychological Aspects of Abuse in Relationships	3

PSY 2220	Dynamics of Racism & Prejudice	3
PSY 2331	Positive Psychology: SS3	3
PSY 2333	Health Psychology: SS3	3
PSY 2770	Introduction to Forensic Psychology	3
SPA 1015	Spanish for the Professional I	3
SPA 2015	Spanish for the Professional II	3
Total Credit Hours		<u>24</u>

**Additional Required Courses**

Twenty-nine (29) credit hours

BEH 3001	Treatment of Mental Health within Existing Systems	3
BEH 3088	Behavioral Health Practicum	3
BEH 4020	Understanding Trauma and PTSD	3
BEH 4030	Whole Person Care	3
BEH 4040	Leadership & Management in Behavioral Health	3
BEH 4081	Addiction Recovery Internship w/test prep	5
CSL 3028	Treating Diverse Populations	2
CSL 3030	Advanced Models in Addiction Treatment	1
CSL 3050	Advanced Motivational Interviewing	2
CSL 4020	Clinical Supervision I	2
CSL 4021	Clinical Supervision II	2
Total Credit Hours		<u>29</u>

Total Credits for Addiction Recovery Emphasis 53

Total Credits for BEH AAS 67

[34 credits from BEH AAS were Gen Eds.]

Total BEH BAS Addiction Recovery Emphasis Credit Hours 120

\*MSC MSW requirement: Students who wish to obtain a master's in social work from Metro State College are required to take PSC 1011 American Government to meet one of the requirements for admission.

## Cybersecurity

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The BAS in Cybersecurity degree is a comprehensive program that equips students with the knowledge and skills needed to protect computer systems, networks, and data from cyber threats. This degree program focuses on understanding the principles of cyber defense measures, threat intelligence, incident investigations, forensics, vulnerability assessments, ethics, and cyber law.

Prior to the BAS students must complete an associate degree with a minimum of 60 credits in one of the following or similar degree before applying to the BAS degree:

**Cybersecurity**

Networking and/or Network Security Secure Software Development

Center of Academic Excellence (CAE) associate degree

\*Associate degree approved by the CNG department with completion of prescribed elective list. See elective note.

**Program Learning Outcomes**

Upon completion of the Cybersecurity degree program, students should be able to:

- Adapt cyber defense methods to proactively repel attacks.
- Trace a vulnerability to its root cause solution using industry tools and techniques.
- Outline the digital forensics steps from the initial recognition of an incident, evidence gathering, preservation, and analysis as part of the Security Incident Analysis and Response.
- Evaluate cyber intelligence for changes to information system security design, operation, policies, and practices.
- Evaluate laws, regulations, standards, and frameworks to improve organizational cybersecurity effectiveness.

**General Education Requirements**

Select any AAS general elective courses

Total Credit Hours 9**Upper Division BAS Course Requirements**

CNG 3020	Cyber Law Ethics and Policy	4
CNG 3036	Business Continuity and Disaster Recovery	4
CNG 3040	Cyber Operations	4
CNG 3050	Cyber Investigation and Forensics	4
CNG 3056	Vulnerability Assessment II	4
CNG 4000	Active Cyber Defense	4
CNG 4010	Cyber Threat Intelligence	4
Total Credit Hours		<u>28</u>

**Network Security Operations Emphasis Electives (Choose 16 credits)**

CNG 3010	Fundamentals of Cyberscurity	4
CNG 3030	Methods of Network Analysis	4
CNG 4020	Zero Trust Networks	4
CNG 4030	Cyber War	4
CNG 4054	Malware Threats and Analysis	4
Any CNG or CSC 3000 or 4000 level course		4
Total Credit Hours		<u>16</u>

Electives Select any BUS, CIS, CNG, CRJ, CSC, CWB, DAT, EMP, PSM, PAR course (unless prescribed by department\*)

Total Credit Hours 7

\*Electives Note: Associate degree transfer that went through CNG departmental approval any or all the following may be prescribed electives. CNG 1024, CNG 1032, and CNG 2057.

<b>Total Credit Hours</b>	<b>60</b>
<b>Total AAS Degree Credit Hours</b>	<b>60</b>
<b>Total BAS Degree Credit Hours</b>	<b>120</b>

## Emergency Service Administration

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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 normal and crisis situations
- 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
- Construct impact analysis for public policy
- Appraise optimal emergency management and leadership characteristics in varying emergency situations

**General Education Requirements**

BUS 2017	Business Communications & Report Writing	3
ENV 1010	Natural Disasters: SC2	3
MAT 1160	Financial Mathematics	3
	or	
MAT 1260	Introduction to Statistics: MA1	(3)
PSC 1025	American State & Local Government: SS1	3
PSY 1016	Stress Management	3
	or	
SOC 2018	Sociology of Diversity: SS3	<u>(3)</u>
<b>Total Credit Hours</b>		<b>15</b>

**Upper Division BAS Course Requirements**

ESA 3000	Leadership for Emergency Executives	3
ESA 3005	Crisis Communication & Public Relations	3
ESA 3010	Emergency Public Information & Media Training	3
ESA 3015	Elements of Emergency Service Administration	3
ESA 3020	Designing Safer Communities: Pre-incident Planning & Risk Analysis	4
ESA 3025	Public Policy & Practical Applications in Emergency Services	3
ESA 3030	Budget & Planning Fundamentals for Emergency Administrators	3
ESA 4000	Personnel Management in Emergency Service Agencies	3
ESA 4005	Public Health in Complex Emergencies	4
ESA 4010	Terrorism Threat & Risk Analysis	3
ESA 4015	Tactical Planning, Response & Recovery	4
ESA 4020	Research & Design for Emergency Administration	3
ESA 4089	Emergency Service Capstone	<u>6</u>
		45
<b>Total Credit Hours</b>		<b>60</b>
<b>Total Associate Degree Credit Hours</b>		<b>60</b>
<b>Total BAS Degree Credit Hours</b>		<b>120</b>

Additional information available on the Emergency Service Administration Department website at [www.pikespeak.edu/esa](http://www.pikespeak.edu/esa).

# Bachelor of Science in Nursing Completion Program

## RN-BSN

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 and in good standing 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 once they have completed the first semester of the ADN program. The program has two courses (NUR 4009 & NUR 4010) that require the student to hold an RN license for a practicum experience. Each general education course and all 3000 and 4000 level nursing courses must be completed with a grade of C or better or the course must be repeated to progress in the program and graduate.

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:

#### Quality care

- Interpret research to promote best practice and use data to monitor the outcomes of care processes. Propose an evaluation process to continuously improve the quality and safety of health care systems and deliver quality care to individuals and diverse populations.

#### Professionalism

- Formulate a plan that demonstrates an enhanced commitment to professionalism embracing excellence, caring, legal and ethical practice, civility, accountability, and professional development.

#### Communication

- Evaluate effective communication and collaboration with colleagues, inter-professional groups, and members of the community to promote health, safety, and well-being across the lifespan and across the continuum of the healthcare environment.

#### Leadership

- Evaluate the contribution of leadership, quality improvement principles, and impact of organizational systems in transforming, managing, and coordinating safe, quality, and cost-effective person-centered care.
- Critical thinking/clinical reasoning
- Integrate a systematic process of critical inquiry with nursing, natural and behavioral sciences, arts, and humanities to

make evidence-based practice decisions to improve the nursing care of individuals, families, populations, and communities.

### General Education Requirements

ENG 1022	English Composition II: CO2	3
MAT 1260	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
<b>Total Credit Hours</b>		<b>18</b>

### Upper Division BSN Course Requirements

NUR 3001	Integration into Baccalaureate Nursing Practice	3
NUR 3002	Trends in Nursing Practice	3
NUR 3003	Nursing Research / Evidence Based Practice	3
NUR 4008	Legal & Ethical Issues Related to Professional Nursing Practice	3
NUR 4009	Leadership in the Nursing Profession	3.5
NUR 4010	Community Health Nursing / Practicum	6
NUR 4011	Senior Seminar	3
<b>Total Credit Hours</b>		<b>24.5</b>

### Upper Division BSN Elective Requirements

#### Students must choose six (6) credits from the following list

NUR 3004	Informatics / Healthcare Technology	3
NUR 3005	Emergency Preparedness	3
NUR 3006	Gerontology Nursing	3
NUR 3007	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
<b>Total Credit Hours</b>	<b>120</b>

## Other Programs and Courses of Study

### Comprehensive Higher Education Certificate

The Comprehensive Higher Education Certificate is offered through the ASPIRE (Achieving Success through Personalized Inclusive Real-world Education) program at Pikes Peak State College (PPSC). ASPIRE at PPSC is designed to provide inclusive higher education opportunities for students with intellectual and developmental disabilities (I/DD).

Students who complete the ASPIRE at PPSC program will earn a modified certificate of completion, demonstrating their acquisition of crucial occupational and life skills. The program is structured as a three-year journey of fully inclusive academic access, outcome-focused vocational preparation, student-centered personal development, and naturally supported campus engagement. Some flexibility is built into the program to accommodate individual student goals and progress.

This Certificate program is highly individualized, aligning students' vocational aspirations with PPSC coursework and experiences. By participating in ASPIRE at PPSC, students with I/DD will have the opportunity to grow academically, professionally, and personally in a supportive and inclusive college environment.

#### Program Learning Outcomes

Upon completion of the Comprehensive Higher Education certificate, students should be able to:

- Apply basic computer functions to complete simple tasks with office applications and internet browsers
- Practice appropriate communication skills in various settings
- Identify common workplace expectations
- Prepare essential job application materials with support
- Identify personal interests related to chosen area of study

#### General Education Courses

CIS 1018	Intro to PC Applications	3
COM 1250	Interpersonal Communication: SS3	3
ENG 0094	Studio 121	3
ENG 1021	English Composition I: CO1	3
PSY 1005	Psychology of Workplace Relationships	3
PSY 1016	Stress Management	3

General Education Options	18
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#### Area of Study Courses

Elective Options	18
<b>Total Credit Hours</b>	<b>36</b>

#### Notes

- Upon acceptance into the ASPIRE Program at PPSC program, student will meet with an ASPIRE staff advisor to determine an appropriate individualized academic plan in alignment with the student's vocational outcome. 18 credit hours will be spent in courses dedicated to gaining competencies for employment in their desired field.
- To be considered for admission to program: The applicant must have a documented intellectual or developmental disability that interferes with their academic performance.
- To apply: Complete and return the ASPIRE at PPSC Application Packet to the ASPIRE Office by deadline listed on ASPIRE at PPSC web page. The packet includes the basic application document, documentation of intellectual or developmental disability, the applicant essay, and two letters of recommendation (one personal and one professional). Eligible

applicants will be invited to campus for an admissions interview. All finalists will also be required to participate in an ASPIRE at PPSC Full Day.

- Life skills workshop: Students that enroll in this program will be required to participate in a life skills workshop taught by one of our ASPIRE staff/faculty.

### 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 PPSC 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.pikespeak.edu/edu](http://www.pikespeak.edu/edu).

### 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, Health, Mathematics, Music, Physical Education, Science, Social Studies, and World Language. For additional information, please contact PPSC's Advising and Testing department.

Additional information available on the Education Department website at [www.pikespeak.edu/programs/education/index.php](http://www.pikespeak.edu/programs/education/index.php).

# COURSE DESCRIPTIONS

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## 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 1000-1999 are usually considered freshman level. Sophomore courses are generally numbered between 2000 and 2999.

Course numbers and descriptions are subject to change.

## Developmental Courses

Developmental courses are numbered from 0001 to 0099. 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 Vice President for Instructional Services.

## Off Campus Courses

Courses that originate at PPSC 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 1075, 1077, 1076, 2075, 2076, 2077 series. Developmental courses are 0075, 0076, 0077. 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.

## Courses in this Catalog

Courses in this catalog may not be offered every semester. The courses are displayed here because they can be awarded as transfer credit for students who took the course at another college.

Courses marked with \* are not offered at PPSC at this time. These courses may be offered at another Colorado Community College or through CO Online.



## Master Course Crosswalk

The Colorado Community College System has determined that courses will change to a 4-digit system effective Summer 2022. The following list is the crosswalk from the 3-digit to 4-digit course numbers. The courses will transition to transcripts, DegreeWorks, etc. Courses marked with an asterisk [\*] are not currently offered at PPSC.

<b>Accounting</b>		AEC 218	AEC 2300
ACC 101	ACC 1001	AEC 225	AEC 2230
ACC 115	ACC 1015	AEC 226	AEC 2630
ACC 121	ACC 1021	AEC 232	AEC 2650
ACC 122	ACC 1022	AEC 233	AEC 2660
ACC 125	ACC 1025	AEC 236	AEC 2700
ACC 131	ACC 1031	AEC 255	AEC 2930
ACC 132	ACC 1032	AEC 280	AEC 2080
ACC 133	ACC 1033		
ACC 135	ACC 1035	<b>Art</b>	
ACC 211	ACC 2011	ART 110	ART 1110
ACC 212	ACC 2012	ART 111	ART 1111
ACC 216	ACC 2016	ART 112	ART 1112
ACC 226	ACC 2026	ART 113	ART 1115
ACC 231	ACC 2031	ART 115	ART 1805
ACC 287	ACC 2087	ART 116	ART 1806
		ART 121	ART 1201
<b>Agriculture</b>		ART 122	ART 1205
AGR 260*	AGR 2106*	ART 124	ART 1307
		ART 128	ART 1203
<b>Agriculture Crops &amp; Soils</b>		ART 131	ART 1002
AGY 240	AGY 2140	ART 132	ART 1003
		ART 133	ART 1604
<b>Agriculture Economics</b>		ART 139	ART 1401
AGE 102*	AGE 1102*	ART 142	ART 2407
		ART 144	ART 2405
<b>American Sign Language</b>		ART 149	ART 1405
ASL 121	ASL 1121	ART 150	ART 1005
ASL 122	ASL 1122	ART 151	ART 1301
ASL 123	ASL 1123	ART 161	ART 1703
ASL 125	ASL 1125	ART 207	ART 1113
ASL 135	ASL 1135	ART 210	ART 2902
ASL 215	ASL 2215	ART 211	ART 2901
ASL 221	ASL 2221	ART 215	ART 2805
ASL 222	ASL 2222	ART 216	ART 2806
		ART 221	ART 1202
<b>Anthropology</b>		ART 222	ART 2201
ANT 101	ANT 1001	ART 223	ART 2202
ANT 107	ANT 1003	ART 224	ART 1308
ANT 108*	ANT 1208*	ART 225	ART 2307
ANT 111	ANT 1005	ART 226	ART 2308
ANT 207	ANT 2317	ART 228	ART 2203
ANT 212	ANT 2315	ART 233	ART 1605
ANT 215	ANT 2115	ART 234	ART 2603
ANT 218	ANT 2218	ART 235	ART 2604
ANT 221	ANT 1101	ART 249	ART 2049
ANT 222	ANT 2101	ART 250	ART 1006
ANT 225	ANT 2125	ART 251	ART 1302
ANT 250	ANT 2550	ART 252	ART 2301
ANT 255	ANT 2545	ART 253	ART 2302
ANT 260	ANT 2130	ART 261	ART 1704
		ART 262	ART 2703
<b>Arabic</b>		ART 263	ART 2704
ARA 111	ARA 1011	ART 280	ART 2080
ARA 112	ARA 1012	ART 289	ART 2089
ARA 211	ARA 2011		
ARA 212	ARA 2012		
		<b>Astronomy</b>	
<b>Architectural Engineer/Construction Management</b>		AST 101	AST 1110
AEC 102	AEC 1231	AST 102	AST 1120
AEC 104	AEC 1220	AST 155	AST 1140
AEC 107	AEC 1200		
AEC 121	AEC 1520	<b>Automotive Collision Technology</b>	
AEC 122	AEC 1600	ACT 101	ACT 1001
AEC 123	AEC 1232	ACT 111	ACT 1011
AEC 125	AEC 1110	ACT 121	ACT 1021
AEC 216	AEC 2610		

ACT 122	ACT 1022	BIO 208*	BIO 2108*
ACT 123	ACT 1023	BIO 216	BIO 2116
ACT 124	ACT 1024	BIO 221	BIO 2121
ACT 131	ACT 1031	BIO 224	BIO 2124
ACT 132	ACT 1032		
ACT 142	ACT 1042	<b>Business</b>	
ACT 143	ACT 1043	BUS 115	BUS 1015
ACT 144	ACT 1044	BUS 181	BUS 1081
ACT 151	ACT 1051	BUS 203	BUS 2003
ACT 160	ACT 1060	BUS 216	BUS 2016
ACT 164	ACT 1064	BUS 217	BUS 2017
ACT 165	ACT 1065	BUS 226	BUS 2026
ACT 166	ACT 1066	BUS 289	BUS 2089
ACT 167	ACT 1067		
ACT 170	ACT 1070	<b>Business Technology</b>	
ACT 171	ACT 1071	BTE 100	BTE 1000
ACT 172	ACT 1072	BTE 102	BTE 1002
ACT 180	ACT 1080	BTE 108	BTE 1008
ACT 181	ACT 1081	BTE 111	BTE 1011
ACT 205	ACT 2005	BTE 166	BTE 1066
ACT 207	ACT 2007		
ACT 211	ACT 2011	<b>Carpentry</b>	
ACT 215	ACT 2015	CAR 101	CAR 1001
ACT 226	ACT 2026	CAR 102	CAR 1002
ACT 232	ACT 2032	CAR 103	CAR 1003
ACT 243	ACT 2043	CAR 104	CAR 1004
ACT 244	ACT 2044	CAR 105	CAR 1005
ACT 251	ACT 2051	CAR 115	CAR 1015
		CAR 123	CAR 1023
		CAR 125	CAR 1025
		CAR 130	CAR 1030
		CAR 134	CAR 1034
		CAR 135	CAR 1035
		CAR 140	CAR 1040
		CAR 146	CAR 1046
		CAR 150	CAR 1050
		CAR 160	CAR 1060
		CAR 280	CAR 2080
		<b>Chemistry</b>	
		CHE 101	CHE 1011
		CHE 102	CHE 1012
		CHE 105	CHE 1005
		CHE 111	CHE 1111
		CHE 112	CHE 1112
		CHE 211	CHE 2111
		CHE 212	CHE 2112
		<b>Chinese</b>	
		CHI 111	CHI 1011
		CHI 112	CHI 1012
		CHI 211	CHI 2011
		<b>College Composition &amp; Reading</b>	
		CCR 094	ENG 0094
		<b>Communication</b>	
		COM 115	COM 1150
		COM 125	COM 1250
		COM 130	COM 1300
		COM 217	COM 2220
		COM 220	COM 2300
		COM 225	COM 2250
		COM 230	COM 2400
		COM 263	COM 2063
		COM 269	COM 2069
		<b>Computer Aided Drafting</b>	
		CAD 100	CAD 1100
		CAD 101	CAD 1101
		CAD 102	CAD 1102
		CAD 104	CAD 1104
		CAD 105	CAD 1105
<b>Automotive Service Technology</b>			
ASE 102	ASE 1002		
ASE 110	ASE 1010		
ASE 111	ASE 1011		
ASE 120	ASE 1020		
ASE 123	ASE 1023		
ASE 130	ASE 1030		
ASE 132	ASE 1032		
ASE 134	ASE 1034		
ASE 140	ASE 1040		
ASE 141	ASE 1041		
ASE 150	ASE 1050		
ASE 151	ASE 1051		
ASE 152	ASE 1052		
ASE 160	ASE 1060		
ASE 161	ASE 1061		
ASE 201	ASE 2001		
ASE 210	ASE 2010		
ASE 221	ASE 2021		
ASE 231	ASE 2031		
ASE 233	ASE 2033		
ASE 235	ASE 2035		
ASE 240	ASE 2040		
ASE 250	ASE 2050		
ASE 251	ASE 2051		
ASE 265	ASE 2065		
ASE 282	ASE 2182		
<b>Biology</b>			
BIO 103	BIO 1003		
BIO 104	BIO 1004		
BIO 105	BIO 1005		
BIO 106	BIO 1006		
BIO 111	BIO 1111		
BIO 112	BIO 1112		
BIO 116*	BIO 1016		
BIO 148	BIO 1048		
BIO 201	BIO 2101		
BIO 202	BIO 2102		
BIO 203	BIO 2103		
BIO 204	BIO 2104		

CAD 115            CAD 1110  
 CAD 153            CAD 2458  
 CAD 219            CAD 2540  
 CAD 224            CAD 2220  
 CAD 227            CAD 2221  
 CAD 230            CAD 2227  
 CAD 234            CAD 2228  
 CAD 240            CAD 2460  
 CAD 253            CAD 2459  
 CAD 255            CAD 2455  
 CAD 259            CAD 2456  
 CAD 262            CAD 2660  
 CAD 266            CAD 2661  
 CAD 280            CAD 2080

**Computer and Networking Technology**

CNG 101            CNG 1001  
 CNG 102            CNG 1002  
 CNG 104            CNG 1004  
 CNG 108            CNG 1008  
 CNG 120            CNG 1020  
 CNG 121            CNG 1021  
 CNG 122            CNG 1022  
 CNG 132            CNG 1032  
 CNG 142            CNG 1042  
 CNG 202            CNG 2002  
 CNG 212            CNG 2012  
 CNG 242            CNG 2042  
 CNG 257            CNG 2057  
 CNG 260            CNG 2060  
 CNG 261            CNG 2061  
 CNG 262            CNG 2062  
 CNG 270            CNG 2070  
 CNG 280            CNG 2080

**Computer Information Systems**

CIS 102            CIS 1002  
 CIS 104            CIS 1004  
 CIS 110            CIS 1010  
 CIS 115            CIS 1015  
 CIS 118            CIS 1018  
 CIS 124            CIS 1024  
 CIS 128            CIS 1028  
 CIS 130            CIS 1030  
 CIS 135            CIS 1035  
 CIS 140            CIS 1040  
 CIS 145            CIS 1045  
 CIS 155            CIS 1055  
 CIS 165            CIS 1065  
 CIS 202            CIS 2002  
 CIS 223            CIS 2023  
 CIS 240            CIS 2040  
 CIS 243            CIS 2043  
 CIS 263            CIS 2063  
 CIS 267            CIS 2067  
 CIS 268            CIS 2068  
 CIS 280            CIS 2080  
 CIS 288            CIS 2088  
 CIS 289            CIS 2089

**Computer Science**

CSC 105            CSC 1005  
 CSC 119            CSC 1019  
 CSC 120            CSC 1020  
 CSC 126            CSC 1026  
 CSC 129            CSC 1029  
 CSC 160            CSC 1060  
 CSC 161            CSC 1061  
 CSC 217            CSC 2017  
 CSC 220            CSC 2020  
 CSC 225            CSC 2025

CSC 230            CSC 2030  
 CSC 233            CSC 2033  
 CSC 236            CSC 2036  
 CSC 240            CSC 2040  
 CSC 241            CSC 2041  
 CSC 245            CSC 2045  
 CSC 246            CSC 2046  
 CSC 267            CSC 2067  
 CSC 280            CSC 2080

**Computer Web-Based**

CWB 110            CWB 1010  
 CWB 130            CWB 1030  
 CWB 205            CWB 2005  
 CWB 221            CWB 2021

**Construction Technology**

CON 120            CON 1020  
 CON 128            CON 1028  
 CON 130            CON 1030  
 CON 138            CON 1038  
 CON 142            CON 1042  
 CON 145            CON 1045  
 CON 146            CON 1046  
 CON 147            CON 1047  
 CON 152            CON 1052  
 CON 153            CON 1053  
 CON 154            CON 1054  
 CON 155            CON 1055  
 CON 157            CON 1057  
 CON 158            CON 1058  
 CON 159            CON 1059  
 CON 160            CON 1060  
 CON 161            CON 1061  
 CON 162            CON 1062  
 CON 163            CON 1063  
 CON 164            CON 1064  
 CON 165            CON 1065  
 CON 166            CON 1066  
 CON 167            CON 1067  
 CON 168            CON 1068  
 CON 169            CON 1069  
 CON 207            CON 2007  
 CON 243            CON 2043  
 CON 245            CON 2045  
 CON 246            CON 2046  
 CON 280            CON 2080  
 CON 289            CON 2089

**Counseling**

CSL 250            CSL 2050  
 CSL 254            CSL 2054  
 CSL 265            CSL 2065

**Criminal Justice**

CRJ 110            CRJ 1010  
 CRJ 112            CRJ 1012  
 CRJ 125            CRJ 1025  
 CRJ 127            CRJ 1027  
 CRJ 135            CRJ 1035  
 CRJ 145            CRJ 1045  
 CRJ 205            CRJ 2005  
 CRJ 209            CRJ 2009  
 CRJ 210            CRJ 2010  
 CRJ 216            CRJ 2016  
 CRJ 220            CRJ 2020  
 CRJ 225            CRJ 2025  
 CRJ 230            CRJ 2030  
 CRJ 231            CRJ 2031  
 CRJ 235            CRJ 2035  
 CRJ 236            CRJ 2036

CRJ 257            CRJ 2057  
 CRJ 268            CRJ 2068  
 CRJ 280            CRJ 2080

### Culinary Arts

CUA 100            CUA 1000  
 CUA 101            CUA 1001  
 CUA 105            CUA 1005  
 CUA 120            CUA 1020  
 CUA 125            CUA 1025  
 CUA 127            CUA 1027  
 CUA 129            CUA 1029  
 CUA 136            CUA 1036  
 CUA 138            CUA 1038  
 CUA 145            CUA 1045  
 CUA 150            CUA 1050  
 CUA 151            CUA 1051  
 CUA 152            CUA 1052  
 CUA 153            CUA 1053  
 CUA 154            CUA 1054  
 CUA 156            CUA 1056  
 CUA 157            CUA 1057  
 CUA 161            CUA 1061  
 CUA 190            CUA 1190  
 CUA 210            CUA 2010  
 CUA 233            CUA 2033  
 CUA 236            CUA 2036  
 CUA 245            CUA 2045  
 CUA 255            CUA 2055  
 CUA 256            CUA 2056  
 CUA 261            CUA 2061  
 CUA 262            CUA 2062  
 CUA 263            CUA 2063  
 CUA 264            CUA 2064  
 CUA 268            CUA 2068  
 CUA 269            CUA 2069  
 CUA 281            CUA 2081

### Dance

DAN 105            DAN 1005  
 DAN 106            DAN 1006  
 DAN 111            DAN 1011  
 DAN 112            DAN 1012  
 DAN 113            DAN 1013  
 DAN 114            DAN 1014  
 DAN 117            DAN 1017  
 DAN 118            DAN 1018  
 DAN 121            DAN 1021  
 DAN 122            DAN 1022  
 DAN 123            DAN 1023  
 DAN 124            DAN 1024  
 DAN 125            DAN 1050  
 DAN 131            DAN 1031  
 DAN 132            DAN 1032  
 DAN 133            DAN 1033  
 DAN 134            DAN 1034  
 DAN 141            DAN 1041  
 DAN 142            DAN 1042  
 DAN 143            DAN 1043  
 DAN 144            DAN 1044  
 DAN 150            DAN 1025  
 DAN 151            DAN 1051  
 DAN 152            DAN 1052  
 DAN 211            DAN 2011  
 DAN 212            DAN 2012  
 DAN 221            DAN 2021  
 DAN 222            DAN 2022  
 DAN 224            DAN 2024  
 DAN 225            DAN 2025  
 DAN 251            DAN 2051

DAN 254            DAN 2054  
 DAN 255            DAN 2055

### Dental Assisting

DEA 102            DEA 1021  
 DEA 104            DEA 1022  
 DEA 111            DEA 1035  
 DEA 120            DEA 1011  
 DEA 121            DEA 1012  
 DEA 122            DEA 1013  
 DEA 123            DEA 1023  
 DEA 124            DEA 1033  
 DEA 125            DEA 1024  
 DEA 126            DEA 1015  
 DEA 131            DEA 1034  
 DEA 132            DEA 1016  
 DEA 134            DEA 1031  
 DEA 140            DEA 1040  
 DEA 181            DEA 1081  
 DEA 182            DEA 1082  
 DEA 200            DEA 2011  
 DEA 205            DEA 2021

### Diesel Power Mechanics

DPM 100            DPM 1000  
 DPM 101            DPM 1001  
 DPM 103            DPM 1003  
 DPM 105            DPM 1005  
 DPM 106            DPM 1006  
 DPM 107            DPM 1007  
 DPM 111            DPM 1011  
 DPM 112            DPM 1012  
 DPM 120            DPM 1020  
 DPM 121            DPM 1021  
 DPM 122            DPM 1022  
 DPM 123            DPM 1023  
 DPM 124            DPM 1024  
 DPM 125            DPM 1025  
 DPM 126            DPM 1026  
 DPM 140            DPM 1040  
 DPM 203            DPM 2003  
 DPM 205            DPM 2005  
 DPM 206            DPM 2006  
 DPM 207            DPM 2007  
 DPM 208            DPM 2008  
 DPM 210            DPM 2010  
 DPM 211            DPM 2011  
 DPM 212            DPM 2012  
 DPM 222            DPM 2022  
 DPM 223            DPM 2023  
 DPM 240            DPM 2040  
 DPM 264            DPM 2064  
 DPM 265            DPM 2065  
 DPM 280            DPM 2080

### Driving

DRV 100            DRV 1000  
 DRV 130            DRV 1030  
 DRV 132            DRV 1032  
 DRV 134            DRV 1034  
 DRV 136            DRV 1036  
 DRV 138            DRV 1038

### Early Childhood Education

ECE 101            ECE 1011  
 ECE 102            ECE 1045  
 ECE 103            ECE 1031  
 ECE 111            ECE 1111  
 ECE 112            ECE 1125  
 ECE 125            ECE 2661  
 ECE 192            ECE 1925

ECE 205	ECE 2051
ECE 209	ECE 2061
ECE 220	ECE 2621
ECE 225	ECE 2631
ECE 226	ECE 2641
ECE 237	ECE 2371
ECE 238	ECE 2381
ECE 240	ECE 2401
ECE 241	ECE 2411
ECE 256	ECE 2101
ECE 260	ECE 2601
ECE 261	ECE 2615
ECE 279	ECE 2079
ECE 289	ECE 2089

**Economics**

ECO 101	ECO 1001
ECO 201	ECO 2001
ECO 202	ECO 2002
ECO 211*	ECO 2011*
ECO 245	ECO 2045

**Education**

EDU 221	EDU 2211
EDU 222	EDU 2221
EDU 233	EDU 2331
EDU 234	EDU 2341
EDU 240	EDU 2401
EDU 250	EDU 2501
EDU 261	EDU 2611
EDU 263	EDU 2631
EDU 288	EDU 2088

**Electricity Industrial Commercial**

EIC 130	EIC 1860
EIC 135	EIC 1861
EIC 217	EIC 2817
EIC 230	EIC 2330
EIC 245	EIC 2340
EIC 253	EIC 2751
EIC 259	EIC 2757

**Electronics**

ELT 101	ELT 1001
ELT 106	ELT 1206
ELT 107	ELT 1207
ELT 112	ELT 1212
ELT 134	ELT 1234
ELT 135	ELT 1235
ELT 146	ELT 1246
ELT 147	ELT 1247
ELT 148	ELT 1248
ELT 163	ELT 1002
ELT 165	ELT 1004
ELT 215	ELT 2215
ELT 248	ELT 2348
ELT 252	ELT 2252
ELT 255	ELT 2455
ELT 257	ELT 2357
ELT 258	ELT 2358
ELT 259	ELT 2359
ELT 261	ELT 2361
ELT 262	ELT 2362
ELT 266	ELT 2266
ELT 267	ELT 2367
ELT 268	ELT 2368
ELT 280	ELT 2080

**Emergency Management & Planning**

EMP 101	EMP 1001
EMP 105	EMP 1005
EMP 106	EMP 1006
EMP 107	EMP 1007
EMP 240	EMP 2040

**Emergency Medical Services**

EMS 115	EMS 1015
EMS 121	EMS 1021
EMS 122	EMS 1022
EMS 123	EMS 1023
EMS 124	EMS 1024
EMS 126	EMS 1026
EMS 127	EMS 1127
EMS 129	EMS 1129
EMS 131	EMS 1125
EMS 132	EMS 1132
EMS 133	EMS 1133
EMS 135	EMS 1135
EMS 138	EMS 1138
EMS 140	EMS 1140
EMS 170	EMS 1070
EMS 171	EMS 1071
EMS 181	EMS 1081
EMS 225	EMS 2025
EMS 226	EMS 2026
EMS 227	EMS 2027
EMS 228	EMS 2028
EMS 229	EMS 2029
EMS 230	EMS 2030
EMS 231	EMS 2031
EMS 232	EMS 2032
EMS 233	EMS 2033
EMS 234	EMS 2034
EMS 235	EMS 2035
EMS 236	EMS 2036
EMS 237	EMS 2037
EMS 280	EMS 2080
EMS 281	EMS 2081
EMS 310	EMS 3010
EMS 311	EMS 3011
EMS 312	EMS 3012
EMS 330	EMS 3030
EMS 331	EMS 3031
EMS 425	EMS 4025
EMS 430	EMS 4030
EMS 433	EMS 4033
EMS 435	EMS 4035
EMS 489	EMS 4089

**Emergency Service Admin**

ESA 300	ESA 3000
ESA 305	ESA 3005
ESA 310	ESA 3010
ESA 315	ESA 3015
ESA 320	ESA 3020
ESA 325	ESA 3025
ESA 330	ESA 3030
ESA 400	ESA 4000
ESA 405	ESA 4005
ESA 410	ESA 4010
ESA 415	ESA 4015
ESA 420	ESA 4020
ESA 489	ESA 4089

**Engineering**

EGG 102	EGG 1020
EGG 140	EGG 1040
EGG 145	EGG 1060
EGG 206	EGG 2030

EGG 211 EGG 2011  
 EGG 212 EGG 2012  
 EGG 230 EGG 2020  
 EGG 243 EGG 2050

#### Engineering Graphics Tech

EGT 103 EGT 2303  
 EGT 140 EGT 1110  
 EGT 205 EGT 2305  
 EGT 210 EGT 2310

#### English

ENG 077 ENG 0077  
 ENG 115 ENG 1015  
 ENG 117 ENG 1017  
 ENG 118 ENG 1018  
 ENG 121 ENG 1021  
 ENG 122 ENG 1022  
 ENG 131 ENG 1031  
 ENG 132 ENG 1032  
 ENG 201 ENG 2001  
 ENG 205 ENG 2005  
 ENG 221 ENG 2021  
 ENG 222 ENG 2022  
 ENG 226 ENG 2026  
 ENG 227 ENG 2027  
 ENG 230 ENG 2030  
 ENG 231 ENG 2031  
 ENG 235 ENG 2035  
 ENG 280 ENG 2080

#### English as a Second Language

ESL 011 ESL 0011  
 ESL 012 ESL 0012  
 ESL 021 ESL 0021  
 ESL 022 ESL 0022  
 ESL 023 ESL 0023  
 ESL 031 ESL 0031  
 ESL 032 ESL 0032  
 ESL 041 ESL 0041  
 ESL 042 ESL 0042  
 ESL 043 ESL 0043  
 ESL 052 ESL 0052  
 ESL 053 ESL 0053

#### Entrepreneurship

ENP 105 ENP 1005

#### Environmental Science

ENV 101 ENV 1111  
 ENV 110 ENV 1010

#### Ethnic Studies

ETH 224 ETH 2024

#### Finance

FIN 105 FIN 1050  
 FIN 106 FIN 1060  
 FIN 115 FIN 1015  
 FIN 201 FIN 2010  
 FIN 240 FIN 2040  
 FIN 287 FIN 2087

#### Fire Science Technology

FST 100 FST 1000  
 FST 101 FST 1001  
 FST 102 FST 1002  
 FST 103 FST 1003  
 FST 105 FST 1005  
 FST 106 FST 1006  
 FST 107 FST 1007  
 FST 109 FST 1009  
 FST 110 FST 1010

FST 126 FST 1026  
 FST 160 FST 1060  
 FST 201 FST 2001  
 FST 202 FST 2002  
 FST 203 FST 2003  
 FST 205 FST 2005  
 FST 206 FST 2006  
 FST 207 FST 2007  
 FST 209 FST 2009  
 FST 251 FST 2051  
 FST 255 FST 2055  
 FST 257 FST 2057  
 FST 258 FST 2058  
 FST 259 FST 2059  
 FST 280 FST 2080

#### Fire Science Wildland

FSW 100 FSW 1000  
 FSW 101 FSW 1001  
 FSW 153 FSW 1053

#### French

FRE 101 FRE 1001  
 FRE 111 FRE 1011  
 FRE 112 FRE 1012  
 FRE 211 FRE 2011  
 FRE 212 FRE 2012

#### Geography

GEO 105 GEO 1005  
 GEO 106 GEO 1006  
 GEO 111 GEO 1011  
 GEO 112 GEO 1012

#### Geology

GEY 108 GEY 1108  
 GEY 111 GEY 1111  
 GEY 112 GEY 1112  
 GEY 135 GEY 1135  
 GEY 216 GEY 1155

#### German

GER 111 GER 1011  
 GER 112 GER 1012  
 GER 211 GER 2011  
 GER 212 GER 2012

#### Health & Wellness

HWE 100 HWE 1050  
 HWE 109 HWE 1064  
 HWE 111 HWE 1062  
 HWE 124 HWE 1061  
 HWE 125 HWE 1065  
 HWE 137 HWE 1019  
 HWE 237 HWE 2060  
 HWE 245 HWE 2062  
 HWE 255 HWE 1068  
 HWE 256 HWE 2064

#### Health Professional

HPR 101 HPR 1006  
 HPR 102 HPR 1011  
 HPR 106 HPR 1008  
 HPR 111 HPR 1003  
 HPR 112 HPR 1020  
 HPR 113 HPR 2020  
 HPR 120 HPR 2011  
 HPR 130 HPR 2013  
 HPR 139 HPR 1039  
 HPR 143 HPR 1005  
 HPR 179 HPR 1079  
 HPR 190 HPR 1050  
 HPR 208 HPR 1045



**Heating and Air Conditioning**

HVA 102	HVA 1002
HVA 105	HVA 1005
HVA 110	HVA 1010
HVA 111	HVA 1011
HVA 112	HVA 1012
HVA 113	HVA 1013
HVA 118	HVA 1018
HVA 120	HVA 1020
HVA 132	HVA 1032
HVA 141	HVA 1041
HVA 142	HVA 1042
HVA 143	HVA 1043
HVA 146	HVA 1046
HVA 201	HVA 2001
HVA 204	HVA 2004
HVA 206	HVA 2006
HVA 222	HVA 2022
HVA 233	HVA 2033
HVA 241	HVA 2041
HVA 245	HVA 2045
HVA 247	HVA 2047
HVA 251	HVA 2051
HVA 252	HVA 2052
HVA 253	HVA 2053
HVA 259	HVA 2059
HVA 262	HVA 2062
HVA 280	HVA 2080
HVA 289	HVA 2089

**History**

HIS 101	HIS 1310
HIS 102	HIS 1320
HIS 111	HIS 1110
HIS 112	HIS 1120
HIS 121	HIS 1210
HIS 122	HIS 1220
HIS 203	HIS 2140
HIS 205	HIS 2005
HIS 207	HIS 2125
HIS 208	HIS 2115
HIS 215	HIS 2105
HIS 218	HIS 2000
HIS 225	HIS 2135
HIS 235	HIS 2130
HIS 236	HIS 2145
HIS 243	HIS 2610
HIS 244	HIS 2200
HIS 246*	HIS 2210*
HIS 247	HIS 2015
HIS 249	HIS 2500
HIS 250	HIS 2110
HIS 255	HIS 2300
HIS 259	HIS 2510
HIS 265	HIS 2765

**Hospitality**

HOS 131	HOS 1031
HOS 148	HOS 1048
HOS 221	HOS 2021
HOS 226	HOS 2026
HOS 231	HOS 2031
HOS 251	HOS 2051
HOS 280	HOS 2080

**Humanities**

HUM 103	HUM 1003
HUM 115	HUM 1015
HUM 121	HUM 1021
HUM 122	HUM 1022
HUM 123	HUM 1023

HUM 211      HUM 2011

**Integrative Health Professions**

IHP 100	IHP 1000
IHP 250	IHP 2050
IHP 252	IHP 2052

**Interior Design**

IND 100	IND 1100
IND 107	IND 1102
IND 112	IND 2201
IND 113	IND 2202
IND 117	IND 1017
IND 118	IND 2206
IND 120	IND 2207
IND 151	IND 2208
IND 152	IND 2209
IND 160	IND 2210
IND 161	IND 2500
IND 201	IND 2211
IND 205	IND 2701
IND 211	IND 2300
IND 213	IND 2702
IND 220	IND 2301
IND 225	IND 2302
IND 231	IND 2703
IND 261	IND 2502
IND 265	IND 2704
IND 278	IND 2078
IND 280	IND 2080
IND 288	IND 2088
IND 289	IND 2089

**Interpreter Prep Program**

IPP 121	IPP 1021
IPP 122	IPP 1022
IPP 125	IPP 1025
IPP 131	IPP 1031
IPP 132	IPP 1032
IPP 145	IPP 1045
IPP 147	IPP 1047
IPP 205	IPP 2005
IPP 207	IPP 2007
IPP 225	IPP 2025
IPP 227	IPP 2027
IPP 229	IPP 2029
IPP 235	IPP 2035
IPP 279	IPP 2079
IPP 281	IPP 2081

**Italian**

ITA 101	ITA 1001
ITA 111	ITA 1011
ITA 112	ITA 1012
ITA 211	ITA 2011
ITA 212	ITA 2012

**Japanese**

JPN 101	JPN 1001
JPN 111	JPN 1011
JPN 112	JPN 1012
JPN 211	JPN 2011
JPN 212	JPN 2012

**Journalism**

JOU 105	JOU 1005
JOU 106	JOU 1006
JOU 121	JOU 1021
JOU 206	JOU 2006
JOU 215	JOU 2015
JOU 225	JOU 2025
JOU 231	JOU 2031



JOU 241            JOU 2041  
 JOU 280            JOU 2080

**Law Enforcement Academy**

LEA 101            LEA 1001  
 LEA 102            LEA 1002  
 LEA 103            LEA 1003  
 LEA 104            LEA 1004  
 LEA 105            LEA 1005  
 LEA 106            LEA 1006  
 LEA 107            LEA 1007  
 LEA 108            LEA 1008  
 LEA 118            LEA 1018

**Literature**

LIT 115            LIT 1015  
 LIT 121            LIT 1021  
 LIT 201            LIT 2001  
 LIT 202            LIT 2002  
 LIT 205            LIT 2005  
 LIT 211            LIT 2011  
 LIT 212            LIT 2012  
 LIT 221            LIT 2021  
 LIT 222            LIT 2022  
 LIT 225            LIT 2025  
 LIT 235            LIT 2035  
 LIT 246            LIT 2046  
 LIT 248            LIT 2048  
 LIT 255            LIT 2055  
 LIT 257            LIT 2057  
 LIT 258            LIT 2058  
 LIT 259\*          LIT 2059\*  
 LIT 268            LIT 2068  
 LIT 269            LIT 2069

**Machining**

MAC 100            MAC 1000  
 MAC 101            MAC 1001  
 MAC 102            MAC 1002  
 MAC 110            MAC 1010  
 MAC 111            MAC 1011  
 MAC 112            MAC 1012  
 MAC 120            MAC 1020  
 MAC 121            MAC 1021  
 MAC 122            MAC 1022  
 MAC 205            MAC 2005  
 MAC 206            MAC 2006  
 MAC 240            MAC 2040  
 MAC 241            MAC 2041  
 MAC 245            MAC 2045  
 MAC 246            MAC 2046  
 MAC 252            MAC 2052  
 MAC 280            MAC 2080

**Management**

MAN 116            MAN 1016  
 MAN 117            MAN 1017  
 MAN 125            MAN 1025  
 MAN 128            MAN 1028  
 MAN 200            MAN 2000  
 MAN 216            MAN 2016  
 MAN 226            MAN 2026  
 MAN 240            MAN 2040  
 MAN 246            MAN 2046

**Manufacturing Technology**

MTE 130            MTE 1130  
 MTE 247            MTE 2330

**Marketing**

MAR 111            MAR 1011  
 MAR 117            MAR 1017

MAR 160            MAR 1060  
 MAR 216            MAR 2016  
 MAR 220            MAR 2020  
 MAR 249            MAR 2049

**Math**

MAT 025            MAT 0200  
 MAT 055            MAT 0300  
 MAT 103            MAT 1120  
 MAT 107            MAT 1140  
 MAT 112            MAT 1160  
 MAT 120            MAT 1240  
 MAT 121            MAT 1340  
 MAT 122            MAT 1420  
 MAT 123            MAT 1320  
 MAT 125            MAT 1400  
 MAT 135            MAT 1260  
 MAT 155            MAT 1220  
 MAT 156            MAT 1230  
 MAT 166            MAT 1440  
 MAT 201            MAT 2410  
 MAT 202            MAT 2420  
 MAT 203            MAT 2430  
 MAT 204            MAT 2431  
 MAT 215            MAT 2520  
 MAT 255            MAT 2540  
 MAT 261\*          MAT 2561\*  
 MAT 265            MAT 2560  
 MAT 266            MAT 2562  
 MAT 280            MAT 2080

**Medical Assisting Professional**

MAP 110            MAP 1010  
 MAP 120            MAP 1020  
 MAP 138            MAP 2038  
 MAP 140            MAP 2040  
 MAP 150            MAP 1050  
 MAP 183            MAP 1083  
 MAP 189            MAP 2069  
 MAP 280            MAP 2080

**Medical Office Technology**

MOT 122            MOT 1015  
 MOT 125            MOT 1025  
 MOT 126            MOT 1036  
 MOT 131            MOT 2040  
 MOT 133            MOT 1026  
 MOT 135            MOT 1027  
 MOT 181            MOT 1081  
 MOT 182            MOT 1082  
 MOT 208            MOT 1050  
 MOT 209            MOT 1060  
 MOT 210            MOT 1061

**Meteorology**

MET 150            MET 1050

**Multimedia Graphic Design**

MGD 102            MGD 1002  
 MGD 103            MGD 1020  
 MGD 104            MGD 1004  
 MGD 105            MGD 1015  
 MGD 106            MGD 1006  
 MGD 107            MGD 1007  
 MGD 109            MGD 1009  
 MGD 110            MGD 1010  
 MGD 111            MGD 1011  
 MGD 112            MGD 1012  
 MGD 114            MGD 1013  
 MGD 116            MGD 1014  
 MGD 117            MGD 1017

MGD 121            MGD 1021  
 MGD 132            MGD 1032  
 MGD 134            MGD 1034  
 MGD 141            MGD 1041  
 MGD 143            MGD 1043  
 MGD 153            MGD 1053  
 MGD 156            MGD 1056  
 MGD 161            MGD 1904  
 MGD 164            MGD 1064  
 MGD 165            MGD 1065  
 MGD 178            MGD 1078  
 MGD 180            MGD 1080  
 MGD 201            MGD 2001  
 MGD 202            MGD 2002  
 MGD 207            MGD 1037  
 MGD 208            MGD 1038  
 MGD 209            MGD 2037  
 MGD 210            MGD 2038  
 MGD 211            MGD 2011  
 MGD 212            MGD 2012  
 MGD 213            MGD 2013  
 MGD 215            MGD 2015  
 MGD 217            MGD 2014  
 MGD 221            MGD 2021  
 MGD 222            MGD 2022  
 MGD 223            MGD 2023  
 MGD 235            MGD 2035  
 MGD 241            MGD 2041  
 MGD 242            MGD 2042  
 MGD 243            MGD 2043  
 MGD 258            MGD 2058  
 MGD 259            MGD 2059  
 MGD 264            MGD 2064  
 MGD 265            MGD 2065  
 MGD 268            MGD 2068  
 MGD 280            MGD 2080  
 MGD 289            MGD 2089

**Music**

MUS 100            MUS 1000  
 MUS 101            MUS 1001  
 MUS 105            MUS 1005  
 MUS 110            MUS 1010  
 MUS 111            MUS 1011  
 MUS 112            MUS 1012  
 MUS 113            MUS 1013  
 MUS 120            MUS 1020  
 MUS 121            MUS 1021  
 MUS 122            MUS 1022  
 MUS 123            MUS 1023  
 MUS 125            MUS 1025  
 MUS 126            MUS 1026  
 MUS 131            MUS 1031  
 MUS 132            MUS 1032  
 MUS 133            MUS 1033  
 MUS 134            MUS 1034  
 MUS 141            MUS 1041  
 MUS 142            MUS 1042  
 MUS 143            MUS 1043  
 MUS 144            MUS 1044  
 MUS 151            MUS 1051  
 MUS 152            MUS 1052  
 MUS 153            MUS 1053  
 MUS 154            MUS 1054  
 MUS 167            MUS 1067  
 MUS 210            MUS 2010  
 MUS 211            MUS 2011  
 MUS 212            MUS 2012  
 MUS 213            MUS 2013  
 MUS 231            MUS 2031

MUS 232            MUS 2032  
 MUS 233            MUS 2033  
 MUS 234            MUS 2034  
 MUS 241            MUS 2041  
 MUS 242            MUS 2042  
 MUS 243            MUS 2043  
 MUS 244            MUS 2044  
 MUS 251            MUS 2051  
 MUS 252            MUS 2052  
 MUS 253            MUS 2053  
 MUS 254            MUS 2054

**Natural Resources**

NRE 100            NRE 1100  
 NRE 102            NRE 1002  
 NRE 204            NRE 2204  
 NRE 205            NRE 2205  
 NRE 212            NRE 2012  
 NRE 214            NRE 2014  
 NRE 225            NRE 2025  
 NRE 236            NRE 2036  
 NRE 278            NRE 2078  
 NRE 280            NRE 2080

**Nursing**

NUR 106            NUR 1006  
 NUR 109            NUR 1009  
 NUR 112            NUR 1012  
 NUR 150            NUR 1050  
 NUR 169            NUR 1069  
 NUR 189            NUR 1089  
 NUR 206            NUR 2006  
 NUR 211            NUR 2011  
 NUR 212            NUR 2012  
 NUR 216            NUR 2016  
 NUR 230            NUR 2030  
 NUR 301            NUR 3001  
 NUR 302            NUR 3002  
 NUR 303            NUR 3003  
 NUR 304            NUR 3004  
 NUR 305            NUR 3005  
 NUR 306            NUR 3006  
 NUR 307            NUR 3007  
 NUR 408            NUR 4008  
 NUR 409            NUR 4009  
 NUR 410            NUR 4010  
 NUR 411            NUR 4011

**Nursing Assistant**

NUA 101            NUA 1001  
 NUA 102            NUA 1002  
 NUA 170            NUA 1070  
 NUA 171            NUA 1071

**Occupational Safety Technician**

OSH 126            OSH 1311  
 OSH 127            OSH 1310

**Paralegal**

PAR 114            PAR 1114  
 PAR 115            PAR 1115  
 PAR 116            PAR 1116  
 PAR 117            PAR 1117  
 PAR 118            PAR 1118  
 PAR 125            PAR 1125  
 PAR 127            PAR 1127  
 PAR 201            PAR 2201  
 PAR 202            PAR 2202  
 PAR 205            PAR 2205  
 PAR 206            PAR 2206  
 PAR 208            PAR 2208

PAR 209            PAR 2209  
 PAR 213            PAR 2213  
 PAR 280            PAR 2080  
 PAR 287            PAR 2087

**Park Ranger**

PRA 205            PRA 2005

**Pharmacy Technician**

PHT 111            PHT 1011  
 PHT 112            PHT 1012  
 PHT 114            PHT 1014  
 PHT 115            PHT 1015  
 PHT 116            PHT 1040  
 PHT 118            PHT 1016  
 PHT 119            PHT 1041  
 PHT 170            PHT 1070  
 PHT 171            PHT 1071  
 PHT 235            PHT 1035  
 PHT 250            PHT 2050  
 PHT 255            PHT 2055  
 PHT 280            PHT 2080

**Philosophy**

PHI 111            PHI 1011  
 PHI 112            PHI 1012  
 PHI 113            PHI 1013  
 PHI 114            PHI 1014  
 PHI 115            PHI 1015  
 PHI 116            PHI 1016  
 PHI 142            PHI 1042  
 PHI 201            PHI 2001  
 PHI 205            PHI 2005  
 PHI 214            PHI 2014  
 PHI 218            PHI 2018  
 PHI 220\*          PHI 2020\*  
 PHI 250            PHI 2050

**Photography**

PHO 101            PHO 1001  
 PHO 105            PHO 1005  
 PHO 120            PHO 1020  
 PHO 143            PHO 1043  
 PHO 205            PHO 2005  
 PHO 226            PHO 2026  
 PHO 232            PHO 2032  
 PHO 234            PHO 2034  
 PHO 235            PHO 2035  
 PHO 236            PHO 2036  
 PHO 237            PHO 2037  
 PHO 260            PHO 2060  
 PHO 263            PHO 2063  
 PHO 266            PHO 2066  
 PHO 268            PHO 2188  
 PHO 269            PHO 2187  
 PHO 280            PHO 2080  
 PHO 281            PHO 2081

**Physical Education**

PED 100            PED 1000  
 PED 102            PED 1002  
 PED 103            PED 1003  
 PED 110            PED 1010  
 PED 111            PED 1011  
 PED 112            PED 1012  
 PED 113            PED 1013  
 PED 122            PED 1022  
 PED 126            PED 1026  
 PED 129            PED 1029  
 PED 140            PED 1040  
 PED 141            PED 1041

PED 142            PED 1042  
 PED 143            PED 1043  
 PED 144            PED 1044  
 PED 151            PED 1051  
 PED 161            PED 1061  
 PED 163            PED 1063  
 PED 230            PED 2030  
 PED 231            PED 2031

**Physical Therapist Assistant**

PTA 110            PTA 1010  
 PTA 115            PTA 1015  
 PTA 120            PTA 1020  
 PTA 124            PTA 1024  
 PTA 131            PTA 1031  
 PTA 134            PTA 1034  
 PTA 135            PTA 1035  
 PTA 140            PTA 1040  
 PTA 141            PTA 1041  
 PTA 205            PTA 2005  
 PTA 230            PTA 2030  
 PTA 240            PTA 2040  
 PTA 251            PTA 2051  
 PTA 278            PTA 2078  
 PTA 280            PTA 2080  
 PTA 281            PTA 2081  
 PTA 282            PTA 2082

**Physics**

PHY 105            PHY 1105  
 PHY 107\*          PHY 1107\*  
 PHY 111            PHY 1111  
 PHY 112            PHY 1112  
 PHY 211            PHY 2111  
 PHY 212            PHY 2112  
 PHY 213            PHY 2113

**Plumbing**

PLU 207            PLU 2007  
 PLU 208            PLU 2008  
 PLU 250            PLU 2050

**Political Science**

POS 105            PSC 2020  
 POS 111            PSC 1011  
 POS 125            PSC 1025  
 POS 136            PSC 1036  
 POS 205            PSC 2005  
 POS 215            PSC 1050  
 POS 225            PSC 2025  
 POS 280            PSC 2080

**Psychology**

PSY 100            PSY 1005  
 PSY 101            PSY 1001  
 PSY 102            PSY 1002  
 PSY 112            PSY 2332  
 PSY 150            PSY 2223  
 PSY 200            PSY 2000  
 PSY 205            PSY 2105  
 PSY 217            PSY 2107  
 PSY 226            PSY 2221  
 PSY 227            PSY 2222  
 PSY 231            PSY 2331  
 PSY 235            PSY 2440  
 PSY 238            PSY 2441  
 PSY 240            PSY 2333  
 PSY 247            PSY 2551  
 PSY 249            PSY 2552  
 PSY 250            PSY 2220  
 PSY 251            PSY 2660

PSY 255      PSY 2661  
 PSY 258      PSY 2662  
 PSY 265      PSY 2771

**Public Security Management**

PSM 130      PSM 1030  
 PSM 132      PSM 1032  
 PSM 133      PSM 1033  
 PSM 135      PSM 1035  
 PSM 136      PSM 1036  
 PSM 137      PSM 1037  
 PSM 200      PSM 2000

**Radio & Television**

RTV 100      RTV 1000  
 RTV 101      RTV 1001  
 RTV 102      RTV 1002  
 RTV 103      RTV 1003  
 RTV 104      RTV 1004  
 RTV 107      RTV 1202  
 RTV 108      RTV 1006  
 RTV 111      RTV 1011  
 RTV 112      RTV 1010  
 RTV 113      RTV 1007  
 RTV 120      RTV 1008  
 RTV 180      RTV 1180  
 RTV 181      RTV 1181  
 RTV 182      RTV 1082  
 RTV 183      RTV 1083  
 RTV 208      RTV 1005  
 RTV 210      RTV 2003  
 RTV 211      RTV 2001  
 RTV 212      RTV 2002  
 RTV 218      RTV 2005  
 RTV 219      RTV 2016  
 RTV 260      RTV 2007  
 RTV 280      RTV 2080  
 RTV 281      RTV 2181  
 RTV 282      RTV 2182  
 RTV 283      RTV 2083  
 RTV 284      RTV 2184

**Radiologic Technology**

RTE 101      RTE 1001  
 RTE 111      RTE 1011  
 RTE 121      RTE 1021  
 RTE 122      RTE 1022  
 RTE 141      RTE 1041  
 RTE 142      RTE 1042  
 RTE 181      RTE 1081  
 RTE 182      RTE 1082  
 RTE 183      RTE 1083  
 RTE 221      RTE 2021  
 RTE 231      RTE 2031  
 RTE 281      RTE 2081  
 RTE 282      RTE 2082  
 RTE 289      RTE 2089

**Russian**

RUS 111      RUS 1011  
 RUS 112      RUS 1012  
 RUS 211      RUS 2011  
 RUS 212      RUS 2012

**Science**

SCI 105      SCI 1105  
 SCI 155      SCI 1055  
 SCI 156      SCI 1056

**Social Work**

SWK 100      SWK 1000  
 SWK 105      SWK 1050

SWK 106      SWK 1060  
 SWK 180      SWK 1080  
 SWK 181      SWK 1081  
 SWK 201      SWK 2010  
 SWK 202      SWK 2020  
 SWK 205      SWK 2050  
 SWK 207      SWK 2070  
 SWK 208      SWK 2008  
 SWK 222      SWK 2222  
 SWK 280      SWK 2080

**Sociology**

SOC 101      SOC 1001  
 SOC 102      SOC 1002  
 SOC 205      SOC 2005  
 SOC 207      SOC 2007  
 SOC 216      SOC 2016  
 SOC 218      SOC 2018  
 SOC 220      SOC 2020  
 SOC 231      SOC 2031  
 SOC 237      SOC 2037

**Spanish**

SPA 101      SPA 1001  
 SPA 102      SPA 1002  
 SPA 109      SPA 1009  
 SPA 111      SPA 1011  
 SPA 112      SPA 1012  
 SPA 114      SPA 1014  
 SPA 115      SPA 1015  
 SPA 201      SPA 2001  
 SPA 202      SPA 2002  
 SPA 211      SPA 2011  
 SPA 212      SPA 2012  
 SPA 215      SPA 2015  
 SPA 261      SPA 2061  
 SPA 262      SPA 2062  
 SPA 289      SPA 2089

**Surgical Technology**

STE 100      STE 1000  
 STE 101      STE 1001  
 STE 105      STE 1005  
 STE 110      STE 1010  
 STE 115      STE 1015  
 STE 120      STE 1020  
 STE 179      STE 2068  
 STE 181      STE 1081  
 STE 182      STE 1082  
 STE 183      STE 1083

**Sustainability Studies**

SUS 101      SUS 1001  
 SUS 201      SUS 2001

**Theatre**

THE 105      THE 1005  
 THE 108      THE 1008  
 THE 111      THE 1011  
 THE 112      THE 1012  
 THE 115      THE 1015  
 THE 116      THE 1016  
 THE 131      THE 1031  
 THE 132      THE 1032  
 THE 135      THE 1035  
 THE 140      THE 1040  
 THE 183      THE 1083  
 THE 204      THE 2004  
 THE 211      THE 2011  
 THE 212      THE 2012  
 THE 215      THE 2015

THE 216	THE 2016
THE 220	THE 2020
THE 255	THE 2055

**Translation and Interpretation**

TRI 101	TRI 1001
TRI 103	TRI 1003
TRI 201	TRI 2001
TRI 202	TRI 2002
TRI 203	TRI 2003

**Veterinary Technology**

VET 102	VET 1002
VET 103	VET 1003
VET 104	VET 1004
VET 109	VET 1009
VET 114	VET 1014
VET 117	VET 1017
VET 120	VET 1020
VET 183	VET 1083

**Welding**

WEL 100	WEL 1000
WEL 106	WEL 1006
WEL 113	WEL 1013
WEL 114	WEL 1014
WEL 115	WEL 1015
WEL 121	WEL 1021
WEL 122	WEL 1022
WEL 124	WEL 1024
WEL 125	WEL 1025
WEL 130	WEL 1030
WEL 180	WEL 1080
WEL 200	WEL 2000
WEL 205	WEL 2005
WEL 224	WEL 2024
WEL 225	WEL 2025
WEL 230	WEL 2030
WEL 231	WEL 2031
WEL 240	WEL 2040
WEL 250	WEL 2050
WEL 263	WEL 2063
WEL 264	WEL 2064
WEL 280	WEL 2080
WEL 289	WEL 2089

**Women and Gender Studies**

WST 200	WST 2000
WST 240*	WST 2200*
WST 249*	WST 2300*

**Zookeeping**

ZOO 101	ZOO 1010
ZOO 102	ZOO 1813
ZOO 103	ZOO 1040
ZOO 104	ZOO 1041
ZOO 107	ZOO 1030
ZOO 110	ZOO 1815
ZOO 111	ZOO 1811
ZOO 112	ZOO 1818
ZOO 113	ZOO 1812
ZOO 114	ZOO 1816
ZOO 115	ZOO 1710
ZOO 117	ZOO 1020
ZOO 120	ZOO 1817
ZOO 122	ZOO 1814
ZOO 125	ZOO 1810
ZOO 145	ZOO 1310
ZOO 155	ZOO 1410
ZOO 165	ZOO 1610
ZOO 180	ZOO 1080
ZOO 181	ZOO 1081
ZOO 200	ZOO 1110
ZOO 203	ZOO 2040
ZOO 206	ZOO 1210
ZOO 207	ZOO 1030
ZOO 215	ZOO 1320
ZOO 245	ZOO 1510
ZOO 255	ZOO 2410
ZOO 265	ZOO 2610
ZOO 267	ZOO 2710
ZOO 280	ZOO 2080
ZOO 281	ZOO 2081

**Courses in this catalog may not be offered every semester. The courses are displayed here because they can be awarded as transfer credit for students who took the course at another college.**

**Courses marked with an asterisk [\*] are not offered at PPSC at this time. These courses may be offered at another Colorado Community College or through CO Online.**

**Meeting Course Prerequisites: Unless otherwise noted, courses must be passed with a "C" grade or higher to meet prerequisite requirements.**

## Accounting Courses

### ACC 1001 Fundamentals of Accounting

(Previously ACC 101 Fundamentals of Accounting)

3 Credit Hours • 45 Contact Hours (Lecture)

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 1011 Introduction to Financial Accounting

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on financial accounting concepts prescribed by Generally Accepted Accounting Principles (GAAP), including financial information for external partners, the accounting cycle process, basic terminology, transaction analysis, internal control systems, and financial statement preparation and analysis.

### ACC 1012 Introduction to Managerial Accounting

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ACC 1001 or ACC 1011 or ACC 1021

Focuses on the fundamentals of managerial accounting and cost management as tools to aid internal users' decision-making processes. This course covers basic managerial accounting concepts, such as product costing and cost behavior and control. It also covers internal management decision making tools, including cost-volume-profit analysis, budgeting, cost analysis, and planning and control systems.

### ACC 1015 Payroll Accounting

(Previously ACC 115 Payroll Accounting)

3 Credit Hours • 45 Contact Hours (Lecture)

*Co-requisite:* ACC 1001 or ACC 1011 or ACC 1021

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 1021 Accounting Principles I

(Previously ACC 121 Accounting Principles I)

4 Credit Hours • 60 Contact Hours (Lecture)

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 1022 Accounting Principles II

(Previously ACC 122 Accounting Principles II)

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite:* ACC 1021

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 1025 Computerized Accounting

(Previously ACC 125 Computerized Accounting)

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces computerized accounting applications for business use, with emphasis on company setup and all aspects of the accounting cycle.

### ACC 1031 Income Tax

(Previously ACC 131 Income Tax)

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces basic concepts of federal income taxation and tax administration with emphasis on taxation of individuals and sole proprietorships.

### ACC 1032 Tax Help Colorado

(Previously ACC 132 Tax Help Colorado)

2 Credit Hours • 30 Contact Hours (Lecture)

*Note:* ACC 1001 or ACC 1011 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 1033 Tax Help Colorado Practicum

(Previously ACC 133 Tax Help Colorado Practicum)

1 Credit Hour • 30 Contact Hours (Practicum)

*Prerequisite:* ACC 1032

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 1035 Spreadsheet Applications for Accounting

(Previously ACC 135 Spreadsheet Applications for Accounting)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* (ACC 1001 or ACC 1011 or ACC 1021) and (CIS 1018 or CIS 1055)

Introduces spreadsheets as an accounting tool in the application of fundamental accounting concepts, problem-solving, and decision-making skills.

### ACC 2011 Intermediate Accounting I

(Previously ACC 211 Intermediate Accounting I)

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite:* ACC 1012 or ACC 1022

Focuses on comprehensive analysis of Generally Accepted Accounting Principles (GAAP), accounting theory, concepts, and financial reporting principles for public corporations. It focuses on the preparation and analysis of business information relevant and useful to external users of financial reports. This course also explores the theories, principles, and practices surveyed in accounting and examines reporting requirements and ethical situations.

### ACC 2012 Intermediate Accounting II

(Previously ACC 212 Intermediate Accounting II)

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite:* ACC 2011

Focuses on the theoretical and practical aspects of Generally Accepted Accounting Principles (GAAP) for public corporations. It is an in-depth study of the theories, practices, reporting, and ethics of financial accounting.

**ACC 2016 Governmental & Not-for-Profit Accounting**

(Previously ACC 216 Governmental &amp; Not-for-Profit Accounting)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ACC 1012 or ACC 1022*

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 2026 Cost Accounting**

(Previously ACC 226 Cost Accounting)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ACC 1012 or ACC 1022*

Explores cost accumulation methods and reports including job order, process, standard, and activity-based cost systems. Topics include budgeting, planning, and control of costs.

**ACC 2031 Business Taxation**

(Previously ACC 231 Business Taxation)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ACC 1031 or ACC 1032*

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 2087 Cooperative Education**

(Previously ACC 287 Cooperative Education)

3 Credit Hours • 135 Contact Hours (Cooperative Education)

*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.

**Agriculture Crops and Soils Course****AGY 2140 Introductory Soil Science: SC1**

(Previously 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 1121 American Sign Language I**

(Previously 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 1122 if planning to enroll in the Interpreter Preparation Program.

**ASL 1122 American Sign Language II**

(Previously ASL 122 American Sign Language II)

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite: ASL 1121 (Grade of B or higher) or passing the ASL 1121 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 1121 proficiency test at 80% or better prior to acceptance into the Interpreting and Transliterating Preparation program.

**ASL 1123 American Sign Language III**

(Previously ASL 123 American Sign Language III)

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite: ASL 1122 (Grade of B or higher) or passing the ASL 1122 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 1122 with more emphasis on expressive skills in signing.

**ASL 1125 Fingerspelling**

(Previously ASL 125 Fingerspelling)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ASL 1122*

Provides the student an opportunity to develop expressive and receptive fingerspelling through various class activities.

**ASL 1135 Conversational ASL**

(Previously ASL 135 Conversational ASL)

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite: ASL 1123 (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 2221.

**ASL 2215 ASL Literature**

(Previously ASL 215 ASL Literature)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ASL 2221 (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 2221 American Sign Language IV: AH4**

(Previously ASL 221 American Sign Language IV: AH4)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ASL 1123 (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 2222 American Sign Language V: AH4**

(Previously ASL 222 American Sign Language V: AH4)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ASL 2221 (Grade of B or higher)*

Focuses on increasing advanced intermediate-level proficiency in understanding and using American Sign Language (ASL).



## Anthropology Courses

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### ANT 1001 Cultural Anthropology: SS3

(Previously ANT 101 Cultural Anthropology: SS3)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

Examines the study of human cultural patterns, including communication, economic systems, social and political organizations, religion, healing systems, and cultural change.

### ANT 1003 Introduction to Archaeology: SS3

(Previously ANT 107 Introduction to Archaeology: SS3)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

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 1005 Biological Anthropology with Laboratory: SC1

(Previously ANT 111 Biological Anthropology with Laboratory: SC1)

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

*Prerequisite: College Readiness in English*

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 1101 Exploring Other Cultures I

(Previously ANT 221 Exploring Other Cultures I)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

Provides an anthropological understanding of a selected culture including 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 2101 Exploring Other Cultures II

(Previously ANT 222 Exploring Other Cultures II)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

Provides an anthropological understanding of another selected culture (continuation of ANT 1101) 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 2115 Native Peoples of North America: SS3

(Previously ANT 215 Native Peoples of North America: SS3)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

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 2125 Anthropology of Religion: SS3

(Previously ANT 225 Anthropology of Religion: SS3)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

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 2130 Sex, Gender & Culture: SS3

(Previously ANT 260 Sex, Gender & Culture)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

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.

### ANT 2218 Archaeology of the Bible

(Previously ANT 218 Archaeology of the Bible)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

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 2315 Introduction to Forensic Anthropology with Lab: SC1

(Previously ANT 212 Introduction to Forensic Anthropology with Lab: SC1)

3 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

*Prerequisite: College Readiness in English and Quantitative Literacy Math*

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 2317 Human Prehistory: SS3

(Previously ANT 207 Human Prehistory)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

Surveys current archaeological and paleoanthropological knowledge of human prehistory from the earliest hominins to the civilizations of the Old and New Worlds. Explores the interrelatedness of biological and cultural attributes in earlier hominin evolution. Examines phylogenetic controversies such as the multiregional vs. replacement models on later hominin evolution. Analyzes competing hypotheses concerning the Neolithic and Urban revolutions.

### ANT 2545 Anthropology of Energy

(Previously ANT 255 Anthropology of Energy)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

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 2550 Medical Anthropology: SS3

(Previously ANT 250 Medical Anthropology: SS3)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

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.

## Arabic Courses

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### ARA 1011 Arabic Language I

(Previously ARA 111 Arabic Language I)  
5 Credit Hours • 75 Contact Hours (Lecture)  
Begins a sequence dealing with the development of functional proficiency in listening, speaking, reading, and writing the Arabic language.

### ARA 1012 Arabic Language II

(Previously ARA 112 Arabic Language II)  
5 Credit Hours • 75 Contact Hours (Lecture)  
*Prerequisite:* ARA 1011  
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 2011 Arabic Language III

(Previously ARA 211 Arabic Language III)  
3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite:* ARA 1012  
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 2012 Arabic Language IV

(Previously ARA 212 Arabic Language IV)  
3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite:* ARA 2011  
Continues Arabic Language III in the development of increased functional proficiency at advanced intermediate level in speaking, aural comprehension, reading, writing, and cultural competency in the Arabic language. This course is conducted predominantly in Arabic.

## Architectural Engineer/Construction Management Courses

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### AEC 1110 History of Architecture

(Previously 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 1200 Print Reading Residential/Commercial

(Previously AEC 107 Print Reading Residential/Commercial)  
3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
Interpret construction prints and the related documents produced by the residential or commercial architect and used in the construction industry.

### AEC 1220 Architectural Drawing Theory

(Previously AEC 104 Architectural Drawing Theory)  
4 Credit Hours • 60 Contact Hours (Lecture)  
*Co-requisite:* CAD 1104  
Print reading, construction assemblies, terminology, isometric drawings, orthographic projections, and oblique sketching.

### AEC 1231 Residential Construction Drawing

(Previously AEC 102 Residential Construction Drawing)  
4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)  
*Prerequisite:* AEC 1200, AEC 1220, CAD 1104  
Investigates 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 1232 Commercial Construction Drawing

(Previously AEC 123 Commercial Construction Drawing)  
4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)  
*Prerequisite:* AEC 1220, AEC 1231, CAD 1104  
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 1520 Construction Material & Systems

(Previously AEC 121 Construction Material & Systems)  
3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Prerequisite:* AEC 1200, AEC 1220  
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 1600 Construction Practices & Documents

(Previously AEC 122 Construction Practices & Documents)  
2 Credit Hours • 30 Contact Hours (Lecture)  
*Prerequisite:* AEC 1200, AEC 1220, AEC 1231, CAD 1104  
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 2080 Internship

(Previously 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.

### AEC 2230 Architectural Design & Development

(Previously AEC 225 Architectural Design & Development)  
4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)  
*Prerequisite:* AEC 1231, AEC 1232, AEC 1520, AEC 2300, CAD 2220  
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 2300 Sustainable Building Systems

(Previously AEC 218 Sustainable Building Systems)  
3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite:* AEC 1200, AEC 1220, AEC 1231, AEC 1520  
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 2610 Construction Estimating**

(Previously AEC 216 Construction Estimating)  
 3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Prerequisite:* AEC 1200, AEC 1520 or CON 1057, CIS 1018  
*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 2630 Construction Scheduling**

(Previously AEC 226 Construction Scheduling)  
 3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Prerequisite:* AEC 1200, AEC 2610; AEC 1520 or CON 1057  
 Perform research using various methods of project scheduling. Emphasis will be placed on critical path method techniques and strategies.

**AEC 2650 Construction Project Management**

(Previously AEC 232 Construction Project Management)  
 3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Prerequisite:* AEC 1231, AEC 1520, AEC 2610, AEC 2630, AEC 2700, CAD 1104, CAD 2220  
 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 2660 Construction Safety & Loss Prevention**

(Previously AEC 233 Construction Safety & Loss Prevention)  
 2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)  
*Prerequisite:* AEC 1200, AEC 1220, AEC 1520 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 2700 International Building Codes**

(Previously AEC 236 International Building Codes)  
 3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite:* AEC 1231 and AEC 1520, or AEC 1200 and CON 1057  
 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 2930 Professional Workplace Skills & Presentation**

(Previously AEC 255 Professional Workplace Skills & Presentation)  
 3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Prerequisite:* AEC 1232, CAD 2220  
*Co-requisite:* AEC 2230 AEC 2650  
 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.

**Art Courses****ART 1002 Visual Concepts 2-D Design**

(Previously 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 1003 3-D Design**

(Previously ART 132 Visual Concepts 3-D Design)  
 3 Credit Hours • 90 Contact Hours (Studio)  
*Note:* ART 1003 is not computer-based  
 Introduces the fundamentals of three-dimensional design, form, and space. The course applies the elements and principles of design to three-dimensional problems.

**ART 1005 Digital Art Foundations I**

(Previously 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 1006 Digital Art Foundations II**

(Previously ART 250 Digital Art Foundations II)  
 3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)  
*Prerequisite:* ART 1005  
 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 1110 Art Appreciation: AH1**

(Previously ART 110 Art Appreciation: AH1)  
 3 Credit Hours • 45 Contact Hours (Lecture)  
 Introduces the cultural significance of the visual arts, including media, processes, techniques, traditions, and terminology.

**ART 1111 Art History Ancient to Medieval: AH1**

(Previously ART 111 Art History Ancient to Medieval: AH1)  
 3 Credit Hours • 45 Contact Hours (Lecture)  
 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 1112 Art History Renaissance to 1900: AH1**

(Previously ART 112 Art History Renaissance to 1900: AH1)  
 3 Credit Hours • 45 Contact Hours (Lecture)  
 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 1113 Art History 1900 to Present: AH1**

(Previously ART 207 Art History 1900 to Present: AH1)  
 3 Credit Hours • 45 Contact Hours (Lecture)  
 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 1115 History of Photography**

(Previously ART 113 History of Photography)  
 3 Credit Hours • 45 Contact Hours (Lecture)  
 Surveys the history of photography from its beginnings to the present. This course emphasizes artistic movements and individual photographers who have made significant contributions to the field. Includes technical, artistic, social, and commercial development of photography as a form of visual communication.

**ART 1201 Drawing I**

(Previously 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 1202 Drawing II**

(Previously ART 221 Drawing II)

3 Credit Hours • 90 Contact Hours (Studio)

*Prerequisite: ART 1201*

Explores expressive drawing techniques with an emphasis on formal composition, black and white, and color media and content or thematic development.

**ART 1203 Figure Drawing I**

(Previously ART 128 Figure Drawing I)

3 Credit Hours • 90 Contact Hours (Studio)

*Note: ART 1201 recommended, but not required*

Introduces the basic techniques of drawing the human figure.

**ART 1205 Drawing for the Graphic Novel**

(Previously ART 122 Drawing for the Graphic Novel)

3 Credit Hours • 90 Contact Hours (Studio)

*Note: ART 1201 and ART 1203 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 1301 Painting I**

(Previously ART 151 Painting I)

3 Credit Hours • 90 Contact Hours (Studio)

*Note: ART 1201 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 1302 Painting II**

(Previously ART 251 Painting II)

3 Credit Hours • 90 Contact Hours (Studio)

*Prerequisite: ART 1301*

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 1307 Watercolor I**

(Previously ART 124 Watercolor I)

3 Credit Hours • 90 Contact Hours (Studio)

*Note: ART 1201 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 1308 Watercolor II**

(Previously ART 224 Watercolor II)

3 Credit Hours • 90 Contact Hours (Studio)

*Prerequisite: ART 1307*

Continues the study of watercolor techniques, emphasizing original compositions and experimentation with materials. Color theory is included.

**ART 1401 Digital Photography I**

(Previously 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 1405 Mixed Media I: Digital Art**

(Previously 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 1604 Jewelry & Metalwork I**

(Previously ART 133 Jewelry &amp; Metalwork I)

3 Credit Hours • 90 Contact Hours (Studio)

Introduces metalsmithing techniques and design used for jewelry and small-scale sculptural objects. This course introduces fabrication and forming techniques such as soldering, forming, hollow construction, cold connections, surface treatment, finishing processes, and basic stone setting. This course includes generating and constructing functional jewelry and sculpture.

**ART 1605 Jewelry & Metalwork II**

(Previously ART 233 Jewelry &amp; Metalwork II)

3 Credit Hours • 90 Contact Hours (Studio)

*Prerequisite: ART 1604*

Introduces intermediate metalsmithing techniques and design used for jewelry and small-scale, sculptural objects. This course covers intermediate fabrication and forming techniques including synclastic and anticlastic forming, forging, advanced soldering techniques, and lost-wax casting. This course involves generating and constructing both functional jewelry and sculpture, as well as emphasizing individual research, compositional development, and critical analysis.

**ART 1703 Ceramics I**

(Previously ART 161 Ceramics I)

3 Credit Hours • 90 Contact Hours (Studio)

Introduces traditional and contemporary approaches to ceramic form and processes, with an emphasis on hand building techniques, and a basic introduction to the potter's wheel. This course includes basic surface design, glaze, and kiln firing procedures.

**ART 1704 Ceramics II Wheel Throwing**

(Previously ART 261 Ceramics II)

3 Credit Hours • 90 Contact Hours (Studio)

*Prerequisite: ART 1703*

Course covers ceramic wheel throwing and explores intermediate-level traditional and contemporary approaches to ceramic form and processes. This course emphasizes wheel throwing techniques and forms. It covers additional development of surface design, glazing, glaze formulation, and kiln firing procedures.

**ART 1805 Stained Glass I**

(Previously 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 1806 Stained Glass II**

(Previously ART 116 Stained Glass II)

3 Credit Hours • 90 Contact Hours (Studio)

*Prerequisite: ART 1805*

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 2049 Mixed Media II: Digital Art**

(Previously ART 249 Mixed Media II: Digital Art)

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

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 2080 Internship**

(Previously 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 2089 Capstone: Studio Art**

(Previously 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.

**ART 2201 Drawing III**

(Previously ART 222 Drawing III)

3 Credit Hours • 90 Contact Hours (Studio)

*Prerequisite: ART 1202*

Offers a continued study of expressive drawing techniques and development of individual style, with an emphasis on composition and technique variation.

**ART 2202 Drawing IV**

(Previously ART 223 Drawing IV)

3 Credit Hours • 90 Contact Hours (Studio)

*Prerequisite: ART 2201*

Explores advanced drawing problems with an emphasis on conceptual development and portfolio and/or exhibition quality presentation.

**ART 2203 Advanced Figure Drawing**

(Previously ART 228 Advanced Figure Drawing)

3 Credit Hours • 90 Contact Hours (Studio)

*Prerequisite: ART 1203*

Provides continuing study of the various methods of drawing the human figure, with emphasis on the description of form and individual style.

**ART 2301 Painting III**

(Previously ART 252 Painting III)

3 Credit Hours • 90 Contact Hours (Studio)

*Prerequisite: ART 1302*

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 2302 Painting IV**

(Previously ART 253 Painting IV)

3 Credit Hours • 90 Contact Hours (Studio)

*Prerequisite: ART 2301*

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 2307 Watercolor III**

(Previously ART 225 Watercolor III)

3 Credit Hours • 90 Contact Hours (Studio)

*Prerequisite: ART 1308*

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 2308 Watercolor IV**

(Previously ART 226 Watercolor IV)

3 Credit Hours • 90 Contact Hours (Studio)

*Prerequisite: ART 2307*

Concentrates on the advanced study of techniques, individual style or expression, and consistency of compositional problem solving in watercolor.

**ART 2405 Portrait Photography**

(Previously ART 144 Portrait Photography)

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

*Prerequisite: ART 1401*

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 2407 Landscape Photography**

(Previously ART 142 Landscape Photography)

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

*Prerequisite: ART 1401*

Focuses on traditional and contemporary approaches to landscape photography. This course examines historic, technical, and aesthetic aspects of landscape photography.

**ART 2603 Jewelry & Metalwork III**

(Previously ART 234 Jewelry & Metalwork III)

3 Credit Hours • 90 Contact Hours (Studio)

*Prerequisite: ART 1604*

Continues intermediate metalsmithing techniques and design used for jewelry and small-scale sculptural objects. This course covers intermediate fabrication and forming techniques, such as chasing and repoussé, chain making, and mechanisms. This course includes generating and constructing functional jewelry and sculpture, and emphasizes ideation practices including individual research, compositional development, and critical analysis.

**ART 2604 Jewelry & Metalwork IV**

(Previously ART 235 Jewelry & Metalwork IV)

3 Credit Hours • 90 Contact Hours (Studio)

*Prerequisite: ART 1605 or ART 2603*

Continues the development of metalsmithing techniques and design used for jewelry and small-scale sculptural objects. Topics include advanced fabrication and forming techniques, such as advanced stone setting, die forming, and alternative casting processes. This course includes the generation and construction of functional jewelry and sculpture while emphasizing ideation practices that include individual research, compositional development, and critical analysis. This course also focuses on creating a cohesive body of work for a portfolio.

**ART 2703 Ceramics III Molding and Slip Casting**

(Previously ART 262 Ceramics III)

3 Credit Hours • 90 Contact Hours (Studio)

*Prerequisite: ART 1703*

Covers ceramic mold making and slip casting techniques and explores intermediate-level traditional and contemporary approaches to ceramic form and additional development of surface design, glazing, glaze formulations, and kiln firing procedures as it applies to molded and cast forms.

**ART 2704 Ceramics IV**

(Previously ART 263 Ceramics IV)  
3 Credit Hours • 90 Contact Hours (Studio)  
*Prerequisite:* ART 1704 or ART 2703

Explores advanced level ceramic form and surface design. This course includes advanced use of clay bodies, unique glazes, engobes, surface textures, and firing methods. Emphasis is placed on individual style and developing strategies to translate an idea into sculptural and functional forms.

**ART 2805 Stained Glass III**

(Previously ART 215 Stained Glass III)  
3 Credit Hours • 90 Contact Hours (Studio)  
*Prerequisite:* ART 1806

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 2806 Stained Glass IV**

(Previously ART 216 Stained Glass IV)  
3 Credit Hours • 90 Contact Hours (Studio)  
*Prerequisite:* ART 2805

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 2901 Business of Visual Art**

(Previously 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 2902 Marketing for Visual Arts**

(Previously 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.

**Astronomy Courses****AST 1110 Planetary Astronomy with Lab: SC1**

(Previously AST 101 Planetary Astronomy with Lab: SC1)  
4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)  
*Prerequisite:* College Readiness in English and College Readiness in Quantitative Literacy Math

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 1120 Stellar Astronomy with Lab: SC1**

(Previously AST 102 Stellar Astronomy with Lab: SC1)  
4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)  
*Prerequisite:* College Readiness in English and College Readiness in Quantitative Literacy Math

Emphasizes the structure and life cycle of the stars, the sun, galaxies, and the universe. This course also includes cosmology and relativity, and incorporates laboratory experience.

**AST 1140 Astronomy of Ancient Cultures: SC2**

(Previously AST 155 Astronomy of Ancient Cultures: SC2)  
3 Credit Hour • 45 Contact Hours (Lecture)  
*Prerequisite:* College Readiness in English and College Readiness in Quantitative Literacy Math

Introduces the study of archaeoastronomy 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.

**Automotive Collision Technology Courses****ACT 1001 Introduction to Automotive Collision Technology**

(Previously 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, and proper handling and disposal of hazardous materials.

**ACT 1011 Metal Welding & Cutting I**

(Previously ACT 111 Metal Welding & Cutting I)  
3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Co-requisite:* ACT 1001

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 1021 Non-Structural Repair Preparation**

(Previously ACT 121 Non-Structural Repair Preparation)  
3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Co-requisite:* ACT 1001

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 1022 Panel Repair & Replacements**

(Previously ACT 122 Panel Repair & Replacements)  
3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Co-requisite:* ACT 1001

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 1023 Metal Finishing & Body Filling**

(Previously ACT 123 Metal Finishing & Body Filling)  
3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Co-requisite:* ACT 1001

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 1024 Replace Weld-on Exterior Panel**

(Previously ACT 124 Replace Weld-on Exterior Panel)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Co-requisite: ACT 1001*

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 1031 Structural Damage Diagnosis**

(Previously ACT 131 Structural Damage Diagnosis)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Co-requisite: ACT 1001*

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 1032 Structural Damage Repair**

(Previously ACT 132 Structural Damage Repair)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Co-requisite: ACT 1001*

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 1042 Surface Preparation I**

(Previously ACT 142 Surface Preparation I)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)  
*Co-requisite: ACT 1001*

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 1043 Spray Equipment Operation**

(Previously ACT 143 Spray Equipment Operation)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)  
*Co-requisite: ACT 1001*

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 1044 Refinishing I**

(Previously ACT 144 Refinishing I)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)  
*Co-requisite: ACT 1001*

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 1051 Plastics & Adhesives I**

(Previously ACT 151 Plastics &amp; Adhesives I)

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)  
*Co-requisite: ACT 1001*

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 1060 Custom Painting**

(Previously ACT 160 Custom Painting)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Co-requisite: ACT 1001*

This course provides instruction in basic custom paint application such as pearl paints, candy colors, metal flakes, etc.

**ACT 1064 Hobbyist Paint & Body**

(Previously ACT 164 Hobbyist's Paint &amp; Body)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)  
*Co-requisite: ACT 1001**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 1065 Automotive Body Customizing I**

(Previously ACT 165 Automotive Body Customizing I)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Co-requisite: ACT 1001*

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 1066 Automotive Body Customizing II**

(Previously ACT 166 Automotive Body Customizing II)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Co-requisite: ACT 1001*

Covers modification of vehicle and vehicle parts such as chopping, measuring, realigning, fabricating, recessing, shaping etc.

**ACT 1067 Automotive Body Customizing III**

(Previously ACT 167 Automotive Body Customizing III)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Co-requisite: ACT 1001*

Covers the completion of modifications that were started in Automotive Body Customizing II along with the addition of body molding kits.

**ACT 1070 Automotive Collision Technology Lab Experiences I**

(Previously ACT 170 Automotive Collision Technology Lab Experiences I)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)  
*Co-requisite: ACT 1001*

Designed to prepare the student to perform basic tasks for a specialized area in a controlled instructional lab.

**ACT 1071 Automotive Collision Technology Lab Experiences II**

(Previously ACT 171 Automotive Collision Technology Lab Experiences II)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)  
*Co-requisite: ACT 1001*

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 1072 Automotive Collision Technology Lab Experiences III**

(Previously ACT 172 Automotive Collision Technology Lab Experiences III)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)  
*Co-requisite: ACT 1001*

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 1080 Automotive Collision Repair Internship Level I**

(Previously ACT 180 Automotive Collision Repair Internship Level I)

2 Credit Hours • 90 Contact Hours (Internship)

*Co-requisite: ACT 1001*

*Note: 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 1081 Automotive Collision Repair Level II Internship**

(Previously ACT 181 Automotive Collision Repair Level II Internship)

2 Credit Hours • 90 Contact Hours (Internship)

*Co-requisite: ACT 1001*

*Note: Completion of all coursework 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 2005 Estimating & Shop Management**

(Previously ACT 205 Estimating & Shop Management)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Co-requisite: ACT 1001*

Initiates written estimates on damaged vehicles. Students learn shop management including work orders, ordering supplies, operating costs, timecards, shop liabilities, employee's safety and insurance management issues.

**ACT 2007 Customer Relations & Sales**

(Previously ACT 207 Customer Relations & Sales)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Co-requisite: ACT 1001*

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 2011 Metal Welding & Cutting II**

(Previously ACT 211 Metal Welding & Cutting II)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Co-requisite: ACT 1001*

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 2015 Paintless Dent Repair**

(Previously ACT 215 Paintless Dent Repair)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Co-requisite: ACT 1001*

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 2026 Production**

(Previously ACT 226 Production)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Co-requisite: ACT 1001*

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 2032 Automotive Glass Repair**

(Previously ACT 232 Automotive Glass Repair)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Co-requisite: ACT 1001*

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 2043 Refinishing II**

(Previously ACT 243 Refinishing II)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Co-requisite: ACT 1001*

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 2044 Final Detail**

(Previously ACT 244 Final Detail)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Co-requisite: ACT 1001*

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 2051 Plastics & Adhesives II**

(Previously ACT 251 Plastics & Adhesives II)

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

*Co-requisite: ACT 1001*

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 1002 Introduction to the Automotive Shop**

(Previously ASE 102 Introduction to the Automotive Shop)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prepares the incoming automotive student to work in the shop safely and gain familiarity with the shop and common equipment.

**ASE 1010 Automotive Brake Service I**

(Previously ASE 110 Automotive Brake Service I)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Co-requisite: ASE 1002*

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 1011 Automotive Brake Service II**

(Previously ASE 111 Automotive Brake Service II)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Co-requisite: ASE 1010*

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 1020 Basic Automotive Electricity**

(Previously ASE 120 Basic Automotive Electricity)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Co-requisite: ASE 1002*

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 1023 Starting & Charging System**

(Previously ASE 123 Starting & Charging System)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Co-requisite: ASE 1020*

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 1030 General Engine Diagnosis**

(Previously ASE 130 General Engine Diagnosis)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Prerequisite: ASE 1023*

Covers how to perform basic engine diagnosis to determine condition of engine including engine support systems. This course meets MLR/AST/MAST requirements.

### **ASE 1032 Ignition System Diagnosis & Repair**

(Previously ASE 132 Ignition System Diagnosis & Repair)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Co-requisite: ASE 1030*

Focuses on lecture and related laboratory experiences in the diagnosis, service, adjustments, and repair of various automotive ignition systems.

### **ASE 1034 Automotive Fuel & Emissions Systems I**

(Previously ASE 134 Automotive Fuel & Emissions Systems I)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Co-requisite: ASE 1030, ASE 1032*

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 1040 Suspension & Steering I**

(Previously ASE 140 Suspension & Steering I)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Co-requisite: ASE 1002*

Focuses on diagnosis and service of suspension and steering systems and components. This course meets MLR/AST/MAST requirements.

### **ASE 1041 Suspension & Steering II**

(Previously ASE 141 Suspension & Steering II)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Co-requisite: ASE 1040*

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 1050 Manual Drive Train & Axle Maintenance**

(Previously ASE 150 Manual Drive Train & Axle Maintenance)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Co-requisite: ASE 1002*

Covers the operating principles and repair procedures relating to axle-shafts, propeller shafts, and universal joints. This course meets MLR/AST/MAST requirements.

### **ASE 1051 Automotive Manual Transmission/Transaxles & Clutches I**

(Previously ASE 151 Automotive Manual Transmission/Transaxles & Clutches I)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Co-requisite: ASE 1050*

Focuses on the diagnosis and repair of automotive manual transmissions, transaxles, clutches, and related components. This course meets AST/MAST requirements.

### **ASE 1052 Manual Transmission, Transaxles & Clutches II**

(Previously ASE 152 Manual Transmission, Transaxles & Clutches II)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Co-requisite: ASE 1051*

Focuses on lecture and related laboratory experiences in the diagnosis and repair of automotive differentials, four-wheel and all-wheel drive units.

### **ASE 1060 Automotive Engine Repair**

(Previously ASE 160 Automotive Engine Repair)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Co-requisite: ASE 1002*

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 1061 Automotive Engine Repair & Rebuild**

(Previously ASE 161 Automotive Engine Repair & Rebuild)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Co-requisite: ASE 1060*

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 2001 Automotive Parts Management I**

(Previously ASE 201 Automotive Parts Management)

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: ASE 1002, ASE 1020, ASE 1023, and consultation with advisor*

Familiarizes the student with the job requirements and responsibilities of an automotive parts specialist. Included is instruction in the proper completion of parts invoices, repair orders, sales receipts and tickets, and other forms that are utilized in a parts business.

### **ASE 2010 Automotive Power & ABS Brake Systems**

(Previously ASE 210 Automotive Power & ABS Brake Systems)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Co-requisite: ASE 1011*

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 2021 Automotive & Diesel Body Electrical**

(Previously ASE 221 Automotive & Diesel Body Electrical)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Prerequisite: ASE 1020*

Provides a comprehensive study of the theory, operation, diagnosis, and repair of vehicle accessories.

### **ASE 2031 Automotive Computers & Ignition Systems**

(Previously ASE 231 Automotive Computers & Ignition Systems)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Prerequisite: ASE 1020, ASE 1034*

Focuses on lecture and laboratory experiences in the inspection and testing of typical computerized engine control systems.

### **ASE 2033 Auto Fuel Injection & Emissions Systems II**

(Previously ASE 233 Auto Fuel Injection & Emissions Systems II)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Prerequisite: ASE 1020, ASE 1034, ASE 2031*

Focuses on lecture and related laboratory experiences in the diagnosis and repair of electronic fuel injection systems and modern exhaust systems.

**ASE 2035 Drivability & Diagnosis**

(Previously ASE 235 Drivability &amp; Diagnosis)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Prerequisite: ASE 2033*

Focuses on diagnostic techniques and the use of diagnostic scan tools, oscilloscopes, lab scopes, multi-meters, and gas analyzers.

**ASE 2040 Suspension & Steering III**

(Previously ASE 240 Suspension &amp; Steering III)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Co-requisite: ASE 1041*

Covers operation of steering and power steering systems. It will also include different alignment types and procedures.

**ASE 2050 Automatic Transmission/Transaxle Service**

(Previously ASE 250 Automatic Transmission/Transaxle Service)

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

*Co-requisite: ASE 1002*

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 2051 Automotive Transmission & Transaxle Repair**

(Previously ASE 251 Automotive Transmission &amp; Transaxle Repair)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: ASE 2050*

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 2065 Heating & Air Conditioning Systems**

(Previously ASE 265 Heating &amp; Air Conditioning Systems)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Prerequisite: ASE 1023*

Emphasizes lecture and related laboratory experiences in the diagnosis and service of vehicle heating and air conditioning systems and their components.

**ASE 2182 Internship: General (Summer)**

(Previously 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.

**Behavior Health Courses****BEH 1001 Mental Health Crisis and Intervention: Preparedness and Empathy**

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on the skills necessary to recognize and assess warning signs of mental health distress and crisis intervention through evidence-based practices. This course also emphasizes trauma-informed care, non-violent crisis intervention, and interventions for diverse populations. This course will prioritize preparation for becoming a compassionate and skilled crisis intervention professional.

**BEH 1020 Cultural Competence in Behavioral Health**

1.5 Credit Hours • 22.5 Contact Hours (Lecture)

Provides an introduction to culturally responsive and inclusive care for diverse populations. This course explores the intersection of culture, mental health, and social disparities, emphasizing the importance of cultural competence in promoting positive outcomes and reducing disparities in behavioral healthcare.

**BEH 1030 Behavioral Health Case Management and Clinical Documentation**

1 Credit Hour • 15 Contact Hours (Lecture)

Focuses on behavioral health case management through documentation of services provided, including interventions, goals, progress, needs assessments, care coordination, client-centered empowerment, and reflective practice. This course does not focus on specific addiction related criteria or regulations, nor does it meet Certified Addiction Technician certification requirements.

**BEH 1040 Child, Adult, and Family Advocacy**

1.5 Credit Hours • 22.5 Contact Hours (Lecture)

Focuses on the critical role of advocating for the mental health and well-being of children, families, and adults within the behavioral health field. This course explores the intersection of advocacy, behavioral health, and social justice, emphasizing the importance of effective advocacy strategies in promoting access to mental health services, reducing stigma, and addressing systemic barriers.

**BEH 1050 Peer Support Specialist Training**

4 Credit Hours • 60 Contact Hours (Lecture)

Provides the International Certification &amp; Reciprocity Consortium (IC&amp;RC) training, which includes advocacy, mentoring and education, recovery and wellness support, ethics, trauma informed care, cultural competency, whole health, substance use, mental health, and family support to those with lived experience of addiction and/or mental health diagnosis and recovery. This training is required to become a Certified Peer and Family Support Specialist (CPFS) in Colorado through successful completion of the IC&amp;RC Peer Recovery (PR) examination.

**BEH 1060 Registered Behavioral Technician Training**

4 Credit Hours • 60 Contact Hours (Lecture)

Provides the knowledge and skills needed to become a competent and effective Registered Behavior Technician (RBT). This course is structured to meet the rigorous standards set forth by the Behavior Analyst Certification Board (BACB) and prepare technicians for the RBT certification exam and for a career in the field of Applied Behavior Analysis (ABA).

**BEH 2001 Mental Health Crisis & Intervention: Advocacy, Intervention, & Resilience**

3 Credit Hours • 45 Contact Hours (Lecture)

Covers a wide range of skills in advocacy, intervention, and resilience within the context of mental health crises. The course emphasizes ethical decision-making, trauma-informed approaches, cultural competence, and innovative intervention strategies through a blend of theory, practical examples, and interactive learning.

**BEH 2030 Applied Therapeutic Communication Skills**

3 Credit Hours • 45 Contact Hours (Lecture)

Provides effective communication techniques in behavioral health settings to forge meaningful connections with clients and provide support and guidance on their journey towards improved mental health and well-being. The course focuses on establishing rapport, demonstrating empathy, and facilitation of meaningful dialogues with clients across diverse populations, settings, and presenting concerns through experiential learning and self-reflection.

**BEH 3001 Treatment of Mental Health Disorders within Existing Systems**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: BEH 2030*

Examines the treatment of mental health disorders within existing healthcare systems. This course explores the role of Medicaid, Medicare, and other systemic frameworks in providing mental health services and discusses the challenges and opportunities for integrating mental health treatment into primary care settings. This course analyzes evidence-based practices and interventions

for addressing mental health needs within the constraints of current systems.

### **BEH 3030 Behavioral Health Program and Case Management**

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite: BEH 1030*

Examines behavioral health program development and case management practices. It explores the principles and strategies for designing, implementing, and evaluating effective behavioral health programs. The course focuses on the practical application of case management skills, including assessment treatment planning, resource coordination, and advocacy. The course reviews ethical considerations, cultural competency requirements, and multidisciplinary, whole person approaches to behavioral healthcare treatment.

### **BEH 3088 Behavior Health Practicum**

3 Credit Hours • 90 Contact Hours (Practicum)

*Prerequisite: BEH 3001, CSL 2050, CSL 2068, PSY 2221*

To be determined by the individual instructor. A Course Description will be developed for each course and documented within the course syllabus. Refer to the SFCC Style Guide for Course Description, Required Course Learning Outcome, and Topical Outline guidelines.

### **BEH 4020 Understanding Trauma and PTSD**

3 Credit Hours • 45 Contact Hours (Lecture)

Explores trauma and Post-Traumatic Stress Disorder (PTSD), examining their psychological, physiological, and social impact. Through interdisciplinary perspectives, the course analyzes trauma's etiology, manifestations, and therapeutic interventions. The course focuses on trauma-informed care, resilience, cultural considerations, and the neurobiology of PTSD. It emphasizes evidence-based practices, ethical considerations, and the development of a comprehensive understanding of, and associated effective strategies for responding to trauma and PTSD.

### **BEH 4030 Whole Person Care**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: BEH 3001*

Explores a comprehensive approach to behavioral health prevention, focusing on the whole person within the context of various systems and examines the role of individual, family, community, and societal factors in promoting mental well-being and preventing behavioral health disorders. This course presents opportunities to analyze evidence-based prevention strategies and interventions across the lifespan and emphasizes the importance of cultural competence, health equity, and collaborative partnerships in implementing effective prevention programs.

### **BEH 4040 Leadership and Management in Behavioral Healthcare**

3 Credit Hours • 45 Contact Hours (Lecture)

Explores principles and practices of leadership and management within behavioral healthcare systems. The course focuses on the skills necessary for effective leadership of diverse teams in behavioral healthcare to promote innovation, problem solving, and advancement of quality and accessibility in behavioral healthcare.

### **BEH 4080 Mental Health Internship**

5 Credit Hours • 225 Contact Hours (Internship)

*Prerequisite: BEH 3030, BEH 3088, BEH 4020*

To be determined by the individual instructor. A Course Description will be developed for each course and documented within the course syllabus. Refer to the SFCC Style Guide for Course Description, Required Course Learning Outcome, and Topical Outline guidelines.

### **BEH 4081 Addiction Recovery Internship**

5 Credit Hours • 225 Contact Hours (Internship)

*Prerequisite: BEH 3088, BEH 4020*

To be determined by the individual instructor. A Course Description will be developed for each course and documented within the course syllabus. Refer to the SFCC Style Guide for Course Description, Required Course Learning Outcome, and Topical Outline guidelines.

## **Biology Courses**

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### **BIO 1003 Principles of Animal Biology: SC2**

(Previously BIO 103 Principles of Animal Biology: SC2)

3 Credit Hours • 45 Contact Hours (Lecture)

*Recommend College Readiness in English and College Readiness in Quantitative Literacy Math*

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 1004 Biology: A Human Approach: SC1**

(Previously BIO 104 Biology: A Human Approach: SC1)

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

*Recommend College Readiness in English and College Readiness in Quantitative Literacy Math*

*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 1005 Science of Biology with Lab: SC1**

(Previously BIO 105 Science of Biology with Lab: SC1)

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

*Recommend College Readiness in English and College Readiness in Quantitative Literacy Math*

*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 1006 Basic Anatomy & Physiology**

(Previously BIO 106 Basic Anatomy & Physiology)

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

*Recommend College Readiness in English and College Readiness in Quantitative Literacy Math*

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 1010 Biology Foundations: Prep for Anatomy & Physiology and Microbiology**

2 Credit Hours • 30 Contact Hours (Lecture)

Introduces foundational concepts for Human Anatomy and Physiology as well as Microbiology including macromolecules and cell structures, functions, and processes. This is a non-laboratory course.

**BIO 1015 Human Genetics**

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on a study of the inheritance of human traits. It is a non-mathematical study for the non-science major. Includes Mendelian, non-Mendelian, sex-linked, blood type traits, inherited diseases, and ethics.

**BIO 1016 Introduction to Human Disease: SC2**

3 Credit Hours • 45 Contact Hours (Lecture)

Focused analysis of the causes and mechanics of human illness and death will be presented for each of the major human body systems. Selected diseases will be studied in greater detail including etiology, pathogenesis, epidemiology, sociology, and therapy.

**BIO 1024 The Biology of Forensics**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

Will explore the scientific methods used for determining time of death, cause, and manner of death, and for identifying identity of victims and suspects. It will explore topics such as osteology, blood spatter, DNA analysis, tool markings, rate and condition of tissue decay, and entomology for solving of potential crimes. It will also include preservation and collection of physical evidence.

**BIO 1048 Basic Ecology**

(Previously 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 1111 GenBio I: Molecular & Cellular Biology w/Lab: SC1**

(Previously BIO 111 General College Biology I with Lab: SC1)

5 Credit Hours • 90 Contact Hours (60 Lecture, 30 Lab)

*Prerequisite: College Readiness in English and College Readiness in Quantitative Literacy Math*

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 1112 GenBio II: Ecology & Organismic Biology w/Lab: SC1**

(Previously BIO 112 General College Biology II with Lab: SC1)

5 Credit Hours • 90 Contact Hours (60 Lecture, 30 Lab)

*Prerequisite: College Readiness in English and College Readiness in Quantitative Literacy Math, BIO 1111*

Examines the fundamental principles of ecology, evolution, classification, structure, and function in plants and animals. This course includes laboratory experience.

**BIO 2101 Human Anatomy & Physiology I with Lab: SC1**

(Previously BIO 201 Human Anatomy &amp; Physiology I with Lab: SC1)

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

*Prerequisite: BIO 1010 or BIO 1111*

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 2102 Human Anatomy & Physiology II with Lab: SC1**

(Previously BIO 202 Human Anatomy &amp; Physiology II with Lab: SC1)

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

*Prerequisite: BIO 2101*

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 2103 Advanced Human Anatomy**

(Previously BIO 203 Advanced Human Anatomy)

2 Credit Hours • 60 Contact Hours (Lab)

*Prerequisite: BIO 2101*

*Co-requisite: BIO 2102*

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 2104 Microbiology with Lab: SC1**

(Previously BIO 204 Microbiology with Lab: SC1)

4 Credit Hours • 90 Contact Hours (45 Lecture, 45 Lab)

*Prerequisite: BIO 1010 or BIO 1111*

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 2116 Human Pathophysiology**

(Previously BIO 216 Human Pathophysiology)

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite: BIO 2101*

*Co-requisite: BIO 2102*

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 2121 Botany with Lab: SC1**

(Previously BIO 221 Botany with Lab: SC1)

5 Credit Hours • 90 Contact Hours (60 Lecture, 30 Lab)

*Prerequisite: BIO 1111 or BIO 1112 or NRE 1100*

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 2124 Genetics: SC1**

(Previously BIO 224 Genetics: SC1)

4 Credit Hour • 75 Contact Hours (45 Lecture, 30 Lab)

*Prerequisite: BIO 1111*

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 1015 Introduction to Business**

(Previously BUS 115 Introduction to Business)

3 Credit Hours • 45 Contact Hours (Lecture)

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 1081 Internship**

(Previously 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 2003 Introduction to International Business**

(Previously BUS 203 Introduction to International Business)

3 Credit Hours • 45 Contact Hours (Lecture)

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 2016 Legal Environment of Business**

(Previously 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 2017 Business Communications & Report Writing**

(Previously BUS 217 Business Communications &amp; Report Writing)

3 Credit Hours • 45 Contact Hours (Lecture)

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 2026 Business Statistics**

(Previously BUS 226 Business Statistics)

3 Credit Hours • 45 Contact Hours (Lecture)

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 2087 Cooperative Education**

(Previously 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 workstations 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 3020 Business Law and Ethics**

3 Credit Hours • 45 Contact Hours (Lecture)

*Note: Must be accepted into the BAS Business Administration Program*

Emphasizes the social, legal, political, and ethical responsibilities of businesses to external and internal stakeholders. This course explores various topics including corporate social responsibility, state and federal laws, contracts, intellectual property regulations,

employment law, product liability, safety practices, and environmental regulations.

**BUS 3040 Business Ethics and Sustainability**

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: BUS 3020

*Note: Must be accepted into the BAS Business Administration Program*

Explores sustainability theories, business ethics, and societal responsibilities that go beyond their economic responsibilities. This course emphasizes the complex business environments and social expectations of corporations and emerging governance structures, management systems, and innovative business models.

**BUS 3060 Management Technology and Information Systems Processes**

3 Credit Hours • 45 Contact Hours (Lecture)

*Note: Must be accepted into the BAS Business Administration Program*

Explores information systems in decision-making and meeting operational and strategic goals. This course explores the use of hardware and software in business, as well as database management systems (DBMS) and network information system fundamentals. This course will apply advanced theories of information systems and customer relationship management.

**BUS 4010 Applied Business Research and Data Analytics**

3 Credit Hours • 45 Contact Hours (Lecture)

*Note: Must be accepted into the BAS Business Administration Program*

Presents fundamental techniques to create business research design models and business data analytics for decision-making. This course integrates the principles of research methodologies, data collection, and applied statistical analytic techniques for making practical data-based business decisions.

**BUS 4081 Internship**

3 Credit Hours • 135 Contact Hours (Internship)

*Prerequisite: Acceptance into the Business Administration BAS Program*

To be determined by the individual instructor. A Course Description will be developed for each course and documented within the course syllabus. Refer to the SFCC Style Guide for Course Description, Required Course Learning Outcome, and Topical Outline guidelines.

**BUS 4089 Capstone**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: Acceptance into the Business Administration BAS Program*

To be determined by the individual instructor. A Course Description will be developed for each course and documented within the course syllabus. Refer to the SFCC Style Guide for Course Description, Required Course Learning Outcome, and Topical Outline guidelines.

## Business and Technology Education Courses

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**BTE 1000 Computer Keyboarding**

(Previously 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 1002 Keyboarding Applications I**

(Previously BTE 102 Keyboarding Applications I)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Note: 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 1008 Ten-Key by Touch**

(Previously 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 1011 Keyboarding Speedbuilding I**

(Previously BTE 111 Keyboarding Speedbuilding I)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Note: 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 1066 Business Editing Skills**

(Previously 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.

**Carpentry Courses****CAR 1001 Basic Safety**

(Previously CAR 101 Basic Safety)

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

*Co-requisite: CAR 1002, CAR 1005*

An overview of safety concerns and procedures in the construction field.

**CAR 1002 Hand & Power Tools**

(Previously CAR 102 Hand &amp; Power Tools)

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

*Co-requisite: CAR 1001, CAR 1005*

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 1003 Carpentry Basics**

(Previously CAR 103 Carpentry Basics)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Co-requisite: CAR 1001, CAR 1002, CAR 1005*

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 1004 Floor & Wall Construction**

(Previously CAR 104 Floor &amp; Wall Construction)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Prerequisite: CAR 1003*

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 1005 Job Site Layout & Blueprint Reading**

(Previously CAR 105 Job Site Layout &amp; Blueprint Reading)

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

*Co-requisite: CAR 1001, CAR 1002*

Introduces blue-print reading and how they apply to the construction site. Includes in-depth introduction to site layout (materials and methods).

**CAR 1015 Form & Foundation Systems**

(Previously CAR 115 Form &amp; Foundation Systems)

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: CAR 1003**Co-requisite: CAR 1004, CAR 1023, CAR 1035*

Covers materials and methods for concrete forms and foundations. Includes various reinforcement methods such as re-bar and welded-wire fabric.

**CAR 1023 Roof Framing**

(Previously CAR 123 Roof Framing)

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: CAR 1003**Co-requisite: CAR 1004, CAR 1015, CAR 1035*

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 1025 Roofing Materials & Methods**

(Previously CAR 125 Roofing Materials &amp; Methods)

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: CAR 1004**Co-requisite: CAR 1023*

Covers application techniques and estimation of asphalt and wood roofing products and accessories including gutters and flashing.

**CAR 1030 Windows & Exterior Doors**

(Previously CAR 130 Windows &amp; Exterior Doors)

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

*Co-requisite: CAR 1004*

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 1034 Exterior Finishes & Trim**

(Previously CAR 134 Exterior Finishes &amp; Trim)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Prerequisite: CAR 1003, CAR 1004*

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 1035 Thermal & Moisture Methods & Materials**

(Previously CAR 135 Thermal &amp; Moisture Methods &amp; Materials)

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: CAR 1003**Co-requisite: CAR 1004, CAR 1015, CAR 1023*

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 1040 Stair Construction/Layout**

(Previously CAR 140 Stair Construction/Layout)

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

*Co-requisite: CAR 1004*

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 1046 Interior Finishes - Drywall Construction**

(Previously CAR 146 Interior Finishes - Drywall Construction)

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: CAR 1003, CAR 1004*

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 1050 Interior Trim – General**

(Previously CAR 150 Interior Trim – General)

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* CAR 1003, CAR 1004

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 1060 Floor Finishes**

(Previously CAR 160 Floor Finishes)

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* CAR 1003, CAR 1004

Covers installation and finishing of hardwood floors, laminate/engineered floors, and tile. Includes discussion on advantages and disadvantages of various choices available.

**CAR 2080 Internship**

(Previously 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 1005 Chemistry in Context with Lab: SC1**

(Previously CHE 105 Chemistry in Context with Lab: SC1)

5 Credit Hours • 90 Contact Hours (60 Lecture, 30 Lab)

*Prerequisite:* College Readiness in English and College Readiness in Quantitative Literacy Math

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 1009 General, Organic, and Biochemistry**

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite:* College Readiness in English and College Readiness in Quantitative Literacy Math

This course surveys the foundations of inorganic, organic, and biochemistry, including the study of measurement, atomic theory, chemical bonding, inorganic and organic nomenclature, reaction stoichiometry, solutions, acid and base chemistry, condensed states of matter, structure-property relationships of different functional groups, and structures and functions of the four main biomolecule classes. This course is designed for non-science majors and students entering selected occupational and health related career areas. This course does not have a lab component.

**CHE 1011 Introduction to Chemistry I with Lab: SC1**

(Previously CHE 101 Introduction to Chemistry I with Lab: SC1)

5 Credit Hours • 90 Contact Hours (60 Lecture, 30 Lab)

*Prerequisite:* College Readiness in English and College Readiness in Quantitative Literacy Math

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 1012 Introduction to Chemistry II with Lab: SC1**

(Previously CHE 102 Introduction to Chemistry II with Lab: SC1)

5 Credit Hours • 90 Contact Hours (60 Lecture, 30 Lab)

*Prerequisite:* College Readiness in English, CHE 1011

Focuses on introductory organic and biochemistry (sequel to Introduction to Chemistry I). This course includes the study of hybridization of atomic orbitals 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 1111 General College Chemistry I with Lab: SC1**

(Previously CHE 111 General College Chemistry I with Lab: SC1)

5 Credit Hours • 105 Contact Hours (60 Lecture, 45 Lab)

*Prerequisite:* College Readiness in English, MAT 1340 or higher and (CHE 1011 or one year of high school chemistry)

Focuses on basic chemistry and measurement, matter, chemical formulas, reactions, equations, stoichiometry, and thermochemistry. 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 1112 General College Chemistry II with Lab: SC1**

(Previously CHE 112 General College Chemistry II with Lab: SC1)

5 Credit Hours • 105 Contact Hours (60 Lecture, 45 Lab)

*Prerequisite:* CHE 1111, MAT 1340

Presents concepts in the areas of solution properties, chemical kinetics, chemical equilibrium, acid-base and ionic equilibrium, thermodynamics, intermolecular forces, and electrochemistry. This course emphasizes problem solving skills and descriptive contents for these topics. Laboratory experiments demonstrate qualitative and quantitative analytical techniques.

**CHE 2111 Organic Chemistry I with Lab**

(Previously CHE 211 Organic Chemistry I with Lab)

5 Credit Hours • 105 Contact Hours (60 Lecture, 45 Lab)

*Prerequisite:* CHE 1112

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 2112 Organic Chemistry II with Lab**

(Previously CHE 212 Organic Chemistry II with Lab)

5 Credit Hours • 105 Contact Hours (60 Lecture, 45 Lab)

*Prerequisite:* CHE 2111

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 2111 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

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### CHI 1001 Conversational Chinese I

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces beginning students to conversational Chinese and focuses on understanding and speaking Chinese. Covers basic vocabulary, grammar, and expressions that are used in daily situations and in travel.

### CHI 1011 Chinese Language I

(Previously CHI 111 Chinese Language I)

5 Credit Hours • 75 Contact Hours (Lecture)

Focuses on the development of functional proficiency in listening, speaking, reading, and writing the Chinese language.

### CHI 1012 Chinese Language II

(Previously CHI 112 Chinese Language II)

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite: CHI 1011*

Continues Chinese Language I in the development of functional proficiency in listening, speaking, reading, and writing the Chinese language.

### CHI 2011 Chinese Language III

(Previously CHI 211 Chinese Language III)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: CHI 1012*

Continues Chinese Language II in the development of increased 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 and Reading Course

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### See ENG 0094 Studio 121

(Previously CCR 094 Studio 121)

## Communication Courses

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### COM 1105 Career Communication

3 Credit Hours • 45 Contact Hours (Lecture)

Develops skills needed in obtaining and keeping a job. Includes job searching, applications, resumes, interviews, and the dynamics of customer, peer, and managerial relationships. Emphasizes speaking, writing, listening, critical reading skills, and vocabulary development essential to the employment world.

### COM 1150 Public Speaking

(Previously COM 115 Public Speaking)

3 Credit Hours • 45 Contact Hours (Lecture)

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 1250 Interpersonal Communication: SS3

(Previously COM 125 Interpersonal Communication: SS3)

3 Credit Hours • 45 Contact Hours (Lecture)

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 1260 Communication in Healthcare

3 Credit Hours • 45 Contact Hours (Lecture)

Covers interactive concerns in settings related to patient-client care. This class includes discussions of diverse cultures, client interaction, and family/caregiver issues. The course addresses the concerns of attitude, office politics, teamwork, self-initiative, and conflict management as specifically experienced in the patient-as-client setting.

### COM 1300 Communication & Popular Culture: AH1

(Previously COM 130 Communication & Popular Culture: AH1)

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces four key theoretical models for examining popular culture: Narrative Theory, Rhetorical Theory, Gender Theory, and Critical Race Theory. Emphasis is on popular American media texts, including books, comics/graphic novels, films, music, and television.

### COM 2060 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 2063 Conflict Resolution

(Previously 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 2064 Negotiation

1 Credit Hour • 15 Contact Hours (Lecture)

Focuses on protecting your interests and those of others while preserving relationships. Examines role-playing and other dynamic techniques and incorporates negotiation skills for personal and professional situations.

### COM 2069 Leadership

(Previously 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.

### COM 2200 Intrapersonal Communication

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces the study of intrapersonal communication (communication with self) and emphasizes understanding of one's past experiences in learning how to set goals, accomplish life objectives, communicate with self, and plan for the future. This course includes individualized research, journaling, creativity explorations, lessons involving an individual's past and present hopes and dreams, goal setting for the future, positive self-exploration techniques and styles, networking, personal assessments, and creativity enhancement.

### COM 2220 Group Communication: SS3

(Previously COM 217 Group Communication: SS3)

3 Credit Hours • 45 Contact Hours (Lecture)

Examines group communication theories with an emphasis on leadership and group behaviors. The course provides opportunities for group participation.

### COM 2250 Organizational Communication

(Previously COM 225 Organizational Communication)

3 Credit Hours • 45 Contact Hours (Lecture)

*Note: Students encouraged to take COM 1150 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 2300 Intercultural Communication: SS3

(Previously COM 220 Intercultural Communication: SS3)

3 Credit Hours • 45 Contact Hours (Lecture)

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 2400 Argumentation & Debate: AH1**

(Previously COM 230 Argumentation and Debate)

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces the theory and practice of argumentation as a civic art. In exploring argumentation as a method for ethical inquiry and advocacy, this course fosters the use of critical thinking to formulate, express, support, refute, and analyze arguments across a variety of contexts. This course includes preparation for and participation in methods of public argumentation, including but not limited to debates.

### **Computer Aided Drafting Courses**

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#### **CAD 1100 Print Reading for Computer Aided Drafting**

(Previously CAD 100 Print Reading for Computer Aided Drafting)

3 Credit Hours • 67.5 Contact Hours (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 1101 Computer Aided Drafting/2D I**

(Previously CAD 101 Computer Aided Drafting/2D I)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Co-requisite: CAD 1100*

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 1102 Computer Aided Drafting/2D II**

(Previously CAD 102 Computer Aided Drafting/2D II)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Co-requisite: CAD 1101*

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 1104 CAD for Architecture**

(Previously CAD 104 CAD for Architecture)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

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 1105 AutoCAD for Interiors**

(Previously CAD 105 AutoCAD for Interiors)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Prerequisite: IND 1100*

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 1110 Sketchup**

(Previously 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 2080 Internship**

(Previously CAD 280 Internship)

3 Credit Hours • 135 Contact Hours (Internship)

*Prerequisite: Program 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 direct guidance of the instructor.

#### **CAD 2220 Revit Architecture**

(Previously CAD 224 Revit Architecture)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: AEC 1200, AEC 1220, AEC 1231, AEC 1520*

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 2221 Advanced Revit Architecture**

(Previously CAD 227 Advanced Revit Architecture)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: CAD 2220*

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 2227 Revit for Interiors**

(Previously CAD 230 Revit for Interiors)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: CAD 1105*

Introduces Autodesk Revit Architecture software, specific to interior design and interior architecture. Topics include the Revit user interface and the use of Building Information Models (BIM) to create both 2-dimensional (2D) construction documentation (CD) sets and 3-dimensional (3D) interior design concepts and presentations including interior finishes, equipment, and furnishings.

#### **CAD 2228 Advanced Revit for Interiors**

(Previously CAD 234 Advanced Revit for Interiors)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: CAD 2227*

Focuses on the advanced applications of Autodesk Revit Architecture software, specific to interior design and interior architecture. Emphasis is placed on producing photorealistic 3-dimensional (3D) renderings and models that are specific to interior building elements and spaces.

#### **CAD 2455 SolidWorks/Mechanical**

(Previously CAD 255 SolidWorks/Mechanical)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: CAD 1100 or MAC 1002*

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 2456 Advanced SolidWorks**

(Previously CAD 259 Advanced SolidWorks)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* CAD 2455

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 2458 Introduction to Creo Basics**

(Previously CAD 153 Introduction to Creo Basics)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

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 2459 Advanced Creo**

(Previously CAD 253 Advanced Creo)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* CAD 2458

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 2460 Inventor I/ Autodesk**

(Previously CAD 240 Inventor I/ Autodesk)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Introduces basic Inventor applications of non-parametric modeling, three-dimensional parametric modeling and visualization & animation of 3D modeling. The student learns to construct, modify, and manage complex models in 3D space. Produces 2D drawing assemblies from 3D models.

**CAD 2540 3DS Max**

(Previously CAD 219 3DS Max)

3 Credit Hours • 67.5 Contact Hours (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 2660 3D Printing/Additive Manufacturing**

(Previously CAD 262 3D Printing/Additive Manufacturing)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* CAD 2455, CAD 2456

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 2661 Advanced 3D Printing**

(Previously CAD 266 Advanced 3D Printing)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* CAD 2660

Provides the student with the ability to create Advanced 3D solid models using 3D printing and 3D Scanning technology and various CAD software programs.

## Computer and Networking Technology Courses

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**CNG 1001 Networking Fundamentals**

(Previously 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 1002 Local Area Networks**

(Previously CNG 102 Local Area Networks)

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces Local Area Networking. Focuses on discussions and demonstrations of planning, installing, and supporting networks.

**CNG 1004 Introduction to TCP/IP**

(Previously CNG 104 Introduction to TCP/IP)

3 Credit Hours • 45 Contact Hours (Lecture)

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 1008 Network Analysis & Design**

(Previously CNG 108 Network Analysis &amp; Design)

3 Credit Hours • 45 Contact Hours (Lecture)

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 1020 A+ Certification Preparation**

(Previously CNG 120 A+ Certification Preparation)

4 Credit Hours • 60 Contact Hours (Lecture)

Prepares students for the CompTIA A+ certification examination. PC hardware and operating system installation, configuration and troubleshooting are practiced and reviewed using A+ techniques.

**CNG 1021 Computer Technician I: A+**

(Previously 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 1022 Computer Technician II: A+**

(Previously CNG 122 Computer Technician II: A+)

4 Credit Hours • 60 Contact Hours (Lecture)

*Co-requisite:* CNG 1021

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 1024 Networking I: Network +**

3 Credit Hours • 45 Contact Hours (Lecture)

Provides students with the knowledge necessary to understand, identify and perform necessary tasks involved in supporting a network. Covers the vendor-independent networking skills and concepts that affect all aspects of networking, such as installing and configuring the TCP/IP. This course also prepares students for the Networking II: Network + course.

**CNG 1025 Networking II: Network +**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: CNG 1024*

Continues to provide students with the knowledge necessary to implement and support a network. Focuses on the vendor-independent networking skills and concepts that affect all aspects of networking. The Networking I and II: Network + courses prepare students for the Network + certification.

**CNG 1029 Wireless LAN Fundamentals**

3 Credit Hours • 45 Contact Hours (Lecture)

Implement and troubleshoot Wireless Local Area Networks (WLANs). This course includes WLAN planning, design, installation, and configuration; WLAN security issues and vendor interoperability strategies; and mobile technology.

**CNG 1031 Principles of Information Assurance**

3 Credit Hours • 45 Contact Hours (Lecture)

Provides skills and knowledge required to survey key issues associated with protecting information assets, determine the levels of protection and response to security incidents, and design a consistent, reasonable information security system, with appropriate intrusion detection and reporting features. Students learn to inspect and protect information assets, detect, and react to threats to information assets, and examine pre- and post-incident procedures, and technical and managerial responses. Students learn about information security planning and staffing functions.

**CNG 1032 Network Security Fundamentals**

(Previously CNG 132 Network Security Fundamentals)

3 Credit Hours • 45 Contact Hours (Lecture)

*Co-requisite: CNG 1001 or CNG 1024*

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 1033 Network Security: Fire Walls and Intrusion Detection and Network Security**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: CNG 1032*

Teaches students the basics of network firewall security. It covers basic installation techniques, discusses how to make an intelligent choice of firewall technology, and presents basic firewall troubleshooting.

**CNG 1036 Guide to IT Disaster Recovery**

3 Credit Hours • 45 Contact Hours (Lecture)

Presents methods to identify technology and communication infrastructure vulnerabilities and appropriate countermeasures to prevent and mitigate failure risks for an organization. The course will take an enterprise-wide approach to developing a disaster recovery plan.

**CNG 1042 Introduction to Cloud Computing Concepts**

(Previously CNG 142 Introduction to Cloud Computing Concepts)

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces fundamental content on cloud computing including system analysis, requirements, configuration, deployment, and testing. This course includes information on management, business continuity, security, maintenance, updating, and troubleshooting as related to cloud computing.

**CNG 2001 Linux Configuration: (OS)**

3 Credit Hours • 45 Contact Hours (Lecture)

Install a Linux operating system (OS). Configure and manage OS using command line interface (CLI) and text editor. Topics include installation and configuration of updates, services, file system,

users and groups, file and folder permissions, networking, and remote access.

**CNG 2002 Unix/Linux Server Admin**

(Previously CNG 202 Unix/Linux Server Admin)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: CNG 2001*

Provides students with the knowledge and skills required to configure, administer, and secure data, users and services in a UNIX or Linux server environment. Emphasis will be on command-line interface (CLI). Topics will also include system monitoring, performance tuning, troubleshooting and interoperability with Windows servers and clients.

**CNG 2003 Advanced Linux Server Admin**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: CNG 2001, CNG 2002*

Administers a Linux multi-server environment by building on previous Linux server environment knowledge. Emphasizes remote access to servers, and automation of system administrative tasks using shell scripts with advanced features and higher-level language (HLL).

**CNG 2009 MS Server Active Directory Configuration**

4 Credit Hours • 60 Contact Hours (Lecture)

Provides students with the knowledge and skills to configure Active Directory Domain Services in a distributed environment, implement Group Policies, perform backup and restore, and monitor and troubleshoot Active Directory related issues.

**CNG 2012 Configuring Windows Server**

(Previously CNG 212 Configuring Windows Server)

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite: CNG 1001 or CNG 1024*

Provides students with the knowledge, skills, and abilities to install, configure and safely administer a Microsoft Windows Server. This class prepares the student for current industry certification.

**CNG 2015 Windows Automation: X**

3 Credit Hours • 45 Contact Hours (Lecture)

Instructs students in Windows automation using command line or Powershell. Student will build on previous server environment knowledge to learn command line utility and/or Powershell cmdlets, and develop scripting skills for automating administrative tasks in a Windows environment.

**CNG 2024 Microsoft Windows Wireless Network**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: CNG 1001 or CNG 1024*

Provides the student with the Microsoft official curriculum from the Microsoft Regional Academy. Offers detailed instruction on the foundation concepts and technologies of wireless data networking. Upon completion of this course, students are prepared to take the Certified Wireless Network Administrator (CWNP) Certification Exam.

**CNG 2040 Virtual Environment Admin**

3 Credit Hours • 45 Contact Hours (Lecture)

Build and administer a hypervisor environment. Includes building of virtual machine (VM) infrastructure and skills such as patching, backing up and securing of both hypervisor and virtual machines.

**CNG 2041 Information Storage and Management**

3 Credit Hours • 45 Contact Hours (Lecture)

Teaches students to configure, manage, and backup data using current information storage technologies.

**CNG 2042 Cloud Computing**

(Previously CNG 242 Cloud Computing)

3 Credit Hours • 45 Contact Hours (Lecture)

Installs, configures, and manages a cloud environment. Builds on knowledge of hypervisor and virtual machine environments.

**CNG 2043 Cloud Security and Cyber Law**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* CNG 1032 or CNG 1042

Introduces concepts of cloud architecture, cloud security, and the law as it pertains to cloud deployment. Focuses on the mechanics of security in the cloud service models: Infrastructure as a service (IaaS), platform as a service (PaaS), and software as a service (SaaS).

**CNG 2051 Anti Virus Concepts**

3 Credit Hours • 45 Contact Hours (Lecture)

Prepares the student for virus eradication. Focuses on how viruses work, how they are designed and how viruses are written. Emphasizes virus eradication and cleaning.

**CNG 2056 Vulnerability Assessment Level I**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* CNG 1032 or CNG 2001

Presents students with an introduction to vulnerability assessment. Vulnerability assessment skills are necessary to understand how companies address vulnerabilities in the business environment. Students gain a better understanding of how information technology security integrates into the corporate world and how a balance must be achieved between security and functionality.

**CNG 2057 Network Defense & Counter Measures**

(Previously CNG 257 Network Defense &amp; Counter Measures)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* CNG 1032

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 2058 Digital Forensics**

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite:* CNG 1032

Exposes the student to the field of digital computer forensics and investigation. This class provides the student with methods to properly conduct a digital forensics investigation including a discussion of ethics. Topics covered include fundamental concepts, history of computer forensics, file structures, data recovery techniques, computer forensic tools and analyses.

**CNG 2059 Enterprise Security**

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite:* CNG 2057*Co-requisite:* CNG 2056

This course challenges students to combine the skills learned in previous coursework (or work experience) and apply them in whole to a mock business IT environment. Students will work in their own virtualized server environment, complete with servers, routers, firewalls, VPN, IDS/IPS, wireless and other current technologies to develop a security policy and framework using risk analysis and risk management techniques.

**CNG 2060 Cisco Network Associate I**

(Previously CNG 260 Cisco Network Associate I)

5 Credit Hours • 75 Contact Hours (Lecture)

*Co-requisite:* CNG 1001 or CNG 1024

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 2061 Cisco Network Associate II**

(Previously CNG 261 Cisco Network Associate II)

5 Credit Hours • 75 Contact Hours (Lecture)

*Co-requisite:* CNG 2060

Introduces the architecture, components, and operations of routers and switches.

**CNG 2062 Cisco Network Associate III**

(Previously CNG 262 Cisco Network Associate III)

5 Credit Hours • 75 Contact Hours (Lecture)

*Co-requisite:* CNG 2061

Explores the architecture, components and operations of routers and switches in a large and more complex network with advanced functionality.

**CNG 2070 Cisco Certified Network Associate, Security**

(Previously CNG 270 Cisco Certified Network Associate, Security)

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite:* CNG 1032, CNG 2061

Provides core and advanced security concepts and skills for Cisco networks.

**CNG 2080 Internship**

(Previously 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.

**CNG 3010 Fundamentals of Cybersecurity**

4 Credit Hours • 60 Contact Hours (Lecture)

Introduces the fundamentals of cybersecurity including a broad survey of cybersecurity concepts, tools, technologies, and best practices.

**CNG 3020 Cyber Law Ethics and Policy**

4 Credit Hours • 60 Contact Hours (Lecture)

Covers ethical and legal issues that arise in relation to employment in the public and private sectors. The main focus of the course will be the ethical and legal standards governing information technology. This course provides a framework for making ethical decisions.

**CNG 3030 Methods of Network Analysis**

4 Credit Hours • 60 Contact Hours (Lecture)

Provides a methodology for analyzing networks by examining the network at its infrastructure, network, and application layers. The course explores how networks transfer data, how network protocols enable communication, and how the lower-level network layers support the upper layers.

**CNG 3036 Business Continuity and Disaster Recovery**

4 Credit Hours • 60 Contact Hours (Lecture)

Covers business continuity and disaster recovery principles including business impact analysis, assessment of risk, development of policies and procedures, and implementation of a plan. The course also covers securing, recovering, and restoring the organization's critical data in the aftermath of a disaster.

**CNG 3040 Cyber Operations**

4 Credit Hours • 60 Contact Hours (Lecture)

Covers concepts of Confidentiality, Integrity, and Availability (CIA) basics together with authentication and non-repudiation; vulnerabilities; security principles and testing; operating systems; and cryptography. The course meets the requirements for security fundamental principles as well as the identification and mitigation of security vulnerabilities.

**CNG 3050 Cyber Investigation and Forensics**

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)  
Covers intrusion detection methodologies, tools, and approaches to incident response. This course explores the ethical and legal issues attendant to cyber investigations and forensics.

**CNG 3056 Vulnerability Assessment II**

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)  
Provides an in-depth understanding of ethical hacking phases, various attack vectors, and preventative countermeasures including how hackers think and act maliciously. The course also covers how organizations use found system weaknesses and vulnerabilities to strengthen their system security controls and minimize the risk of an incident. This course covers an active offensive defense posture toward the responsibilities and measures required to be secure.

**CNG 4000 Active Cyber Defense**

4 Credit Hours • 60 Contact Hours (Lecture)  
Introduces the policies, techniques, and operational capabilities and limitations of implementing an Active Cyber Defense program. A broad survey of development of defensible network architectures; integration of passive defensive technologies; consumptions and production of Cyber Threat Intelligence (CTI) products; implementation of Network Security Monitoring (NSM) and Hunt Teaming (HT) operations; employment of Incident Response (IR) plans; and Threat and Environment Manipulation techniques (TEM) will be presented.

**CNG 4010 Cyber Threat Intelligence**

4 Credit Hours • 60 Contact Hours (Lecture)  
Provides an in-depth investigation of threat actors and the techniques they employ to attack networks. This course covers threat capabilities and objectives. Formal ethical hacking methodology including reconnaissance, scanning and enumeration, gaining access, escalation of privilege, maintaining access, and reporting is examined.

**CNG 4020 Zero Trust Networks**

4 Credit Hours • 60 Contact Hours (Lecture)  
Covers the fundamentals of Zero Trust Networks (ZTN), including the most effective methodologies used by leading companies and cyber professionals to design and implement a ZTN. The course covers design concepts including Software Defined Networks (SDN), and how to leverage SDN and mutual authentication to create a scalable, robust, and secure network.

**CNG 4030 Cyber War**

4 Credit Hours • 60 Contact Hours (Lecture)  
Introduces what constitutes cyber warfare along with its policy, doctrine, and operational constraints. This course presents a broad survey of cyber tools, techniques, and procedures to practice and implement attack methodologies.

**CNG 4054 Malware Threats and Analysis**

4 Credit Hours • 60 Contact Hours (Lecture)  
Covers methodologies to safely perform static and dynamic analysis of code from potentially unknown origins, including obfuscated malware in order to better understand the software's purpose and functionality. This course covers the fundamental principles of malware analysis and software reverse engineering.

**CNG 4080 Internship**

4 Credit Hours • 180 Contact Hours (Internship)  
To be determined by the individual instructor. A Course Description will be developed for each course and documented within the course syllabus. Refer to the SFCC Style Guide for Course Description, Required Course Learning Outcome, and Topical Outline guidelines.

**CNG 4089 Capstone**

4 Credit Hours • 60 Contact Hours (Lecture)  
To be determined by the individual instructor. A Course Description will be developed for each course and documented

within the course syllabus. Refer to the SFCC Style Guide for Course Description, Required Course Learning Outcome, and Topical Outline guidelines.

**Computer Information Systems Courses****CIS 1002 Computer Assistive Technology**

(Previously 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 1004 Word Processing with Assistive Technology**

(Previously 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 1010 Introduction to Computing Technology: (device)**

(Previously 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 1015 Introduction to Computer Information Systems**

(Previously 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 1018 Introduction to PC Applications**

(Previously 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 1024 Introduction to Operating Systems**

(Previously 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 1028 Operating System: Using \_\_\_\_\_**

(Previously 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 1000 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 1030 Introduction to Internet**

(Previously 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 1035 Complete Word Processing (Software Package)**

(Previously 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 1040 Microsoft Outlook**

(Previously 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 1045 Introduction to Desktop Database**

(Previously 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 1055 Complete Spreadsheets: (Software Package)**

(Previously 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 1065 Complete Presentation Graphics**

(Previously 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 2002 Automated Project Management**

(Previously CIS 202 Automated Project Management)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: CIS 1018 or CIS 1028 or CSC 1005, or (CIS 1035 and CIS 1055)*

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 2023 Linux**

(Previously CIS 223 Linux)

3 Credit Hours • 45 Contact Hours (Lecture)

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 2040 Database Design & Development**

(Previously 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 (SQL) for databases.

### **CIS 2043 Introduction to Structured Query Language (SQL)**

(Previously 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 2063 PC Help Desk Skills**

(Previously 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 2067 Management of Information Systems**

(Previously 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 2068 Systems Analysis & Design I**

(Previously 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 2080 Internship**

(Previously 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 2088 Practicum**

(Previously 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 2089 Capstone**

(Previously 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

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### **CSC 1005 Computer Literacy**

(Previously 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 1019 Introduction to Programming: (Programming Language)**

(Previously 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 1020 Problem Solving with (Software Package)**

(Previously 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 1026 Game Design & Development**

(Previously 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 1029 Introduction to Secure Coding**

(Previously CSC 129 Introduction to Secure Coding)

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

*Co-requisite: CSC 1060*

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 1060 Computer Science I: (Language)**

(Previously CSC 160 Computer Science I: (Language))

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

*Prerequisite: CSC 1019 or CSC 1020*

*Co-requisite: MAT 1340 or higher*

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 1061 Computer Science II: (Language)**

(Previously CSC 161 Computer Science II: (Language))

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

*Prerequisite: CSC 1060*

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 2017 Advanced Python Programming**

(Previously CSC 217 Advanced Python Programming)

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

*Prerequisite: ((CSC 1019 or CSC 1020) and MAT 1340 or higher) or CSC 1060*

Continues program development and problem solving not covered in CSC 1019: Introduction to Programming. Students will create larger programs in the areas of advanced expression, iterator objects, parsing, and GUI applications.

### **CSC 2020 Introduction to Microsoft Visual Basic.NET**

(Previously 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 2025 Computer Architecture/Assembly Language Programming**

(Previously CSC 225 Computer Architecture/Assembly Language Programming)

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

*Co-requisite: CSC 1061*

Covers how a computer operates and the relationship between machine code and the primary computer components. The course explores the design of the processor, registers, memory, and various types of storage. Assembly language is used for computer processes commands and how programming languages use memory addresses. Overview of architecture that is in development will be discussed.

### **CSC 2030 C Programming: Platform**

(Previously CSC 230 C Programming: Platform)

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

*Prerequisite: CSC 1019 or CSC 1020*

*Co-requisite: CSC 1060*

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 2033 Object-Oriented Programming: (Language)**

(Previously CSC 233 Object-Oriented Programming: (Language))

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

*Prerequisite: CSC 1061*

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 2036 C# Programming**

(Previously CSC 236 C# Programming)

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

*Prerequisite:* CSC 1060

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 2040 Java Programming**

(Previously CSC 240 Java Programming)

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

*Prerequisite:* CSC 1060 or CSC 2017

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 2041 Advanced Java Programming**

(Previously CSC 241 Advanced Java Programming)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* CSC 1060 or CSC 2040

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 2045 Secure Software Development: (Language)**

(Previously CSC 245 Secure Software Development: (Language))

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

*Prerequisite:* CSC 1029*Co-requisite:* CSC 1061

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 2046 Mobile App Development: (Platform)**

(Previously CSC 246 Mobile App Development: (Platform))

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

*Prerequisite:* CSC 1060

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 2067 Object-Oriented Analysis & Design**

(Previously CSC 267 Object-Oriented Analysis &amp; Design)

3 Credit Hours • 45 Contact Hours (Lecture)

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 2080 Internship**

(Previously 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.

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**Computer Web-Based Courses**

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**CWB 1010 Introduction to Web Authoring**

(Previously 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 1030 Web Editing Tools**

(Previously 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 2005 Client-side Scripting: (Software)**

(Previously CWB 205 Client-side Scripting: (Software))

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* CSC 1010, CWB 1019

Explores the client-side programming skills necessary to create dynamic web content using a markup embeddable and procedural scripting language executed on the client web browser.

**CWB 2021 Technology Foundations for E-Commerce**

(Previously CWB 221 Technology Foundations for E-Commerce)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* CWB 1010

Provides the student with thorough knowledge of e-commerce architecture, relational database management systems, and HTML and Network fundamentals.

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**Construction Technology Courses**

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**CON 1020 Building Materials & Environmental Impact**

(Previously CON 120 Building Materials &amp; Environmental Impact)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* CON 1057

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 1028 Cost Estimation**

(Previously CON 128 Cost Estimation)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* CON 1057, CON 1058

Provides an overview of the estimation process. Bid requirements, and package are discussed along with an introduction to the CSI divisions.

**CON 1030 Blueprint Reading**

(Previously CON 130 Blueprint Reading)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* CON 1057

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 1038 Plumbing & Electric Fundamentals**

(Previously CON 138 Plumbing &amp; Electric Fundamentals)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Co-requisite:* CAR 1004

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 1042 International Residential Code (IRC)**

(Previously 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 1045 Construction Project Management**

(Previously CON 145 Construction Project Management)  
2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)  
*Prerequisite:* CON 1057  
Covers the principles of project planning, scheduling, estimating and management. The participant learns the basic skills required to supervise personnel, with the introduction of technologies as they become commonly accepted.

**CON 1046 Construction Project Scheduling**

(Previously CON 146 Construction Project Scheduling)  
2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)  
*Prerequisite:* CON 1057  
Covers the principles of project planning and scheduling. Techniques and tools for effective scheduling are introduced and investigated. The participant learns the basic skills required to supervise personnel. New technologies will be introduced as they become commonly accepted. Several case studies are included.

**CON 1047 Field Engineering I**

(Previously CON 147 Field Engineering I)  
3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Prerequisite:* CON 1057  
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 1052 National Center for Construction Education & Research Masonry I**

(Previously CON 152 National Center for Construction Education & Research Masonry I)  
6 Credit Hours • 135 Contact Hours (Lecture/Lab Combination)  
*Prerequisite:* CON 1057  
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 1053 National Center for Construction Education & Research Masonry II**

(Previously CON 153 National Center for Construction Education & Research Masonry II)  
6 Credit Hours • 135 Contact Hours (Lecture/Lab Combination)  
*Prerequisite:* CON 1052, CON 1057  
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 1054 National Center for Construction Education & Research Masonry III**

(Previously CON 154 National Center for Construction Education & Research Masonry III)  
6 Credit Hours • 135 Contact Hours (Lecture/Lab Combination)  
*Prerequisite:* CON 1052, CON 1053, CON 1057  
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 1055 National Center for Construction Education & Research Masonry IV**

(Previously CON 155 National Center for Construction Education & Research Masonry IV)  
6 Credit Hours • 135 Contact Hours (Lecture/Lab Combination)  
*Prerequisite:* CON 1054  
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 1057 National Center for Construction Education & Research Core**

(Previously 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 1058 National Center for Construction Education & Research Carpentry I**

(Previously 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 1059 National Center for Construction Education & Research Carpentry II**

(Previously CON 159 National Center for Construction Education & Research Carpentry II)  
6 Credit Hours • 135 Contact Hours (Lecture/Lab Combination)  
*Prerequisite:* CON 1057, CON 1058  
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 1060 National Center for Construction Education & Research Carpentry III**

(Previously CON 160 National Center for Construction Education & Research Carpentry III)  
6 Credit Hours • 135 Contact Hours (Lecture/Lab Combination)  
*Prerequisite:* CON 1057, CON 1058, CON 1059  
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 1061 National Center for Construction Education & Research Carpentry IV**

(Previously CON 161 National Center for Construction Education & Research Carpentry IV)

6 Credit Hours • 135 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* CON 1057, CON 1058, CON 1059, CON 1060

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 1062 National Center for Construction Education & Research Electrical I**

(Previously CON 162 National Center for Construction Education & Research Electrical I)

6 Credit Hours • 135 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* CON 1057

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 1063 National Center for Construction Education & Research Electrical II**

(Previously CON 163 National Center for Construction Education & Research Electrical II)

6 Credit Hours • 135 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* CON 1057, CON 1062

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 1064 National Center for Construction Education & Research Electrical III**

(Previously CON 164 National Center for Construction Education & Research Electrical III)

6 Credit Hours • 135 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* CON 1057, CON 1062

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 1065 National Center for Construction Education & Research Electrical IV**

(Previously CON 165 National Center for Construction Education & Research Electrical IV)

6 Credit Hours • 135 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* CON 1057, CON 1062, CON 1063, CON 1064

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 1066 National Center for Construction Education & Research Plumbing I**

(Previously CON 166 National Center for Construction Education & Research Plumbing I)

6 Credit Hours • 135 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* CON 1057

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 1067 National Center for Construction Education & Research Plumbing II**

(Previously CON 167 National Center for Construction Education & Research Plumbing II)

6 Credit Hours • 135 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* CON 1057, CON 1066

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 1068 National Center for Construction Education & Research Plumbing III**

(Previously CON 168 National Center for Construction Education & Research Plumbing III)

6 Credit Hours • 135 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* CON 1057, CON 1066, CON 1067

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 1069 National Center for Construction Education & Research Plumbing IV**

(Previously CON 169 National Center for Construction Education & Research Plumbing IV)

6 Credit Hours • 135 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* CON 1057, CON 1066, CON 1067, CON 1068

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 2007 Light Construction Equipment**

(Previously 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 2043 Project Supervision**

(Previously CON 243 Project Supervision)

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite:* CON 1057

Examines the role of construction supervisors in the field of construction. The topics include problem solving, safety responsibilities, quality control, project planning, resource control, and the importance of construction documents.

**CON 2045 Project Management**

(Previously CON 245 Project Management)  
2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)  
*Prerequisite:* CON 1057, CON 1058

Covers the principles of project planning, scheduling, estimating and management. Emphasizes the basic skills required to supervise personnel. Includes case studies.

**CON 2046 Fundamentals of Crew Leadership**

(Previously CON 246 Fundamentals of Crew Leadership)  
1 Credit Hour • 15 Contact Hours (Lecture)  
*Prerequisite:* CON 1057

Examines the role of construction supervisors in the field of construction. The topics include problem solving, safety responsibilities, quality control, project planning, resource control, and the importance of construction documents.

**CON 2080 Internship**

(Previously CON 280 Internship)  
0-12 Credit Hours • Per Credit Hour, 45 Contact Hours (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 2089 Capstone: Construction**

(Previously CON 289 Capstone: Construction)  
0-12 Credit Hours • Per Credit Hour, 45 Contact Hours (Internship)  
*Note: Department Chair Approval*

Provides a demonstrated culmination of learning within a given program of study.

**Counseling Courses****CSL 2046 Ethical Practice in Addiction Treatment**

1 Credit Hour • 15 Contact Hours (Lecture)  
This course focuses on professional and ethical issues specific to the practice of addiction counseling. Will prepare students to make informed decisions according to the National Association for Alcoholism and Drug Abuse Counselors' (NAADAC's) Code of Ethics, following federal and state rules and regulations in the practice of addiction counseling and treatment of co-occurring disorders. This course meets the requirements per Behavioral Health Administration (BHA) for the Certified Addiction Counseling (CAC) clinical training program. Notes: All Behavioral Health Administration (BHA) Certified Addiction Counselor (CAC) courses seek to 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 2048 Advanced Case Conceptualization**

1 Credit Hour • 15 Contact Hours (Lecture)  
*Prerequisite:* CSL 2061  
This course examines the components of clinical assessment, including biopsychosocial interviews, assessing risk, identifying cultural needs and supports, problem domains, and determining stage of readiness for change. The course covers the Diagnostic and Statistical Manual of Mental Disorders (DSM) current edition diagnostic criteria and American Society of Addiction Medicine (ASAM) patient placement criteria to determine the appropriate level of care. It presents screening and assessment tools, documentation requirements, and service planning. This course meets the requirements per Behavioral Health Administration (BHA) for the Certified Addiction Counseling (CAC) clinical training program. Notes: All Behavioral Health Administration (BHA) Certified Addiction Counselor (CAC) courses seek to 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 2050 Motivational Interviewing I**

(Previously CSL 250 Motivational Interviewing I)  
1.5 Credit Hours • 22.5 Contact Hours (Lecture)  
*Prerequisite:* CSL 2068

This course explores the evidence-based and client-centered Motivational Interviewing (MI) framework with a focus on collaborative conversation designed to strengthen a person's motivation for and commitment to change. The course covers how to identify client readiness, willingness, and ability to make changes. This course meets the requirements of Behavioral Health Administration (BHA) for the Certified Addiction Counseling (CAC) clinical training program. Notes: All Behavioral Health Administration (BHA) Certified Addiction Counselor (CAC) courses seek to 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 2051 Pharmacology I for Addiction Counselors**

1 Credit Hour • 15 Contact Hours (Lecture)  
This course provides a solid base of knowledge about the drugs of abuse including the impact on human physiology and behaviors. It focuses on pharmacology as a cornerstone of addiction counseling and a major part of what differentiates the professional field of addiction counseling from other mental health disciplines. This course meets the requirements of Behavioral Health Administration (BHA) for the Certified Addiction Counseling (CAC) clinical training program. Notes: All Behavioral Health Administration (BHA) Certified Addiction Counselor (CAC) courses seek to 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 2052 Advanced Pharmacology**

1 Credit Hour • 15 Contact Hours (Lecture)  
*Prerequisite:* CSL 2051  
This course explores the neurobiological basis of addiction and how addictive drugs produce neurochemical changes in the brain's reward pathway. Topics include the action of neurotransmitters, brain regions affected by drug abuse, medication-assisted treatment, and the impact of substance use on cognitive and psychosocial functioning. Emphasis is placed on understanding addiction as a medical brain disease and applying this knowledge to client-centered treatment planning. This course meets the requirements per Behavioral Health Administration (BHA) for the Certified Addiction Counseling (CAC) clinical training program. Notes: All Behavioral Health Administration (BHA) Certified Addiction Counselor (CAC) courses seek to 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 2053 Cognitive Behavior Therapy**

1 Credit Hour • 15 Contact Hours (Lecture)  
This course focuses on Cognitive-behavioral therapy (CBT) as a treatment approach to addiction. It emphasizes an evidence-based, flexible, and individualized approach that can be adapted to a wide range of clients and a wide range of treatment settings and formats. This course meets the requirements of Behavioral Health Administration (BHA) for the Certified Addiction Counseling (CAC) clinical training program. Notes: All Behavioral Health Administration (BHA) Certified Addiction Counselor (CAC) courses seek to 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 2054 Trauma Informed Care**

(Previously CSL 254 Trauma Informed Care)

1 Credit Hour • 15 Contact Hours (Lecture)

This course introduces the concept of trauma-informed care and defines ways in which a traditional treatment setting can be modified to increase an individual's sense of safety. It explores the relationship between trauma, post-traumatic stress disorder (PTSD), traumatic brain injury (TBI), and substance use disorders. Emphasis is on incorporating trauma-informed practices into substance use disorder treatment with diverse populations. This course meets the requirements per Behavioral Health Administration (BHA) for the Certified Addiction Counseling (CAC) clinical training program. Notes: All Behavioral Health Administration (BHA) Certified Addiction Counselor (CAC) courses seek to 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 2055 Infectious Diseases for Addiction Counselors**

1 Credit Hour • 15 Contact Hours (Lecture)

This course focuses on how substance use can increase susceptibility to contract and spread infectious diseases, including Sexually Transmitted Infections (STIs), Sexually Transmitted Diseases (STDs), and other blood borne illnesses. The course explores impacts of ongoing substance use and Substance Use Disorders (SUDs) on physical health and risk-taking behaviors, as well as assessments, treatment considerations, and referral recommendations. This course meets the requirements per the Behavioral Health Administration (BHA) for the Certified Addiction Counseling (CAC) clinical training program. Notes: All Behavioral Health Administration (BHA) Certified Addiction Counselor (CAC) courses seek to 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 2056 Co-occurring Disorders**

1 Credit Hour • 15 Contact Hours (Lecture)

This course explores the prevalence, diagnostic criteria, and treatment of co-occurring mental health and substance use disorders (SUDs). It examines the bidirectional relationship between these disorders and the difficulty in diagnosis and treatment. The course introduces the current edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM) diagnostic criteria for mental disorders commonly co-occurring with SUDs and reviews changes to SUD diagnosis. This course meets the requirements per Behavioral Health Administration (BHA) for the Certified Addiction Counseling (CAC) clinical training program. Notes: All Behavioral Health Administration (BHA) Certified Addiction Counselor (CAC) courses seek to 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 2058 Group Counseling Skills**

1.5 Credit Hours • 22.5 Contact Hours (Lecture)

*Prerequisite:* CSL 2068

This course explores the use of group therapy in the addiction treatment field and develops skills necessary to facilitate psychoeducational and therapy groups. It covers models, types, structure, content, process, and leadership skills. The course integrates motivational interviewing techniques and strategies into the group process. There is an emphasis on experiential learning, presentations of case studies, and practice facilitating groups with real-world scenarios. This course meets the requirements per Behavioral Health Administration (BHA) for the Certified Addiction Counseling (CAC) clinical training program. Notes: All Behavioral Health Administration (BHA) Certified Addiction Counselor (CAC) courses seek to 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 2059 Advanced Professional and Ethical Practice**

1 Credit Hour • 15 Contact Hours (Lecture)

*Prerequisite:* CSL 2046

This course explores organizational, provider, and private practice ethics, practices, and guidelines. The course addresses licensing rules, regulations, and practice standards and guidelines. It examines professional competencies, boundaries, ethical relationships, reporting violations, and supervision. The course emphasizes ethical delivery of culturally responsive and trauma-informed care. It builds on the Ethical Practice in Addiction Treatment training and clinical supervision trainings. This course meets the requirements per Behavioral Health Administration (BHA) for the Certified Addiction Counseling (CAC) clinical training program. Notes: All Behavioral Health Administration (BHA) Certified Addiction Counselor (CAC) courses seek to 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 2061 Case Conceptualization and Documentation**

1 Credit Hour • 15 Contact Hours (Lecture)

This course explores the clinical and legal importance of comprehensive documentation in addiction counseling, including intake, assessment, service planning, and progress notes. Emphasizes the use of standardized forms, the American Society of Addiction Medicine (ASAM) patient placement criteria, and adherence to confidentiality regulations. Highlights the connections between documentation and effective, integrated treatment delivery. This course meets the requirements of Behavioral Health Administration (BHA) for the Certified Addiction Counseling (CAC) clinical training program. Notes: All Behavioral Health Administration (BHA) Certified Addiction Counselor (CAC) courses seek to 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 2065 Culturally Informed Treatment**

(Previously CSL 265 Culturally Informed Treatment)

1 Credit Hour • 15 Contact Hours (Lecture)

This course explores the role of culture in addiction counseling, emphasizing cultural competence, awareness, and sensitivity. It covers cultural identities, privilege, age, gender, sexual orientation, and spirituality. Additionally, it presents the impact of culture on substance use and treatment, disparities in accessing care, and culturally appropriate interventions. It examines personal biases and beliefs, and how they influence counseling diverse populations. This course meets the requirements of Behavioral Health Administration (BHA) for the Certified Addiction Counseling (CAC) clinical training program. Notes: All Behavioral Health Administration (BHA) Certified Addiction Counselor (CAC) courses seek to 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 2068 Addiction Counseling Skills**

1.5 Credit Hours • 22.5 Contact Hours (Lecture)

This course explores a framework and counseling model for working with individuals with substance misuse and addiction. The course focuses on the development of the counseling skills needed to assist individuals in processing their information and experiences to move toward the change process. This course utilizes client-centered models, counselor-directed therapy along with motivational spirit of counseling. This course meets the requirements per the Behavioral Health Administration (BHA) for the Certified Addiction Counseling (CAC) clinical training program. Notes: All Behavioral Health Administration (BHA) Certified Addiction Counselor (CAC) courses seek to 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 2069 Principles of Addiction Treatment**

1.5 Credit Hours • 22.5 Contact Hours (Lecture)

This course focuses on models of addiction, defines addiction treatment, presents the National Institute on Drug Abuse (NIDA) principles of effective treatment approaches, outlines various types of addiction treatment and the use of evidence-based treatment approaches, and the competencies required and professional readiness of an addiction counselor. This course meets the requirements per the Behavioral Health Administration (BHA) for the Certified Addiction Counseling (CAC) clinical training program. Notes: All Behavioral Health Administration (BHA) Certified Addiction Counselor (CAC) courses seek to 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 3028 Treating Diverse Populations**

2 Credit Hours • 30 Contact Hours (Lecture)

Explores the diverse populations in addiction treatment, including gender-specific, criminal justice-involved, families, LGBTQIA, veterans, and those affected by the opioid epidemic. The course examines the impact of race, ethnicity, and culture on treatment effectiveness. This course presents definitions and principles related to microaggressions, systemic racial injustice, social justice, and multicultural and social justice counseling. This course meets the requirements per Behavioral Health Administration (BHA) for the Certified Addiction Counseling (CAC) clinical training program.

### **CSL 3030 Advanced Models in Addiction Treatment**

1 Credit Hour • 15 Contact Hours (Lecture)

An overview of specialized counseling models for behavioral health environments that offer co-occurring mental health and addiction interventions. It focuses on teaching the structure, purpose, appropriate population, and practice details of each model to equip clinical supervisors with the knowledge required to provide adequate support and supervision for these models. This course meets the requirements per the Behavioral Health Administration (BHA) for the Certified Addiction Counseling (CAC) clinical training program.

### **CSL 3050 Advanced Motivational Interviewing**

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite:* CSL 2050

Covers intensive skill development training in Advanced Motivational Interviewing (MI), focusing on assisting clients in identifying and strengthening intrinsic motivation for positive change. This course offers a brief review of the fundamental spirit, principles, and skills of MI, followed by interactive and experiential learning to develop and practice advanced MI skills. This course meets the requirements per the Behavioral Health Administration (BHA) for the Certified Addiction Counseling (CAC) clinical training program.

### **CSL 4020 Clinical Supervision I**

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite:* CSL 2050, CSL 2058, CSL 2068, CSL 3050

Introduces the foundational concepts and practices of clinical supervision in addiction counseling, including the purpose and value of clinical supervision, its historical development, and roles and models of supervision. This course explores cultural and contextual factors, ethical and legal issues, and performance evaluation, while emphasizing the core competencies for addiction counseling and skills needed for effective supervision in an integrated behavioral health and primary care setting. This course meets the requirements per the Behavioral Health Administration (BHA) for the Certified Addiction Counseling (CAC) clinical training program.

### **CSL 4021 Clinical Supervision II**

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite:* CSL 4020

Focuses on clinical and service provider supervisors and acquired motivational interviewing (MI) skills and explores observation and coaching strategies of skills. The course covers MI interview rating systems, general interview rating etiquette, using feedback, guidelines for MI supervision, coding to enhance clinical supervision, implementation, and integrating MI and clinical supervision into various settings. This course meets the requirements per the Behavioral Health Administration (BHA) for the Certified Addiction Counseling (CAC) clinical training program.

## **Criminal Justice Courses**

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### **CRJ 1010 Introduction to Criminal Justice: SS3**

(Previously 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 1012 Procedural Criminal Law**

(Previously CRJ 112 Procedural Criminal Law)

3 Credit Hours • 45 Contact Hours (Lecture)

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 1025 Policing Systems**

(Previously 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 1027 Crime Scene Investigation**

(Previously 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 1035 Judicial Function**

(Previously CRJ 135 Judicial Function)

3 Credit Hours • 45 Contact Hours (Lecture)

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 1045 Correctional Process**

(Previously 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 2005 Principles of Criminal Law**

(Previously 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 2009 Criminal Investigation I**

(Previously 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 searchers, police drawings, and recognition and collection of evidence.

**CRJ 2010 Constitutional Law**

(Previously 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 2016 Juvenile Law & Procedures**

(Previously CRJ 216 Juvenile Law &amp; 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 2020 Human Relations & Social Conflict**

(Previously CRJ 220 Human Relations &amp; 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 2025 Crisis Intervention**

(Previously 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 2030 Criminology**

(Previously 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 2031 Introduction to Forensic Science & Criminalistics**

(Previously CRJ 231 Introduction to Forensic Science &amp; 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 2035 Delinquent Behavior**

(Previously 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 2036 Criminal Justice Research Methods**

(Previously 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 2057 Victimology**

(Previously 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 2068 Criminal Profiling**

(Previously 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 2080 Internship**

(Previously 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 1000 Culinary Program Fundamentals**

(Previously 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 1001 Food Safety & Sanitation**

(Previously CUA 101 Food Safety &amp; 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 1005 Food Service Concepts & Management Skills**

(Previously 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 1020 Wines & Spirits**

(Previously 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 1025 Introduction to Foods**

(Previously CUA 125 Introduction to Foods)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Prerequisite: CUA 1000, CUA 1001*

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 1027 Soups, Sauces & Consommés**

(Previously CUA 127 Soups, Sauces & Consommés)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: CUA 1000, CUA 1001, CUA 1025*

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 1029 Center of the Plate**

(Previously CUA 129 Center of the Plate)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Prerequisite: CUA 1000, CUA 1001, CUA 1025*

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 1036 Alcohol & Bartending Management**

(Previously CUA 136 Alcohol & Bartending Management)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Prerequisite: CUA 1000, CUA 1001*

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 1038 Food & Beverage Service**

(Previously CUA 138 Food & Beverage Service)

2 Credit Hours • 30 Contact Hours (Lecture)

*Note: Student must have completed and passed the ServSafe National Exam*

*Prerequisite: CUA 1000, CUA 1001, CUA 1025, CUA 1045*

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 1045 Introduction to Baking**

(Previously CUA 145 Introduction to Baking)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Prerequisite: CUA 1000, CUA 1001*

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 1050 Baking: Decorating & Presentation**

(Previously CUA 150 Baking: Decorating & Presentation)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: CUA 1045*

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 1051 Baking: Intermediate Bread Preparation**

(Previously CUA 151 Baking: Intermediate Bread Preparation)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: CUA 1045*

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 1052 Individual Fancy Dessert Production**

(Previously CUA 152 Individual Fancy Dessert Production)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: CUA 1045*

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 1053 Confectionaries & Petit Fours**

(Previously CUA 153 Confectionaries & Petit Fours)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: CUA 1045*

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 1054 Introduction to the Business of Catering**

(Previously CUA 154 Introduction to the Business of Catering)  
3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Prerequisite:* CUA 1000, CUA 1001, CUA 1025  
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 1056 Nutrition for the Hospitality Professional**

(Previously 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 1057 Menu Planning**

(Previously 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 1061 Advanced Cake Decorating – Wedding Cakes**

(Previously CUA 161 Advanced Cake Decorating – Wedding Cakes)  
2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)  
*Prerequisite:* CUA 1050  
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 1190 Dining Room Management**

(Previously 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 2010 Advanced Cuisine & Gardé Manger**

(Previously CUA 210 Advanced Cuisine & Gardé Manger)  
4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)  
*Prerequisite:* CUA 1029  
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 2033 Advanced Line Prep & Cookery**

(Previously CUA 233 Advanced Line Prep & Cookery)  
4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)  
*Prerequisite:* CUA 1029  
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 2036 Advanced Baking**

(Previously CUA 236 Advanced Baking)  
2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)  
*Prerequisite:* CUA 1051, CUA 1061  
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 2045 International Cuisine**

(Previously CUA 245 International Cuisine)  
2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)  
*Prerequisite:* CUA 1027, CUA 1029  
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 2055 Supervision in the Hospitality Industry**

(Previously 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 2056 Marketing in the Hospitality Industry**

(Previously 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 2061 Cost Controls**

(Previously 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 2062 Purchasing for the Hospitality Industry**

(Previously 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 procurement of food and supplies, supplier 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 2063 Legal Aspects of Hospitality Management**

(Previously 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 2064 Sustainable Food Service Operations**

(Previously CUA 264 Sustainable Food Service Operations)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: CUA 1005*

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 2068 Vegetarian & Dietary Cuisine**

(Previously CUA 268 Vegetarian &amp; Dietary Cuisine)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: CUA 1025, CUA 1056*

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 2069 Dietary Baking**

(Previously CUA 269 Dietary Baking)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Prerequisite: CUA 1045*

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 2081 Internship**

(Previously CUA 281 Internship)

4 Credit Hours • 180 Contact Hours (Internship)

*Prerequisite: CUA 1027*

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 1002 Feldenkrais Method for Performing Artists**

1 Credit Hour • 30 Contact Hours (Lab)

Explores a practice of moving more easily, skillfully, and flexibly, to enhance clarity and self-expression for performing artists. The course promotes a culture of awareness, acceptance and exploration that heightens creativity. This course will explore movement puzzles with guided awareness for improving

performance capabilities and reducing injury and repetitive strain often experienced by artists.

**DAN 1005 Hip Hop Dance I**

(Previously 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 1006 Hip Hop Dance II**

(Previously 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 1011 Modern Dance I**

(Previously 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 1012 Modern Dance II**

(Previously 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 1013 Modern Dance III**

(Previously 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 1012: Modern II. This course may be repeated up to two times for credit.

**DAN 1014 Modern Dance IV**

(Previously 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 1013: Modern III and are at an intermediate/advanced level. This course may be repeated up to two times for credit.

**DAN 1017 Salsa I**

(Previously 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 1018 Salsa II**

(Previously DAN 118 Salsa II)

1 Credit Hour • 30 Contact Hours (Lab)

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 1021 Jazz I**

(Previously 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 1022 Jazz II**

(Previously 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 1023 Jazz III**

(Previously DAN 123 Jazz III)

2 Credit Hours • 60 Contact Hours (Lab)

Builds on skills learned in DAN 1022 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 1024 Jazz IV**

(Previously DAN 124 Jazz IV)

2 Credit Hours • 60 Contact Hours (Lab)

Builds on skills learned in DAN 1023 and incorporates work at a more advanced level. Emphasizes more challenging movement combinations and performance techniques.

**DAN 1025 Dance Appreciation: AH1**

(Previously DAN 150 Dance Appreciation: AH1)

3 Credit Hours • 45 Contact Hours (Lecture)

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 1031 Ballet I**

(Previously 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 1032 Ballet II**

(Previously 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 1033 Ballet III**

(Previously 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 1034 Ballet IV**

(Previously 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 1041 Ballroom Dance**

(Previously 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 1042 Ballroom Dance II**

(Previously DAN 142 Ballroom Dance II)

1 Credit Hour • 30 Contact Hours (Lab)

Continues DAN 1041 with focus on regional dances, customs, and rhythms. Partners are not required.

**DAN 1043 Tap I**

(Previously 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 1044 Tap II**

(Previously DAN 144 Tap II)

1 Credit Hour • 30 Contact Hours (Lab)

Continues with the concepts introduced in Tap I including more advanced versions of time steps, drawbacks, and bomber shays. Introduces wings and syncopated pullbacks. Focuses on intricate rhythm patterns.

**DAN 1050 Dance History: AH1**

(Previously DAN 125 History of Dance I: AH1)

3 Credit Hours • 45 Contact Hours (Lecture)

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 1051 Belly Dance I**

(Previously 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 1052 Belly Dance II**

(Previously DAN 152 Belly Dance II)

1 Credit Hour • 30 Contact Hours (Lab)

Continues Belly Dance I (DAN 1051) with emphasis on coordination and balance and additional techniques. Includes costume design.

**DAN 2011 Dance Composition & Improvisation I**

(Previously DAN 211 Dance Composition &amp; 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 2012 Dance Composition & Improvisation II**

(Previously DAN 212 Dance Composition &amp; Improvisation II)

2 Credit Hours • 60 Contact Hours (Lab)

Furtheres 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 2021 Dance Performance I**

(Previously 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 2022 Dance Performance II**

(Previously DAN 222 Dance Performance II)

2 Credit Hours • 60 Contact Hours (Lab)

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 2024 Dance for Musical Theatre I**

(Previously 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 2025 Dance for Musical Theatre II**

(Previously DAN 225 Dance for Musical Theatre II)

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

Continues DAN 2024 with more emphasis on performance.

**DAN 2051 Belly Dance III**

(Previously DAN 251 Belly Dance III)

1 Credit Hour • 30 Contact Hours (Lab)

Continues Belly Dance II (DAN 1052) 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 2054 Methods of Teaching Dance**

(Previously 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 2055 Dance for Camera**

(Previously DAN 255 Dance for Camera)

2 Credit Hours • 60 Contact Hours (Lab)

Analyzes, discusses, and traces the history of Dance for Camera/Screenance 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.

## Data Science Courses

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**DAT 1001 Introduction to Data Science**

3 Credit Hours • 45 Contact Hours (Lecture)

Provides a foundational overview of data science and develops the knowledge required to make data-driven decisions to address regarding real-world problems. The course introduces the how to collecting data from different sources, use of statistics to draw conclusions about a given data set, use of technology to visualize data and some of the challenges associated with storing, manipulating, analyzing and securing data. Computational tools are used as a component of the course.

## Dental Assisting Courses

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**DEA 1011 Introduction to Dental Practices**

(Previously DEA 120 Introduction to Dental Practices)

1 Credit Hour • 15 Contact Hours (Lecture)

*Prerequisite: College Readiness in English**Note: May be taken concurrently with DEA 1012*

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 1012 Dental Science I**

(Previously DEA 121 Dental Science I)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English**Note: May be taken concurrently with DEA 1011*

Includes fundamentals of the oral structures as they apply to oral histology, embryology, morphology, pathology, dental anatomy, and dental charting.

**DEA 1013 Dental Science II**

(Previously DEA 122 Dental Science II)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

This course examines the anatomy and function of the head and neck with emphasis on the muscles of mastication and facial expression, bones of the head and neck, the temporomandibular joint (TMJ), lymphatics, glandular system, vascular supply, nervous system, and the oral cavity.

**DEA 1015 Infection Control**

(Previously DEA 126 Infection Control)

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Lab)

*Prerequisite: College Readiness in English*

Assesses basic information concerning infection and disease transmission and hazardous chemical management in the dental office. This course emphasizes knowledge of microorganisms, aseptic techniques, sterilization, patient and dental healthcare worker safety, and hazard communication management.

**DEA 1016 Medical Emergencies in the Dental Office**

(Previously DEA 132 Medical Emergencies in the Dental Office)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Prerequisite: College Readiness in English*

Emphasizes recognition, prevention, and management of medical emergency situations in the dental office. This course also includes techniques for taking and reading vital signs, completing and updating patient health history, and addresses pharmacology.

**DEA 1021 Principles of Clinical Practice**

(Previously DEA 102 Principles of Clinical Practice)

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Lab)

*Prerequisite: DEA 1011, DEA 1012**Note: Must be taken concurrently with DEA 1023; may be taken concurrently with DEA 1015*

Focuses on fundamental procedures and techniques used in the delivery of restorative dentistry. This course emphasizes infection

control, restorative instrumentation, delivery of care, treatment room and patient management, operator, assistant and patient positioning and principles of anesthesia and pain control.

### **DEA 1022 Specialties in Dentistry**

(Previously DEA 104 Specialties in Dentistry)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* DEA 1011, DEA 1012

Focuses on dental specialties recognized by the American Dental Association (ADA) to include select procedures, instrumentation, and the dental assistant's role in each.

### **DEA 1023 Dental Materials I**

(Previously DEA 123 Dental Materials I)

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Lab)

*Prerequisite:* DEA 1011, DEA 1012

*Note:* Must be taken concurrently with DEA 1021. May be taken concurrently with DEA 1015.

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 1024 Dental Radiography**

(Previously DEA 125 Dental Radiography)

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Lab)

*Prerequisite:* DEA 1011, DEA 1012

*Note:* May be taken concurrently with DEA 1015

Focuses on the science of radiography, the application of radiographic techniques, and aseptic techniques.

### **DEA 1031 Prevention & Nutrition in Dentistry**

(Previously DEA 134 Prevention & Nutrition in Dentistry)

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Lab)

*Prerequisite:* DEA 1015, DEA 1016, DEA 1021, DEA 1023

*Note:* May be taken concurrently with DEA 1013

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 1033 Dental Materials II**

(Previously DEA 124 Dental Materials II)

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Lab)

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 1034 Advanced Dental Radiography**

(Previously DEA 131 Advanced Dental Radiography)

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Lab)

*Prerequisite:* DEA 1015, DEA 1016, DEA 1021, DEA 1023, DEA 1024

*Note:* May be taken concurrently with DEA 1013

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 1035 Dental Office Management**

(Previously DEA 111 Dental Office Management)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* DEA 1015, DEA 1016, DEA 1021, DEA 1023, DEA 1024

*Note:* May be taken concurrently with DEA 1013, DEA 1022, DEA 1031, DEA 1033, DEA 1034

Addresses office communication, office management procedures, administrative processes, appointment scheduling, records

maintenance, dental insurance, financial account management, recall systems, and inventory control.

### **DEA 1040 Dental Assisting National Board Review (Elective)**

(Previously DEA 140 Dental Assisting National Board Review (Elective))

1 Credit Hour • 15 Contact Hours (Lecture)

*Prerequisite:* DEA 1011, DEA 1012, DEA 1013, DEA 1015, DEA 1016, DEA 1021, DEA 1022, DEA 1023, DEA 1024, DEA 1031, DEA 1033, DEA 1034, DEA 1035, DEA 1081, DEA 1082

*Note:* May be taken concurrently with DEA 1082

Focuses on a review for the Dental Assisting National Board (DANB) Examination.

### **DEA 1081 Clinical Internship I**

(Previously DEA 181 Clinical Internship I)

1 Credit Hour • 45 Contact Hours (Internship)

*Prerequisite:* DEA 1011, DEA 1012, DEA 1015, DEA 1016, DEA 1021, DEA 1023, DEA 1024

*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 1082 Clinical Internship II**

(Previously DEA 182 Clinical Internship II & Seminar)

6 Credit Hours • 270 Contact Hours (Internship)

*Prerequisite:* DEA 1081

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 2011 Introduction to Expanded Functions**

(Previously DEA 200 Introduction to Expanded Functions)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* DEA 1011, DEA 1012, DEA 1013, DEA 1015, DEA 1016, DEA 1021, DEA 1022, DEA 1023, DEA 1024, DEA 1031, DEA 1033, DEA 1034, DEA 1035, DEA 1040, DEA 1081, DEA 1082

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 2021 Expanded Functions for the Dental Auxiliary**

(Previously DEA 205 Expanded Functions for the Dental Auxiliary)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* DEA 2011

Focuses on clinical application of expanded functions in dental assisting.

## **Dental Hygiene Courses**

### **DEH 1001 Preclinical Dental Hygiene**

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite:* Acceptance into the Dental Hygiene Program

Introduces basic dental hygiene theory, instrumentation, and patient care assessment. Focuses on the application of diagnostic, preventive, and therapeutic procedures in a wide variety of areas related to clinical practice, health promotion, and disease prevention.

### **DEH 1002 Preclinical Dental Hygiene Lab**

3 Credit Hours • 90 Contact Hours (Lab)

*Prerequisite:* Acceptance into the Dental Hygiene Program

Introduces the entry-level dental hygiene student to fundamental procedures and techniques to include instrumentation, infection control, and patient assessment. Provides a variety of clinical learning experiences to develop basic skills and knowledge for entry into the dental hygiene profession.

**DEH 1003 Dental Anatomy and Histology**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: Acceptance into the Dental Hygiene Program*

Introduces the general anatomy of the face including terminology, anatomic landmarks, and tooth identification. Specific focus is placed on the anatomical and histologic features of the teeth and other structures of the oral cavity. Introduction to the embryology of the face, oral, and nasal cavities is presented, as well as development of the teeth and histological features of the various components of the teeth and surrounding structures.

**DEH 1004 Dental Radiology**

3 Credit Hour • 60 Contact Hours (15 Lecture, 45 Lab)

*Prerequisite: Acceptance into the Dental Hygiene Program*

Introduces principles of x-radiation production and safety factors; application and theory of properly exposing, processing, mounting and evaluating radiographs; identification of normal anatomic landmarks and pathologic conditions. Focuses on utilization of the laboratory in performing procedures necessary to produce quality radiographs.

**DEH 1005 Introduction to Dental Hygiene**

1 Credit Hour • 15 Contact Hours (Lecture)

*Prerequisite: Acceptance into the Dental Hygiene Program*

Provides the first-year dental hygiene student with the basic knowledge, theory, and skill necessary to advance to subsequent clinical dental hygiene courses. This course includes an introduction to the principles of basic instrument recognition, expected professional and ethical behaviors, HIPAA and FERPA compliance, OSHA standards for infection control, dental software systems, oral hygiene instruction, dental hygiene care planning for the patient, and proper consent form documentation.

**DEH 1011 Dental and Medical Emergencies**

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite: Acceptance into the Dental Hygiene Program*

Explains the management of emergency situations with an emphasis on prevention and identification of potential medical emergencies that can occur in the dental office or during dental treatment. Provides practical skills applicable to dental hygienists and the scope of responsibility for medical emergency management as dictated by state dental practice law. Includes content and use of emergency kits, oxygen support systems, use of ASA classification to evaluate risk, and emergency management simulations.

**DEH 1022 Periodontics I**

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite: Acceptance into the Dental Hygiene Program*

Introduces the principles of periodontics with a focus on the recognition of tissues in health and disease, macro and microanatomy of the periodontium, and histopathology of periodontal diseases and other related gingival conditions. This course explains the theory and discussion of periodontal assessment, etiology, epidemiology, inflammatory process/immune response, and the American Academy of Periodontology (AAP) Periodontal Disease Classification System.

**DEH 1023 Head and Neck Anatomy**

1 Credit Hour • 15 Contact Hours (Lecture)

*Prerequisite: Acceptance into the Dental Hygiene Program*

Analyzes the anatomy and function of the head and neck with emphasis on the muscles of mastication and facial expression, bones of the head and neck, the temporomandibular joint, lymphatics, glandular system, vascular supply, nervous system, and the oral cavity.

**DEH 1026 Dental Materials**

2 Credit Hours • 37.5 Contact Hours (15 Lecture, 22.5 Lab)

*Prerequisite: Acceptance into the Dental Hygiene Program*

Examines the science of dental materials providing a sound knowledge of the use and function of these materials in clinical practice. Covers didactic and laboratory experiences of the

physical properties, chemistry, and clinical applications of the materials used in the practice of dentistry.

**DEH 1032 Applied Dental Pharmacology**

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite: Acceptance into the Dental Hygiene Program*

Examines general pharmacology and discusses relevant drugs that may influence the management of dental hygiene patients. Completion of the course enables students to perform safe and effective evaluations of patients for dental hygiene treatment.

**DEH 1035 Pain and Anxiety Control for the Dental Hygienist**

2 Credit Hours • 45 Contact Hours (15 Lecture, 30 Lab)

*Prerequisite: Acceptance into the Dental Hygiene Program*

Covers the theory and practice of pain management and anxiety control as applied to the practice of dentistry and dental hygiene. This course emphasizes mastery of the armamentarium, techniques of local and regional anesthesia, and nitrous oxide/oxygen sedation. This course covers the knowledge and skills necessary to administer local anesthetics and nitrous oxide/oxygen sedation proficiently and safely.

**DEH 1050 Dental Lasers: Theory and Practice**

1 Credit Hour • 22.5 Contact Hours (7.5 Lecture, 15 Lab)

*Prerequisite: Acceptance into the Dental Hygiene Program*

Develops knowledge related to the use of diode lasers in dental hygiene treatment. Introduction to the physics of laser technology with safe integration into the dental hygiene clinical setting.

**DEH 1053 Clinical Theory of Dental Hygiene I**

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite: Acceptance into the Dental Hygiene Program*

Builds on introductory concepts with emphasis on enhancing skill and knowledge in patient assessment, instrumentation and instrument maintenance, preventive and adjunctive dental hygiene procedures.

**DEH 1070 Clinical Practice of Dental Hygiene I**

4 Credit Hours • 120 Contact Hours (Clinical)

*Prerequisite: Acceptance into the Dental Hygiene Program*

Creates direct clinical experience for the student dental hygienist by providing an opportunity to treat a variety of patients utilizing assessment, instrumentation, and additional preventative clinical procedures.

**DEH 1071 Clinical Practice of Dental Hygiene I-A**

2 Credit Hours • 60 Contact Hours (Clinical)

*Prerequisite: Acceptance into the Dental Hygiene Program*

Provides patient care opportunities for the performance of dental hygiene treatment. Treatment will be provided to both periodontally-compromised and healthy patients utilizing advanced instrumentation and power scaling.

**DEH 2004 Community Dental Health I**

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite: Acceptance into the Dental Hygiene Program*

Develops knowledge in the concepts, methods, and social determinants of health related to improving oral health in the community. Emphasis is placed on evidence-based strategies for the development of oral health promotion, oral disease prevention and oral health management programs.

**DEH 2013 General and Oral Pathology**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: Acceptance into the Dental Hygiene Program*

Focuses on the fundamentals of general pathology and the disease process. Covers oral pathology with emphasis on recognition and identification of pathologic conditions that most frequently occur around the oral cavity. Helps students identify appropriate referral mechanisms to render a definitive diagnosis.

**DEH 2021 Ethics and Practice Management**

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite: Acceptance into the Dental Hygiene Program*

Focuses on the transition from an educational environment to a working dental business. Enables the student to learn management skills of operating a dental office. Emphasizes opportunities for self-exploration in development of personal and professional goals. Examines professional ethics, legal issues, and the relationship to the licensed practice of dental hygiene.

**DEH 2025 Community Dental Health II: Field Experience**

1 Credit Hour • 15 Contact Hours (Lecture)

*Prerequisite: Acceptance into the Dental Hygiene Program*

Provides practical application of community dental health theory and opportunities to conduct needs assessments on a variety of populations. Emphasizes meeting the educational needs of specific populations through program planning, implementation and evaluation. Incorporates supervised field experiences in low-income, school and other public facilities as well as private health and education-oriented organizations.

**DEH 2042 Periodontics II**

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite: Acceptance into the Dental Hygiene Program*

Continues to explore theoretical/clinical preparations with emphasis on dental hygiene process of care, treatment planning, non-surgical treatment, evaluation of treatment, and maintenance needs of the periodontal patient. Develops research and decision-making skills with use of library and Internet resources relating to risk factors, etiologic agents, and treatment modalities. Includes comprehensive periodontal assessment, supplemental diagnostics, periodontal pharmacology, and evidence-based treatment planning.

**DEH 2068 Clinical Theory of Dental Hygiene II**

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite: Acceptance into the Dental Hygiene Program*

Provides the didactic theory for clinical practice of dental hygiene skills at the beginning of the second year of dental hygiene curriculum. Builds on clinic theory from first year curriculum to provide the knowledge base needed for treatment of patients with more advanced periodontal disease and medical/health factors. Focuses on: periodontal charting and documentation, interpretation of periodontal factors on radiographs, use of treatment planning in the dental hygiene process of care, legal parameters of record keeping and informed consent, use of oral photography, application of sealants, treatment of dental hypersensitivity, application of chemotherapeutics and professional oral irrigation, application of ergonomics in dentistry, clinical dental hygiene treatment considerations for patients with history of cardiac complications and diabetes.

**DEH 2070 Clinical Practice of Dental Hygiene II**

6 Credit Hours • 180 Contact Hours (Clinical)

*Prerequisite: Acceptance into the Dental Hygiene Program*

Covers patient care sessions for the performance of traditional dental hygiene treatment. Continues and expands periodontal patient care and special patient care sessions. Focuses on clinical competence in margination and polishing of restorations, nutrition counseling, oral irrigation, chemotherapeutics and OSHA compliance.

**DEH 2071 Clinical Practice of Dental Hygiene III**

6 Credit Hours • 180 Contact Hours (Clinical)

*Prerequisite: Acceptance into the Dental Hygiene Program*

Continues patient care session with emphasis on attaining a level of competency and efficiency for successful performance in clinical board exams and private practice. Focuses on clinical skill development in tobacco cessation, product selection, patient communications, curettage and special topics developed patient treatments. Provides elective extra-mural clinical sites for additional practice.

**DEH 2082 Periodontics III**

1 Credit Hour • 15 Contact Hours (Lecture)

*Prerequisite: Acceptance into the Dental Hygiene Program*

Course provides comprehensive dental hygiene clinical management techniques for periodontal patients supported by application of basic clinical research sciences. Focus is on the therapy component of periodontics including instructional sessions covering the general principles of periodontal surgery, the surgical management of soft tissues and osseous defects, wound healing, implants, and the role of occlusion in periodontal therapy.

**DEH 2085 Clinical Theory of Dental Hygiene III**

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite: Acceptance into the Dental Hygiene Program*

Serves as the capstone course of the final semester of a two-year curriculum. Prepares the student for two major goals: basic competence for transition to provision of dental hygiene services in private practice; and the ability to successfully pass both written National Boards examinations and regional dental hygiene clinical examinations. Emphasizes the application of case-based learning. Major topics include cosmetic bleaching, air powered polishing devices, application of the re-evaluation process in treatment planning for periodontally involved cases, preparation for the CRDTS regional clinical exam process, application of an effective tobacco cessation process, technique and process for gingival curettage, technique and process for amalgam polishing and margination, care of cosmetic dental restorations, and maintenance of implants.

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**Diesel Power Mechanics Courses**

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**DPM 1000 Introduction to Diesel Mechanics**

(Previously DPM 100 Introduction to Diesel Mechanics)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

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 1001 Diesel Shop Orientation**

(Previously DPM 101 Diesel Shop Orientation)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Co-requisite: DPM 1000*

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 1003 Diesel Engines I**

(Previously DPM 103 Diesel Engines I)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Prerequisite: DPM 1000**Co-requisite: DPM 1001*

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 1005 Heavy Duty Powertrains I**

(Previously DPM 105 Heavy Duty Powertrains I)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: DPM 1000, DPM 1001*

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 1006 Diesel Fuel Systems**

(Previously DPM 106 Diesel Fuel Systems)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Note: DPM 1006 must be taken concurrently with DPM 2010*

*Prerequisite: DPM 1000, DPM 1001*

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 1007 Fundamentals of Four-Wheel & Front-Wheel Drive**

(Previously DPM 107 Fundamentals of Four-Wheel & Front-Wheel Drive)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Prerequisite: DPM 1000, DPM 1001*

Focuses on the operation and repair of four-wheel drive and front wheel drive systems.

#### **DPM 1011 Cab & Electrical PMI**

(Previously DPM 111 Cab & Electrical PMI)

1.5 Credit Hours • 33.75 Contact Hours (Lecture/Lab Combination)

*Note: DPM 1011 must be taken concurrently with DPM 1012*

*Prerequisite: DPM 1000, DPM 1001*

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 1012 Engine Systems PMI**

(Previously DPM 112 Engine Systems PMI)

1.5 Credit Hours • 33.75 Contact Hours (Lecture/Lab Combination)

*Note: DPM 1012 must be taken concurrently with DPM 1011*

*Prerequisite: DPM 1000, DPM 1001*

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 1020 Basic Heavy Duty Electricity**

(Previously DPM 120 Basic Heavy Duty Electricity)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Prerequisite: DPM 1000, DPM 1001*

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 1021 Hydraulic Systems I**

(Previously DPM 121 Hydraulic Systems I)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: DPM 1000, DPM 1001*

Offers instruction on the basic fundamentals of hydraulics and their applications. Diagnosis, service, and testing along with safety are stressed within this course.

#### **DPM 1022 Hydraulic Systems II**

(Previously DPM 122 Hydraulic Systems II)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Co-requisite: DPM 1021*

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 1023 Cummins B Series**

(Previously DPM 123 Cummins B Series)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Prerequisite: DPM 1000, DPM 1001, DPM 1003, DPM 1006, DPM 2003, DPM 2010*

Covers the history, developments, theory, operation, and service procedures of a Cummins B Series diesel engines.

#### **DPM 1024 Powerstroke Engines**

(Previously DPM 124 Powerstroke Engines)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Prerequisite: DPM 1000, DPM 1001, DPM 1003, DPM 1006, DPM 2003, DPM 2010*

Covers the history, development, theory, operation, and service procedures of Powerstroke Diesel Engines used in Ford Trucks.

#### **DPM 1025 Duramax Engines**

(Previously DPM 125 Duramax Engines)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Prerequisite: DPM 1000, DPM 1001, DPM 1003, DPM 1006, DPM 2003, DPM 2010*

Covers the history, development, theory, operation, and service procedures for Duramax Diesel Engines used in General Motors Trucks.

#### **DPM 1026 Heavy Duty Starting & Charging**

(Previously DPM 126 Heavy Duty Starting & Charging)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: DPM 1000, DPM 1001*

*Co-requisite: DPM 1020*

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 1040 Heavy Duty Steering & Suspension I**

(Previously DPM 140 Heavy Duty Steering & Suspension I)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: DPM 1000, DPM 1001*

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 2003 Diesel Engines II**

(Previously DPM 203 Diesel Engines II)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Co-requisite: DPM 1003*

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 2005 Heavy Duty Powertrains II**

(Previously DPM 205 Heavy Duty Powertrains II)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: DPM 1000, DPM 1001*

*Co-requisite: DPM 1005*

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 2006 Heavy Duty Brakes I**

(Previously DPM 206 Heavy Duty Brakes I)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* DPM 1000, DPM 1001

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 2007 Heavy Duty Brakes II**

(Previously DPM 207 Heavy Duty Brakes II)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* DPM 1000, DPM 1001*Co-requisite:* DPM 2006

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 2008 H/D Automatic Trans Diagnosis**

(Previously DPM 208 H/D Automatic Trans Diagnosis)

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* DPM 1000, DPM 1001*Co-requisite:* DPM 2005

Provides laboratory hands on experiences in the diagnosis of electrically controlled heavy duty transmissions.

**DPM 2010 Diesel Air Induction & Exhaust**

(Previously DPM 210 Diesel Air Induction &amp; Exhaust)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Note:* DPM 2010 must be taken concurrently with DPM 1006*Prerequisite:* DPM 1000, DPM 1001

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 2011 Drivetrain, Steering & Suspension Preventive Maintenance**

(Previously DPM 211 Drivetrain, Steering &amp; Suspension Preventive Maintenance)

1.5 Credit Hours • 33.75 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* DPM 1000, DPM 1001, DPM 1011

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 2012 Brake Systems PMI**

(Previously DPM 212 Brake Systems PMI)

1.5 Credit Hours • 33.75 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* DPM 1000, DPM 1001*Co-requisite:* DPM 2011

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 2022 Heavy Duty Lighting & Instrumentation**

(Previously DPM 222 Heavy Duty Lighting &amp; Instrumentation)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* DPM 1000, DPM 1001, DPM 1020

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 a 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 2023 Heavy Duty Body Electrical Systems**

(Previously DPM 223 Heavy Duty Body Electrical Systems)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* DPM 1000, DPM 1001, DPM 1020

Provides a comprehensive study of the theory, operation, diagnosis, and repair of the heavy-duty vehicle body and safety electrical systems and accessories.

**DPM 2040 Heavy Duty Steering & Suspension II**

(Previously DPM 240 Heavy Duty Steering &amp; Suspension II)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* DPM 1000, DPM 1001*Co-requisite:* DPM 1040

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 2064 Heavy Duty Heating & Ventilation**

(Previously DPM 264 Heavy Duty Heating &amp; Ventilation)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* DPM 1000, DPM 1001*Co-requisite:* DPM 2065

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 2065 Heavy Duty Air Conditioning Systems Service**

(Previously DPM 265 Heavy Duty Air Conditioning Systems Service)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* DPM 1000, DPM 1001*Co-requisite:* DPM 2064

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 2080 Internship**

(Previously 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.



## Driving Courses

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### DRV 1000 Driver's Education

(Previously DRV 100 Driver's Education)

2.5 Credit Hours • 56.25 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* DRV 1030 (Grade of B or higher), DRV 1034 (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 1030 Preparing for CDL

(Previously DRV 130 Preparing for CDL)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* DRV 1032 (Grade of B or higher), DRV 1036 (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 1032 Trucks & Trailing

(Previously DRV 132 Trucks & Trailing)

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 1034 Trucking Laws & Regulations

(Previously DRV 134 Trucking Laws & Regulations)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* DRV 1032 (Grade of B or higher), DRV 1036 (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 1036 Vehicle Inspection & Maintenance

(Previously 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 1038 Driver Training

(Previously DRV 138 Driver Training)

6 Credit Hours • 135 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* DRV 1030 (Grade of B or higher), DRV 1034 (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

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### ECE 1011 Introduction to Early Childhood Education

(Previously ECE 101 Introduction to Early Childhood Education)

3 Credit Hours • 45 Contact Hours (Lecture)

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 1031 Guidance Strategies for Young Children

(Previously ECE 103 Guidance Strategies for Young Children)

3 Credit Hours • 45 Contact Hours (Lecture)

*Co-requisite:* ECE 1011

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 1045 Introduction to Early Childhood Techniques

(Previously ECE 102 Introduction to Early Childhood Techniques)

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Practicum)

*Co-requisite:* ECE 1011, ECE 1031

Focuses on a classroom seminar and placement in a childcare 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 1111 Infant & Toddler Theory & Practice

(Previously ECE 111 Infant & Toddler Theory & Practice)

3 Credit Hours • 45 Contact Hours (Lecture)

*Co-requisite:* ECE 1011

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 1125 Introduction to Infant/Toddler Lab Techniques

(Previously ECE 112 Introduction to Infant/Toddler Lab Techniques)

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Practicum)

*Co-requisite:* ECE 1011, ECE 1111

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 1925 School Age Lab Techniques

(Previously ECE 192 School Age Lab Techniques)

3 Credit Hours • 90 Contact Hours (Practicum)

*Co-requisite:* ECE 2381

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 2051 Nutrition, Health & Safety**

(Previously ECE 205 Nutrition, Health &amp; Safety)

3 Credit Hours • 45 Contact Hours (Lecture)

*Co-requisite: ECE 1011*

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 2061 Observation & Assessment of Young Children's Development, Learning, & Programs**

(Previously ECE 209 Observation &amp; Assessment of Young Children's Development, Learning &amp; Programs)

1 Credit Hour • 15 Contact Hours (Lecture)

*Co-requisite: ECE 1011*

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 2079 Seminar**

(Previously 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 2089 Capstone: Early Childhood Education**

(Previously 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.

**ECE 2101 Working with Families & Communities**

(Previously ECE 256 Working with Families &amp; Communities)

3 Credit Hours • 45 Contact Hours (Lecture)

*Co-requisite: ECE 1011*

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 2371 Theories & Techniques of Social & Emotional Growth**

(Previously ECE 237 Theories &amp; Techniques of Social &amp; Emotional Growth)

3 Credit Hours • 45 Contact Hours (Lecture)

*Co-requisite: ECE 1011**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 2381 ECE Child Growth & Development**

(Previously ECE 238 ECE Child Growth &amp; Development)

3 Credit Hours • 45 Contact Hours (Lecture)

*Co-requisite: ECE 1011*

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 2401 Administration of Early Childhood Care & Education Programs**

(Previously ECE 240 Administration of Early Childhood Care &amp; Education Programs)

3 Credit Hours • 45 Contact Hours (Lecture)

*Co-requisite: ECE 1011*

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 2411 Administration: Human Relations for Early Childhood Education**

(Previously ECE 241 Administration: Human Relations for Early Childhood Education)

3 Credit Hours • 45 Contact Hours (Lecture)

*Co-requisite: ECE 1011*

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 2601 The Exceptional Child**

(Previously ECE 260 The Exceptional Child)

3 Credit Hours • 45 Contact Hours (Lecture)

*Co-requisite: ECE 1011, ECE 2381*

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 2615 Exceptional Child Lab Techniques**

(Previously ECE 261 Exceptional Child Lab Techniques)

3 Credit Hours • 90 Contact Hours (Practicum)

*Co-requisite: ECE 2601*

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 2621 Curriculum Development: Methods & Techniques**

(Previously ECE 220 Curriculum Development: Methods &amp; Techniques)

3 Credit Hours • 45 Contact Hours (Lecture)

*Co-requisite: ECE 1011, ECE 2381*

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 2631 Language & Cognition for the Young Child**

(Previously ECE 225 Language &amp; Cognition for the Young Child)

3 Credit Hours • 45 Contact Hours (Lecture)

*Co-requisite: ECE 1011, ECE 2381**Note: Course offered at CO Online 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 2641 Creativity & the Young Child**

(Previously ECE 226 Creativity & the Young Child)

3 Credit Hours • 45 Contact Hours (Lecture)

*Co-requisite: ECE 1011, ECE 2381*

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 2661 Science/Math & the Young Child**

(Previously ECE 125 Science/Math & the Young Child)

3 Credit Hours • 45 Contact Hours (Lecture)

*Co-requisite: ECE 1011, ECE 2381*

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.

## **Economics Courses**

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### **ECO 1001 Economics of Social Issues: SS1**

(Previously 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 2001 Principles of Macroeconomics: SS1**

(Previously ECO 201 Principles of Macroeconomics: SS1)

3 Credit Hours • 45 Contact Hours (Lecture)

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 2002 Principles of Microeconomics: SS1**

(Previously ECO 202 Principles of Microeconomics: SS1)

3 Credit Hours • 45 Contact Hours (Lecture)

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 2011 Gender in the Economy: SS1**

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces the role of gender in the economy including the concepts of femininity and masculinity and how these concepts play a role in consumption, labor, marriage, poverty, inequality, and globalization.

### **ECO 2045 Environmental Economics: SS1**

(Previously ECO 245 Environmental Economics: SS1)

3 Credit Hours • 45 Contact Hours (Lecture)

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**

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### **EDU 2088 Practicum II**

(Previously EDU 288 Practicum II)

1 Credit Hour • 45 Contact Hours (Practicum)

*Co-requisite: EDU 2211*

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 2211 Introduction to Education**

(Previously EDU 221 Introduction to Education)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

*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 the educational theory and practices from Early Childhood Education (ECE) through secondary education.

### **EDU 2215 Introduction to Education Techniques**

1 Credit Hour • 15 Contact Hours (Lecture)

Provides opportunities to explore teacher dispositions and skills through hands-on work experience under the immediate supervision of experienced personnel in an educational setting related to an educator program of study. Direct guidance is provided by the course instructor in educational settings from PreK – 12th grade.

### **EDU 2221 Effective Teaching**

(Previously EDU 222 Effective Teaching)

1 Credit Hour • 15 Contact Hours (Lecture)

Focuses on strategies for becoming effective teachers in diverse education settings within Early Childhood Education (ECE), K-12, or higher education. This course includes using learning objectives for assessment, instructional design, and lesson planning to create inclusive learning environments through the implementation of research-based best practices.

### **EDU 2331 English Language Learners**

(Previously EDU 233 English Language Learners)

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on all aspects in the role of working with and teaching English Language Learners (ELL). This course introduces language acquisition, pedagogy, and culture. Additional topics include the examination of historical, legal, and political issues related to educational programs for non-and limited-English speaking students, and associated resources for teaching ELL students.

### **EDU 2341 Multicultural Education**

(Previously EDU 234 Multicultural Education)

3 Credit Hours • 45 Contact Hours (Lecture)

Explores racial, ethnic, cultural, and socioeconomic groups to gain an understanding of equity, diversity, and inclusion in communities and education. This course provides opportunities to contextualize multicultural perspectives in society and their impact on the education system.

### **EDU 2401 Teaching the Exceptional Learners**

(Previously EDU 240 Teaching the Exceptional Learner)

*Prerequisite: PSY 2440 or PSY 2441*

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on learners with exceptionalities with emphasis on factors relating to current practices, identification, characteristics, and educational adaptations in special education preschool to 21 (P-21). Course topics include issues related to mild disabilities,

severe disabilities, emotional and behavioral disorders, intellectual disabilities, and gifted and talented.

### **EDU 2501 CTE in Colorado**

(Previously 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 2611 Teaching, Learning & Technology**

(Previously 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 2631 Teaching & Learning Online**

(Previously 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.

## **Electricity Industrial Commercial Courses**

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### **EIC 1860 National Electrical Code I**

(Previously 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 1861 National Electrical Code II**

(Previously EIC 135 National Electrical Code II)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Builds on course EIC 1860 and covers chapters five through nine of the National Electrical Code, including hazardous locations, special occupancies, conditions, and equipment.

### **EIC 2330 Instrument & Process Control II**

(Previously EIC 230 Instrument and Process Control II)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Prerequisite: ELT 1206*

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 2340 Supervisory Control & Data Acquisition**

(Previously EIC 245 Supervisory Control & Data Acquisition)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Prerequisite: ELT 1206*

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 2751 Fiber Optics Certification**

(Previously EIC 253 Fiber Optics Certification)

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: ELT 1206*

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 2757 Lan Certification/Repair/Troubleshooting**

(Previously EIC 259 Lan Certification/Repair/Troubleshooting)

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: ELT 1206*

Explores the testing, repair, certifying and troubleshooting of LAN using network distribution simulators to diagnose twisted repairs, coax and fiber.

### **EIC 2770 Fundamentals of Industrial Networking**

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: ELT 1206*

Covers the operation and troubleshooting of industrial networks. This course introduces intersectional skills pertaining to industrial networking including security and wireless.

### **EIC 2817 Electrical Estimating/Costing**

(Previously EIC 217 Electrical Estimating/Costing)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Prerequisite: ELT 1206*

Focuses on the fundamentals of electrical estimating, material takeoffs from prints, required labor hours, material loss allowances and scheduling to ensure orderly work progress.

## **Electronics Courses**

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### **ELT 1001 Survey of Electronics**

(Previously 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 1002 Soldering**

(Previously 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 1004 Electronic Assembly**

(Previously 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 1206 Fundamentals of DC/AC**

(Previously ELT 106 Fundamentals of DC/AC)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Co-requisite: MAT 1140 or higher*

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 1207 Fundamentals of Industrial Electronics**

(Previously ELT 107 Fundamentals of Industrial Electronics)  
3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Prerequisite:* ELT 1206  
Provides a basic knowledge of generators, motors, and the solid-state devices and digital techniques used for industrial control applications.

**ELT 1212 Advanced DC/AC**

(Previously ELT 112 Advanced DC/AC)  
3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Prerequisite:* ELT 1206  
Continues to build on ELT 1206 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 1234 Solid State Devices I**

(Previously ELT 134 Solid State Devices I)  
3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Prerequisite:* ELT 1206  
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 1235 Solid State Devices II**

(Previously ELT 135 Solid State Devices II)  
3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Prerequisite:* ELT 1206  
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 1236 Introduction to Transistors**

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)  
*Prerequisite:* ELT 1206  
Introduces the operation and applications of bipolar transistors, JFETs and MOSFETs. Includes switching circuits, single-stage small-signal amplifiers and troubleshooting.

**ELT 1237 Advanced Transistors**

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Prerequisite:* ELT 1206  
Continues ELT 1236 with specifications and additional applications of bipolar transistors, JFETs and MOSFETs. Covers voltage regulation, common-collector, and power amplifiers. Includes analyses of single and cascaded amplifier stages. Emphasizes troubleshooting.

**ELT 1246 Digital Devices in Computers**

(Previously ELT 146 Digital Devices in Computers)  
3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Prerequisite:* ELT 1206  
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 1247 Digital Devices I**

(Previously ELT 147 Digital Devices I)  
4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)  
*Prerequisite:* ELT 1206  
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 1248 Digital Devices II**

(Previously ELT 148 Digital Devices II)  
3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Prerequisite:* ELT 1206  
Continues ELT 1247 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 1250 Electromechanical Troubleshooting**

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)  
*Prerequisite:* ELT 1206  
Focuses on troubleshooting electromechanical systems consisting of switches, relays, and motors. Emphasizes teamwork.

**ELT 2080 Internship**

(Previously ELT 280 Internship)  
3 Credit Hours • 135 Contact Hours (Internship)  
*Prerequisite:* Permission of Chair or Instructor  
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.

**ELT 2205 Electronic Troubleshooting I**

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Prerequisite:* ELT 1206  
Introduces basic troubleshooting techniques and skills required to analyze, troubleshoot, and repair both analog and digital electronic devices.

**ELT 2206 Electronic Troubleshooting II**

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Prerequisite:* ELT 1206  
Focuses on selection, maintenance and care procedures for equipment used in troubleshooting analog equipment. Introduces basic repair procedures and quality assurance and control methods.

**ELT 2215 Operational Amplifiers**

(Previously ELT 215 Operational Amplifiers)  
3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Prerequisite:* ELT 1206  
Focuses on a study of integrated operational amplifiers and their applications. Troubleshooting is emphasized.

**ELT 2235 Semiconductor Manufacturing I**

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Prerequisite:* ELT 1206  
Serves as the first course in a two-course capstone sequence in semiconductor processing. Covers tracing semiconductor processing from raw materials to a finished integrated circuit, and semiconductor device physics. Includes the following manufacturing processes: oxidation, mask design, photolithography, and etch.

**ELT 2236 Semiconductor Manufacturing II**

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Prerequisite:* ELT 1206  
Serves as the second course in a two-course capstone sequence in semiconductor processing. Covers the following manufacturing processes: doping, chemical vapor deposition, metalizing, and test/sort.

**ELT 2252 Motors & Controls**

(Previously ELT 252 Motors &amp; Controls)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: ELT 1206*

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 2266 Advanced Electronic Assembly**

(Previously ELT 266 Advanced Electronic Assembly)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: ELT 1206*

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 2348 Automation Control Circuits**

(Previously ELT 248 Automation Control Circuits)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: ELT 1206*

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 2357 Sensors & Transducers**

(Previously ELT 257 Sensors &amp; Transducers)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: ELT 1206*

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 2358 Programmable Logic Controllers**

(Previously ELT 258 Programmable Logic Controllers)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: ELT 1206, ELT 2252*

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 2359 Advanced Programmable Logic Controllers**

(Previously ELT 259 Advanced Programmable Logic Controllers)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: ELT 2358*

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 2361 Microprocessors**

(Previously ELT 261 Microprocessors)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: ELT 1246 or ELT 1247*

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 2362 Introduction to Microcontrollers**

(Previously ELT 262 Introduction to Microcontrollers)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: ELT 1246 or ELT 1247*

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 2367 Introduction to Robotics**

(Previously ELT 267 Introduction to Robotics)

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: ELT 1206*

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 2368 Robotics Technologies**

(Previously ELT 268 Robotics Technologies)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: ELT 2358*

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 2437 Vacuum and Power RF Systems**

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: ELT 1206, ELT 1212*

Covers vacuum systems and RF (radio frequency) energy sources in the manufacture of semiconductor devices. Includes gas laws and gas properties, vacuum pumps, gauges and valves, and leak detection techniques. Addresses plasma physics, RF generators, transmission lines, RF interference, and safety.

**ELT 2455 Fluid Power**

(Previously ELT 255 Fluid Power)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: ELT 1206*

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.

## Emergency Management and Planning Courses

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**EMP 1001 Principles of Emergency Management**

(Previously 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 1005 Emergency Planning**

(Previously 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 1006 Exercise Design Evaluation**

(Previously 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 1007 Emergency Operations Center & Communications**

(Previously 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 2040 Leadership & Influence**

(Previously 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**

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#### **EMS 1015 Emergency Medical Responder**

(Previously 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 1021 EMT Fundamentals**

(Previously EMS 121 EMT Fundamentals)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Note: EMS 1021, EMS 1022, EMS 1023, EMS 1024, and EMS 1070 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 1022 EMT Medical Emergencies**

(Previously EMS 122 EMT Medical Emergencies)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Co-requisite: EMS 1021*

*Note: EMS 1021, EMS 1022, EMS 1023, EMS 1024, and EMS 1070 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 1023 EMT Trauma Emergencies**

(Previously EMS 123 EMT Trauma Emergencies)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Co-requisite: EMS 1021*

*Note: EMS 1021, EMS 1022, EMS 1023, EMS 1024, and EMS 1070 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 1024 EMT Special Considerations**

(Previously EMS 124 EMT Special Considerations)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Co-requisite: EMS 1021*

*Note: EMS 1021, EMS 1022, EMS 1023, EMS 1024, and EMS 1070 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 1026 EMT Basic Refresher**

(Previously 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 1070 EMT Clinical**

(Previously EMS 170 EMT Clinical)

1 Credit Hour • 30 Contact Hours (Clinical)

*Co-requisite: EMS 1021*

*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 1011 at PPSC 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 1071 Advanced Emergency Medical Technician Clinical Internship**

(Previously EMS 171 Advanced Emergency Medical Technician Clinical Internship)

2 Credit Hours • 90 Contact Hours (Clinical)

*Co-requisite: EMS 1125*

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 1081 EMT Internship I**

(Previously EMS 181 EMT Internship)

1.5 Credit Hours • 67.5 Contact Hours (Internship)

*Note: Colorado EMT Certification required*

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 1125 Advanced Emergency Medical Technician Fundamentals**

(Previously EMS 131 Advanced Emergency Medical Technician Fundamentals)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Prerequisite: College Readiness in English*

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 1127 Advanced Emergency Medical Technician Special Considerations**

(Previously EMS 127 Advanced Emergency Medical Technician Special Considerations)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Co-requisite: EMS 1125*

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 1129 Emergency Medical Technician Pharmacology**

(Previously EMS 129 Emergency Medical Technician Pharmacology)

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

*Co-requisite: EMS 1125*

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 1132 EMS Intravenous / Intraosseous Therapy**

(Previously 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 1133 Advanced Emergencies Medical Emergencies**

(Previously EMS 133 Advanced Emergencies Medical Emergencies)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Co-requisite: EMS 1125*

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 1135 Advanced Emergency Medical Technician Trauma Emergencies**

(Previously EMS 135 Advanced Emergency Medical Technician Trauma Emergencies)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Co-requisite: EMS 1125*

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 1138 Basic EMS Simulation Lab**

(Previously EMS 138 Basic EMS Simulation Lab)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*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 1140 Advanced EMS Simulation Lab**

(Previously EMS 140 Advanced Simulation Lab)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*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 2025 Fundamentals of Paramedic Practice**

(Previously EMS 225 Fundamentals of Paramedic Practice)  
3 Credit Hours • 90 Contact Hours (45 Lecture/Lab Combination, 45 Practicum)

*Prerequisite: BIO 1006*

*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 2026 Fundamentals of Paramedic Practice Lab**

(Previously EMS 226 Fundamentals of Paramedic Practice Lab)  
2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Co-requisite: EMS 2025*

*Note: Must have faculty consent to enroll*

Serves as the lab experience to coincide with EMS 2025 topics.

### **EMS 2027 Paramedic Special Considerations**

(Previously EMS 227 Paramedic Special Considerations)  
3 Credit Hours • 90 Contact Hours (45 Lecture/Lab Combination, 45 Practicum)

*Co-requisite: EMS 2025*

*Note: Must have faculty consent to enroll*

Focuses on a comprehensive study of Advanced Life Support Practice.

### **EMS 2028 Paramedic Special Considerations Lab**

(Previously EMS 228 Paramedic Special Considerations Lab)  
2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Co-requisite: EMS 2025*

*Note: Must have faculty consent to enroll*

Serves as the lab experience for those students enrolled in EMS 2027.

### **EMS 2029 Paramedic Pharmacology**

(Previously EMS 229 Paramedic Pharmacology)  
3 Credit Hours • 90 Contact Hours (45 Lecture/Lab Combination, 45 Practicum)

*Co-requisite: EMS 2025*

*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 2030 Paramedic Pharmacology Lab**

(Previously EMS 230 Paramedic Pharmacology Lab)  
2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)  
*Co-requisite: EMS 2025*

*Note: Must have faculty consent to enroll*

Serves as the required lab course in the paramedic education program.

### **EMS 2031 Paramedic Cardiology**

(Previously EMS 231 Paramedic Cardiology)  
5 Credit Hours • 135 Contact Hours (90 Lecture/Lab Combination, 45 Practicum)

*Co-requisite: EMS 2025*

*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 2032 Paramedic Cardiology Lab**

(Previously EMS 232 Paramedic Cardiology Lab)  
1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)  
*Co-requisite: EMS 2025*

*Note: Must have faculty consent to enroll*

Incorporates a hands-on application of principles of cardiac care in the hospital environment.

### **EMS 2033 Paramedic Medical Emergencies**

(Previously EMS 233 Paramedic Medical Emergencies)  
4 Credit Hours • 112.5 Contact Hours (67.5 Lecture/Lab Combination, 45 Practicum)

*Co-requisite: EMS 2025*

*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 2034 Paramedic Medical Emergencies Lab**

(Previously EMS 234 Paramedic Medical Emergencies Lab)  
1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

*Co-requisite: EMS 2025*

*Note: Must have faculty consent to enroll*

Focuses on a clinical study of adult and pediatric medical emergencies.

### **EMS 2035 Paramedic Trauma Emergencies**

(Previously 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 2036 Paramedic Trauma Emergencies Lab**

(Previously EMS 236 Paramedic Trauma Emergencies Lab)  
1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)  
*Co-requisite: EMS 2025*

*Note: Must have faculty consent to enroll*

Serves as a lab presenting various acute trauma scenarios.

**EMS 2037 Paramedic Internship Preparatory**

(Previously EMS 237 Paramedic Internship Preparatory)  
2 Credit Hours • 30 Contact Hours (Lecture)

*Co-requisite: EMS 2025*

*Note: Must have faculty consent to enroll*

Reviews concepts and techniques used in the pre-hospital setting.

**EMS 2080 Paramedic Internship I**

(Previously EMS 280 Paramedic Internship I)  
6 Credit Hours • 270 Contact Hours (Internship)  
*Co-requisite: EMS 2025*

*Note: Must have faculty consent to enroll*

Serves as the preceptor/internship program for paramedic students.

**EMS 2081 Paramedic Internship II**

(Previously EMS 281 Paramedic Internship II)  
6 Credit Hours • 270 Contact Hours (Internship)  
*Co-requisite: EMS 2025*

*Note: Must have faculty consent to enroll*

Serves as the continuation of EMS 2080, preceptor program for paramedic students.

**EMS 3010 Behavior Assessment**

(Previously EMS 310 Behavior Assessment)  
3 Credit Hours • 45 Contact Hours (Lecture)

*Note: Admission into the Advanced Paramedic Practitioner BAS required*

Introduces several assessment tools and techniques for assessing a client in a behavioral setting. 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 3011 Motivational Interviewing EMS**

(Previously EMS 311 Motivational Interviewing EMS)  
3 Credit Hours • 45 Contact Hours (Lecture)

*Note: Admission into the Advanced Paramedic Practitioner BAS required*

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.

**EMS 3012 Trauma Informed Care and Assessment**

(Previously EMS 312 Trauma Informed Care and Assessment)  
3 Credit Hours • 45 Contact Hours (Lecture)

*Note: Admission into the Advanced Paramedic Practitioner BAS required*

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 3030 Community Advocacy & Outreach**

(Previously EMS 330 Community Advocacy and Outreach)  
3 Credit Hours • 45 Contact Hours (Lecture)

*Note: Admission into the Advanced Paramedic Practitioner BAS required*

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 3031 Community Assessment**

(Previously EMS 331 Community Assessment)  
3 Credit Hours • 45 Contact Hours (Lecture)

*Note: Admission into the Advanced Paramedic Practitioner BAS required*

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 4025 Fundamentals of Advanced Paramedic Practice**

(Previously EMS 425 Fundamentals of Advanced Paramedic Practice)  
4 Credit Hours • 60 Contact Hours (Lecture)

*Note: Admission into the Advanced Paramedic Practitioner BAS required*

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 4030 Care & Prevention Development Strategies**

(Previously EMS 430 Care and Prevention Development Strategies)  
3 Credit Hours • 45 Contact Hours (Lecture)

*Note: Admission into the Advanced Paramedic Practitioner BAS required*

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 4033 Advanced Paramedic Medical Care**

(Previously EMS 433 Advanced Paramedic Medical Care)  
4 Credit Hours • 60 Contact Hours (Lecture)

*Note: Admission into the Advanced Paramedic Practitioner BAS required*

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 4035 Advanced Paramedic Trauma Care**

(Previously EMS 435 Advanced Paramedic Trauma Care)  
3 Credit Hours • 45 Contact Hours (Lecture)

*Note: Admission into the Advanced Paramedic Practitioner BAS required*

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 4089 Capstone**

(Previously EMS 489 Capstone)  
5 Credit Hours • 150 Contact Hours (Clinical)

*Note: Admission into the Advanced Paramedic Practitioner BAS required*

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.

## **Emergency Service Administration Courses**

### **ESA 3000 Leadership for Emergency Executives**

(Previously ESA 300 Leadership for Emergency Executives)

3 Credit Hours • 45 Contact Hours (Lecture)

*Note: Permission of Program Faculty required*

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 3005 Crisis Communication & Public Relations**

(Previously ESA 305 Crisis Communication & Public Relations)

3 Credit Hours • 45 Contact Hours (Lecture)

*Co-requisite: ESA 3000*

Develops enhanced 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 applicable to a wide range of audiences and situations.

### **ESA 3010 Emergency Public Information & Media Training**

(Previously ESA 310 Emergency Public Information & Media Training)

3 Credit Hours • 45 Contact Hours (Lecture)

*Co-requisite: ESA 3000*

Examines communicating public information in emergency services. This course covers communication technologies, relationships among methods of delivery, effective skills of an effective Public Information Officer (PIO), and effective communication tools for given situations and audiences. Additionally, the course discusses effective oral and written communication, designing and executing a media plan, and developing a public awareness campaign for an emergency event.

### **ESA 3015 Elements of Emergency Service Administration**

(Previously ESA 315 Elements of Emergency Service Administration)

3 Credit Hours • 45 Contact Hours (Lecture)

*Co-requisite: ESA 3000*

Introduces the fundamentals of emergency service administration. This course also examines the multidisciplinary roles and responsibilities of the emergency service administrator in terms of leading and participating in incident management including command, multi-agency coordinating, communicating, and establishing procedures.

### **ESA 3020 Designing Safer Communities: Pre-incident Planning & Risk Analysis**

(Previously ESA 320 Designing Safer Communities: Pre-incident Planning & Risk Analysis)

4 Credit Hours • 60 Contact Hours (Lecture)

*Co-requisite: ESA 3000*

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 3025 Public Policy & Practical Applications in Emergency Services**

(Previously ESA 325 Public Policy & Practical Applications in Emergency Services)

3 Credit Hours • 45 Contact Hours (Lecture)

*Co-requisite: ESA 3000*

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 3030 Budget & Planning Fundamentals for Emergency Administrators**

(Previously ESA 330 Budget & Planning Fundamentals for Emergency Administrators)

3 Credit Hours • 45 Contact Hours (Lecture)

*Co-requisite: ESA 3000*

Covers budgeting principles in emergency services including effective and efficient budgeting strategies necessary to support and sustain emergency service organizational operations. Guidelines for procurement of emergency service funding are strongly emphasized. This course describes the auditing processes for private and public organizations and provides scenarios of misappropriations or misuse of funding. Additionally, it introduces lean management and SWOT (Strength, Weakness, Opportunity, Threat) concepts.

### **ESA 4000 Personnel Management in Emergency Service Agencies**

(Previously ESA 400 Personnel Management in Emergency Service Agencies)

3 Credit Hours • 45 Contact Hours (Lecture)

*Co-requisite: ESA 3000*

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 4005 Public Health in Complex Emergencies**

(Previously ESA 405 Public Health in Complex Emergencies)

4 Credit Hours • 60 Contact Hours (Lecture)

*Co-requisite: ESA 3000*

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 4010 Terrorism Threat & Risk Analysis**

(Previously ESA 410 Terrorism Threat & Risk Analysis)

3 Credit Hours • 45 Contact Hours (Lecture)

*Co-requisite: ESA 3000*

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 4015 Tactical Planning, Response & Recovery**

(Previously ESA 415 Tactical Planning, Response &amp; Recovery)

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite: ESA 3000, ESA 3015*

Expands upon concepts in emergency management introduced in Elements of Emergency Service Administration. This course addresses topics associated with All-Hazards emergency planning, response, and recovery, as well as multi-agency involvement. It also discusses the templates and models used to develop action and operations plans and the complex interface between incident action planning, incident command, and emergency operations at all levels of government.

**ESA 4020 Research & Design for Emergency Administration**

(Previously ESA 420 Research &amp; Design for Emergency Administration)

3 Credit Hours • 45 Contact Hours (Lecture)

*Co-requisite: ESA 3000*

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 4089 Capstone: Emergency Services Administration**

(Previously ESA 489 Capstone: Emergency Services Administration)

6 Credit Hours • 90 Contact Hours (Lecture)

*Note: Permission of Program Faculty required*

Provides an opportunity to demonstrate a culmination of learning through integrative experience within a given program of study.

## Engineering Courses

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**EGG 1020 Engineering Methodologies**

(Previously EGG 102 Introduction to Engineering Methodologies)

3 Credit Hours • 67.5 Contact Hours (22.5 Lecture (1.5 Credit Hours), 45 Lab (1.5 Credit Hours))

*Prerequisite: MAT 1340 or higher*

Presents the fundamental principles of engineering methodologies with integration of concepts in a laboratory setting. This course focuses on collaboration in the engineering design process while developing scientific and engineering related projects with a focus on professional communication in engineering.

**EGG 1025 Principles of Aerospace**

3 Credit Hours • 67.5 Contact Hours (22.5 Lecture (1.5 Credit Hours), 45 Lab (1.5 Credit Hours))

*Prerequisite: MAT 1340 or higher*

This course covers the field of aerospace engineering and how engineers use math, science, and technology to solve problems. The course also includes how the problem-solving process is applied to satellite subsystem designs and implemented practically, and an examination of the social and political implications of technology.

**EGG 1040 Engineering Projects**

(Previously EGG 140 Engineering Projects)

3 Credit Hours • 67.5 Contact Hours (22.5 Lecture (1.5 Credit Hours), 45 Lab (1.5 Credit Hours))

*Prerequisite: MAT 1340 or higher*

Teaches how to engage community stakeholders and use traditional research practices to identify, define, articulate, and design technical solutions to open-ended problems. The course utilizes teamwork on a semester-long iterative design project.

**EGG 1060 Introduction to Engineering Computing**

(Previously EGG 145 Introduction to Engineering Computing)

4 Credit Hours • 60 Contact Hours (Lecture)

*Co-requisite: MAT 2410 or higher*

Introduces techniques for designing, implementing, and testing computer programs in higher-level programming languages to solve problems common in engineering domains. This course uses elementary numerical methods, visualization, and tools from engineering.

**EGG 1065 Logic Design I**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

Covers the design of combinatorial and sequential switching circuits. Topics include: Boolean Algebra, Boolean Function Minimization Techniques, Combinatorial Circuit Analysis and Synthesis, Synchronous Sequential Circuit Analysis and Synthesis, Algorithmic State Machine Design, Asynchronous Sequential Circuit Analysis and Synthesis. Use of computer aided design tools facilitating design, simulation and implementation of digital system using field programmable logic devices is an integral part of the entire course. Laboratory experiments included.

**EGG 2011 Engr Mechanics I – Statics**

(Previously EGG 211 Engr Mechanics I - Statics)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: MAT 2410 or higher**Co-requisite: PHY 2111*

Focuses on the vector and calculus treatment of forces and force systems. Covers concurrent and noncurrent force systems. Includes calculating moments of friction, trusses, centroids, and moments of inertia.

**EGG 2012 Engineering Mechanics II (Dynamics)**

(Previously EGG 212 Engineering Mechanics II (Dynamics))

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: EGG 2011*

Presents content in particle kinematics, including 2-D motion in x-y coordinates, normal tangential coordinates, and polar coordinates; rigid body kinematics, including relative velocities and relative accelerations; and rigid body kinetics, including the equation of motion, work and energy, linear impulse-momentum, and angular momentum.

**EGG 2020 Thermodynamics**

(Previously EGG 230 Thermodynamics)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: MAT 2410 or higher, PHY 2111*

Explores fundamental concepts and basic theory, including first and second laws of thermodynamics, thermodynamic functions, properties, states, pure substances, and chemical and phase equilibrium.

**EGG 2030 Mechanics of Solids**

(Previously EGG 206 Mechanics of Solids)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: EGG 2011*

Covers shear forces and bending moment, torsion, stresses in beams, deflection in beams, matrix analysis of frame structures, analysis of stress and strain in 2-D and 3-D (field equations, transformations), energy methods, stress concentrations, and columns.

**EGG 2041 Circuit Analysis I**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

*Prerequisite: MAT 2420 or higher**Co-requisite: PHY 2112*

Introduces the basic techniques used in the design and analysis of electrical circuits. This course includes basic theorems of DC circuit analysis, transient analysis, and steady state analysis of AC circuits. The course also includes a lab component using standard electrical lab equipment.

**EGG 2050 Engineering Economics**

(Previously EGG 243 Engineering Economics)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: MAT 1340 or higher*

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.

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**Engineering Graphics Technology Courses**

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**EGT 1100 Print Reading**

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Focuses on the interpretation of mechanical shop and working drawings. Examines drawing formats, view selection, hardware, symbols, dimensioning, and tolerancing systems utilizing the American Society of Mechanical Engineers (ASME) standard.

**EGT 1101 Mechanical Design I**

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Co-requisite: CAD 1100 or EGT 1100*

Provides the training to develop skillsets on how to produce technical drawings utilizing the latest technologies. Course will develop skills in hand lettering/sketching techniques and the use of a Computer Aided Design (CAD) based drawing system. Course covers how to develop technical drawings demonstrating multi-view orthographic projections, auxiliary views, section views, and beginning dimensioning concepts based on ANSI/ASME standards.

**EGT 1102 Mechanical Design II**

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: EGT 1101*

Provides the training and skillsets on how to produce technical drawings that include hardware, threads, springs, and pattern developments. Develops skills on the application of dimensioning systems and the application of applying tolerances to produce baseline, ordinate, tabulated, chart, and rectangular coordinate dimensioning based on American Society of Mechanical Engineers (ASME) standards.

**EGT 1110 IDEA: Introduction to Design and Engineering Applications**

(Previously EGT 140 IDEA: Introduction to Design and Engineering Applications)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: MAT 1340 or higher*

Provides students with opportunities to engage with an industry client on a real-world, open-ended engineering design problem. Students will develop professional skills and knowledge using Computer Aided Drafting (CAD) as a primary tool. The course covers human-centered design and the role of engineering in a sustainable society. Students will cultivate an understanding of the differences in engineering disciplines while working in interdisciplinary teams. Written and verbal communication skills will also be covered.

**EGT 2303 Applied Dimension & Tolerance**

(Previously EGT 103 Applied Dimension &amp; Tolerance)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: CAD 1100, CAD 1101**Co-requisite: CAD 1102*

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 2305 Geometric Dimension & Tolerance**

(Previously EGT 205 Geometric Dimension &amp; Tolerance)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: CAD 1100 or EGT 1101 or MAC 1002*

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 2310 Mechanical Design III**

(Previously EGT 210 Mechanical Design III)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisites: CAD 2456 or CAD 2458; EGT 2303*

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.

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**English Courses**

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**ENG 0077 Studio 131**

(Previously ENG 077 Studio 131)

3 Credit Hours • 45 Contact Hours (Lecture)

*Note: ENG 0077 must be taken concurrently with ENG 1031*

Integrates and contextualizes reading and writing strategies tailored to co-requisite ENG 1031 coursework. Students will read and understand complex materials and respond to ideas and information through technical writing.

**ENG 0090 Composition and Reading**

3 Credit Hours • 45 Contact Hours (Lecture)

Integrates and contextualizes college-level reading and writing.

**ENG 0094 Studio 121**

(Previously CCR 094 Studio 121)

3 Credit Hours • 45 Contact Hours (Supplemental Academic Instruction)

*Note: ENG 0094 must be taken concurrently with ENG 1021*

Integrates and contextualizes reading and writing strategies tailored to co-requisite ENG 1021 coursework.

**ENG 1015 Technical English & Communication**

(Previously ENG 115 Technical English &amp; Communication)

3 Credit Hours • 45 Contact Hours (Lecture)

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 1017 Grammar, Usage & Style for the Professional Writer**

(Previously ENG 117 Grammar, Usage &amp; 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 1018 Designing Online Documentation**

(Previously 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 1021 English Composition I: C01**

(Previously ENG 121 English Composition I: C01)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

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 1022 English Composition II: C02**

(Previously ENG 122 English Composition II: C02)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 1021 or ENG 1031*

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 1031 Technical Writing I: C01**

(Previously ENG 131 Technical Writing I: C01)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English**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 1032 Technical Writing II**

(Previously ENG 132 Technical Writing II)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 1031*

Expands and refines the objectives of ENG 1031, emphasizing formal presentations, both written and oral.

**ENG 2001 English Composition III: C03**

(Previously ENG 201 English Composition III: C03)

3 Credit Hours • 45 Contact Hours (Lecture)

*Co-requisite: ENG 1022*

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 2005 Technical Editing**

(Previously 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 2021 Creative Writing I: AH1**

(Previously ENG 221 Creative Writing I: AH1)

3 Credit Hours • 45 Contact Hours (Lecture)

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 2022 Creative Writing II**

(Previously ENG 222 Creative Writing II)

3 Credit Hours • 45 Contact Hours (Lecture)

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 2026 Fiction Writing**

(Previously ENG 226 Fiction Writing)

3 Credit Hours • 45 Contact Hours (Lecture)

Provides techniques for analyzing and writing fiction, including the study of form and technique with an emphasis on the writing process.

**ENG 2027 Poetry Writing**

(Previously ENG 227 Poetry Writing)

3 Credit Hours • 45 Contact Hours (Lecture)

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 2030 Creative Nonfiction**

(Previously ENG 230 Creative Nonfiction)

3 Credit Hours • 45 Contact Hours (Lecture)

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 2031 Literary Magazine**

(Previously ENG 231 Literary Magazine)

3 Credit Hours • 45 Contact Hours (Lecture)

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 2035 Rhetoric & Propaganda**

(Previously ENG 235 Rhetoric &amp; Propaganda)

3 Credit Hours • 45 Contact Hours (Lecture)

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 2080 Internship**

(Previously ENG 280 Internship)

3 Credit Hours • 135 Contact Hours (Internship)

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

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### ESL 0011 Basic Pronunciation

(Previously ESL 011 Basic Pronunciation)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* LOEP LS score of 35 or higher

Provides listening and speaking activities that help students recognize and produce English vowel and consonant sounds and common stress and intonation patterns.

### ESL 0012 Intermediate Pronunciation

(Previously ESL 012 Intermediate Pronunciation)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* LOEP LS score of 35 or higher

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 0021 Basic Grammar

(Previously ESL 021 Basic Grammar)

5 Credit Hours • 75 Contact Hours (Lecture)

Develops competency in basic grammatical structures through oral and written practice.

### ESL 0022 Intermediate Grammar

(Previously ESL 022 Intermediate Grammar)

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite:* LOEP LU score of 58-82

Builds on basic grammar structures. This course develops competency in intermediate grammar structures with continued emphasis on oral and written communication.

### ESL 0023 Advanced Grammar

(Previously ESL 023 Advanced Grammar)

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite:* ESL 0022, ESL 0042, ESL 0052; or LOEP LU score of 83-107

Builds on intermediate level grammar structures. This course develops competency in advanced grammatical structures with increased emphasis on written communication.

### ESL 0031 Basic Listening & Speaking

(Previously ESL 031 Basic Listening & Speaking)

4 Credit Hours • 60 Contact Hours (Lecture)

Provides listening and speaking activities that help the student communicate more competently. Provides practice with pronunciation, vocabulary, and basic grammatical patterns.

### ESL 0032 Intermediate Listening & Speaking

(Previously ESL 032 Intermediate Listening & Speaking)

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite:* ESL 0021, ESL 0031, ESL 0041; or LOEP LU score of 64-82

Teaches listening, pronunciation, and conversation skills. Increases speed and accuracy in speaking through free and guided conversational practice.

### ESL 0041 Basic Reading

(Previously ESL 041 Basic Reading)

4 Credit Hours • 60 Contact Hours (Lecture)

Improves comprehension of simple written texts through vocabulary building and reading strategies.

### ESL 0042 Intermediate Reading

(Previously ESL 042 Intermediate Reading)

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite:* ESL 0021, ESL 0041; or LOEP RS score 63-87

Helps the student read more quickly and accurately and understand a variety of intermediate level reading material.

### ESL 0043 Advanced Reading

(Previously ESL 043 Advanced Reading)

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite:* ESL 0022, ESL 0042, ESL 0052; or LOEP RS score 88-112

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 0052 Intermediate Composition

(Previously ESL 052 Intermediate Composition)

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite:* ESL 0021, ESL 0041

Introduces the fundamentals of paragraph organization and development. Emphasizes development of sentence variety and grammatical competency within well-organized paragraphs.

### ESL 0053 Advanced Composition

(Previously ESL 053 Advanced Composition)

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite:* ESL 0022, ESL 0042, ESL 0052

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.

## Entrepreneurship Course

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### ENP 1005 Introduction to Entrepreneurship

(Previously 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

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### ENV 1010 Natural Disasters: SC2

(Previously ENV 110 Natural Disasters: SC2)

3 Credit Hours • 45 Contact Hours (Lecture)

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.

### ENV 1111 Environmental Science with Lab: SC1

(Previously ENV 101 Environmental Science with Lab: SC1)

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

*Prerequisite:* College Readiness in English and College Readiness in Quantitative Literacy Math

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.

## Ethnic Studies Course

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### ETH 2024 Introduction to Chicano Studies

(Previously ETH 224 Introduction to Chicano Studies)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* College Readiness in English

*Co-requisite:* ENG 0094 and ENG 1021

Introduces students to skills development in multicultural education. Covers Chicano history, migration and labor, education, law, and Chicano culture.

## Finance Courses

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### FIN 1015 Retail Banking

(Previously 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 1050 Principles of Banking

(Previously 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 1060 Consumer Economics

(Previously 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 2010 Principles of Finance

(Previously FIN 201 Principles of Finance)

3 Credit Hours • 45 Contact Hours (Lecture)

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 2040 Law & Banking Principles

(Previously FIN 240 Law and Banking Principles)

2 Credit Hours • 30 Contact Hours (Lecture)

*Co-requisite: FIN 1015*

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 2087 Cooperative Education

(Previously 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.

### FIN 3020 Applied Finance

3 Credit Hours • 45 Contact Hours (Lecture)

*Note: Must be accepted into the BAS Business Administration Program*

Focuses on applying financial concepts, ethical and financial sustainability practices to promote managerial success and improve organizational performance. It addresses the budgeting process, raising capital and examines cash and risk management. Topics include analysis of financial markets, managing financial performance, cash and capital budgeting, risk versus return,

capital structure, time value of money, and financing for both short and long-term requirements.

## Fire Science Technology Courses

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### FST 1000 Firefighter I

(Previously FST 100 Firefighter I)

9 Credit Hours • 202.5 Contact Hours (Lecture/Lab Combination)

*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 1021 or provide proof of completion of ENG 1021, or its equivalent, with a grade of C or higher. 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 1007 Hazardous Materials Operations before or concurrently with FST 1000 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 1001 Firefighter II

(Previously 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, Firefighter Professional Qualifications. This is a lecture and lab course for meeting the NFPA 1001, level II, standard.

### FST 1002 Principles/Emergency Services

(Previously 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 1003 Fire Behavior & Combustion

(Previously 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 1005 Building Construction for Fire Protection

(Previously 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 1006 Fire Prevention

(Previously 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 1007 Hazardous Materials Operations (Level I)**

(Previously FST 107 Hazardous Materials Operations (Level I))

3 Credit Hours • 45 Contact Hours (Lecture)

*Note: 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 1007 Hazardous Materials Operations before or concurrently with FST 1000 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 1009 Occupational Safety & Health for Fire**

(Previously FST 109 Occupational Safety &amp; 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 1010 Job Placement & Assessment**

(Previously FST 110 Job Placement &amp; Assessment)

3 Credit Hours • 67.5 Contact Hours (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 1026 Vehicle Extrication Awareness Level**

(Previously 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 1060 Candidate Physical Abilities Test Prep**

(Previously FST 160 Candidate Physical Abilities Test Prep)

3 Credit Hours • 67.5 Contact Hours (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 2001 Instructional Methodology**

(Previously 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 2002 Strategy & Tactics**

(Previously FST 202 Strategy &amp; 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 2003 Fire Hydraulics & Water Supply**

(Previously FST 203 Fire Hydraulics &amp; 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 2005 Fire Investigation I**

(Previously 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 2006 Fire Company Supervision & Leadership (Fire Officer I)**

(Previously FST 206 Fire Company Supervision &amp; 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 2007 Firefighting Strategy & Tactics II**

(Previously FST 207 Firefighting Strategy &amp; 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 2009 Fire Protection Systems**

(Previously 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 2051 Legal Aspects of Fire Service**

(Previously 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 2055 Fire Service Management**

(Previously 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 2057 Fire Department Administration**

(Previously 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 2058 Wildland Fire Incident Management & Organization**

(Previously 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 2059 Wildland Firefighting Strategy & Tactics**

(Previously 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 2080 Internship**

(Previously FST 280 Internship)

3 Credit Hours • 135 Contact Hours (Internship)

*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**

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### **FSW 1000 S-190 Introduction to Wildland Fire Behavior**

(Previously 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 1001 S-130 Firefighting Training**

(Previously 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 1053 S-290 Intermediate Wildland Fire Behavior**

(Previously 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**

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### **FRE 1001 Conversational French I**

(Previously 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 1011 French Language I**

(Previously FRE 111 French Language I)

5 Credit Hours • 75 Contact Hours (Lecture)

Develops students' interpretive, interpersonal, and presentational communicative abilities in the French language. This course

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 1012 French Language II**

(Previously FRE 112 French Language II)

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite: FRE 1011*

Expands students' interpretive, interpersonal, and presentational communicative abilities in the French language. This course 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 2011 French Language III: AH4**

(Previously FRE 211 French Language III: AH4)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: FRE 1012*

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 2012 French Language IV: AH4**

(Previously FRE 212 French Language IV: AH4)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: FRE 2011*

Continues the development of increased functional proficiency at intermediate mid-level in speaking, aural comprehension, reading, writing, and cultural competency in the French language. This course is conducted predominantly in French.

## **Geography Courses**

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### **GEO 1005 World Regional Geography: SS2**

(Previously GEO 105 World Regional Geography: SS2)

3 Credit Hours • 45 Contact Hours (Lecture)

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 1006 Human Geography: SS2**

(Previously GEO 106 Human Geography: SS2)

3 Credit Hours • 45 Contact Hours (Lecture)

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 1011 Physical Geography: Landforms with Lab: SC1**

(Previously GEO 111 Physical Geography: Landforms with Lab: SC1)

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

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 1012 Physical Geography: Weather, Climate and Ecosystems with Lab: SC1**

(Previously GEO 112 Physical Geography: Weather, Climate and Ecosystems with Lab: SC1)

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

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.

**GEO 1060 Global Climate Change: SC2**

3 Credit Hours • 45 Contact Hours (Lecture)

Presents global climate change from an Earth science perspective including paleoclimatology, atmospheric science, vegetation, fluvial systems, and oceanic circulation. This course analyzes observed and predicted impacts of climate change on the world's terrestrial regions. This course examines interrelationships among economy, society, public policy, and geographic variation in greenhouse gas emissions at national and regional scales. This course also discusses efforts to mitigate climate change and its causes and/or adaptations to global climate change.

**GEO 2010 Careers & Research in the GeoSciences**

1 Credit Hour • 15 Contact Hours (Lecture)

Introduces students to current research, research tools, techniques, and terminology within the geosciences. Explores and prepares students for outside internship opportunities for community college students in the geosciences and related fields. Explores different professions within the geosciences. Explains different coursework needed to best achieve academic success at four-year universities and careers beyond graduation. Provides experience preparing resumes and completing internship and job applications.

## Geology Courses

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**GEY 1108 Geology of U.S. National Parks: SC2**

(Previously GEY 108 Geology of U.S. National Parks: SC2)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English and College Readiness in Quantitative Literacy Math*

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 1111 Physical Geology with Lab: SC1**

(Previously GEY 111 Physical Geology with Lab: SC1)

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

*Prerequisite: College Readiness in English and College Readiness in Quantitative Literacy Math*

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 1112 Historical Geology with Lab: SC1**

(Previously GEY 112 Historical Geology with Lab: SC1)

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

*Prerequisite: GEY 1111*

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 1135 Environmental Geology with Lab: SC1**

(Previously GEY 135 Environmental Geology with Lab: SC1)

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

*Prerequisite: College Readiness in English and College Readiness in Quantitative Literacy Math*

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 1155 General Oceanography with Lab: SC1**

(Previously GEY 216 General Oceanography with Lab: SC1)

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

*Prerequisite: College Readiness in English and College Readiness in Quantitative Literacy Math*

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

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**GER 1011 German Language I**

(Previously GER 111 German Language I)

5 Credit Hours • 75 Contact Hours (Lecture)

Develops students' interpretive, interpersonal, and presentational communicative abilities in the German language. This course integrates these skills in the cultural contexts in which the language is used and offers a foundation in the analysis of culture.

**GER 1012 German Language II**

(Previously GER 112 German Language II)

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite: GER 1011*

Expands students' interpretive, interpersonal, and presentational communicative abilities in the language. This course 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 2011 German Language III: AH4**

(Previously GER 211 German Language III: AH4)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: GER 1012*

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 2012 German Language IV: AH4**

(Previously GER 212 German Language IV: AH4)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: GER 2011*

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

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### **HWE 1005 American Heart Association Heartsaver First Aid CPR and AED**

(Previously HWE 118 American Heart Association Heartsaver First Aid CPR and AED)

0.5 Credit Hours • 7.5 Contact Hours (Lecture)

Grading: P/F only

Provides training in lifesaving skills for responding to first aid and cardiopulmonary emergencies. This course provides the skills and knowledge for the 2-year certification from the American Heart Association (AHA) Heartsaver First Aid, Cardiopulmonary Resuscitation (CPR), and Automated External Defibrillator (AED).

### **HWE 1019 Skills & Methods of Teaching Fitness Instruction**

(Previously HWE 137 Skills & Methods of Teaching Fitness Instruction)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Focuses on preparing students to lead a variety of group exercise classes with an entry-level skill set encompassing a variety of choreographed or non-choreographed activities. Classes may include aerobics (step and floor), mind body (yoga/pilates), or specialty (kickboxing, stability ball, senior classes, and boot camp).

### **HWE 1050 Human Nutrition**

(Previously 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 micronutrients 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 1055 Lifecycle Nutrition**

3 Credit Hours • 45 Contact Hours (Lecture)

Examines the nutritional needs of humans as they move through the life cycle stages from pre-conception through older adult years.

### **HWE 1061 Fitness & Wellness**

(Previously HWE 124 Fitness & Wellness)

2 Credit Hours • 45 Contact Hours (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 1062 Health & Wellness**

(Previously 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 1064 Weight Management & Exercise**

(Previously HWE 109 Weight Management & Exercise)

2 Credit Hours • 30 Contact Hours (Lecture)

Offers guided instruction in weight management. Emphasis is placed on the development of weight management programs and the role of exercise in maintaining weight loss.

### **HWE 1065 Introduction to Exercise Health Sciences**

(Previously 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 1068 Certified Personal Trainer Preparatory Course**

(Previously 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.

### **HWE 1080 Internship**

3 Credit Hours • 135 Contact Hours (Internship)

To be determined by the individual instructor. A course description will be developed for each course and documented within the course syllabus. Refer to the SFCC Style guide for Course Description, Required Course Learning Outcomes, and Topical Outline Guidelines.

### **HWE 2060 Exercise, Nutrition & Body Composition**

(Previously HWE 237 Exercise, Nutrition & Body Composition)

3 Credit Hours • 45 Contact Hours (Lecture)

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 2062 Physiology of Exercise**

(Previously HWE 245 Physiology of Exercise)

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces the physiological effects and responses by the body to the stressor of exercise. This course focuses on fundamental concepts of exercise physiology including metabolic, nervous, cardiovascular, respiratory, and musculoskeletal systems, and the significance of these effects on health and performance.

### **HWE 2064 Health & Wellness Coaching**

(Previously HWE 256 Health and Wellness Coaching)

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on behavioral change strategies and goal setting for adopting a healthier lifestyle with emphasis on exercise, physical activity, stress management, and nutrition. Methods of coaching topics include how to overcome obstacles that impede success. This course is geared towards the health and fitness professional.

## Health Professional Courses

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### **HPR 1000 Introduction to Health**

3 Credit Hours • 45 Contact Hours (Lecture)

Provides foundational knowledge and skills necessary for careers in health care. This course covers basic health skills such as vital signs, hand washing, and Cardiopulmonary Resuscitation (CPR).

### **HPR 1003 Success Seminar**

(Previously 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 1005 Orientation to Health Careers**

(Previously 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 1006 Customer Service in Healthcare**

(Previously 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 1008 Law & Ethics for Health Professions**

(Previously HPR 106 Law &amp; 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 1011 CPR for Professionals**

(Previously 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 1013 AHA Heartsaver First Aid CPR & AED**

0.5 Credit Hours • 7.5 Contact Hours (Lecture)

*Grading: P/F only*

This course covers training in lifesaving skills for responding to first aid and cardiopulmonary emergencies. This course includes the skills and knowledge for the 2-year certification from the American Heart Association (AHA) Heartsaver First Aid, Cardiopulmonary Resuscitation (CPR), and Automated External Defibrillator (AED).

**HPR 1017 Anatomical Kinesiology**

(Previously HPR 117 Anatomical Kinesiology)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Studies the Anatomical Basis of Human Movement.

**HPR 1020 Phlebotomy**

(Previously HPR 112 Phlebotomy)

4 Credit Hours • 135 Contact Hours (45 Lecture/Lab Combination, 90 Practicum)

*Note: Must be accepted into Phlebotomy program through application process. Program Coordinator approval needed to register.*

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 1038 Introduction to Medical Terminology**

1 Credit Hour, 15 Contact Hours (Lecture)

Introduces the structure of medical terms with emphasis on using and combining the most common prefixes, roots, and suffixes. This course includes terms related to major body systems and provides accepted pronunciation of terms.

**HPR 1039 Medical Terminology**

(Previously 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 1045 Medical Record Terminology**

(Previously 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.

**HPR 1050 Basic EKG Interpretation**

(Previously 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 1079 Seminar**

(Previously HPR 179 Seminar)

2 Credit Hours • 30 Contact Hours (Lecture)

Provides students with an experiential learning opportunity.

**HPR 2011 Advanced Cardiac Life Support**

(Previously 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 2013 Pediatric Advanced Life Support**

(Previously 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 2020 Advanced Phlebotomy**

(Previously HPR 113 Advanced Phlebotomy)

4 Credit Hours • 135 Contact Hours (45 Lecture/Lab Combination, 90 Practicum)

*Note: Must be accepted into Phlebotomy program through application process. Program Coordinator approval to register.*

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.

## Heating, Air Conditioning and Refrigeration Technology Courses

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**HVA 1002 Basic Refrigeration**

(Previously HVA 102 Basic Refrigeration)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Introduces the basic theory of refrigeration systems, components, charging, recycling, and evacuation of refrigeration units.

**HVA 1005 Electricity for HVAC/R**

(Previously HVA 105 Electricity for HVAC/R)

4 Credit Hours • 90 Contact Hours (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 1010 Fundamentals of Gas Heating**

(Previously HVA 110 Fundamentals of Gas Heating)

4 Credit Hours • 90 Contact Hours (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 1011 Piping Skills for HVAC**

(Previously HVA 111 Piping Skills for HVAC)

4 Credit Hours • 90 Contact Hours (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 1012 R-410a**

(Previously 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 1013 Refrigerant Recovery Training**

(Previously 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 1018 Customer Soft Skills (Customer Services & Ethics)**

(Previously HVA 118 Customer Soft Skills (Customer Services &amp; 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 1020 Green Technology Awareness**

(Previously 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 1032 Air Conditioning & Refrigeration Controls**

(Previously HVA 132 Air Conditioning &amp; Refrigeration Controls)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Co-requisite: HVA 1002, HVA 1005*

Continues HVA 1005. 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 1041 Sheet Metal Fabrication**

(Previously 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 1042 Residential Air Conditioning**

(Previously HVA 142 Residential Air Conditioning)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Co-requisite: HVA 1002, HVA 1005*

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 1043 Residential HVAC Trouble Shooting**

(Previously HVA 143 Residential HVAC Trouble Shooting)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Co-requisite: HVA 1010*

Troubleshooting practical problems and techniques will be covered. Use of computer simulation as well as actual equipment will be utilized.

**HVA 1046 Residential Load Calculation & Duct Design**

(Previously HVA 146 Residential Load Calculation &amp; Duct Design)

4 Credit Hours • 90 Contact Hours (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 2001 Heating for Commercial**

(Previously HVA 201 Heating for Commercial)

3 Credit Hours • 67.5 Contact Hours (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 2004 Direct Digital Controls**

(Previously HVA 204 Direct Digital Controls)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Note: Sophomore standing or faculty consent*

Introduces the student to the field of direct digital controls.

**HVA 2006 Mechanical Codes**

(Previously HVA 206 Mechanical Code)

4 Credit Hours • 60 Contact Hours (Lecture)

*Co-requisite: HVA 1010*

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 2022 HVAC & R Systems Troubleshooting**

(Previously HVA 222 HVAC &amp; R Systems Troubleshooting)

5 Credit Hours • 112.5 Contact Hours (Lecture/Lab Combination)

*Note: Sophomore standing or faculty consent*

Studies troubleshooting industrial and commercial heating, ventilating, air conditioning, and refrigeration systems.

**HVA 2033 Advanced Refrigeration**

(Previously 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 2041 Advanced Air Conditioning**

(Previously HVA 241 Advanced Air Conditioning)

3 Credit Hours • 67.5 Contact Hours (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 2045 Commercial Refrigeration & Air Conditioning**

(Previously HVA 245 Commercial Refrigeration &amp; 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 2047 Hot Water Heating Systems**

(Previously HVA 247 Hot Water Heating Systems)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Co-requisite: HVA 1010*

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 convactor sizing are also discussed.

**HVA 2051 Building Automation I, Installer**

(Previously HVA 251 Building Automation I, Installer)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Co-requisite: ELT 1001*

Helps the student with the installation of building automation devices with regard to HVAC equipment.

**HVA 2052 Building Automation II, Service**

(Previously HVA 252 Building Automation II, Service)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Prerequisite: HVA 2051*

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 2053 Building Automation III, Advanced Operations**

(Previously HVA 253 Building Automation III, Advanced Operations)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Prerequisite: HVA 2052*

Covers complete set up and programming of a building automation system. The class includes extensive hands-on workshops.

**HVA 2059 Commercial HVAC System Design**

(Previously HVA 259 Commercial HVAC System Design)

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite: HVA 1005*

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 2062 Residential Heat Pump Service**

(Previously 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 2080 Internship**

(Previously 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 2089 Capstone**

(Previously 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

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History courses may be taken in any order

**HIS 1110 The World: Antiquity–1500: HI1**

(Previously HIS 111 The World: Antiquity–1500: HI1)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

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 1120 The World: 1500–Present: HI1**

(Previously HIS 112 The World: 1500–Present: HI1)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

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 1210 United States History to Reconstruction: HI1**

(Previously HIS 121 U.S. History to Reconstruction: HI1)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

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 1220 United States History Since the Civil War: HI1**

(Previously HIS 122 U.S. History Since the Civil War: HI1)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

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 1310 Western Civilization: Antiquity–1650: HI1**

(Previously HIS 101 Western Civilization: Antiquity–1650: HI1)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

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 1320 Western Civilization: 1650–Present: HI1**

(Previously HIS 102 Western Civilization: 1650–Present: HI1)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

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 2000 History of Science & Technology: HI1**

(Previously HIS 218 History of Science & Technology: HI1)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

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 2005 Women in World History: HI1**

(Previously HIS 205 Women in World History: HI1)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

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 2015 20th Century World History: HI1**

(Previously HIS 247 20th Century World History: HI1)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

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 2105 Women in U.S. History: HI1**

(Previously HIS 215 Women in U.S. History: HI1)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

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 2110 African American History: HI1**

(Previously HIS 250 African American History: HI1)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

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 2115 American Indian History: HI1**

(Previously HIS 208 American Indian History: HI1)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

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 2125 American Environmental History: HI1**

(Previously HIS 207 American Environmental History: HI1)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

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 2130 History of the American West: HI1**

(Previously HIS 235 History of the American West: HI1)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

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 2135 Colorado History: HI1**

(Previously HIS 225 Colorado History: HI1)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

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 2140 Civil War Era in American History: HI1**

(Previously HIS 203 Civil War Era in American History: HI1)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

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 2145 U.S. History Since 1945: HI1**

(Previously HIS 236 U.S. History Since 1945: HI1)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

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 2200 History of Latin America: HI1**

(Previously HIS 244 History of Latin America: HI1)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

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 2300 The Middle Ages: HI1**

(Previously HIS 255 The Middle Ages: HI1)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

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 2500 History of Islamic Civilization: HI1**

(Previously HIS 249 History of Islamic Civilization: HI1)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

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 2510 Modern Middle East: HI1**

(Previously HIS 259 Modern Middle East: HI1)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

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 2610 History of Modern China: HI1**

(Previously HIS 243 History of Modern China: HI1)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

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 2765 Writing About History: CO3**

(Previously HIS 265 Writing About History: CO3)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

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.

**Hospitality Courses****HOS 1005 Introduction to Management in the Hospitality Industry**

3 Credit Hours • 45 Contact Hours (Lecture)

Describes the history, development, and operation of the hospitality industry including careers in the industry, management practices, accounting procedures, destinations, and lodging.

**HOS 1031 Planning for Special Events**

(Previously 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 1048 Introduction to Food & Beverage**

(Previously HOS 148 Introduction to Food &amp; 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 2021 Basic Hotel & Restaurant Accounting**

(Previously HOS 221 Basic Hotel &amp; 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 2026 Supervision in the Hospitality Industry**

(Previously 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 2031 Resort Facilities Management & Design**

(Previously HOS 231 Resort Facilities Management &amp; 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 2051 Hotel Operations**

(Previously 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 2080 Internship**

(Previously HOS 280 Internship)

3 Credit Hours • 135 Contact Hours (Internship)

To be determined by the individual instructor. A Course Description will be developed for each course and documented within the course syllabus.

**Humanities Courses**

Humanities courses may be taken in any order

**HUM 1003 Introduction to Film Art: AH2**

(Previously HUM 103 Introduction to Film Art: AH2)

3 Credit Hours • 45 Contact Hours (Lecture)

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 1015 World Mythology: AH2**

(Previously HUM 115 World Mythology: AH2)

3 Credit Hours • 45 Contact Hours (Lecture)

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 1021 Early Civilization: AH2**

(Previously HUM 121 Early Civilization: AH2)

3 Credit Hours • 45 Contact Hours (Lecture)

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 1022 Medieval - Modern: AH2**

(Previously HUM 122 Medieval - Modern: AH2)

3 Credit Hours • 45 Contact Hours (Lecture)

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 1023 Modern World: AH2**

(Previously HUM 123 Modern World: AH2)

3 Credit Hours • 45 Contact Hours (Lecture)

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 2011 Cultural Diversity in the Humanities**

(Previously 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.

**Industrial Mechatronics Maintenance Courses****IMM 1004 Service & Repair Principles**

(Previously IMM 104 Service &amp; Repair Principles)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Provides information about basic mechanical principles such as force and energy. Understanding properties of materials used in industrial systems in order to perform work fastening components or sealing and coating equipment. Students will learn the use of a variety of tools to complete the tasks, and an understanding of mechanical principles, material properties, and tool operation is critical.

**IMM 1006 Boiler Systems**

(Previously IMM 106 Boiler Systems)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Provides information on topics of boiler systems such as the safe efficient operations, energy efficiency, and environmental regulations. Students will study additional topics such as heat exchanger principles, boiler emissions requirements, blowdown temperature control, heat-recovery related equipment, and sequential operating procedures for common boiler operator duties.

**IMM 1008 Efficiency and Sustainability**

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Introduces fundamentals of efficient and sustainable design of industrial facilities. The content includes green building practices and implementation along with green building concepts, site and industrial facilities planning and development, materials, strategies, cost benefit analysis, and practical applications in the industrial facilities business environment.

**IMM 1009 Soldering & Brazing**

(Previously IMM 109 Soldering and Brazing)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Focuses on principles and technologies of joining different types of alloys by braze welding and soldering. Course covers safety and health, procedures and design, pre-cleaning and surface preparation, filler metals, fluxes and atmospheres, torch brazing, pipe and tube, copper, and cast iron.

**IMM 1011 National Institute for Metalworking Skills (NIMS) Maintenance Operations**

(Previously IMM 111 National Institute for Metalworking Skills (NIMS) Maintenance Operations)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Introduces students to career opportunities in the maintenance operations field. This course also addresses several basic topics such as safety, tools, fasteners, print reading, troubleshooting, and rigging. This course will prepare student to earn the NIMS Industrial Technology Maintenance Level 1 Maintenance Operations credential.

**IMM 1012 National Institute for Metalworking Skills (NIMS) Mechanical Systems**

(Previously IMM 112 National Institute for Metalworking Skills (NIMS) Mechanical Systems)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Covers basic principles of mechanical transmission and the working principles of simple machines. Topics include common types of bearings, seals, lubricants, industrial shafting, belt and chain drives, gear power transmission, and conveyor systems. Covers troubleshooting techniques used in evaluating mechanical systems. Content will help prepare student to earn the National Institute for Metalworking Skills (NIMS) Industrial Technology Maintenance Level 1 Basic Mechanical Systems credential.

**IMM 1013 National Institute for Metalworking Skills (NIMS) Hydraulic Systems**

(Previously IMM 113 National Institute for Metalworking Skills (NIMS) Hydraulic Systems)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
Introduces essential principles and components of hydraulic systems, covering fluid power system diagrams and the important relationships between fluid flow and pressure in systems. Overview of the NIMS areas of pneumatic systems of a manufacturing facility, some maintenance and troubleshooting tips to properly work on these systems. This content is preparation to earn the NIMS Industrial Technology Maintenance Level 1 Basic Hydraulic Systems credential.

**IMM 1014 National Institute for Metalworking Skills (NIMS) Pneumatic Systems**

(Previously IMM 114 National Institute for Metalworking Skills (NIMS) Pneumatic Systems)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
Introduces essential principles, of pneumatic systems, system diagrams and the relationships between fluid flow and pressure in systems. This course will include maintenance and troubleshooting tips necessary for working on these systems. This course content will help prepare the student to earn the National Institute for Metalworking Skills (NIMS) Industrial Technology Maintenance Level 1 Basic Pneumatic Systems credential.

**IMM 1015 National Institute for Metalworking Skills (NIMS) Electrical Systems**

(Previously IMM 115 National Institute for Metalworking Skills (NIMS) Electrical Systems)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
Introduces industrial maintenance technology used in electrical systems. Focuses on how electrical power is converted into energy. Explains electrical applications and the theory on which they operate. The content in this section will help prepare student to earn the NIMS Industrial Technology Maintenance Level 1 Electrical Systems credential.

**IMM 1016 National Institute for Metalworking Skills (NIMS) Electronic Control Systems**

(Previously IMM 116 National Institute for Metalworking Skills (NIMS) Electronic Control Systems)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
Introduces the use of DC power supplies, signal conditioning equipment, sensors, transistors, and variable frequency drives (VFDs). Also explains installing, programming, and troubleshooting programmable logic controllers (PLCs). Topics covered are human-machine interfaces (HMIs) and the use of devices and software which allow technicians to interact with industrial control systems. This content will help prepare students to earn the National Institute for Metalworking Skills (NIMS) Industrial Technology Maintenance Level 1 Electronic Control Systems (ECS) credential.

**IMM 1017 National Institute for Metalworking Skills (NIMS) Process Control Systems**

(Previously IMM 117 National Institute for Metalworking Skills (NIMS) Process Control Systems)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
Introduces control systems, the operation of heating and cooling systems, and related maintenance and troubleshooting tasks. This course includes how to read and comprehend piping and instrumentation diagrams (P&IDs) and the standard symbols they contain. The content in this course will help prepare student to earn the National Institute for Metalworking Skills (NIMS) Industrial Technology Maintenance Level 1 Process Control Systems credentials.

**IMM 1018 National Institute for Metalworking Skills (NIMS) Maintenance Piping**

(Previously IMM 118 National Institute for Metalworking Skills (NIMS) Maintenance Piping)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
Introduces the basics of piping systems and the tools and operations needed to maintain these systems. This course also provides basic knowledge of the engineering principles that apply to piping systems troubleshooting and repairing these systems. The content in this section will help prepare student to earn the National Institute for Metalworking Skills (NIMS) Industrial Technology Maintenance Level 1 Maintenance Piping credential.

**IMM 1019 High Pressure Boilers**

(Previously IMM 119 High Pressure Boilers)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
Provides information on the safe efficient operations, energy efficiency, and environmental regulations of high-pressure boilers. Covers heat exchanger principles, boiler emissions requirements, blowdown temperature control, heat recovery related equipment, and sequential operating procedures for common boiler operator duties.

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**Integrative Health Professions Courses**

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**IHP 100 Exploring Complementary Health Modalities**

(Previously IHP 100 Exploring Complementary Health Modalities)

1 Credit Hour • 15 Contact Hours (Lecture)

Explores some of the more widely used alternative/complimentary healing methods. The course expands perspectives on health and provides a basis for conversing in a knowledgeable manner with clients and practitioners about alternative health options.

**IHP 2050 Registered Yoga Teacher Training Level 200**

(Previously IHP 250 Registered Yoga Teacher Training Level 200)

10 Credit Hours • 225 Contact Hours (Lecture/Lab Combination)

Provides training in applicable anatomy, educational and physical requirements, and specific kinesthetic techniques necessary to become a professional Hatha Yoga (RYT200) instructor. This course describes the history, philosophy, and practice of Yoga and its multi-faceted impact on health. Special training is given to provide modifications for those with various health-related conditions or limitations. Content will focus on lesson plans preparation, protocol and skill development, and the ethical practices in becoming a registered yoga instructor.

**IHP 2052 Mindfulness Practices for Health & Wellness**

(Previously IHP 252 Mindfulness Practices for Health and Wellness)

2 Credit Hours • 30 Contact Hours (Lecture)

Examines the mental, emotional, spiritual, and physiological impact of mindfulness and meditation techniques on the brain, bodily systems and on overall stress reduction. This course explores the historical and cultural evolution of mindfulness techniques and investigates the overall health benefits of various breathing and meditation practices in promoting wellness. Content will promote experiential mindfulness exercises and information on diverse meditation tools for individual practice development and for teaching to others.

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**Interior Design Courses**

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**IND 1017 Interior Textiles**

(Previously 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 1100 Interior Design Fundamentals**

(Previously IND 100 Interior Design Fundamentals)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)  
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 1102 History of Interior Design**

(Previously IND 107 History of Interior Design)

3 Credit Hours • 45 Contact Hours (Lecture)

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 2078 Workshop**

(Previously IND 278 Workshop)

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: IND 2207*

*Note: Must have Department Chair permission to enroll*

Provides students with an experiential learning opportunity.

**IND 2080 Internship**

(Previously IND 280 Internship)

2-4 Credit Hours • Per Credit Hour, 45 Contact Hours (Internship)

*Prerequisite: IND 2300*

*Note: Must have Department Chair permission to enroll*

Provides work experience in a business or industry.

**IND 2088 Practicum**

(Previously IND 288 Practicum)

1 Credit Hour • 30 Contact Hours (7.5 Lecture, 22.5 Practicum)

*Prerequisite: IND 2207 or IND 2211*

*Note: Must have Department Chair permission to enroll*

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

**IND 2089 Capstone**

(Previously IND 289 Capstone)

3-4 Credit Hours • Per Credit Hour, 22.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: IND 2088*

*Note: Must have Department Chair permission to enroll*

Provides a demonstrated culmination of learning within a given program of study.

**IND 2201 Graphic Communication**

(Previously IND 112 Graphic Communication)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Teaches methods of communicating interior design plans, elements, and ideas in 3-D, through perspective drawing construction and quick sketch techniques, and practice rendering and illustration skills.

**IND 2202 Perspective & Rendering Technique**

(Previously IND 113 Perspective & Rendering Technique)

3 Credit Hours • 67.5 Contact Hours (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 2206 Interior Finishes**

(Previously 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 2207 Interior Design II – Space Planning & Human Factors**  
(Previously IND 120 Interior Design II – Space Planning & Human Factors)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: CAD 1105*

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 2208 Residential Design**

(Previously IND 151 Residential Design)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Prerequisite: CAD 1105, IND 2207; CAD 1110 or IND 2300*

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 2209 Commercial Design I**

(Previously IND 152 Commercial Design I)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Prerequisite: CAD 1105, IND 2207*

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 2210 Accessorizing**

(Previously IND 160 Accessorizing)

2 Credit Hours • 45 Contact Hours (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 2211 Commercial Design II**

(Previously IND 201 Commercial Design II)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Prerequisite: CAD 2227 or IND 2209*

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 2300 Interior Construction**

(Previously IND 211 Interior Construction)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Prerequisite: CAD 1105 or CAD 2220*

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 2301 Interior Design III – Materials, Details, Codes & Specs**

(Previously IND 220 Interior Design III – Materials, Details, Codes & Specs)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: CAD 1105*

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 2302 Lighting Design**

(Previously IND 225 Lighting Design)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* CAD 1105 or CAD 2220

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 2500 Introduction to Kitchen & Bath Design**

(Previously IND 161 Introduction to Kitchen & Bath Design)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* CAD 1105

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 2502 Advanced Kitchen & Bath Design**

(Previously IND 261 Advanced Kitchen & Bath Design)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

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 2701 Professional Practice for Interior Designers**

(Previously 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 2702 IND Portfolio Presentations**

(Previously IND 213 IND Portfolio Presentations)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* IND 2078 or IND 2208 or IND 2211

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 2703 Sustainable Design**

(Previously IND 231 Sustainable Design)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Co-requisite:* IND 2211 or IND 2704

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 2704 Interior Design IV**

(Previously IND 265 Interior Design IV)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* IND 2078 or IND 2300

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.

## **Interpreter Prep Program Courses**

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### **IPP 1021 Aspects of Interpreting I**

(Previously IPP 121 Aspects of Interpreting I)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ASL 1122 (Grade of B or higher), ENG 1021

*Note:* Completion of ASL 1123 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 1022 Aspects of Interpreting II**

(Previously IPP 122 Aspects of Interpreting II)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ASL 1123 (Grade of B or higher), ENG 1021, IPP 1021 (Grade of B or higher)

*Note:* Completion of ASL 2221 or concurrent enrollment

Provides a more in-depth study of the field of interpreting, expanding on the basics introduced in IPP 1021. 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 1025 Oral Transliteration**

(Previously IPP 125 Oral Transliteration)

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite:* IPP 1021

*Co-requisite:* IPP 1032

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 1031 Text Analysis**

(Previously IPP 131 Text Analysis)

3 Credit Hours • 45 Contact Hours (Lecture)

*Note:* Completion of ASL 1123 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 1032 Interpretation Analysis**

(Previously IPP 132 Interpretation Analysis)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ASL 1123 (Grade of B or higher), ENG 1021, IPP 1031 (Grade of B or higher)

*Note:* Completion of ASL 2221 or concurrent enrollment

Follows IPP 1031 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 1031, further increasing English/Sign vocabulary and idioms.

**IPP 1045 Deaf People in Society**

(Previously IPP 145 Deaf People in Society)  
2 Credit Hours • 30 Contact Hours (Lecture)  
*Prerequisite:* ASL 1122 (Grade of B or higher), ENG 1021  
*Co-requisite:* ANT 1001

*Note:* Completion of ASL 1123 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 1047 Survey of Deaf Culture**

(Previously IPP 147 Survey of Deaf Culture)  
3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite:* ANT 1001, ASL 1123 (Grade of B or higher), ENG 1021, IPP 1045 (Grade of B or higher)

*Note:* Completion of ASL 2221 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 2005 Educational Interpreting**

(Previously IPP 205 Educational Interpreting)  
4 Credit Hours • 60 Contact Hours (Lecture)  
*Prerequisite:* ASL 1123 (Grade of B or higher), ENG 1021, IPP 1021 (Grade of B or higher), IPP 1031 (Grade of B or higher)

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 2007 Specialized & Technical Communication**

(Previously IPP 207 Specialized & Technical Communication)  
2 Credit Hours • 30 Contact Hours (Lecture)  
*Prerequisite:* ASL 2221 (Grade of B or higher), IPP 1022 (Grade of B or higher), IPP 1032 (Grade of B or higher)

*Note:* Completion of ASL 2222 or concurrent enrollment  
Expands their repertoire of specialized and technical sign terminology and apply them in appropriate contexts.

**IPP 2025 English to ASL Interpreting**

(Previously IPP 225 English to ASL Interpreting)  
3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite:* ASL 2221 (Grade of B or higher), COM 1150, IPP 1032 (Grade of B or higher)

*Note:* Completion of ASL 2222 or concurrent enrollment; must be taken with IPP 2027 and IPP 2029

Provides the student an opportunity to develop consecutive and simultaneous interpreting skills, working from spoken English to American Sign Language.

**IPP 2027 ASL to English Interpreting**

(Previously IPP 227 ASL to English Interpreting)  
3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite:* ASL 2221 (Grade of B or higher), COM 1150, IPP 1032 (Grade of B or higher)

*Note:* Completion of ASL 2222 or concurrent enrollment, must be taken with IPP 2025 and IPP 2029

Provides the student an opportunity to develop consecutive and simultaneous interpreting skills, working from American Sign Language to spoken English.

**IPP 2029 Transliterating**

(Previously IPP 229 Transliterating)  
3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite:* ASL 2221 (Grade of B or higher), IPP 1022, IPP 1032 (Grade of B or higher)

*Note:* Completion of ASL 2222 or concurrent enrollment; must be taken with IPP 2025 and IPP 2027

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 2035 Advanced Interpreting**

(Previously IPP 235 Advanced Interpreting)  
4 Credit Hours • 60 Contact Hours (Lecture)  
*Prerequisite:* ANT 1001, ASL 2222, CIS 1018 or CSC 1005, COM 1150, ENG 1021, IPP 2025, IPP 2027, IPP 2029 (Grade of B or higher for all prerequisite courses), MAT 1140 or higher

*Note:* Should be taken with IPP 2079 and IPP 2081 in the final semester

Provides the student an opportunity to refine skills in ASL/English interpretation and transliteration.

**IPP 2079 Interpreter Seminar**

(Previously IPP 279 Interpreter Seminar)  
3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite:* ANT 1001, CIS 1018 or CSC 1005, COM 1150, ENG 1021, MAT 1140 or higher

*Note:* IPP 2035, IPP 2081 must be taken concurrently with IPP 2079. Must have GPA of B or higher. Grade of B or higher in ASL 2222, IPP 2025, IPP 2027, IPP 2029

*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 2081 Internship**

(Previously IPP 281 Internship)  
5 Credit Hours • 225 Contact Hours (Internship)  
*Prerequisite:* ANT 1001, CIS 1018 or CSC 1005, COM 1150, ENG 1021, MAT 1140 or higher

*Note:* IPP 2035, IPP 2079 must be taken concurrently with IPP 2081. Must have GPA of B or higher; Grade of B or higher in ASL 2222, IPP 2025, IPP 2027, IPP 2029

*Grading:* P/F only

Provides field experience interpreting in a supervised educational, community, service agency, or other setting.

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**Italian Courses****ITA 1001 Conversational Italian I**

(Previously 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 1011 Italian Language I**

(Previously ITA 111 Italian 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.

**ITA 1012 Italian Language II**

(Previously ITA 112 Italian Language II)

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite: ITA 1011*

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 2011 Italian Language III: AH4**

(Previously ITA 211 Italian Language III: AH4)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ITA 1012*

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 2012 Italian Language IV: AH4**

(Previously ITA 212 Italian Language IV: AH4)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ITA 2011*

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.

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**Japanese Courses**

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**JPN 1001 Conversational Japanese I**

(Previously JPN 101 Conversational Japanese I)

3 Credit Hours • 45 Contact Hours (Lecture)

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 1011 Japanese Language I**

(Previously JPN 111 Japanese Language I)

5 Credit Hours • 75 Contact Hours (Lecture)

Begins a sequence dealing with the development of functional proficiency in listening, speaking, reading, and writing the Japanese language.

**JPN 1012 Japanese Language II**

(Previously JPN 112 Japanese Language II)

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite: JPN 1011*

Continues Japanese Language I in the development of functional proficiency in listening, speaking, reading, and writing the Japanese language.

**JPN 2011 Japanese Language III: AH4**

(Previously JPN 211 Japanese Language III: AH4)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: JPN 1012*

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 2012 Japanese Language IV: AH4**

(Previously JPN 212 Japanese Language IV: AH4)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: JPN 2011*

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.

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**Journalism Courses**

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**JOU 1005 Introduction to Mass Media: SS3**

(Previously JOU 105 Introduction to Mass Media: SS3)

3 Credit Hours • 45 Contact Hours (Lecture)

Places the mass media in an historical and cultural perspective, considering the validity, integrity, and influence of the media in a democracy.

**JOU 1006 Media News & Reporting**

(Previously JOU 106 Media News &amp; Reporting)

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

Introduces newswriting, reporting, and interviewing with an emphasis on clarity, accuracy, timeliness, and fairness.

**JOU 1021 Photojournalism**

(Previously 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 2006 Intermediate Newswriting & Editing**

(Previously JOU 206 Intermediate Newswriting &amp; Editing)

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

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 2015 Publications Production & Design**

(Previously JOU 215 Publications Production &amp; Design)

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

Provides for students' participation in the planning, writing, design, and production processes of a non-newspaper publication.

**JOU 2025 New Media**

(Previously 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 2031 Introduction to Public Relations**

(Previously JOU 231 Introduction to Public Relations)

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on public relations and its role for the individuals, non-profit organizations, businesses, and governments. This course covers research methodologies, principles, and practices necessary to become a public relations practitioner.

**JOU 2041 Feature & Magazine Writing**

(Previously JOU 241 Feature &amp; Magazine Writing)

3 Credit Hours • 45 Contact Hours (Lecture)

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 2080 Internship**

(Previously JOU 280 Internship)

0.25 - 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.

## Law Enforcement Courses

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LEA courses must have permission of Academy Director to register.

### LEA 1001 Basic Police Academy I

(Previously LEA 101 Basic Police Academy I)

6 Credit Hours • 135 Contact Hours (Lecture/Lab Combination)

*Note: Taken concurrently with LEA 1002, LEA 1003, LEA 1004, LEA 1005, LEA 1006, LEA 1007, LEA 1008, PED 1002, PED 1003*  
Conforms to POST (Peace Officer Standards and Training) standards and Colorado 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 both a lecture and laboratory mode of learning.

### LEA 1002 Basic Police Academy II

(Previously LEA 102 Basic Police Academy II)

12 Credit Hours • 270 Contact Hours (Lecture/Lab Combination)

*Note: Taken concurrently with LEA 1001, LEA 1003, LEA 1004, LEA 1005, LEA 1006, LEA 1007, LEA 1008, PED 1010*

Conforms to POST (Peace Officer Standards and Training) 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 1003 Basic Law Enforcement Academy III

(Previously LEA 103 Basic Law Enforcement Academy III)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Note: Taken concurrently with LEA 1001, LEA 1002, LEA 1004, LEA 1005, LEA 1006, LEA 1007, LEA 1008, PED 1010*

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 1004 Basic Law Enforcement Academy IV

(Previously LEA 104 Basic Law Enforcement Academy IV)

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

*Note: Taken concurrently with LEA 1001, LEA 1002, LEA 1003, LEA 1005, LEA 1006, LEA 1007, LEA 1008, PED 1010*

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 1005 Basic Law

(Previously LEA 105 Basic Law)

8 Credit Hours • 120 Contact Hours (Lecture)

*Note: Taken concurrently with LEA 1001, LEA 1002, LEA 1003, LEA 1004, LEA 1006, LEA 1007, LEA 1008, PED 1010*

Conforms to POST (Peace Officer Standards and Training) 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 1006 Arrest Control Techniques

(Previously LEA 106 Arrest Control Techniques)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Note: Taken concurrently with LEA 1001, LEA 1002, LEA 1003, LEA 1004, LEA 1005, LEA 1007, LEA 1008, PED 1010*

*Grading: P/F only*

Conforms to POST (Peace Officer Standards and Training) standards and Colorado state certification requirements as well as the basic skills and knowledge necessary to perform the entry level duties of a peace officer. Exploration of the skills, knowledge, and abilities necessary to effectively maintain control of a suspect when making an arrest. Explains the continuum of force and de-escalation of force.

### LEA 1007 Law Enforcement Driving

(Previously LEA 107 Law Enforcement Driving)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Note: Taken concurrently with LEA 1001, LEA 1002, LEA 1003, LEA 1004, LEA 1005, LEA 1006, LEA 1008, PED 1010*

*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 1008 Firearms

(Previously LEA 108 Firearms)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Note: Taken concurrently with LEA 1001, LEA 1002, LEA 1003, LEA 1004, LEA 1005, LEA 1006, LEA 1007, PED 1010*

*Grading: P/F only*

Conforms to POST (Peace Officer Standards and Training) standards and Colorado state certification requirements as well as the basic skills and knowledge necessary to perform the entry level duties of a peace officer. 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 be able to explain the firearms role within the continuum of force.

### LEA 1018 Police Report Writing

(Previously LEA 118 Police Report Writing)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 1021 or ENG 1031*

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

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### LIT 1015 Introduction to Literature I: AH2

(Previously LIT 115 Introduction to Literature I: AH2)

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces fiction, poetry, and drama. This course emphasizes active and responsive reading.

### LIT 1021 Survey of World Mythology Literature

(Previously LIT 121 Survey of World Mythology Literature)

3 Credit Hours • 45 Contact Hours (Lecture)

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 2001 World Literature to 1600: AH2**

(Previously LIT 201 World Literature to 1600: AH2)

3 Credit Hours • 45 Contact Hours (Lecture)

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 2002 World Literature after 1600: AH2**

(Previously LIT 202 World Literature after 1600: AH2)

3 Credit Hours • 45 Contact Hours (Lecture)

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 2005 Race, Ethnicity, and Culture in U.S. Literature: AH2**

(Previously LIT 205 Race, Ethnicity, Culture: AH2)

3 Credit Hours • 45 Contact Hours (Lecture)

Examines the cultural, historical, and social contexts impacting multiple ethnic American identities through critical reading and analysis. This course focuses on significant works by authors who identify as African American, Native American, Latino/a, Asian American, and other ethnicities.

**LIT 2011 American Literature to Civil War: AH2**

(Previously LIT 211 American Literature to Civil War: AH2)

3 Credit Hours • 45 Contact Hours (Lecture)

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 2012 American Literature after the Civil War: AH2**

(Previously LIT 212 American Literature after the Civil War: AH2)

3 Credit Hours • 45 Contact Hours (Lecture)

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 2021 British Literature to 1770: AH2**

(Previously LIT 221 British Literature to 1770: AH2)

3 Credit Hours • 45 Contact Hours (Lecture)

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 2022 British Literature since 1770: AH2**

(Previously LIT 222 British Literature since 1770: AH2)

3 Credit Hours • 45 Contact Hours (Lecture)

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 2025 Introduction to Shakespeare: AH2**

(Previously LIT 225 Introduction to Shakespeare: AH2)

3 Credit Hours • 45 Contact Hours (Lecture)

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 2035 Science Fiction**

(Previously 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 2046 Literature of Women: AH2**

(Previously LIT 246 Literature of Women: AH2)

3 Credit Hours • 45 Contact Hours (Lecture)

Examines the techniques and themes in literature by and about women by examining women's issues from various genres.

**LIT 2048 Native American Literature**

(Previously LIT 248 Native American Literature)

3 Credit Hours • 45 Contact Hours (Lecture)

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 2055 Children's Literature: AH2**

(Previously LIT 255 Children's Literature: AH2)

3 Credit Hours • 45 Contact Hours (Lecture)

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 2057 Literature & Film**

(Previously LIT 257 Literature &amp; Film)

3 Credit Hours • 45 Contact Hours (Lecture)

Examines the relationship between literature and motion pictures, emphasizing the technique and interpretive function of filmmakers.

**LIT 2058 Latinx Literature: AH2**

(Previously LIT 258 Latinx Literature)

3 Credit Hours • 45 Contact Hours (Lecture)

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 2068 Celtic Literature: AH2**

(Previously LIT 268 Celtic Literature: AH2)

3 Credit Hours • 45 Contact Hours (Lecture)

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 2069 Popular Literature & Culture**

(Previously LIT 269 Popular Literature &amp; Culture)

3 Credit Hours • 45 Contact Hours (Lecture)

Explores special interests in literature, such as Detective Fiction and Science Fiction.

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## Machining Courses

**MAC 1000 Machine Shop Safety**

(Previously 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 1001 Introduction to Machine Shop**

(Previously MAC 101 Introduction to Machine Shop)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
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 1002 Print Reading for Machinists**

(Previously 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 1010 Introduction to Engine Lathe**

(Previously MAC 110 Introduction to Engine Lathe)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
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 1011 Intermediate Engine Lathe**

(Previously MAC 111 Intermediate Engine Lathe)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
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 1012 Advanced Engine Lathe**

(Previously MAC 112 Advanced Engine Lathe)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
Prepares students to form radius, single-point isometric threads, turn spherical radius, use a radius gauge, and work within .0005 inches tolerance externally.

**MAC 1020 Introduction to Milling Machine**

(Previously MAC 120 Introduction to Milling Machine)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
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 1021 Intermediate Milling Machine**

(Previously MAC 121 Intermediate Milling Machine)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
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 1022 Advanced Milling Machine Operations**

(Previously MAC 122 Advanced Milling Machine Operations)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
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 2001 Introduction to CNC Turning Operations**

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
Introduces basic writing and editing of CNC lathe programs. G&M codes, math, speeds and feeds, production processes including basic process controls, and documentation associated with manufacturing will be covered.

**MAC 2002 CNC Turning Operations II**

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
Covers skills in writing and editing advanced CNC Lathe programs. G&M codes, math, speeds and feeds, production processes including multi-part, process controls, and documentation associated with manufacturing will be covered.

**MAC 2005 Introduction to CNC Milling Operations**

(Previously MAC 205 Introduction to CNC Milling Operations)

3 Credit Hours • 45 Contact Hours (Lecture)  
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 2006 CNC Milling Operations II**

(Previously MAC 206 CNC Milling Operations II)

3 Credit Hours • 45 Contact Hours (Lecture)  
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 2040 CAD/CAM 2D**

(Previously MAC 240 CAD/CAM 2D)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
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 2041 CAD/CAM 2D Lab**

(Previously MAC 241 CAD/CAM 2D Lab)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
Requires students to produce a variety of lab exercises on robotic machinery in conjunction with MAC 2040. 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 2043 Mastercam**

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Introduces the concepts of creating basic 2D and 3D Mastercam wireframes, building and manipulating surfaces and solids. The practices and techniques of fixture incorporation, tool pathing, and machine code generation will be discussed. Basic user interfaces and custom interface setup will be covered, as well as common file storage

**MAC 2045 CAD/CAM 3D**

(Previously MAC 245 CAD/CAM 3D)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
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 2046 CAD/CAM 3D Lab**

(Previously MAC 246 CAD/CAM 3D Lab)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
Requires students to produce a variety of three-dimensional lab exercises on robotic machinery in a self-paced format in conjunction with MAC 2045. 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 2052 Practical Metallurgy**

(Previously MAC 252 Practical Metallurgy)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
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 2080 Machining Internship**

(Previously MAC 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.

**Management Courses****MAN 1016 Principles of Supervision**

(Previously 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 1017 Time Management**

(Previously 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 1025 Team Building**

(Previously 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 1028 Human Relations in Organizations**

(Previously 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 2000 Human Resource Management I**

(Previously MAN 200 Human Resource Management I)

3 Credit Hours • 45 Contact Hours (Lecture)  
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 2016 Small Business Management**

(Previously MAN 216 Small Business Management)

3 Credit Hours • 45 Contact Hours (Lecture)  
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 2026 Principles of Management**

(Previously 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 2040 Strategic Management**

(Previously MAN 240 Strategic Management)

3 Credit Hours • 45 Contact Hours (Lecture)  
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 2046 Critical Issues in Marketing & Management**

(Previously MAN 246 Critical Issues in Marketing &amp; Management)

3 Credit Hours • 45 Contact Hours (Lecture)  
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.

**MAN 3030 Contemporary Management**

3 Credit Hours • 45 Contact Hours (Lecture)

Note: Must be accepted into the BAS Business Administration Program  
Provides a broad overview of current organizational management principles, techniques, and concepts needed for managerial analysis and decision-making related to planning, organizing, leading, and controlling of organizational resources. This course also explores the evolving nature and roles of managers and leaders.

**MAN 3050 Innovation and Change Management**

3 Credit Hours • 45 Contact Hours (Lecture)

Note: Must be accepted into the BAS Business Administration Program

Provides essential skills required to navigate the dynamic and ever-evolving business environment. This course explores and applies the concepts, theories, and practical tools necessary to understand and drive organizational change, fostering adaptability and innovation within an organization.

**MAN 3060 Operations Management**

3 Credit Hours • 45 Contact Hours (Lecture)

Note: Must be accepted into the BAS Business Administration Program

Examines the planning, organization, and measurement of operations common within successful business production and service. This course emphasizes product design, supply chain management, quality control, inventory management, and planning.

**MAN 4030 Organizational Leadership**

3 Credit Hours • 45 Contact Hours (Lecture)

Note: Must be accepted into the BAS Business Administration Program

Explores leadership development through foundational theories, along with development and applications of effective leadership principles and skills. This course covers motivation, group dynamics, conflict resolution, power/politics, communication, and organizational change and development. This course emphasizes a personal leadership development plan toward becoming an effective leader in the organization.

**MAN 4040 Strategic Management**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: FIN 3020, MAN 3030, MAR 3040*

Note: Must be accepted into the BAS Business Administration Program

Applies strategic thinking and development and implementation strategies for businesses with a domestic and global perspective. This course combines fundamentals from accounting, marketing, finance and management, operations, and management information systems to analyze information and make strategic decisions and plans.

**MAN 4060 Human Resources and Supervisory Management**

3 Credit Hours • 45 Contact Hours (Lecture)

Note: Must be accepted into the BAS Business Administration Program

Establishes the foundational knowledge and skills required to effectively manage personnel, foster a productive work environment, and handle various human resource functions within an organization. The course explores applications of the key principles, best practices, and legal aspects of Human Resources (HR) and supervisory management.

**Manufacturing Technology Courses****MTE 1100 Print Reading Manufacturing**

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.

**MTE 1102 Safety Manufacturing Environment**

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

Introduces Occupational Safety and Health Administration (OSHA) federal and state regulations, industrial practices, and accident investigation techniques, including topics such as hazard communication standards, lockout/tagout procedures, eye safety, lifting techniques, electrical safety, stored energy safety, Personal Protective Equipment (PPE), and safety program development and monitoring.

**MTE 1130 Metrology**

(Previously 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 2330 Strength of Materials**

(Previously MTE 247 Strength of Materials)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: CAD 2456, EGT 2303, MAT 1140 or higher*

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 1011 Principles of Sales**

(Previously 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 1017 Principles of Retailing**

(Previously 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 1060 Customer Service**

(Previously 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 2016 Principles of Marketing**

(Previously 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 2020 Principles of Advertising**

(Previously MAR 220 Principles of Advertising)

3 Credit Hours • 45 Contact Hours (Lecture)

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 2049 Strategic Marketing**

(Previously MAR 249 Strategic Marketing)

3 Credit Hours • 45 Contact Hours (Lecture)

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.

**MAR 3040 Business Practical Marketing**

3 Credit Hours • 45 Contact Hours (Lecture)

Note: Must be accepted into the BAS Business Administration Program

Explores contemporary marketing environments, effective strategies and practices and common legal, ethical, and social issues within a variety of industries. This course emphasizes elements of the marketing mix, including product and service development and management, social media, e-marketing, pricing, channel management, and promotion.

**MAR 4010 Digital Marketing and Analytics**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: MAR 3040*

Note: Must be accepted into the BAS Business Administration Program

Presents practical application of the Internet and digital platforms for marketing products and services. This course develops skills and techniques in product and services marketing, sales, and analytics. This course explores the diverse online business models, digital advertising, social media marketing techniques, and advanced marketing analytics. The course emphasizes data-driven marketing decision-making.

**Math Courses****MAT 0120 Math for Clinical Calculations Support**

1 Credit Hours • 15 Contact Hours (Supplemental Academic Instruction)

*Co-requisite: MAT 1120**Note: MAT 0120 must be taken concurrently with MAT 1120*

Supports skill development necessary for success within Math for Clinical Calculations.

**MAT 0140 Career Math Support**

1 Credit Hours • 15 Contact Hours (Supplemental Academic Instruction)

*Co-requisite: MAT 1140**Note: MAT 0140 must be taken concurrently with MAT 1140*

Supports skill development necessary for success within Career Math.

**MAT 0160 Financial Mathematics Support**

1 Credit Hour • 15 Contact Hours (Supplemental Academic Instruction)

*Co-requisite: MAT 1160**Note: MAT 0160 must be taken concurrently with MAT 1160*

Supports skill development necessary for success within Financial Mathematics.

**MAT 0200 Algebraic Literacy Lab**

(Previously MAT 025 Algebraic Literacy Lab)

1 Credit Hour • 15 Contact Hours (Supplemental Academic Instruction)

*Co-requisite: MAT 0300**Note: MAT 0200 must be taken concurrently with MAT 0300*

Supports skill development for students registered in MAT 0300. Topics covered in this course include those defined in MAT 0300 and/or any pre-requisite skills needed by the student.

**MAT 0240 Mathematics for Liberal Arts Support**

2 Credit Hours • 30 Contact Hours (Supplemental Academic Instruction)

*Co-requisite: MAT 1240**Note: MAT 0240 must be taken concurrently with MAT 1240*

Supports skill development necessary for success within Math for Liberal Arts.

**MAT 0250 Quantitative Literacy**

(Previously MAT 050 Quantitative Literacy)

4 Credit Hours • 60 Contact Hours (Lecture)

Develops number sense and critical thinking strategies, introduces algebraic thinking, and connects mathematics to real world applications. Topics in this course include ratios, proportions, percent, measurement, linear relationships, properties of exponents, and math learning strategies. This course prepares students for math for liberal arts, statistics, integrated math, and college level career math courses.

**MAT 0260 Introduction to Statistics Support**

2 Credit Hours • 30 Contact Hours (Supplemental Academic Instruction)

*Co-requisite: MAT 1260**Note: MAT 0260 must be taken concurrently with MAT 1260*

Supports skill development necessary for success within Introduction to Statistics.

**MAT 0300 Algebraic Literacy**

(Previously MAT 055 Algebraic Literacy)

4 Credit Hours • 60 Contact Hours (Lecture)

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 1320 and MAT 1340.

**MAT 0340 College Algebra Support**

2 Credit Hours • 30 Contact Hours (Supplemental Academic Instruction)

*Co-requisite: MAT 1340*

Supports skill development necessary for success within College Algebra.

**MAT 1120 Math for Clinical Calculations**

(Previously MAT 103 Math for Clinical Calculations)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in Career Math*

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 1140 Career Math**

(Previously MAT 107 Career Math)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in Career Math*

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 1160 Financial Mathematics**

(Previously MAT 112 Financial Mathematics)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in Career Math*

Covers the fundamentals of financial mathematics. Topics include pricing, taxes, insurance, interest, annuities, amortization, and investments.

**MAT 1220 Integrated Math I: MA1**

(Previously MAT 155 Integrated Math I: MA1)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in Quantitative Literacy Math*

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 1230 Integrated Math II: MA1**

(Previously MAT 156 Integrated Math II: MA1)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in Quantitative Literacy Math*

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 1240 Mathematics for the Liberal Arts: MA1**

(Previously MAT 120 Mathematics for the Liberal Arts: MA1)

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite: College Readiness in Quantitative Literacy Math*

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 1260 Introduction to Statistics: MA1**

(Previously MAT 135 Introduction to Statistics: MA1)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in Quantitative Literacy Math*

Introduces descriptive and inferential statistics, with an emphasis on critical thinking and statistical literacy. Topics include methods of data collection, presentation and summarization, introduction to probability concepts and distributions, and statistical inference of one and two populations. This course uses real world data to illustrate applications of a practical nature.

**MAT 1320 Finite Mathematics: MA1**

(Previously MAT 123 Finite Mathematics: MA1)

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite: College Readiness in Algebra*

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 1340 College Algebra: MA1**

(Previously MAT 121 College Algebra: MA1)

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite: College Readiness in Algebra*

Focuses on a variety of functions and the exploration of their graphs. Topics include equations and inequalities, operations on functions, exponential and logarithmic functions, linear and non-linear systems, and an introduction to conic sections. This course provides essential skills for Science, Technology, Engineering, and Math (STEM) pathways.

**MAT 1400 Survey of Calculus: MA1**

(Previously MAT 125 Survey of Calculus: MA1)

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite: MAT 1340 or appropriate test scores*

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 1420 College Trigonometry: MA1**

(Previously MAT 122 College Trigonometry: MA1)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: MAT 1340 or appropriate test scores*

Explores trigonometric functions, their graphs, inverse functions and identities. Topics include trigonometric equations, solutions of triangles, trigonometric form of complex numbers, and polar coordinates. This course provides essential skills for Science, Technology, Engineering, and Math (STEM) pathways.

**MAT 1440 Pre-Calculus: MA1**

(Previously MAT 166 Pre-Calculus: MA1)

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite: MAT 1340 or appropriate test scores*

Extends algebraic concepts and explores the subject of trigonometry. Topics include polynomial, rational, logarithmic, and exponential functions, trigonometric and inverse trigonometric functions and their graphs, trigonometric identities, and applications. This course provides essential skills for Science, Technology, Engineering, and Math (STEM) pathways.

**MAT 2080 Internship**

(Previously 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.

**MAT 2410 Calculus I: MA1**

(Previously MAT 201 Calculus I: MA1)

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite: MAT 1420 or MAT 1440 or appropriate test scores*

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 2420 Calculus II: MA1**

(Previously MAT 202 Calculus II: MA1)

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite: MAT 2410*

Continues the study of single variable calculus which will include techniques of integration, analytic geometry, improper integrals, convergence of infinite numerical series and power series.

**MAT 2430 Calculus III: MA1**

(Previously MAT 203 Calculus III: MA1)

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite: MAT 2420*

Focuses on the traditional subject matter of multivariable Calculus. Topics include vectors, vector-valued functions, partial derivatives, analytic geometry, multiple integrals, line integrals and applications.

**MAT 2431 Calculus III with Engineering Applications: MA1**

(Previously MAT 204 Calculus III with Engineering Applications: MA1)

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite: MAT 2420*

Focuses on 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 2520 Discrete Mathematics: MA1**

(Previously MAT 215 Discrete Mathematics: MA1)

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite: MAT 2410*

Concentrates on formal logic, algorithms, induction proofs, equivalence relations and graphs. This course is designed for mathematics and computer science students.

**MAT 2540 Linear Algebra**

(Previously MAT 255 Linear Algebra)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: MAT 2420*

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 2560 Differential Equations: MA1**

(Previously MAT 265 Differential Equations: MA1)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: MAT 2420*

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 2562 Differential Equations with Linear Algebra**

(Previously MAT 266 Differential Equations with Linear Algebra)

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite: MAT 2420*

Concentrates on formal logic, algorithms, induction proofs, equivalence relations and graphs. This course is designed for mathematics and computer science students.

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**Medical Assistant Professional Courses**

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**MAP 1010 Medical Office Administration**

(Previously MAP 110 Medical Office Administration)

4 Credit Hours • 60 Contact Hours (Lecture)

Introduces the administrative duties specifically used in medical offices.

**MAP 1020 Medical Office Financial Management**

(Previously MAP 120 Medical Office Financial Management)

4 Credit Hours • 60 Contact Hours (Lecture)

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 Classifications of Diseases (ICD) codes, thus establishing the medical necessity required for third-party reimbursement.

**MAP 1050 Pharmacology for Medical Assistants**

(Previously MAP 150 Pharmacology for Medical Assistants)

3 Credit Hours • 45 Contact Hours (Lecture)

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 1083 Medical Assistant Internship**

(Previously 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 2038 Medical Assisting Laboratory**

(Previously MAP 138 Medical Assisting Laboratory)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Prerequisite: MOT 1036 (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 2040 Medical Assisting Clinical Skills**

(Previously MAP 140 Medical Assisting Clinical Skills)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Prerequisite: MOT 1036 (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 2069 Review for Medical Assistant National Examination**

(Previously 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 2080 Internship**

(Previously 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.

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**Medical Office Technology Courses**

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**MOT 1015 Electronic Medical Office Records**

(Previously MOT 122 Electronic Medical Office Records)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: HPR 1039, HPR 1045*

Outlines the rules and principles of medical records in ambulatory care settings. Topics include hard copy and Electronic Medical/Health Records (EMR/EHR), data entry, records retention, Release of Information (ROI), Health Insurance & Portability Accountability Act (HIPAA), and other legal topics relating to patient records.

**MOT 1025 Basic Medical Sciences I**

(Previously MOT 125 Basic Medical Sciences I)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Introduces the anatomy, 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 1026 Basic Medical Sciences II**

(Previously 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 1027 Basic Medical Sciences III**

(Previously 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 1036 Introduction to Clinical Skills**

(Previously 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 1050 CPT Coding**

(Previously MOT 208 CPT Coding)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)  
*Prerequisite:* MOT 1025, MOT 1026, MOT 1027 or program coordinator approval

*Note:* MOT 1050 and MOT 1060 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 1060 ICD Coding**

(Previously MOT 209 ICD Coding)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)  
*Prerequisite:* MOT 1025, MOT 1026, MOT 1027 or program coordinator approval

*Note:* MOT 1060 and MOT 1050 must be taken concurrently

Teaches coding concepts using the ICD (international classification of disease) coding system for insurance claims.

**MOT 1061 Intermediate Coding**

(Previously MOT 210 Intermediate Coding)

3 Credit Hours • 45 Contact Hours (Lecture)  
 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.

**MOT 1081 Internship: Administrative**

(Previously 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 1082 Internship: Clinical**

(Previously 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 2040 Advanced Insurance Billing & Coding**

(Previously MOT 131 Advanced Insurance Billing &amp; Coding)

3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite:* MOT 1050, MOT 1060  
 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.

## Meteorology Course

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**MET 1050 General Meteorology with Lab: SC1**

(Previously MET 150 General Meteorology with Lab: SC1)

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)  
 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

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**MGD 1002 Introduction to Multimedia**

(Previously 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 1004 Videography**

(Previously 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 1006 Creativity & Visual Thinking**

(Previously MGD 106 Creativity &amp; 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 1007 History of Design**

(Previously 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 1009 Design & Color**

(Previously MGD 109 Design &amp; Color)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Prerequisite:* MGD 1011 or MGD 1012  
 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 online, form, composition, and continuity.

**MGD 1010 Lettering for Graphic Design**

(Previously 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 1011 Adobe Photoshop I**

(Previously 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 1012 Adobe Illustrator I**

(Previously 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 1013 Adobe InDesign**

(Previously 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 1014 Typography I**

(Previously MGD 116 Typography I)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
 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 1015 Typography & Layout**

(Previously MGD 105 Typography &amp; Layout)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Co-requisite: MGD 1002 or MGD 1012 or MGD 1013*  
 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 1017 Introduction to Visual Communications**

(Previously 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 1020 Production Design**

(Previously MGD 103 Production Design)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Co-requisite: MGD 1011 or MGD 1012 or MGD 1013*  
 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 1021 Painter for Digital Media**

(Previously 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 1032 Design & Color II**

(Previously MGD 132 Design &amp; Color II)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Prerequisite: MGD 1009*

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 1034 Drawing for Illustrators**

(Previously 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 1037 Illustration I**

(Previously MGD 207 Illustration I)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Prerequisite: MGD 1034 or ART 1201*

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 1038 Illustration II**

(Previously MGD 208 Illustration II)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Prerequisite: MGD 1037*

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 1041 Web Design I**

(Previously 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 1043 Motion Graphic Design I: (Software)**

(Previously MGD 143 Motion Graphic Design I: (Software))

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
 Explores the creation of animation and dynamic media for web and multimedia applications, conforming to professional standards. Emphasizes the manipulation of time-based media using key-frames, tweens and other technologies related to the specific software being utilized. Also examines the use of scripts to trigger timeline events and create basic interactive behavior.

**MGD 1053 3D Animation I**

(Previously MGD 153 3D Animation I)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
 Encompasses all major aspects of creating 3D characters using animation software. Using developed characters, the student will learn how to animate for personality.

**MGD 1056 Emergent Media Practices**

(Previously 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 1058 Introduction to UI/UX**

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
This course emphasizes the creation of solutions for suggested user tasks and the development of design patterns used in contemporary apps and websites.

#### **MGD 1064 Digital Video Editing I**

(Previously MGD 164 Digital Video Editing I)  
3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
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 1065 After Effects I**

(Previously 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 1078 Seminar/Workshop**

(Previously MGD 178 Seminar/Workshop)  
3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
Provides students with an exceptional learning experience.

#### **MGD 1080 Internship**

(Previously 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 1904 Director I**

(Previously 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 2001 Children's Book Illustration**

(Previously MGD 201 Children's Book Illustration)  
3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Prerequisite: MGD 1009*  
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 2002 Point of Purchase Packaging Design**

(Previously MGD 202 Point of Purchase Packaging Design)  
3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Prerequisite: MGD 1012*  
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 2011 Adobe Photoshop II**

(Previously MGD 211 Adobe Photoshop II)  
3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Prerequisite: MGD 1011*  
Develops and reinforces image composition techniques learned in Adobe Photoshop I, MGD 1011. Fundamentals are continuously reinforced as new design techniques are introduced.

#### **MGD 2012 Adobe Illustrator II**

(Previously MGD 212 Adobe Illustrator II)  
3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Prerequisite: MGD 1012*  
Expands the skillful practice and strategic use of Adobe Illustrator as a vector-based design tool in traditional and emerging workflows.

#### **MGD 2013 Electronic Prepress**

(Previously MGD 213 Electronic Prepress)  
3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Prerequisite: MGD 1011, MGD 1012, MGD 1013*  
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 2014 Typography II**

(Previously MGD 217 Typography II)  
3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Prerequisite: MGD 1014 or MGD 1015*  
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 2015 Painting for Illustrators**

(Previously 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 2021 Computer Graphics I**

(Previously MGD 221 Computer Graphics I)  
3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Prerequisite: MGD 1011, MGD 1012, MGD 1013, MGD 1014*  
Introduces the process of generating computer design.

#### **MGD 2022 Computer Graphics II**

(Previously MGD 222 Computer Graphics II)  
3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Prerequisite: MGD 2021*  
Continues MGD 2021 with advanced problems in generating computer design for graphics application, emphasizing production of individual fine art pieces.

#### **MGD 2023 Graphic Storytelling I**

(Previously 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 2035 Word & Image 1: Comics**

(Previously 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 2037 Illustration III**

(Previously MGD 209 Illustration III)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Prerequisite:* MGD 1038  
Continues Illustration II with added emphasis on conceptual development and proficiency in technique.

### **MGD 2038 Illustration IV**

(Previously MGD 210 Illustration IV)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Prerequisite:* MGD 2037  
Covers advanced illustration techniques including manual, computer, and mixed media techniques.

### **MGD 2041 Web Design II**

(Previously MGD 241 Web Design II)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Prerequisite:* MGD 1041  
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 2042 Web Architecture: Open Source Design**

(Previously MGD 242 Web Architecture: Open Source Design)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Prerequisite:* MGD 1041  
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 2043 Web Motion Graphic Design II**

(Previously MGD 243 Web Motion Graphic Design II)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Prerequisite:* MGD 1043  
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 2058 User Experience/User Interface Design (UX/UI)**

(Previously MGD 258 User Experience/User Interface Design (UX/UI))

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Prerequisite:* MGD 1058  
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 2059 Management & Production**

(Previously MGD 259 Management & Production)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
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 2064 Digital Video Editing II**

(Previously MGD 264 Digital Video Editing II)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Prerequisite:* MGD 1064  
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 2065 After Effects II**

(Previously MGD 265 After Effects II)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Prerequisite:* MGD 1065  
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 2068 Business for Creatives**

(Previously 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 2080 Internship**

(Previously 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 2089 Capstone**

(Previously MGD 289 Capstone)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
A demonstrated culmination of learning within a given program of study.

## **Music Courses**

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### **MUS 1000 Music Theory Fundamentals I**

(Previously 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 1001 Music Theory Fundamentals II**

(Previously MUS 101 Music Theory Fundamentals II)

3 Credit Hours • 45 Contact Hours (Lecture)

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 1005 Introduction to Computer Applications**

(Previously 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 1010 Music Theory I**

(Previously MUS 110 Music Theory I)

3 Credit Hours • 45 Contact Hours (Lecture)

*Note: MUS 1010, MUS 1012, and MUS 1031 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 1011 Music Theory II**

(Previously MUS 111 Music Theory II)

3 Credit Hours • 45 Contact Hours (Lecture)

*Note: MUS 1011, MUS 1013, and MUS 1032 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 1012 Ear Training/Sight-singing I Lab**

(Previously MUS 112 Ear Training/Sight-singing I Lab)

1 Credit Hour • 37.5 Contact Hours (Studio)

*Note: MUS 1010, MUS 1012, and MUS 1031 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 1013 Ear Training/Sight-singing II Lab**

(Previously MUS 113 Ear Training/Sight-singing II Lab)

1 Credit Hour • 37.5 Contact Hours (Studio)

*Note: MUS 1011 and MUS 1013 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 1020 Music Appreciation: AH1**

(Previously MUS 120 Music Appreciation: AH1)

3 Credit Hours • 45 Contact Hours (Lecture)

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 1021 Music History Medieval thru Classical: AH1**

(Previously MUS 121 Music History Medieval thru Classical: AH1)

3 Credit Hours • 45 Contact Hours (Lecture)

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 1022 Music History Early Romantic Period to the Present: AH1**

(Previously MUS 122 Music History Early Romantic Period to the Present: AH1)

3 Credit Hours • 45 Contact Hours (Lecture)

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 1023 Survey of World Music: AH1**

(Previously MUS 123 Survey of World Music: AH1)

3 Credit Hours • 45 Contact Hours (Lecture)

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 1025 History of Jazz: AH1**

(Previously MUS 125 History of Jazz: AH1)

3 Credit Hours • 45 Contact Hours (Lecture)

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 1026 History of Rock & Pop**

(Previously MUS 126 History of Rock &amp; Pop)

3 Credit Hours • 45 Contact Hours (Lecture)

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 1031 Music Class I**

(Previously 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 1032 Music Class II**

(Previously 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 1033 Music Class III**

(Previously 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 1034 Music Class IV**

(Previously 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 1041 Private Instruction I: (Specify)**

(Previously 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 1042 Private Instruction II: (Specify)**

(Previously 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 1043 Private Instruction III: (Specify)**

(Previously 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 1044 Private Instruction IV: (Specify)**

(Previously 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 1051 Ensemble I: (Specify)**

(Previously 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 1052 Ensemble II: (Specify)**

(Previously 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 1053 Ensemble III: (Specify)**

(Previously 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 1054 Ensemble IV: (Specify)**

(Previously 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 1061 Computer Music Applications I**

3 Credit Hours • 45 Contact Hours (Lecture)  
 Introduces audio signal flow, Digital Audio Workstation (DAW), current computer music software, digital audio practices, Musical Instrument Digital Interface (MIDI) sequencing, and audio for video.

**MUS 1062 Computer Music Applications II**

3 Credit Hours • 45 Contact Hours (Lecture)  
 Further explores the technical and creative use Digital Audio Workstation (DAW) environment. Sound design using analog and digital synthesis and sampling, digital signal processing, and mastering and audio formats will be among the topics explored.

**MUS 1063 Music Audio Production I:**

3 Credit Hours • 45 Contact Hours (Lecture)  
 Provides music majors and students with a strong interest in music with a basic understanding of the music audio production process. The course covers the fundamentals of audio/music production and signal flow, fundamentals of sound, acoustics, and microphones, digital and analog technology, recording, and mixing.

**MUS 1064 Music Audio Production II:**

3 Credit Hours • 45 Contact Hours (Lecture)  
 Refines techniques and emphasizes critical listening in the acoustic and Digital Audio Workstation environments.

**MUS 1067 Music Business I**

(Previously MUS 167 Music Business I)  
 3 Credit Hours • 45 Contact Hours (Lecture)  
 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 2010 Music Theory III**

(Previously MUS 210 Music Theory III)  
 3 Credit Hours • 45 Contact Hours (Lecture)  
*Note: MUS 2010 must be taken with MUS 2012*  
 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 2011 Music Theory IV**

(Previously MUS 211 Music Theory IV)  
 3 Credit Hours • 45 Contact Hours (Lecture)  
*Note: MUS 2011 must be taken with MUS 2013*  
 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 2012 Ear Training/Sight-Singing Lab III**

(Previously MUS 212 Ear Training/Sight-Singing Lab III)  
 1 Credit Hour • 37.5 Contact Hours (Studio)  
*Note: MUS 2012 must be taken with MUS 2010. 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 2013 Ear Training/Sight-Singing Lab IV**

(Previously MUS 213 Ear Training/Sight-Singing Lab IV)  
 1 Credit Hour • 37.5 Contact Hours (Studio)  
*Note: MUS 2013 must be taken with MUS 2011. Follow sequence or have faculty consent to enroll.*  
 Covers sight singing and ear training skills related to musical styles since 1900.

**MUS 2031 Music Class I:**

(Previously 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 2032 Music Class II:**

(Previously 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 2033 Music Class III:**

(Previously 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 2034 Music Class IV:**

(Previously 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 2041 Private Instruction**

(Previously 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 2042 Private Instruction**

(Previously 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 2043 Private Instruction**

(Previously 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 2044 Private Instruction**

(Previously 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 2051 Ensemble I**

(Previously 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 2052 Ensemble II**

(Previously 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 2053 Ensemble III**

(Previously 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 2054 Ensemble IV**

(Previously MUS 254 Ensemble IV)

1 Credit Hour • 37.5 Contact Hours (Studio)

Rehearses and performs various types of musical literature. Second year, fourth term.

**MUS 2065 Live Audio Engineering**

3 Credit Hours • 45 Contact Hours (Lecture)

Covers the concepts and technical skills of live sound reinforcement. Topics include basic audio concepts, the operation and interconnection of a sound system, signal processing, and the duties of the sound engineer.

**MUS 2084 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.

**MUS 2089 Capstone**

2 Credit Hours • 30 Contact Hours (Lecture)

Provides a demonstrated culmination of learning within a given program of study.

## Natural Resources Courses

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**NRE 1002 Introduction to Natural Resources Management**

(Previously 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 1100 Foundations of Forestry**

(Previously 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 2012 Ecosystem Management**

(Previously NRE 212 Ecosystem Management)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: ENV 1111*

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 2014 Environmental Issues & Ethics**

(Previously NRE 214 Environmental Issues &amp; 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 2025 Environmental Education**

(Previously NRE 225 Environmental Education)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Introduces students to the history, legislation, principles, and goals of environmental literacy and education. Students will apply this understanding by creating, presenting, and evaluating an environmental lesson and environmental education project.

**NRE 2036 Public Relations of Natural Resources**

(Previously NRE 236 Public Relations of Natural Resources)

2 Credit Hours • 30 Contact Hours (Lecture)

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 2078 Workshop/Seminar**

(Previously NRE 278 Workshop/Seminar)

1-6 Credit Hours • Per Credit Hour, 15 Contact Hours (Seminar)

Provides students with an experiential learning opportunity.

**NRE 2080 Internship**

(Previously 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 2204 Range Management & Restoration**

(Previously NRE 204 Range Management &amp; Restoration)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Prerequisite: NRE 2205*

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 2205 Wildlife & Fisheries Management Principles**

(Previously NRE 205 Wildlife &amp; 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.

**Nursing Courses****NUR 1001 Pharmacology Calculations**

1 Credit Hour • 15 Contact Hours (Lecture)

*Prerequisite: BIO 1006, ENG 1021; Acceptance into the Practical Nursing program*

Prepares nurse to provide safe, person-centered nursing care related to dosage calculations within the respective scope of practice. This course introduces critical thinking applied to dosage calculations and communication used when interacting with patients and members of the healthcare team related to various aspects of safe administration of medications. Information technology used to document medications administered and patient technology used to deliver medications are also practiced.

**NUR 1002 Alterations in Adult Health I**

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite: BIO 1006, ENG 1021; Acceptance into the Practical Nursing program**Co-requisite: NUR 1001, NUR 1003, NUR 1005*

Provides acquisition of basic nursing theory, communication, collaboration, and critical thinking necessary for safe, person-centered nursing care to diverse adult patients experiencing common health alterations requiring medical/surgical interventions. The course introduces practical nursing and incorporates the legal and ethical responsibilities of the practical nurse (PN).

**NUR 1003 Basic Health Assessment for the Practical Nurse**

1 Credit Hour • 45 Contact Hours (Lab)

*Prerequisite: Acceptance into the Practical Nursing program**Co-requisite: NUR 1001, NUR 1002, NUR 1005*

Provides the theoretical knowledge and psychomotor skills used by the practical nurse (PN) performing a basic assessment of health status of stable adult patients with predictable outcomes, including collecting, reporting, and recording objective and subjective data, observing conditions or changes in condition, and differentiating normal from abnormal findings. The principles of therapeutic communication and patient teaching are included, along with practice in collecting basic assessment data in the nursing skills laboratory.

**NUR 1004 Alterations in Adult Health II**

5 Credit Hours • 105 Contact Hours (60 Lecture, 45 Lab)

*Prerequisite: NUR 1001, NUR 1002, NUR 1003, NUR 1005; Acceptance into the Practical Nursing program**Co-requisite: NUR 1010, NUR 1070, NUR 1071*

Applies and expands the knowledge and skills learned in Adult Health I to provide acquisition of basic nursing theory, communication, collaboration and critical thinking necessary for safe, person-centered nursing care for diverse adult patients with conditions that are stable and predictable. This course focuses on care of patients experiencing common health alterations requiring medical surgical interventions. The course incorporates legal and ethical responsibilities of the practical nurse (PN) in the care of adults.

**NUR 1005 Practical Nursing Arts and Skills**

6 Credit Hours • 180 Contact Hours (45 Lecture, 135 Lab)

*Prerequisite: Acceptance into the Practical Nursing program**Co-requisite: NUR 1001, NUR 1002, NUR 1003*

Employs basic nursing theory and applies that theory and theory from other co-requisite nursing courses to the performance of nursing skills. Communication, collaboration, and critical thinking necessary for safe, person-centered nursing care are applied to the care of patients across the lifespan with stable and predictable outcomes. This course applies guidelines related to the professional, legal, and ethical scope of practice of the practical nurse (PN), including demonstrating safe performance of all psychomotor skills.

**NUR 1006 Medical Surgical Nursing Concepts**

(Previously NUR 106 Medical &amp; Surgical Nursing Concepts)

7 Credit Hours • 213 Contact Hours (51 Lecture (3.4 credit hours), 13.5 Lab (0.3 credit hours), 148.5 Clinical (3.3 credit hours))

*Prerequisite: Successful completion of the preceding nursing program coursework; BIO 2102, MAT 1120, NUR 1009, NUR 1012**Corequisite: BIO 2116, NUR 1050. BIO 2116 may be taken during the second semester in the Nursing Program*

Builds on fundamentals and introduces basic medical surgical nursing concepts, as well as application of mental health concepts, communication, collaboration, caring, and critical thinking/clinical judgment necessary for safe, person-centered care to a developmentally and culturally diverse adult patient population. This course incorporates evidence-based practice, quality improvement, professional standards, and legal and ethical responsibilities of the nurse. The application of knowledge and skills occurs in the nursing skills laboratory and a variety of clinical settings.

**NUR 1009 Fundamentals of Nursing**

(Previously NUR 109 Fundamentals of Nursing)

6 Credit Hours • 210 Contact Hours (30 Lecture, 90 Lab, 90 Clinical)

*Prerequisite: BIO 2101, BIO 2104, ENG 1021, PSY 2440**Co-requisite: BIO 2102, MAT 1120**Note: BIO 2102 and MAT 1120 may be taken during the first semester in the Nursing Program*

Examines the fundamental concepts necessary for safe, person-centered nursing care to a diverse patient population while integrating legal and ethical responsibilities. This course introduces caring, critical thinking/clinical judgment, the nursing process, quality improvement, and communication used when interacting with patients and interdisciplinary team through evidence-based nursing practice. The 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 1010 Pharmacology for Practical Nursing**

3 Credit Hour • 45 Contact Hours (Lecture)

*Prerequisite:* BIO 1006, ENG 1021, NUR 1001, NUR 1002, NUR 1003, NUR 1005; *Acceptance into the Practical Nursing program*

*Co-requisite:* NUR 1004, NUR 1070, NUR 1071

Categorizes basic principles of pharmacology, including major drug classifications using prototype drugs, principles of medication administration including best practices for safe, quality, and person-centered care. This course will discuss the legal and ethical responsibilities of the practical nurse (PN) related to medication administration. The application of this content is used throughout the program nursing courses.

### **NUR 1011 Advancement into Practical Nursing**

1 Credit Hour • 15 Contact Hours (Lecture)

*Prerequisite:* NUR 1004, NUR 1005, NUR 1010, NUR 1070, NUR 1071; *Acceptance into the Practical Nursing program*

*Co-requisite:* NUR 1013, NUR 1014, NUR 1015, NUR 1016, NUR 1072, NUR 1073

Demonstrates the roles and responsibilities of the Practical Nurse including scope of practice, supervision, assignment, and leadership skills. Emphasis on accountability, lifelong learning, perspectives in healthcare, and career and job readiness skills for entry level nursing practice.

### **NUR 1012 Basic Concepts of Pharmacology**

(Previously NUR 112 Basic Concepts of Pharmacology)

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite:* Permission of program director. Admission to the program

*Corequisite:* NUR 1009

Provides an overview of the basic principles of pharmacology including major drug classifications and prototypes of commonly used medications. This course introduces central concepts including safety and quality improvement practices in the administration of medications, person centered teaching, and variations encountered when administering medications to diverse population across the lifespan.

### **NUR 1013 Basic Concepts of Maternal-Newborn Nursing**

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite:* NUR 1004, NUR 1005, NUR 1010, NUR 1070, NUR 1071; *Acceptance into the Practical Nursing program*

*Co-requisite:* NUR 1011, NUR 1014, NUR 1015, NUR 1016, NUR 1072, NUR 1073

Applies and expands the knowledge and skills learned in the previous and concurrent courses to provide the acquisition of basic nursing theory, communication, collaboration, and critical thinking necessary for safe, person-centered nursing care to childbearing families. This course incorporates the legal and ethical responsibilities of the practical nurse (PN) in the care of childbearing families.

### **NUR 1014 Basic Concepts of Pediatric Nursing**

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite:* NUR 1004, NUR 1005, NUR 1010, NUR 1070, NUR 1071; *Acceptance into the Practical Nursing program*

*Co-requisite:* NUR 1011, NUR 1013, NUR 1015, NUR 1016, NUR 1072, NUR 1073

Applies and builds upon the knowledge and skills learned in the previous and concurrent courses to provide for the acquisition of

basic nursing theory, communication, collaboration, and critical-thinking necessary for safe, person-centered nursing care to children and their families. This course incorporates the legal and ethical responsibilities of the practical nurse (PN) in the care of children.

### **NUR 1015 Basic Concepts of Mental Health Nursing**

1 Credit Hour • 15 Contact Hours (Lecture)

*Prerequisite:* NUR 1004, NUR 1005, NUR 1010, NUR 1070, NUR 1071; *Acceptance into the Practical Nursing program*

*Co-requisite:* NUR 1011, NUR 1013, NUR 1014, NUR 1016, NUR 1072, NUR 1073

Applies knowledge of basic nursing theory, communication, collaboration, and critical thinking necessary for safe, person-centered nursing care to diverse patients at various levels of mental health promotion and mental illness management. This course incorporates the legal and ethical responsibilities of the practical nurse (PN) in the care of patients with mental health issues.

### **NUR 1016 Basic Concepts of Geriatric Nursing**

1 Credit Hour • 15 Contact Hours (Lecture)

*Prerequisite:* NUR 1004, NUR 1005, NUR 1010, NUR 1070, NUR 1071; *Acceptance into the Practical Nursing program*

*Co-requisite:* NUR 1011, NUR 1013, NUR 1014, NUR 1015, NUR 1072, NUR 1073

Applies and builds upon the knowledge and skills learned in the previous and concurrent courses to provide for the acquisition of basic nursing theory, communication, collaboration, and critical thinking necessary for safe, person-centered nursing care to older adults. This course incorporates the legal and ethical responsibilities of the practical nurse (PN) in the care of older adults.

### **NUR 1050 Maternal - Child Nursing**

(Previously 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 2102, MAT 1120, NUR 1009, NUR 1012

*Corequisite:* BIO 2116, NUR 1006

*Note:* BIO 2116 may be taken during the second semester in the Nursing Program

Provides the theory of maternal-child nursing, as well as application of mental health concepts, communication, collaboration, caring, and critical thinking/clinical judgment necessary for safe, family-centered nursing care to childbearing families and children that is developmentally and culturally appropriate. This course incorporates evidence-based practice, standards of practice, quality improvement, and legal and ethical responsibilities. The application of knowledge and skills occurs in the nursing skills laboratory and in a variety of maternal-child and pediatric clinical settings.

### **NUR 1068 Introduction to Professional Nursing Practice for Paramedics**

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* Unencumbered Paramedic certification or license

*Co- prerequisite:* Acceptance into the Paramedic to RN Bridge program

Introduces the paramedic to nursing principles that supports future clinical practice. These principles include the professional nursing role, nursing process, evidence-based practice, and patient centered care. Nursing process will be defined as the essential core of practice for the professional nurse to deliver holistic, patient-centered care. Emphasis will be to demonstrate nursing skills common to the in-patient setting.



**NUR 1069 Transition into Practical Nursing**

(Previously NUR 169 Transition into Practical Nursing)  
4 Credit Hours • 120 Contact Hours (30 Lecture, 90 Clinical)  
*Prerequisite:* Permission of program director. NUR 1006, NUR 1050

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 1070 Clinical I**

2 Credit Hours • 90 Contact Hours (Clinical)  
*Prerequisite:* NUR 1005; Acceptance into the Practical Nursing program

*Co-requisite:* NUR 1004, NUR 1010, NUR 1071  
Students will apply skills related to nursing theory as it relates to caring for stable patients with predictable outcomes.

**NUR 1071 Clinical II**

2 Credit Hours • 90 Contact Hours (Clinical)  
*Prerequisite:* NUR 1005; Acceptance into the Practical Nursing program

*Co-requisite:* NUR 1004, NUR 1010, NUR 1070  
Students will apply skills related to nursing theory as it relates to caring for stable patients with predictable outcomes in a variety of acute care settings.

**NUR 1072 Clinical III**

2 Credit Hours • 90 Contact Hours (Clinical)  
*Prerequisite:* NUR 1004, NUR 1005, NUR 1010, NUR 1070, NUR 1071; Acceptance into the Practical Nursing program  
*Co-requisite:* NUR 1011, NUR 1013, NUR 1014, NUR 1015, NUR 1016, NUR 1073

Offers a clinical skills experience for caring for stable patients in maternal-child care, newborn, and pediatric settings.

**NUR 1073 Clinical IV**

3 Credit Hours • 135 Contact Hours (Clinical)  
*Prerequisite:* NUR 1004, NUR 1005, NUR 1010, NUR 1070, NUR 1071; Acceptance into the Practical Nursing program  
*Co-requisite:* NUR 1011, NUR 1013, NUR 1014, NUR 1015, NUR 1016, NUR 1072

Caring for stable patients with predictable outcomes.

**NUR 1089 Transition from LPN to ADN**

(Previously 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 2001 IV Therapy for LPNs**

2.5 Credit Hours • 56.25 Contact Hours (Lecture/Lab Combination)  
*Prerequisite:* Unencumbered license

*Co-prerequisite:* Program Director Acceptance  
Provides LPNs with an opportunity to expand their nursing roles by learning appropriate procedures for intravenous therapy and venous blood withdrawal. The course includes lecture, laboratory practice and clinical experiences. The course prepares the student for IV certification under State Board of nursing Guidelines.

**NUR 2002 Transition from LPN to Professional Nursing**

3 Credit Hours • 75 Contact Hours (30 Lecture, 22.5 Lab, 22.5 Clinical)  
Facilitates transition of the Licensed Practical Nurse (LPN) to new roles and responsibilities of a professional nurse, the nursing process, critical thinking/clinical judgment, legal and ethical issues in nursing practice, and the nursing care of childbearing families and pediatric clients. The application of knowledge and skills occurs in the laboratory and maternal-child and pediatric clinical settings.

**NUR 2006 Advanced Concepts of Medical-Surgical Nursing I**

(Previously 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 2011, NUR 2012  
Builds on medical surgical nursing theory, mental health concepts, communication, collaboration, caring, and critical thinking/clinical judgment necessary for safe, person-centered nursing care to developmentally and culturally diverse, high acuity medical surgical adult patients. The course incorporates evidence-based practice, quality improvement, professional standards, and legal and ethical responsibilities of the professional nurse. The application of knowledge and skills occurs in the nursing skills laboratory and in a variety of clinical settings.

**NUR 2011 Psychiatric-Mental Health Nursing**

(Previously NUR 211 Psychiatric-Mental Health Nursing)  
4 Credit Hours • 99 Contact Hours (40.5 Lecture (2.7 Credit Hours), 58.5 Clinical (1.3 Credit Hours))  
*Prerequisite:* Permission of program director. Successful completion of preceding nursing program course work.

*Co-requisite:* NUR 2006, NUR 2012  
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 2012 Pharmacology II**

(Previously NUR 212 Pharmacology II)  
2 Credit Hours • 30 Contact Hours (Lecture)  
*Prerequisite:* Permission of program director. NUR 1006, NUR 1050  
*Co-requisite:* NUR 2006, NUR 2011

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 2016 Advanced Concepts of Medical-Surgical Nursing II**

(Previously NUR 216 Advanced Concepts of Medical-Surgical Nursing II)  
5 Credit Hours • 156 Contact Hours (34.5 Lecture (2.3 credit hours), 121.5 Clinical (2.7 credit hours))

*Prerequisite:* Permission of program director. Successful completion of preceding nursing program course work.

NUR 2016 is a continuation of NUR 2006, focusing on complex. Continues to build on medical surgical nursing theory, mental health concepts, communication, collaboration, caring, and critical thinking/clinical judgment necessary for safe, person-centered nursing care to developmentally and culturally diverse adult patients experiencing high acuity medical surgical conditions. This course incorporates evidence-based practice, quality improvement, professional standards, and legal and ethical responsibilities of the professional nurse in high acuity

settings. The application of knowledge and skills occurs in a variety of clinical settings.

### **NUR 2030 Transition to Professional Nursing Practice**

(Previously NUR 230 Transition to Professional Nursing Practice)  
4 Credit Hours • 132 Contact Hours (24 Lecture, 108 Clinical)  
*Prerequisite: Permission of program director. NUR 2011, NUR 2012*

Provides an integrative experience applying all dimensions of the professional nurse when caring for diverse patient populations across a variety of healthcare settings. All major concepts of the nursing program are addressed in this seminar and practice capstone course. Leadership and the management of multiple patients are emphasized. The application of knowledge and skills occurs in the clinical setting to facilitate an effective transition from student to registered professional nurse.

### **NUR 3001 Integration into Baccalaureate Nursing Practice**

(Previously 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 on knowledge and understanding of the professional nursing standards and the nursing role at the baccalaureate level.

### **NUR 3002 Trends in Nursing Practice**

(Previously NUR 302 Trends in Nursing Practice)  
3 Credit Hours • 45 Contact Hours (Lecture)  
*Co-requisite: NUR 3001*

Examines current issues that nurses encounter in the health care environment including their roles and responsibilities within the nursing profession.

### **NUR 3003 Nursing Research / Evidence Based Practice**

(Previously NUR 303 Nursing Research / Evidence Based Practice)  
3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite: MAT 1260, NUR 3001, NUR 3002*

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 3004 Informatics / Healthcare Technology**

(Previously NUR 304 Informatics / Healthcare Technology)  
3 Credit Hours • 45 Contact Hours (Lecture)  
*Co-requisite: NUR 3002*

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 3005 Emergency Preparedness**

(Previously NUR 305 Emergency Preparedness)  
3 Credit Hours • 45 Contact Hours (Lecture)  
*Co-requisite: NUR 3002*

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 3006 Gerontology Nursing**

(Previously NUR 306 Gerontology Nursing)  
3 Credit Hours • 45 Contact Hours (Lecture)  
*Co-requisite: NUR 3002*

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 3007 Behavioral Health**

(Previously NUR 307 Behavioral Health)  
3 Credit Hours • 45 Contact Hours (Lecture)  
*Co-requisite: NUR 3002*

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 4008 Legal & Ethical Issues Related to Professional Nursing Practice**

(Previously NUR 408 Legal & Ethical Issues Related to Professional Nursing Practice)  
3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite: NUR 3001, NUR 3002*  
*Co-requisite: NUR 3003*

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 4009 Leadership in the Nursing Profession**

(Previously NUR 409 Leadership in the Nursing Profession)  
3.5 Credit Hours • 63.75 Contact Hours (41.25 Lecture, (2.75 Credits), 22.5 Clinical (0.75 Credits))  
*Prerequisite: NUR 3001, NUR 3002, NUR 3003, NUR 4008*

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 4010 Community Health Nursing/Practicum**

(Previously NUR 410 Community Health Nursing/Practicum)  
6 Credit Hours • 112.5 Contact Hours (67.5 Lecture, (4.5 Credits), 45 Clinical (1.5 Credits))  
*Prerequisite: NUR 3001, NUR 3002, NUR 3003, NUR 4008*

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 4011 Senior Seminar**

(Previously NUR 411 Senior Seminar)  
3 Credit Hours • 45 Contact Hours (Seminar)  
*Prerequisite: NUR 3001, NUR 3002, NUR 3003, NUR 4008*  
*Co-requisite: NUR 4009, 4010*

Integrates theory into practice by building on previous concepts and knowledge.

## **Nursing Assistant Courses**

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### **NUA 1001 Nurse Aide Health Care Skills**

(Previously NUA 101 Nurse Aide Health Care Skills)  
4 Credit Hours • 75 Contact Hours (30 Lecture, 45 Lab)

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 1002 Certification Exam Prep**

(Previously 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 1070 Nurse Aide Clinical Experience**

(Previously NUA 170 Nurse Aide Clinical Experience)

0.67 Credit Hour • 20 Contact Hours (Clinical)

*Co-requisite: NUA 1001**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 1001 to patient care.

**NUA 1071 Clinical: Advanced Nurse Aide**

(Previously NUA 171 Clinical: Advanced Nurse Aide)

1 Credit Hour • 30 Contact Hours (Clinical)

*Co-requisite: NUA 1001, NUA 1070**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 1070 to client care.

**Occupational Safety Technician Courses**

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**OSH 1310 10-HR Construction Industry Standards**

(Previously 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.

**OSH 1311 30-HR Construction Industry Standards**

(Previously 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.

**Paralegal Courses**

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**PAR 1114 Computers & the Law**

(Previously PAR 114 Computers &amp; 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 1115 Introduction to Law**

(Previously PAR 115 Introduction to Law)

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces the United States (U.S.) legal system, legal terminology and concepts, and a variety of substantive areas of law. This course covers the role of paralegals and issues facing paralegals within the U.S. legal system.

**PAR 1116 Torts**

(Previously PAR 116 Torts)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 1021, PAR 1115*

Focuses on tort law, including negligence, intentional torts, and strict liability.

**PAR 1117 Family Law**

(Previously PAR 117 Family Law)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 1021, PAR 1115*

Emphasizes domestic relations law, including formation of marriage, dissolution of marriage and legal separation, child custody and support, adoption, and other family law issues.

**PAR 1118 Contracts**

(Previously PAR 118 Contracts)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 1021, PAR 1115*

This course covers the basic principles of contract law.

**PAR 1125 Property Law**

(Previously PAR 125 Property Law)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 1021, PAR 1115*

Focuses on real estate law, ownership, sale, leasing, financing, and government regulation of land.

**PAR 1127 Legal Ethics**

(Previously PAR 127 Legal Ethics)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 1021, PAR 1115*

Explores the parameters of professional responsibilities and value systems for paralegals and related occupations.

**PAR 2080 Internship**

(Previously PAR 280 Internship)

3 Credit Hours • 135 Contact Hours (Internship)

*Prerequisite: PAR 1115**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 2087 Cooperative Education**

(Previously PAR 287 Cooperative Education)

3 Credit Hours • 135 Contact Hours (On-the-Job-Training)

*Prerequisite: PAR 1115*

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.

**PAR 2201 Civil Litigation**

(Previously PAR 201 Civil Litigation)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 1021, PAR 1115*

Presents fundamental concepts and procedures of civil litigation, including the Federal Rules of Civil Procedure and the Colorado Rules of Civil Procedure. This course explores the paralegal's role in civil litigation.

**PAR 2202 Evidence**

(Previously PAR 202 Evidence)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 1021, PAR 1115*

Introduces the state and federal Rules of Evidence and application within the trial process.

**PAR 2205 Criminal Law**

(Previously PAR 205 Criminal Law)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 1021, PAR 1115*

Introduces basic concepts of criminal law and criminal procedure, including federal laws, Colorado statutes and Rules of Procedure.

**PAR 2206 Business Organization Law**

(Previously PAR 206 Business Organizations)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 1021, PAR 1115*

Emphasizes the federal, state, and local laws impacting business organizations. This course focuses on the creation, maintenance, and dissolution of the major types of business organizations.

**PAR 2208 Probate & Estates**

(Previously PAR 208 Probate &amp; Estates)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 1021, PAR 1115*

Provides an understanding of the creation and administration of an estate, including wills and trusts, and the probate process.

**PAR 2209 Constitutional Law**

(Previously PAR 209 Constitutional Law)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 1021, PAR 1115*

Explores the powers of the federal and state governments and the three branches of the federal government, as allocated and defined by the United States Constitution. This course also examines the individual freedoms and protections outlined in the U.S. Constitution.

**PAR 2213 Legal Research & Writing I**

(Previously PAR 213 Legal Research &amp; Writing I)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 1021, PAR 1115*

Provides an introduction to legal research and writing.

**Park Ranger Course****PRA 2005 Resource Interpretation**

(Previously 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 1011 Introduction to Pharmacy**

(Previously PHT 111 Introduction to Pharmacy)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

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 1012 Pharmacy Law & Ethics**

(Previously PHT 112 Pharmacy Law &amp; Ethics)

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

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 1014 Computer Skills for Pharmacy Technicians**

(Previously PHT 114 Computer Skills for Pharmacy Technicians)

1 Credit Hour • 15 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

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 1015 Pharmacology I**

(Previously PHT 115 Pharmacology I)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

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 1016 Pharmacology II**

(Previously PHT 118 Pharmacology II)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

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 1035 Pharmaceutical Calculations & Compounding Techniques**

(Previously PHT 235 Pharmaceutical Calculations &amp; Compounding Techniques)

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

*Prerequisite: College Readiness in Quantitative Literacy Math**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 1040 Institutional Pharmacy**

(Previously PHT 116 Institutional Pharmacy)

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

*Prerequisite: College Readiness in English and College Readiness Quantitative Literacy Math**Note: PHT 1035 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 1041 Community Pharmacy**

(Previously PHT 119 Community Pharmacy)

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

*Prerequisite: College Readiness in English and College Readiness Quantitative Literacy Math**Note: PHT 1035 recommended*

Explores the role of pharmacy technicians and the practice of pharmacy in the community and other outpatient pharmacy settings. This course covers community pharmacy organization, workflow, terminology, inventory management, third-party billing, and packaging and preparation of prescriptions for out-patient dispensing. This course includes a hands-on simulation component in preparation for community pharmacy practice.

**PHT 1070 Clinical:**

(Previously PHT 170 Pharmacy Clinical: Institutional)  
4 Credit Hours • 180 Contact Hours (Internship)  
*Prerequisite: College Readiness in English and College Readiness Quantitative Literacy Math*  
Offers the clinical practicum required for the program.

**PHT 1071 Clinical:**

(Previously PHT 171 Pharmacy Clinical: Community)  
4 Credit Hours • 180 Contact Hours (Internship)  
*Prerequisite: College Readiness in English and College Readiness Quantitative Literacy Math*  
Offers the clinical practicum required for the program.

**PHT 2050 Sterile Compounding & Aseptic Technique**

(Previously PHT 250 Sterile Compounding & Aseptic Technique)  
2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)  
*Prerequisite: PHT 1040*  
*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 2055 Advanced Pharmacy Practice & Nontraditional Roles**

(Previously PHT 255 Advanced Pharmacy Practice & Nontraditional Roles)  
2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)  
*Prerequisite: College Readiness in English and College Readiness Quantitative Literacy Math*  
*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.

**PHT 2080 Internship**

(Previously PHT 280 Internship)  
1 Credit Hour • 45 Contact Hours (Internship)  
*Note: Instructor Signature Required*

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.

## Philosophy Courses

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Philosophy courses can be taken in any order.

**PHI 1011 Introduction to Philosophy: AH3**

(Previously PHI 111 Introduction to Philosophy: AH3)  
3 Credit Hours • 45 Contact Hours (Lecture)  
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 1012 Ethics: AH3**

(Previously PHI 112 Ethics: AH3)  
3 Credit Hours • 45 Contact Hours (Lecture)  
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 1013 Logic: AH3**

(Previously PHI 113 Logic: AH3)  
3 Credit Hours • 45 Contact Hours (Lecture)  
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 1014 Comparative Religions: AH3**

(Previously PHI 114 Comparative Religions: AH3)  
3 Credit Hours • 45 Contact Hours (Lecture)  
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 1015 World Religions – West: AH3**

(Previously PHI 115 World Religions – West: AH3)  
3 Credit Hours • 45 Contact Hours (Lecture)  
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 1016 World Religions – East: AH3**

(Previously PHI 116 World Religions – East: AH3)  
3 Credit Hours • 45 Contact Hours (Lecture)  
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 1042 New Testament: AH2**

(Previously PHI 142 New Testament)  
3 Credit Hours • 45 Contact Hours (Lecture)  
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 are 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 2001 Social & Political Philosophy**

(Previously PHI 201 Social & Political Philosophy)  
3 Credit Hours • 45 Contact Hours (Lecture)  
Addresses a single topic among those relevant to social and political philosophy such as political rights, political freedom, social obligations, or democracy.

**PHI 2005 Business Ethics: AH3**

(Previously PHI 205 Business Ethics: AH3)  
3 Credit Hours • 45 Contact Hours (Lecture)  
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 2014 Philosophy of Religion: AH3**

(Previously PHI 214 Philosophy of Religion: AH3)

3 Credit Hours • 45 Contact Hours (Lecture)

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 2018 Environmental Ethics: AH3**

(Previously PHI 218 Environmental Ethics: AH3)

3 Credit Hours • 45 Contact Hours (Lecture)

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 to nature; and the connection between moral and political values and economic policies.

**PHI 2050 Eastern Wisdom**

(Previously PHI 250 Eastern Wisdom)

3 Credit Hours • 45 Contact Hours (Lecture)

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.

**Physical Education Courses****PED 1000 Fitness Concepts**

(Previously 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 1002 Weight Training I**

(Previously 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 1003 Weight Training II**

(Previously 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 1010 Fitness Center Activity I**

(Previously 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 1011 Fitness Center Activity II**

(Previously PED 111 Fitness Center Activity II)

1 Credit Hour • 30 Contact Hours (Physical Education)

*Prerequisite: PED 1010*

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 1012 Fitness Center Activity III**

(Previously PED 112 Fitness Center Activity III)

1 Credit Hour • 30 Contact Hours (Physical Education)

*Prerequisite: PED 1011*

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 1013 Fitness Center Activity IV**

(Previously PED 113 Fitness Center Activity IV)

1 Credit Hour • 30 Contact Hours (Physical Education)

*Prerequisite: PED 1012*

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 1022 Step Aerobics**

(Previously 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 1026 Cardio Kickboxing Aerobic I**

(Previously 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 1029 Zumba**

(Previously 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 1040 Body Sculpting & Toning**

(Previously 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 1041 Pilates Matwork I**

(Previously 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 1042 Pilates Matwork II**

(Previously PED 142 Pilates Matwork II)

1 Credit Hour • 30 Contact Hours (Physical Education)

*Prerequisite: PED 1041*

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 1043 Yoga I**

(Previously PED 143 Yoga I)

1 Credit Hour • 30 Contact Hours (Physical Education)

Introduces the history and philosophy of yoga, fundamental principles of alignment, breath work, and meditation through guided practice. Course focuses on demonstrating safety and stability within each pose.

#### **PED 1044 Yoga II**

(Previously PED 144 Yoga II)

1 Credit Hour • 30 Contact Hours (Physical Education)

*Prerequisite: PED 1043*

Builds on the concepts of basic yoga. This course emphasizes cultivating discernment, awareness, self-regulation, and higher consciousness in the individual.

#### **PED 1051 Walking & Jogging**

(Previously 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 1061 Tai Chi I**

(Previously 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 1063 Martial Arts I**

(Previously 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 2030 Volleyball I**

(Previously 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 2031 Volleyball II**

(Previously PED 231 Volleyball II)

1 Credit Hour • 30 Contact Hours (Physical Education)

*Prerequisite: PED 2030*

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.

#### **PED 2058 Law Enforcement Academy Physical Training I**

1 Credit Hour • 30 Contact Hours (Lab)

Introduces the health and fitness skills critical for a career in law enforcement. This course covers stress management, chronic diseases, and physical fitness training relevant to the Law Enforcement Academy.

#### **PED 2059 Law Enforcement Academy Physical Training II**

1 Credit Hour • 30 Contact Hours (Lab)

Continues the overall wellness and fitness skill critical for a career in law enforcement. This course covers nutrition, weight management, and physical fitness training specific to the Law Enforcement Academy.

## **Physical Therapist Assistant Courses**

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#### **PTA 1010 Basic Patient Care in Physical Therapy**

(Previously 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*

Examines the basic patient care skills for the healthcare practitioner enabling understanding and demonstration of skills that include positioning, body mechanics, transfers, range of motion, palpation, vital signs, aseptic techniques, bandaging, medical terminology, activities of daily living (ADLs), wheelchair management, architectural barriers, and gait training.

#### **PTA 1015 Principles & Practices of Physical Therapy**

(Previously PTA 115 Principles & Practices of Physical Therapy)

2 Credit Hours • 30 Contact Hours (Lecture)

Explores the history of the profession including definition, development, and areas of practice. The role of the American Physical Therapy Association (APTA), the physical therapist assistant (PTA) and the relationship between the physical therapist (PT), PTA and other health care professionals are investigated. This course covers current issues and trends including professionalism, legal aspects, ethics, quality assurance, communications, and reimbursement issues such as Medicare, Medicaid, Worker's Compensation, and commercial insurance.

#### **PTA 1018 Functional Anatomy and Kinesiology**

5 Credit Hours • 112.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: BIO 2101*

Covers the study of basic functional anatomy as it relates to the field of physical therapy. This course explains descriptive terminology, osteology, arthrology, and neurology and muscle physiology. This course focuses on origin, insertion, action, and innervation of major muscles along with the movements that occur. Laboratory sessions will involve palpation of bones, muscles, and joints, location of origin and insertion, muscle actions and structures affecting movement.

**PTA 1020 Modalities in Physical Therapy**

(Previously PTA 120 Modalities in Physical Therapy)

5 Credit Hours • 112.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: PTA 1010*

Examines the theory and principles of physical therapy modalities. This course includes therapeutic heat and cold, traction, hydrotherapy, and light therapies.

**PTA 1024 Rehab Principles of Medical I**

(Previously PTA 124 Rehab Principles of Medical I)

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite: Admission to the Physical Therapy Assistant Program*

Investigates the functioning, disability and health associated with a variety of genetic, developmental and neuromusculoskeletal conditions. The course covers medical management including pharmacology, and its impact on physical therapy rehabilitation principles are discussed. The course investigates evidence-based practice for genetic, developmental, musculoskeletal, and neurological system diagnosis, as well as common medical and surgical conditions, will be reviewed as they relate to physical therapy rehabilitation.

**PTA 1031 Professional Communications I**

(Previously PTA 131 Professional Communications I)

1 Credit Hour • 15 Contact Hours (Lecture)

*Prerequisite: Admission to the Physical Therapy Assistant Program*

Introduces oral and written professional communication in the physical therapy field. This course develops skills in verbal and non-verbal communication, performance evaluation, literature research, and presentation, use of editorial style and technology, and development of professional behaviors.

**PTA 1034 Rehabilitation Principles of Medical Management II**

(Previously PTA 134 Rehab Principles of Medical II)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Prerequisite: Admission to the Physical Therapy Assistant Program*

Investigates the functioning, disabilities and health associated with a variety of pathophysiological processes and conditions. Medical management, including pharmacology, and its impact on physical therapy rehab principles are discussed. Evidence based practice for cardiovascular, endocrine/metabolic, gastrointestinal, genital/reproductive, hematologic, immune, integumentary, hepatic/biliary, lymphatic, and respiratory system diagnoses as well as chronic pain diagnoses and common medical and surgical conditions will be reviewed as they relate to physical therapy rehab.

**PTA 1035 Principles of Electrical Stimulation**

(Previously PTA 135 Principles of Electrical Stimulation)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Prerequisite: PTA 1010*

Explores the principles and application of electrical stimulation (ES) modalities currently used in physical therapy practice. This course enables the understanding of the electrochemical and physiological effects of electrical stimulation and identification of the various forms and applications of electrical stimulation modalities.

**PTA 1040 Clinical Kinesiology**

(Previously PTA 140 Clinical Kinesiology)

5 Credit Hours • 112.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: HPR 1017 and Admission to the Physical Therapy Assistant Program*

Focuses on the science of human motion, theories of biomechanics and muscle and joint structure and function. This course emphasizes basic principles of therapeutic exercise and their application to specific body regions and includes the application of kinesiology and exercise principles.

**PTA 1041 Professional Communications II**

(Previously PTA 141 Professional Communications II)

1 Credit Hour • 15 Contact Hours (Lecture)

*Prerequisite: PTA 1031*

Explores medical documentation of patient care as used in the profession of physical therapy throughout multiple practice settings. This course develops physical therapy documentation skills that use standardized formats and meet requirements of various payer sources and settings.

**PTA 2005 Psychosocial Issues in Health Care**

(Previously PTA 205 Psychosocial Issues in Health Care)

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite: PTA 2080*

Explores the psychosocial aspects of the patient and or 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 enabling the development of skills necessary to meet expectations and needs of members of society receiving health care services.

**PTA 2030 Orthopedic Assessment & Management**

(Previously PTA 230 Orthopedic Assessment &amp; Management Techniques)

5 Credit Hours • 112.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: PTA 1020, PTA 1040*

Examines the theory, principles, and practices of orthopedic conditions. This course includes assessment and management techniques pertaining to orthopedic conditions, goniometry, manual muscle testing, gait analysis, and posture analysis.

**PTA 2040 Neurologic Assessment & Management Techniques**

(Previously PTA 240 Neurologic Assessment &amp; Management Techniques)

5 Credit Hours • 112.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: PTA 1020, PTA 1040*

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 2051 Professional Communications III**

(Previously PTA 251 Professional Communications III)

1 Credit Hour • 15 Contact Hours (Lecture)

*Prerequisite: PTA 1041*

Advances development and application of the written and oral communication skills utilized in healthcare and physical therapy workplace settings.

**PTA 2078 PTA Seminar**

(Previously PTA 278 PTA Seminar)

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite: PTA 2030, PTA 2080*

*Note: Students should be in the final semester of their degree*  
Provides students with an experiential learning opportunity.

**PTA 2080 Internship I**

(Previously PTA 280 Internship I)

4 Credit Hours • 180 Contact Hours (Internship)

*Prerequisite: PTA 1020, PTA 1040*

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 2081 PTA Internship II**

(Previously PTA 281 PTA Internship II)

5 Credit Hours • 225 Contact Hours (Internship)

*Prerequisite: PTA 2080**Co-requisite: PTA 2030*

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 2082 PTA Internship III**

(Previously PTA 282 PTA Internship III)

5 Credit Hours • 225 Contact Hours (Internship)

*Prerequisite: PTA 2040, PTA 2081*

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 1105 Conceptual Physics with Lab: SC1**

(Previously PHY 105 Conceptual Physics with Lab: SC1)

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

*Prerequisite: College Readiness in English and College Readiness Quantitative Literacy Math*

Focuses on mechanics, heat, properties of matter, electricity and magnetism, and light. Incorporates laboratory experience.

**PHY 1111 Physics: Algebra-Based I with Lab: SC1**

(Previously PHY 111 Physics: Algebra-Based I with Lab: SC1)

5 Credit Hours • 105 Contact Hours (60 Lecture, 45 Lab)

*Prerequisite: MAT 1340*

The physics of mechanics and requires application of classical physics to both mathematical and conceptual problems. This course includes kinematics in one and two dimensions, Newton's Laws, circular motion, work and energy, impulse and momentum, rotational mechanics, and simple harmonic motion.

**PHY 1112 Physics: Algebra-Based II with Lab: SC1**

(Previously PHY 112 Physics: Algebra-Based II with Lab: SC1)

5 Credit Hours • 105 Contact Hours (60 Lecture, 45 Lab)

*Prerequisite: PHY 1111*

The physics of electricity and magnetism and requires application of classical physics to both mathematical and conceptual problems. This course covers Direct Current (DC) circuits involving resistors, capacitors, and batteries. This course also covers traveling and standing waves, electromagnetic waves, and geometric optics.

**PHY 2111 Physics: Calculus-Based I with Lab: SC1**

(Previously PHY 211 Physics: Calculus-Based I with Lab: SC1)

5 Credit Hours • 105 Contact Hours (60 Lecture, 45 Lab)

*Prerequisite: MAT 2410*

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 2112 Physics: Calculus-Based II with Lab: SC1**

(Previously PHY 212 Physics: Calculus-Based II with Lab: SC1)

5 Credit Hours • 105 Contact Hours (60 Lecture, 45 Lab)

*Prerequisite: PHY 2111**Co-requisite: MAT 2420*

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 2113 Physics III: Calculus Based Modern Physics**

(Previously PHY 213 Physics III: Calculus Based Modern Physics)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: MAT 2420, PHY 2112*

Expands upon PHY 2112 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 2007 International Plumbing Code**

(Previously 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 2008 International Fuel Gas Code**

(Previously PLU 208 International Fuel Gas Code)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Prerequisite: PLU 2007*

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 2050 Plumbing Estimating and Costing**

(Previously 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****PSC 1011 American Government: SS1**

(Previously POS 111/POS 1011 American Government: SS1)

3 Credit Hours • 45 Contact Hours (Lecture)

Explores the origins, development, structure, and functions of the American Constitution and national government. This course examines federalism, civil liberties, civil rights, electoral processes, and mechanisms of civic participation and influence.

**PSC 1025 American State & Local Government: SS1**

(Previously POS 125/POS 1025 American State &amp; Local Government: SS1)

3 Credit Hours • 45 Contact Hours (Lecture)

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.

**PSC 1036 American Presidency**

(Previously POS 136/POS 1036 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.

**PSC 1050 Current Political Issues: SS1**

(Previously POS 215/POS 1050 Current Political Issues: SS1)  
3 Credit Hours • 45 Contact Hours (Lecture)  
Incorporates an in-depth analysis of the background and nature of political issues and themes.

**PSC 2005 International Relations: SS1**

(Previously POS 205/POS 2005 International Relations: SS1)  
3 Credit Hours • 45 Contact Hours (Lecture)  
Examines the interactions among various levels of actors in the international system. This course attempts to explain behaviors across state boundaries.

**PSC 2020 Introduction to Political Science: SS1**

(Previously POS 105/POS 2020 Introduction to Political Science: SS1)  
3 Credit Hours • 45 Contact Hours (Lecture)  
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.

**PSC 2025 Comparative Government: SS1**

(Previously POS 225/POS 2025 Comparative Government: SS1)  
3 Credit Hours • 45 Contact Hours (Lecture)  
Examines domestic political systems, developments, themes, and events across countries and regions while applying the comparative method to identify similarities and differences.

**PSC 2080 Internship**

(Previously POS 280/POS 2080 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.

## Professional Photography Courses

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**PHO 1001 Professional Photography I**

(Previously 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 1005 Photo & Computer Orientation**

(Previously 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 1020 Fundamentals of Photography**

(Previously 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 1043 Perception & Photography I**

(Previously PHO 143 Perception & Photography I)  
3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Prerequisite: PHO 1020*  
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 2005 Professional Digital Photo I**

(Previously PHO 205 Professional Digital Photo I)  
3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
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 2026 Digital Workflow Management**

(Previously PHO 226 Digital Workflow Management)  
3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Note: It is recommended to take MGD 1011 before PHO 2026*  
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 2032 Professional Portraiture**

(Previously PHO 232 Professional Portraiture)  
3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Prerequisite: PHO 2037*  
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 2034 View Camera/Lighting Technique**

(Previously PHO 234 View Camera/Lighting Technique)  
3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Prerequisite: ART 1401 or PHO 1020*  
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 2035 Architectural Photography**

(Previously PHO 235 Architectural Photography)  
3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Prerequisite: PHO 1020, PHO 2005*  
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 2036 Product Photography**

(Previously PHO 236 Product Photography)  
3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Prerequisite: PHO 2034*  
Continues techniques from Large Format & Lighting (PHO 2034), 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 2037 Advanced Lighting Technique**

(Previously PHO 237 Advanced Lighting Technique)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: PHO 1020 or ART 1401**Co-requisite: ART 2405*

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 2060 Events & Wedding Photography**

(Previously PHO 260 Events &amp; Wedding Photography)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: ART 2405*

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 2063 Digital Capture Processing III**

(Previously PHO 263 Digital Capture Processing III)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: PHO 2005, PHO 2026*

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 2066 Pro Digital Workflow: Software**

(Previously PHO 266 Pro Digital Workflow: Software)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: ART 1401 or PHO 1020*

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 2080 Internship**

(Previously 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 2081 Internship**

(Previously 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.

**PHO 2187 Business of Photography**

(Previously PHO 269 Business of Photography)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: PHO 1020*

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 2188 Portfolio & Career Exploration**

(Previously PHO 268 Portfolio &amp; Career Exploration)

3 Credit Hours • 45 Contact Hours (Lecture)

*Co-requisite: PHO 2187*

Focuses on the creation of professional visual portfolio(s) and promotional pieces with techniques, styles, and formats appropriate for a photographic career.

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## Psychiatric Technician Courses

**PTE 1010 Introduction to Behavioral Health Care and Wellness**

3 Credit Hours • 45 Contact Hours (Lecture)

Explores basic principles of behavioral health and wellness care in behavioral health settings. This course develops interpersonal and technical skills while working with clients in psychiatric care settings.

**PTE 1017 Theoretical Concepts of Psychiatric Care II**

2 Credit Hours • 30 Contact Hours (Lecture)

Explores psychiatric problems common to four (4) special populations: children/adolescents, developmentally disabled individuals, aging persons, and forensic clients. The student learns to recognize and intervene with problems common to these four groups.

**PTE 1020 Application of Behavioral Health Care & Wellness**

5 Credit Hours • 90 Contact Hours (45 Lecture, 45 Lecture/Lab Combination)

Explores basic etiology, symptoms, and interventions for common behavioral and mental health disorders. Provides the opportunity for students to experience the milieu of a behavioral health care setting while providing basic care to clients experiencing common behavioral and mental health issues.

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## Psychology Courses

**PSY 1001 General Psychology I: SS3**

(Previously PSY 101 General Psychology I: SS3)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

Focuses on the scientific study of behavior including motivation, emotion, physiological psychology, stress and coping, research methods, consciousness, sensation, perception, learning, and memory.

**PSY 1002 General Psychology II: SS3**

(Previously PSY 102 General Psychology II: SS3)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

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 1005 Psychology of Workplace Relationships**

(Previously PSY 100 Psychology of Workplace Relationships)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

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 1016 Stress Management**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

Identifies the physiological, emotional, and behavioral aspects of stress. Techniques of stress reduction and management are explored and applied, including nutrition, exercise, assertiveness, time management, and financial management.

### **PSY 2000 Research Methodology**

(Previously PSY 200 Research Methodology)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: PSY 1001*

Introduces research methods and designs including correlational studies, experimental designs, and quasi-experimental designs. Additional topics include evaluations of scientific research, data analysis, report writing and research ethics.

### **PSY 2105 Psychology of Gender: SS3**

(Previously PSY 205 Psychology of Gender: SS3)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

Examines gender comparisons in work, courtship, family life, and sexual behavior throughout the life span.

### **PSY 2107 Human Sexuality: SS3**

(Previously PSY 217 Human Sexuality: SS3)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

Surveys physiological, psychological, and psychosocial aspects of human sexuality. Topics include relationships, sexual identity, and sexual health.

### **PSY 2111 Psychological Aspects of Abuse in Relationships**

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

Focuses on psychosocial factors contributing to both abusive and victimization behaviors in a variety of relationships.

### **PSY 2112 Introduction to Addictive Behavior**

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

Focuses on addictive behavior and its effect on individuals, families, and society.

### **PSY 2220 Dynamics of Racism and Prejudice**

(Previously PSY 250 Dynamics of Racism and Prejudice)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

Focuses on early race relations in the United States, the development of prejudicial attitudes and the social impact, and strategies for positive change.

### **PSY 2221 Social Psychology: SS3**

(Previously PSY 226 Social Psychology: SS3)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

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 2222 The Psychology of Death & Dying: SS3**

(Previously PSY 227 The Psychology of Death & Dying: SS3)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

Examines philosophies of life and death emphasizing dying, death, mourning, and the consideration of one's own death.

### **PSY 2223 Environmental Psychology**

(Previously PSY 150 Environmental Psychology)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

Environmental Psychology is intended to provide an overview of basic terms and issues fundamental to the study of the molar effects of natural and built environments on human behavior and thinking. By the end of the term, successful students will be able to identify the main ways that environments are perceived and affect cognition, as well as specific effects of weather, climate, technological and natural disasters, toxic hazards, pollution, high density and crowding, and urban environments. Students will also improve their ability to clearly converse about planning and design for human behavior, the design of work, learning, and leisure environments, and obstacles to changing behavior to sustain the environment. Finally, students will practice effective APA-style on all written work and sharpen their skills in problem solving, critical thinking, written and spoken communication, and ethical evaluation.

### **PSY 2331 Positive Psychology: SS3**

(Previously PSY 231 Positive Psychology: SS3)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

Focuses on human strengths and explores strengths-based research and concepts of life satisfaction, well-being, happiness, helpfulness, resiliency, post-traumatic growth, and improving emotional, psychological, and social functioning.

### **PSY 2332 Psychology of Adjustment**

(Previously PSY 112 Psychology of Adjustment)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

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 2333 Health Psychology: SS3**

(Previously PSY 240 Health Psychology: SS3)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

Focuses on an overview of the scientific study of attitudes, behaviors, and personality variables related to health, illness, and bodily systems. The course emphasizes the interaction of biological, psychological, and social factors that cause illness and influence its treatment and prevention.

### **PSY 2440 Human Growth & Development: SS3**

(Previously PSY 235 Human Growth & Development: SS3)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

Examines human development from conception through death, emphasizing physical, cognitive, emotional, and psychosocial factors.

### **PSY 2441 Child Development: SS3**

(Previously PSY 238 Child Development: SS3)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

Focuses on the growth and development of the individual, from conception through childhood, emphasizing physical, cognitive, emotional, and psychosocial factors.

### **PSY 2551 Child Abuse & Neglect**

(Previously PSY 247 Child Abuse & Neglect)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

Examines the causes and effects of physical, sexual, and psychological abuse and neglect. This course emphasizes intervention and prevention strategies.

**PSY 2552 Psychopathology: SS3**

(Previously PSY 249 Abnormal Psychology: SS3)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

Examines psychopathology and its classification, causes, treatment, and prevention.

**PSY 2660 Introduction to Evolutionary Psychology**

(Previously PSY 251 Introduction to Evolutionary Psychology)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

Introduces the principles of natural selection and their application to the discipline of psychology and the study of human behavior. This course lays a framework for a biologically based approach to psychology and proposes a metatheory for the discipline. Current experimental data supporting the principles of evolution and their application in psychology will be examined.

**PSY 2661 Brain & Behavior**

(Previously PSY 255 Brain and Behavior)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

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 mental experience and behavior, are also considered. Applies neuroscience concepts to understand and intervene in human behaviors and psychological disorders.

**PSY 2662 Introduction to Neuropsychology**

(Previously PSY 258 Introduction to Neuropsychology)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: PSY 1001 or PSY 1002*

Focuses on introduction to basic neuropsychological terms and concepts with emphasis on application of thinking and behavior in humans.

**PSY 2770 Introduction to Forensic Psychology**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

Provides an overview of forensic psychology. This course explores both current research and practice in police psychology, criminal psychology, victimology, correctional psychology, and the interface of psychology and the courts. This course facilitates an understanding of the numerous careers related to forensic psychology and how to prepare for them.

**PSY 2771 Psychology of Personality: SS3**

(Previously PSY 265 Psychology of Personality: SS3)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

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 1030 Homeland Security Law**

(Previously 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 1032 Homeland Defense: Forecasting Terrorism**

(Previously 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 1033 Homeland Security: Chemical & Biological Defense**

(Previously PSM 133 Homeland Security: Chemical &amp; 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 1035 Critical Infrastructure Protection**

(Previously 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 1036 Hospital Emergency Response Training (HERT) for Weapons of Mass Destruction (WMD)**

(Previously 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&amp;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 1037 Introduction to Mitigation**

(Previously 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 2000 National Incident Management System/Interagency Operations**

(Previously 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 and Television Courses****RTV 1000 Introduction to Electronic Media**

(Previously 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 1001 Radio Programming & Production I**

(Previously 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 1002 Beginning Television**

(Previously 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 1003 Writing for Television & Radio**

(Previously 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 1004 Corporate Scriptwriting**

(Previously 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 1005 Basic Video Production**

(Previously RTV 208 Basic Video Production)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
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 1006 Principles of Audio**

(Previously 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 1007 Automated Production Control I**

3 Credit Hours • 45 Contact Hours (Lecture)

Provides operational training and preparation for utilization of an Automated Production Control (APC) system in a studio environment.

**RTV 1008 News & Sports Writing & Reporting**

(Previously 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 1010 Fundamentals of Podcasting**

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Explores and evaluates existing podcasts on content, delivery, and production values, culminating in the creation and distribution of the first episode of an original podcast.

**RTV 1011 Gaming, Vlogging, and Lifestyle Video Live Streaming**

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Focuses on the basic tenets of starting and maintaining a live stream, as well as ways to create original and engaging content to build and keep an audience.

**RTV 1082 Internship - Radio Station/Audio Production Company**

(Previously RTV 182 Internship - Radio Station/Audio Production Company)

4 Credit Hours • 180 Contact Hours (Internship)

*Prerequisite: RTV 1001*

*Note: Must have faculty consent to enroll*

Provides experience in a commercial radio station or an allied industry.

**RTV 1083 Internship - Television Studio/Video Production Company**

(Previously RTV 183 Internship - Television Studio/Video Production Company)

4 Credit Hours • 180 Contact Hours (Internship)

*Prerequisite: RTV 1002*

*Note: Must have faculty consent to enroll*

Provides experience in a commercial television station or an allied industry.

**RTV 1180 Internship - KEPC Radio**

(Previously RTV 180 Internship - KEPC Radio)

4 Credit Hours • 180 Contact Hours (Internship)

*Prerequisite: RTV 1001 or RTV 1002*

Incorporates on-the-air experience on the college FM radio station, KEPC.

**RTV 1181 Internship - College ITV Studio**

(Previously RTV 181 Internship - College ITV Studio)

4 Credit Hours • 180 Contact Hours (Internship)

*Prerequisite: RTV 1002, RTV 1005*

Provides experience in a commercial television station or an allied industry.

**RTV 1202 Television Studio Production**

(Previously RTV 107 Television Studio Production)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Examines principles and techniques of basic television production and direction in a laboratory setting using commercial television broadcast equipment for broadcast and institutional video productions.

**RTV 2001 Radio Programming & Production II**

(Previously RTV 211 Radio Programming & Production II)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: RTV 1001*

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 2002 Advanced Television Production**

(Previously RTV 212 Advanced Television Production)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* RTV 1002

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 2003 Audio Mixing**

(Previously 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 2005 Advanced Video Production**

(Previously RTV 218 Advanced Video Production)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* RTV 1005

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 2007 Broadcast Management**

(Previously 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 2016 Multi-Media Reporting**

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Introduces multi-media reporting, the fundamentals of reporting, gathering information, capturing compelling audio and video, and editing them all together to create engaging news stories across platforms.

### **RTV 2080 Internship – TV Studio/Video Production II**

(Previously RTV 280 Internship – TV Studio/Video Production II)

3 Credit Hours • 135 Contact Hours (Internship)

*Prerequisite:* RTV 1002, RTV 1083 or RTV 1181

Provides experience in a commercial television station or an allied industry.

### **RTV 2083 Internship – Radio Station/Audio Production II**

(Previously RTV 283 Internship – Radio Station/Audio Production II)

3 Credit Hours • 135 Contact Hours (Internship)

*Prerequisite:* RTV 1002, RTV 1180 or RTV 2182

Incorporates advanced experience in a commercial radio station or an allied industry.

### **RTV 2181 Internship in the News – KEPC Radio**

(Previously RTV 281 Internship in the News – KEPC Radio)

3 Credit Hours • 135 Contact Hours (Internship)

*Prerequisite:* RTV 1001

Enables the student to cover news events, actualities, and report several regular newscasts on KEPC.

### **RTV 2182 Internship – KEPC Radio II**

(Previously RTV 282 Internship – KEPC Radio II)

3 Credit Hours • 135 Contact Hours (Internship)

*Prerequisite:* RTV 1001, RTV 1082 or RTV 1180

Incorporates advanced experience on radio station KEPC.

### **RTV 2184 Internship in Telecommunications**

(Previously RTV 284 Internship in Telecommunications)

3 Credit Hours • 135 Contact Hours (Internship)

*Prerequisite:* RTV 1001 or RTV 1002, RTV 1082 or RTV 1083 or RTV 1180

Provides experience in a commercial TV station or an allied industry.

## **Radiologic Technology Courses**

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### **RTE 1001 Introduction to Radiography**

(Previously RTE 101 Introduction to Radiography)

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite:* College Readiness in English

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 1011 Radiographic Patient Care**

(Previously 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 1021 Radiographic Procedures I**

(Previously 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 1022 Radiographic Procedures II**

(Previously RTE 122 Radiographic Procedures II)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* RTE 1021

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 1041 Radiographic Equipment & Imaging I**

(Previously 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 1042 Radiographic Equipment & Imaging II**

(Previously RTE 142 Radiographic Equipment & Imaging II)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* RTE 1041

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 1081 Internship: Radiographic I**

(Previously 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 1082 Internship: Radiographic II**

(Previously RTE 182 Radiographic Internship II)  
5 Credit Hours • 225 Contact Hours (Internship)  
*Prerequisite: RTE 1081*  
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 1083 Internship: Radiographic III**

(Previously RTE 183 Radiographic Internship III)  
7 Credit Hours • 315 Contact Hours (Internship)  
*Prerequisite: RTE 1082*  
Reinforces and builds independence in the clinical internship experience. Applies radiographic knowledge learned in the classroom and prior clinical internship experience.

**RTE 2021 Advanced Medical Imaging**

(Previously RTE 221 Advanced Medical Imaging)  
3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Prerequisite: RTE 1021*  
Offers advanced imaging techniques including radiographic procedures involving the skull, trauma, mobile, surgical, pediatric, special procedures, and advanced modalities.

**RTE 2031 Radiation Biology/Protection**

(Previously RTE 231 Radiation Biology/Protection)  
*Prerequisite: RTE 1041*  
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 2081 Radiographic Internship IV**

(Previously RTE 281 Radiographic Internship IV)  
8 Credit Hours • 360 Contact Hours (Internship)  
*Prerequisite: RTE 1083*  
Introduces the student to the radiographic specialty areas of Pediatrics, Geriatrics, the out-patient clinic, as well as increasing proficiency in general radiography.

**RTE 2082 Radiographic Clinical Internship V**

(Previously RTE 282 Radiographic Internship V)  
8 Credit Hours • 360 Contact Hours (Internship)  
*Prerequisite: RTE 2081*  
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 2089 Capstone**

(Previously RTE 289 Capstone)  
3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite: RTE 2021, RTE 2031*  
Prepares the radiology technology student to effectively search for a job in radiography and sit for the American Registry of Radiologic Technology examination.

## Russian Courses

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**RUS 1011 Russian Language I**

(Previously RUS 111 Russian Language I)  
5 Credit Hours • 75 Contact Hours (Lecture)  
Begins a sequence dealing with the development of functional proficiency in listening, speaking, reading, and writing the Russian language.

**RUS 1012 Russian Language II**

(Previously RUS 112 Russian Language II)  
5 Credit Hours • 75 Contact Hours (Lecture)  
*Prerequisite: RUS 1011*  
Continues Russian I in the development of functional proficiency in listening, speaking, reading, and writing the Russian language.

**RUS 2011 Russian Language III: AH4**

(Previously RUS 211 Russian Language III: AH4)  
3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite: RUS 1012*  
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 2012 Russian Language IV: AH4**

(Previously RUS 212 Russian Language IV: AH4)  
3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite: RUS 2011*  
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

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**SCI 1055 Integrated Science I-Physics & Chemistry with Lab: SC1**

(Previously SCI 155 Integrated Science I-Physics & Chemistry with Lab: SC1)  
4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)  
*Prerequisite: College Readiness in English, MAT 1220 or higher*  
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 1056 Integrated Science II-Earth & Life Sciences with Lab: SC1**

(Previously SCI 156 Integrated Science II-Earth & Life Sciences with Lab: SC1)  
4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)  
*Prerequisite: College Readiness in English, MAT 1220 or higher*  
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.

**SCI 1105 Science in Society: SC2**

3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite: College Readiness in English*  
Examines issues relating to the way science interacts with society. A selection of issues from information technology, the environment and earth science, physics and astronomy, biology, medicine, and the interaction of science with politics will be examined, as informed by current events. Emphasis will be on research, inquiry, and critical analysis of science-related issues, including the negative and positive roles of science in society.



## Social Work Courses

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### SWK 1000 Introduction to Social Work

(Previously SWK 100 Introduction to Social Work)  
3 Credit Hours • 45 Contact Hours (Lecture)

*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 1050 Application of Group Counseling

(Previously SWK 105 Application of Group Counseling)  
3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

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 1060 Introduction to Alcohol & Drugs

(Previously SWK 106 Introduction to Alcohol & Drugs)  
3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

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 1080 Internship I

(Previously SWK 180 Internship I)  
6 Credit Hours • 270 Contact Hours (Internship)

*Prerequisite: SWK 2222*

Provides work experience in a business or industry.

### SWK 1081 Internship II

(Previously SWK 181 Internship II)  
6 Credit Hours • 270 Contact Hours (Internship)

*Prerequisite: SWK 2222*

Provides work experience in a business or industry.

### SWK 1100 Social Welfare and Community Agencies

3 Credit Hours • 45 Contact Hours (Lecture)

Teaches the history of the social welfare system and how it is currently administered. Community resources are discussed and investigated. Social workers from community human service agencies are invited to visit the class as guest speakers in order to discuss the purpose and function of their agency.

### SWK 2008 Social Work Case Management

(Previously SWK 208 Social Work Case Management)  
3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

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 2010 Human Behavior in the Social Environment I

(Previously 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 2020 Human Behavior in the Social Environment II

(Previously SWK 202 Human Behavior in the Social Environment II)

3 Credit Hours • 45 Contact Hours (Lecture)

*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 2050 Social Welfare in the U.S.

(Previously SWK 205 Social Welfare in the U.S.)

3 Credit Hours • 45 Contact Hours (Lecture)

*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 2070 Differential Approaches in Social Services

(Previously SWK 207 Differential Approaches in Social Services)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

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 2080 Internship III

(Previously SWK 280 Internship III)

6 Credit Hours • 270 Contact Hours (Internship)

*Prerequisite: SWK 1081, SWK 2222*

Provides work experience in a business or industry.

### SWK 2222 Introduction to Social Work Practice

(Previously SWK 222 Introduction to Social Work Practice)

3 Credit Hours • 45 Contact Hours (Lecture)

*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.

## Sociology Courses

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### SOC 1001 Introduction to Sociology I: SS3

(Previously SOC 101 Introduction to Sociology I: SS3)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

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 1002 Introduction to Sociology II: SS3

(Previously SOC 102 Introduction to Sociology II: SS3)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

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 2005 Sociology of Family Dynamics: SS3**

(Previously SOC 205 Sociology of Family Dynamics: SS3)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

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 2007 Environmental Sociology: SS3**

(Previously SOC 207 Environmental Sociology: SS3)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

Examines how humans' relationship with the environment is mediated by social stratification. Key topic areas include industrial and economic growth versus sustainability, natural resources development and management, cultural values, social movements, and comparative perspectives on people's relationship to the environment.

**SOC 2016 Sociology of Gender: SS3**

(Previously SOC 216 Sociology of Gender: SS3)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

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 2018 Sociology of Diversity: SS3**

(Previously SOC 218 Sociology of Diversity: SS3)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

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 2020 Sociology of Religion: SS3**

(Previously SOC 220 Sociology of Religion: SS3)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

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 2031 The Sociology of Deviant Behavior: SS3**

(Previously SOC 231 The Sociology of Deviant Behavior: SS3)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

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 2037 Sociology of Death & Dying: SS3**

(Previously SOC 237 Sociology of Death &amp; Dying: SS3)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

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 1001 Conversational Spanish I**

(Previously SPA 101 Conversational Spanish I)

3 Credit Hours • 45 Contact Hours (Lecture)

This course presents introductory Spanish conversation skills necessary to navigate everyday situations and travel. This course is intended for language learners with little or no prior experience.

**SPA 1002 Conversational Spanish II**

(Previously SPA 102 Conversational Spanish II)

3 Credit Hours • 45 Contact Hours (Lecture)

This course builds upon basic Spanish conversation skills necessary to navigate everyday situations and travel.

**SPA 1009 Spanish for Travelers**

(Previously 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 1011 Spanish Language I**

(Previously 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 1012 Spanish Language II**

(Previously SPA 112 Spanish Language II)

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite: SPA 1011*

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 1014 Fast-Track Spanish I & II**

(Previously SPA 114 Fast-Track Spanish I &amp; 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 1015 Spanish for the Professional I**

(Previously SPA 115 Spanish for the Professional I)

3 Credit Hours • 45 Contact Hours (Lecture)

This course presents introductory Spanish language skills, for professional use in a variety of fields, within Spanish-speaking environments. This course is intended for language learners with little or no prior experience.

**SPA 2001 Conversational Spanish III**

(Previously SPA 201 Conversational Spanish III)

3 Credit Hours • 45 Contact Hours (Lecture)

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 2002 Conversational Spanish IV**

(Previously SPA 202 Conversational Spanish IV)

3 Credit Hours • 45 Contact Hours (Lecture)

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 2011 Spanish Language III: AH4**

(Previously SPA 211 Spanish Language III: AH4)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: SPA 1012*

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 2012 Spanish Language IV: AH4**

(Previously SPA 212 Spanish Language IV: AH4)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: SPA 2011*

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 2015 Spanish for the Professional II**

(Previously SPA 215 Spanish for the Professional II)

3 Credit Hours • 45 Contact Hours (Lecture)

Continues SPA 1015 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 2061 Spanish Language for Heritage and Intermediate-Mid Speakers**

(Previously SPA 261 Grammar for the Heritage Language Speaker)

3 Credit Hours • 45 Contact Hours (Lecture)

*Note: Permission of Instructor required*

Focuses on developing Spanish language skills necessary for communication in social and professional settings. Coursework is curated for speakers who learned Spanish in an informal, non-academic setting and for intermediate-mid speakers. This course emphasizes grammar, vocabulary expansion, reading and writing skills, global linguistic variations, and topics related to Hispanic communities in the United States and the Spanish-speaking world.

**SPA 2062 Writing for Heritage and Intermediate-Mid Spanish Speakers**

(Previously SPA 262 Composition for the Heritage Language Speaker)

3 Credit Hours • 45 Contact Hours (Lecture)

Emphasizes the writing skills necessary for communication in professional and academic settings, focusing on topics related to Hispanic communities in the United States and the Spanish-speaking world. Coursework is curated for speakers who learned Spanish in an informal, non-academic setting and for intermediate-mid speakers.

**SPA 2089 Capstone**

(Previously SPA 289 Capstone)

3 Credit Hours • 45 Contact Hours (Lecture)

Provides a demonstrated culmination of learning within a given program of study.

**Sterile Processing Technology Courses****SPI 1000 Sterile Instrument Processing**

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Reviews the job skills needed for the sterile processing technician. Includes the fundamentals of the central services department, instrument processing and important regulatory protocols. Includes a comprehensive review of medical terminology, anatomy, and microbiology. Infection prevention and important environmental control and safety factors are included. The importance of professionalism, clinical advancement and workplace communication is presented.

**SPI 1001 Sterile Instrument Lab Skills**

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Co-requisite: SPI 1000*

Reviews hands on knowledge and job skills needed by the sterile processing technician. Includes a comprehensive review of surgical instrumentation, including instrument categories, design and construction, assembly, care, and maintenance. Tools and equipment utilized for instrument processing is presented. Instrument decontamination, cleaning, processing, and various methods of sterilization is discussed.

**SPI 1081 Internship: Sterile Processing**

9 Credit Hours • 405 Contact Hours (Internship)

*Co-requisite: SPI 1001*

Complete 400 hours of clinical internship in the sterile processing department.

**SPI 2079 Seminar**

1 Credit Hour • 15 Contact Hours (Lecture)

*Co-requisite: SPI 1081*

Provides students with an exceptional learning experience.

**Surgical Technology Courses****STE 1000 Fundamentals of Surgical Technology**

(Previously STE 100 Fundamentals of Surgical Technology)

6 Credit Hours • 135 Contact Hours (Lecture/Lab Combination)

*Prerequisite: BIO 2101, BIO 2104, ENG 1031 or ENG 1021, HPR 1045, MAT 1120 or higher**Note: Recommended Preparation BIO 2102 and PSY 2440**Note: Program Director 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 1001 Surgical Technology Skills Lab**

(Previously STE 101 Surgical Technology Skills Lab)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Co-requisite: STE 1000**Note: Program Director 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 1005 Pharmacology of Surgical Technologist**

(Previously STE 105 Pharmacology of Surgical Technologist)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Note: Program Director Signature Required*

This course discusses relevant knowledge as it pertains to surgical pharmacology theory, drugs, and aspects of anesthesia.

**STE 1010 Surgical Procedures I**

(Previously STE 110 Surgical Procedures I)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Co-requisite: STE 1000, STE 1001, STE 1005*

Reviews General, Obstetric/Gynecological and Urologic surgical procedures.

**STE 1015 Surgical Procedures II**

(Previously STE 115 Surgical Procedures II)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: STE 1000, STE 1001, STE 1005*

Reviews plastic, otorhinolaryngological, ophthalmologic and orthopedic surgical procedures.

**STE 1020 Surgical Procedures III**

(Previously STE 120 Surgical Procedures III)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: STE 1000, STE 1001, STE 1005*

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 1081 Internship I**

(Previously STE 181 Internship I)

4 Credit Hours • 180 Contact Hours (Internship)

*Prerequisite:* STE 1000, STE 1001, STE 1005, STE 1010, STE 1015

*Co-requisite:* STE 1082, STE 1083

Allows students to integrate theoretical concepts in a clinical setting.

### **STE 1082 Internship II**

(Previously STE 182 Internship II)

4 Credit Hours • 180 Contact Hours (Internship)

*Prerequisite:* STE 1000, STE 1001, STE 1005, STE 1010, STE 1015

*Co-requisite:* STE 1081, STE 1083

Allows students to integrate advanced theoretical concepts in a clinical surgical setting.

### **STE 1083 Internship III**

(Previously STE 183 Internship III)

6 Credit Hours • 270 Contact Hours (Internship)

*Prerequisite:* STE 1000, STE 1001, STE 1010, STE 1015

*Co-requisite:* STE 1081, STE 1082

Allows students to integrate advanced theoretical concepts in a clinical surgical setting.

### **STE 2068 Surgical Technical Seminar**

(Previously STE 179 Surgical Technical Seminar)

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite:* STE 1000, STE 1001, STE 1005, STE 1010, STE 1015

*Co-requisite:* STE 1081, STE 1082, STE 1083

Allows Surgical Technology students to learn techniques helpful in passing the required national certification exam for surgical technology from the Association for Surgical Technologists.

## **Sustainability Studies Courses**

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### **SUS 1001 Introduction to Sustainability**

(Previously SUS 101 Introduction to Sustainability)

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces the principles of sustainability as a whole-systems approach to pressing socio-ecological challenges, a local to global social movement, and an important personal and public practice. This course explores the historical, philosophical, ethical, and practical pillars of sustainability, and covers a wide range of sustainability topics including systemic understanding of major sustainability issues and identification of avenues for individual and collective action.

### **SUS 2001 Issues in Sustainability**

(Previously SUS 201 Issues in Sustainability)

3 Credit Hours • 45 Contact Hours (Lecture)

Explores in depth one to two major sustainability issues that are both local and global in their scope and draws connections between specific sustainability challenges and the larger causes and effects of the global sustainability crisis. This course examines the selected issues from environmental, social or cultural, and economic perspectives; and presents the framework of social-ecological resilience as a normative guide for applied action.

## **Theatre Courses**

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### **THE 1005 Theatre Appreciation: AH1**

(Previously 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 1008 Theatre Script Analysis: AH1**

(Previously 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 1011 Acting I**

(Previously THE 111 Acting I)

3 Credit Hours • 45 Contact Hours (Lecture)

*Note: It is strongly recommended to take THE 1005 before THE 1011*

Covers basic acting techniques and approaches including scene study, improvisation, and script analysis. It includes practical application through classroom performance.

### **THE 1012 Acting II**

(Previously THE 112 Acting II)

3 Credit Hours • 45 Contact Hours (Lecture)

*Note: It is strongly recommended to take THE 1005 before THE 1012*

Continues to explore basic acting techniques and approaches including scene study, improvisation, and intermediate script analysis. It includes practical application through classroom performance.

### **THE 1015 Stage Movement for Actors**

(Previously 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 1016 Technical Theatre**

(Previously 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 1031 Theatre Production I**

(Previously 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 1032 Theatre Production II**

(Previously THE 132 Theatre Production II)

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 1035 Stage Makeup I**

(Previously THE 135 Stage Makeup)

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 1040 Stage Dialects**

(Previously THE 140 Stage Dialects)

1 Credit Hour • 15 Contact Hours (Lecture)

Teaches students to develop skills in nine dialects and accents.

**THE 1083 Internship**

(Previously 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 2004 Voice & Articulation I**

(Previously THE 204 Voice &amp; Articulation I)

2 Credit Hours • 30 Contact Hours (Lecture)

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 2011 Development of Theatre Greek-Renaissance: AH1**

(Previously THE 211 Development of Theatre Greek-Renaissance: AH1)

3 Credit Hours • 45 Contact Hours (Lecture)

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 2012 Development of Theatre Restoration to Modern: AH1**

(Previously THE 212 Development of Theatre Restoration to Modern: AH1)

3 Credit Hours • 45 Contact Hours (Lecture)

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 2015 Playwriting: AH1**

(Previously 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 2016 Theatre Lighting & Design**

(Previously THE 216 Theatre Lighting &amp; Design)

3 Credit Hours • 45 Contact Hours (Lecture)

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 2020 Directing I**

(Previously THE 220 Directing I)

3 Credit Hours • 45 Contact Hours (Lecture)

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 2055 Advanced Playwriting**

(Previously THE 255 Advanced Playwriting)

3 Credit Hours • 45 Contact Hours (Lecture)

Continues to explore playwriting techniques developed in THE 2015 for theatre and applies concepts of writing for movie, television, radio, and animation scripts, with emphasis on the dramatic process and form.

**Translation and Interpretation Courses****TRI 1001 Introduction to Translation & Interpretation**

(Previously TRI 101 Introduction to Translation &amp; 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 1003 Ethics for Translation & Interpretation**

(Previously TRI 103 Ethics for Translation &amp; 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 2001 Consecutive Interpretation I**

(Previously TRI 201 Consecutive Interpretation I)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: TRI 1001, TRI 1003*

Presents the theory, history, and skills of consecutive interpretation and fosters the practical application of these skills.

**TRI 2002 Simultaneous Interpretation I**

(Previously TRI 202 Simultaneous Interpretation I)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: TRI 1001, TRI 1003*

Presents the theory, history, and skills of simultaneous interpretation and fosters the practical application of these skills.

**TRI 2003 Sight Translation**

(Previously TRI 203 Sight Translation)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: TRI 1001, TRI 1003*

Presents the theory, history, and skills of sight translation and fosters the practical application of these skills.

**Veterinary Technology Courses****VET 1002 Veterinary Medical Terminology**

(Previously VET 102 Veterinary Medical Terminology)

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

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 1003 Veterinary Assistant Restraint & Handling**

(Previously VET 103 Veterinary Assistant Restraint &amp; 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 1004 Assistant Large Animal Nursing**

(Previously VET 104 Assistant Large Animal Nursing)

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: VET 1003 (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 assistant. This course focuses on handling and specific skills necessary for the profession.

**VET 1009 Applied Companion Animal Behavior**

(Previously 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 1014 Vet Assistant Lab & Clinical Procedures**

(Previously VET 114 Vet Assistant Lab & Clinical Procedures)  
3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Prerequisite:* VET 1003 (Grade of C or higher), VET 1020 (Grade of C or higher)

*Co-requisite:* VET 1017

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 1017 Veterinary Assistant Surgery & Nursing Care**

(Previously VET 117 Veterinary Assistant Surgery & Nursing Care)  
2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)  
*Prerequisite:* VET 1002 (Grade of C or higher), VET 1003 (Grade of C or higher), VET 1009 (Grade of C or higher)

*Co-requisite:* VET 1014

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 1020 Office Procedures & Relations**

(Previously 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 1083 Internship**

(Previously VET 183 Internship)  
3 Credit Hours • 135 Contact Hours (Internship)  
*Prerequisite:* VET 1002 (Grade of C or higher), VET 1003 (Grade of C or higher), VET 1004 (Grade of C or higher), VET 1009 (Grade of C or higher), VET 1014 (Grade of C or higher), VET 1017 (Grade of C or higher), VET 1020 (Grade of C or higher)  
*Grading:* P/F only

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.

**Welding Courses****WEL 1000 Safety for Welders**

(Previously 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 1006 Blueprint Reading for Welders & Fitters**

(Previously 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 1013 Oxyfuel & Plasma Cutting**

(Previously 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 1014 Oxyacetylene Welding**

(Previously 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 1015 Autobody Welding & Cutting**

(Previously 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 1021 Structural Welding I**

(Previously 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 1022 Structural Welding II**

(Previously WEL 122 Structural Welding II)  
3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
Continues WEL 1021 with final emphasis toward AWS welder qualification with mild steel electrode E-7018 qualification test in the 2G, 3GU, and 4G position.

**WEL 1024 Gas Tungsten Arc Welding I**

(Previously 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 1025 Introduction to Gas Metal Arc Welding**

(Previously 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 1030 Maintenance Welding**

(Previously 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 1080 Internship**

(Previously 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 2000 Advanced CAD/CAM Cutting Processes**

(Previously WEL 200 Advanced CAD/CAM Cutting Processes)  
4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)  
Covers advanced plasma cutting processes including designing and generating images using Computer Aided Design and Computer Aided Manufacturing (CAD/CAM) software. The course covers cutting developed images or parts using the Computer Numerical Control (CNC) Plasma Cutting Table.

**WEL 2005 Introduction to Ornamental Iron**

(Previously 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 2024 Gas Tungsten Arc Welding II**

(Previously WEL 224 Gas Tungsten Arc Welding II)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)  
Covers Gas Tungsten Arc Welding (GTAW) operations utilizing a variety of base metals and advanced joint designs.

**WEL 2025 Advanced Gas Metal Arc Welding**

(Previously WEL 225 Advanced Gas Metal Arc Welding)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)  
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 2030 Pipe Welding I**

(Previously WEL 230 Pipe Welding I)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)  
Covers pipe welding operations utilizing the Shielded Metal Arc Welding (SMAW) process in a variety of positions on carbon steel.

**WEL 2031 Pipe Welding II**

(Previously WEL 231 Pipe Welding II)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)  
Covers pipe welding operations utilizing processes and positions.

**WEL 2040 Pipe Welding Certification**

(Previously WEL 240 Pipe Welding Certification)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)  
Introduces theory and practice in modern welding methods of pressure pipeline and pipe systems. Emphasis toward welder qualification under various codes.

**WEL 2050 Layout & Fabrication**

(Previously WEL 250 Layout &amp; Fabrication)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)  
Develops welding and associated skills in metal fabrication.

**WEL 2063 Applied Metal Properties**

(Previously 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 2064 Creative Welding**

(Previously 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 2080 Internship**

(Previously 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 2089 Capstone**

(Previously 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**

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**WST 2000 Introduction to Women's and Gender Studies: SS3**

(Previously WST 200 Introduction to Women's Studies: SS3)

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: College Readiness in English*

Explores the interdisciplinary field of women's and gender studies. Topics include the background and history of women's and gender studies, rights movements, LGBTQIA+ identities, social constructions of sex and gender, relevant theories, women's and gender statuses in social institutions including but not limited to the media, healthcare, religion, and government. This course examines inequality in gender and sexuality on national and global levels.

**Zoo Keeping Courses**

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**ZOO 1010 Introduction to Captive Animal Management**

(Previously ZOO 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.

**ZOO 1020 Biodiversity & Conservation**

(Previously ZOO 117 Biodiversity &amp; 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 1030 Animal Behavior**

(Previously ZOO 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 1040 Introduction to Animal Training**

(Previously ZOO 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.

**ZOO 1041 Animal Training**

(Previously ZOO 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.

**ZOO 1080 Zoo Keeping Internship I**

(Previously ZOO 180 Zoo Keeping Internship I)

5 Credit Hours • 225 Contact Hours (Internship)

*Prerequisite:* COM 1150 (Grade of C or higher), ZOO 1410 (Grade of C or higher), ZOO 1610 (Grade of C or higher), ZOO 1710 (Grade of C or higher), ZOO 1810 (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 1081 Zoo Keeping Internship II**

(Previously ZOO 181 Zoo Keeping Internship II)

5 Credit Hours • 225 Contact Hours (Internship)

*Prerequisite:* ZOO 1080*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 1080 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 1080. Requires a 2.8 GPA.

**ZOO 1110 Advanced Exhibitory Techniques**

(Previously 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 1210 Exhibit & Horticulture Design for Zoo Exhibits**

(Previously ZOO 206 Exhibit &amp; 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 1310 Zoonotic Preventative Medicine**

(Previously ZOO 145 Zoonotic Preventative Medicine)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* ZOO 1010

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 1320 Veterinary Zookeeping**

(Previously ZOO 215 Veterinary Zookeeping)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Explores a wide variety of topics including but not limited to quarantine procedures, immobilization, zoonotic disease, and other important aspects of veterinary animal management.

**ZOO 1410 Invertebrate Zoology**

(Previously ZOO 155 Invertebrate Zoology)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

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 1510 Fish Husbandry & Aquaria Management**

(Previously ZOO 245 Fish Husbandry &amp; Aquaria Management)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Co-requisite:* BIO 1003

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 1610 Herpetology**

(Previously ZOO 165 Herpetology)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

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 1710 Bird Husbandry**

(Previously ZOO 115 Bird Husbandry)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* BIO 1003 (Grade of C or higher), ENG 1031 or ENG 1021 (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 1810 Mammal Husbandry**

(Previously ZOO 125 Mammal Husbandry)

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* BIO 1003 (Grade of C or higher), ZOO 1010 (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 1811 Ungulates-The Hoofed Mammals**

(Previously 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 1812 Pachyderms: Hippos, Rhinos & Elephants**

(Previously ZOO 113 Pachyderms: Hippos, Rhinos &amp; Elephants)

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Note:* ZOO 1810 recommended, but not required

Explores the natural history and conservation of pachyderms. Evaluate husbandry requirements for housing pachyderms in a captive setting.

**ZOO 1813 Primates: Prosimians and Monkeys**

(Previously ZOO 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.

**ZOO 1814 Apes**

(Previously 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 1815 Wild Cats-Conservation & Management**

(Previously 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 1816 Wild Canids**

(Previously ZOO 114 Wild Canids)  
2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)  
*Note: ZOO 1810 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 1817 Bats: An Introduction**

(Previously 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 1818 Elephants: An Introduction**

(Previously ZOO 112 Elephants: An Introduction)  
1 Credit Hour • 15 Contact Hours (Lecture)  
Explore the natural history of the two current living genera of elephants, their status in the wild and status in captivity. Discover the challenges and conservation efforts both in the wild populations and in captive settings being made to save these animals. Elephant anatomy and physiology will be explored as well as the basics of captive husbandry techniques.

### **ZOO 2040 Animal Training in Action**

(Previously ZOO 203 Animal Training in Action)  
2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)  
*Prerequisite: ZOO 1030 (Grade of C or better), ZOO 1040 (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 2080 Zoo Keeping Internship III**

(Previously ZOO 280 Zoo Keeping Internship III)  
5 Credit Hours • 225 Contact Hours (Internship)  
*Prerequisite: ZOO 1081*  
*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 1080 and ZOO 1081. 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 1080 and ZOO 1081. Requires a 2.8 GPA.

### **ZOO 2081 Internship – Abroad**

(Previously ZOO 281 Internship – Abroad)  
5 Credit Hours • 225 Contact Hours (Internship)  
*Co-requisite: ZOO 2610 and/or ZOO 1810*  
*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.

### **ZOO 2410 Aquatic & Terrestrial Invertebrate Husbandry**

(Previously ZOO 255 Aquatic & Terrestrial Invertebrate Husbandry)  
4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)  
*Co-requisite: BIO 1003*

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 2610 Reptile & Amphibian Husbandry**

(Previously ZOO 265 Reptile & Amphibian Husbandry)  
4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)  
*Prerequisite: ZOO 1010 (Grade of C or higher), ZOO 1020 (Grade of C or higher), ZOO 1030 (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 2710 Avian Conservation**

(Previously ZOO 267 Avian Conservation)  
2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)  
*Prerequisite: ZOO 1710*  
Focuses on avian conservation concerns and efforts globally and locally to include local bird conservation projects, hands-on training, experience and networking with conservation organizations and individuals in the field of ornithology.

# COLLEGE ADMINISTRATIVE STAFF

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## Officers of the College

President	Lance Bolton
Executive Assistant to the President	Allison Cortez
Vice President for Administrative Services	Darlene Melby
Vice President for Human Resource Services	Kim Hennessy
Vice President for Instructional Services	Jacquelyn Gaiters-Jordan
Vice President for Student Experience and Equity	Enrique Romo
Vice President for Student Services	Roberto Garcia
Executive Director for Institutional Effectiveness	Patricia Grandieu
Executive Director for Marketing and Communications	Matthew Radcliffe
Chief Development Officer	Donna Nelson

## State Board for Community Colleges & Occupational Education

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Chancellor Joseph Garcia

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Ms. Rebecca Decker, Chair  
 Mr. L. Carlos Jimenez, Member  
 Mr. Mike Juran, Member  
 Ms. Erin M. Miller, Member  
 Mr. Robert K. "Rocky" Scott, Member

# FACULTY & STAFF

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BJORKMAN, Sharon, Ph.D., Loyola University, 2004  
Professor of Sociology, Division of Arts, Humanities, & Social Sciences

BLAKE, Esther  
Custodian I, Facilities & Operations

BLOCK, Heidi  
Assistant Professor of Culinary Arts, Career Start, Division of Business, Technology, & Public Service

BLUEJACKET, Savannah  
Enrollment Services Specialist, Admissions, Recruitment, & Enrollment

BOGNER, Gary, M.B.A., Baker College, 1996  
Faculty of Business, Division of Business, Technology, & Public Service

BOICE, Kaylyn, A.S., Pikes Peak State College, 2024  
I.T. Service Desk Specialist, Information Technology Support Services

BOLTON, Lance, Ph.D., University of Georgia, 1997  
President, Pikes Peak State College

BOST, Megan  
Program Assistant I, Facilities & Operations

BOWLBY, Desiree, M.S., Colorado State University, 2019  
Program Manager, Office of Technical and Professional Studies

BOYCE, Carolyn, A.A.S., Pikes Peak State College, 2020  
Graphics Designer, Marketing & Communications

BOYD, David, M.MOAS., Air University, 2011  
Faculty of Emergency Service Administration, Division of Business, Technology, & Public Service

BRACE, Tobias, M.S.N., Walden University, 2014  
Assistant Professor of Nursing, Division of Health Sciences

BRATSCHI, Christopher, J.D., Thomas M. Cooley Law School, 1990  
Faculty of Paralegal, Division of Business, Technology, & Public Service

BREITBEIL, Cristal, M.B.A., University of Colorado, 2006  
Faculty of Accounting, Division of Business, Technology, & Public Service

BRINSON, Lorinda  
Coordinator of Administrative Services, Advising & Testing

BROWN, Aaron  
Faculty of Diesel Power Mechanics, Division of Technical & Professional Studies

BROWN, Elaine, B.A.S. Pikes Peak State College, 2020  
Third Party Specialist, Financial Services

BROWN, Naomi, A.G.S., Pikes Peak State College, 2008  
Administrative Assistant III, Admissions, Recruitment, & Enrollment Services

BRUWER, Anneke, M.S., Saint Cloud State University, 2019  
Assistant Professor of Psychology, Division of Arts, Humanities, & Social Sciences

BUDD, Benjamin  
Assistant Director of Facilities, Facilities & Operations

BURGESS, Parker  
Pipe/Mechanical Trades I, Facilities & Operations

BURKS, Jordan, A.G.S., Pikes Peak State College, 2020  
Assistant to the Executive Dean, Division of Science, Engineering, & Math

BURNETTE, Justin, M.A. University of Colorado, 2005  
Faculty of History, Division of Arts, Humanities, & Social Sciences

BUXTON, Terry  
Faculty of Building, Construction, & Maintenance, Division of Technical & Professional Studies

BYNUM, Tina, D.M., Colorado Technical University, 2016  
Associate Dean of Business, Technology, & Public Service

CAFFEE, Kelly, M.Ed., Grand Canyon University, 2018  
COSI Success Coach, Accessibility Services

CALLIHAN, Kristy, M.A., Texas Tech University, 1994  
Professor of Communication Arts, Division of Arts, Humanities, & Social Sciences

CAMACHO, Jayla, B.A., University of Colorado, 2023  
Program Advisor, Advising & Testing

CAMPBELL, Majel, M.A., University of Georgia, 2005  
Faculty of Spanish, Division of Arts, Humanities, & Social Sciences

CAMPBELL, Rachael, M.A., Antioch University, 1997  
Director of Retention, Admissions, Recruitment, and Enrollment Services

CARPENTER, Richard, A.O.S., The Culinary Institute of America, 1985

Assistant Professor of Culinary Arts, Division of Business, Technology, & Public Service

CARTWRIGHT, Kara, A.A.S., Pikes Peak State College, 2024  
Faculty of Welding, Division of Technical & Professional Studies

CASAS, Dionisio, B.S. University of New Hampshire, 2021  
Enrollment Specialist, Military & Veterans Programs

CASH, Charles  
Custodian Manager, Facilities & Operations

CASTILLO, Jessica, Ph.D., University of Colorado, 2019  
Grants Development Director, Foundation

CATES, David, B.S., University of Northern Colorado, 2003  
Assistant Professor of Fire Science, Division of Business, Technology, & Public Service

CHAN, Dianne, M.S., University of Illinois, 1991  
Default/Debt Management Advisor, Financial Aid

CHARLEMAN, Joseph, D.B.A., National University, 2020  
Executive Dean for Health Sciences, Division of Health Sciences

CISNEROS, Daniel, B.S., Colorado State University, 2015  
Application Developer, Marketing

CLAY, Sarah, M.A. University of Colorado, 2012  
Assistant to the Dean of Online Learning, eLearning

COELHO, Elizabeth, M.S., San Diego State University, 2008  
Faculty of Astronomy, Division of Science, Engineering, & Math

COKE-CLARK, Lorraine, M.S., Capella University, 2009  
Faculty of English, Division of Arts, Humanities, & Social Sciences

COLLINS, Stephen, Ph.D., Northwestern University, 2001  
Professor of Communication, Division of Arts, Humanities, & Social Sciences

CONE, Alex, B.A., University of Colorado, 2017  
Videographer/Video Productions, Marketing & Communications

CONRAD, Martin, M.A., University of Colorado, 2009  
Assistant Professor of Humanities, Division of Arts, Humanities, & Social Sciences

COOK, Seth, B.S., Purdue University Global, 2018  
I.T. Network Analyst, Information Technology Support Services

COOPER, Edith, M.S.W., St. Louis University, 2016  
Mental Health Counselor, Counseling Center

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 Arts, Humanities, & Social Sciences

CORN, Leland, A.A.S., Pikes Peak State College, 1996  
Faculty of Welding, Career Start, Division of Technical and Professional Studies

CORNELIUS, Belenda, M.A., University of Colorado, 1992  
Recruitment & Admissions Specialist, Admissions, Recruitment, & Enrollment Services

CORNISH, Amy, M.A., Colorado State University, 2000  
Faculty of French, Division of Arts, Humanities, & Social Sciences

CORTEZ, Mari "Allison", M.A., University of Colorado, 2009  
Executive Assistant to the President, President's Office

COVINGTON, Charles, B.A., University of Oklahoma, 2014  
Operations Manager, Military Veterans Program

COWARD, Vendetta  
Custodian I, Facilities & Operations

CRABINE, Shannan, B.A., University of Colorado, 2021  
Enrollment Services Specialist, Admissions, Recruitment, & Enrollment Services

CRAWFORD, Herman, Ed. D., Capella University, 2017  
Associate Professor of Hospitality, Division of Business, Technology, & Public Service

CRICK II, Jay, A.A.S., Pikes Peak State College, 2023  
I.T. Service Desk Coordinator, Information Technology Support Services

CRUZ, Kenda, A.A.S., Pikes Peak State College, 2018  
AHA Training Center Coordinator, Division of Health Sciences

CUNNINGHAM, Casey  
Structural Trades III, Facilities & Operations

CUSHMAN, Ann, Ph.D., Colorado State University, 2001  
Professor of Mathematics, Division of Science, Engineering, & Math

DAUM, Jillian, B.S., University of Colorado, 2022  
COSI Grant Program Lead Coach, Academic Resources

DAVIS, Nicole, B.S., Southern Nazarene University, 2022  
Associate Dean of Health Sciences, Division of Health Sciences

DE LA CRUZ, Maria, B.A., Adams State University, 2002  
Associate Dean of Business, Technology, & Public Service, Division of Business, Technology, & Public Service

DEANDA, Rene, M.A., Regis University, 2008  
Fort Carson Program Manager, Military Veterans Program

DEANGELIS, M. "Maggie", B.S., St. Mary of the Woods College, 2011  
ADN Support Specialist, Division of Health Sciences

DECECCO, Paul, M.A., University of New Mexico, 1998  
Director of Military & Veterans Programs

DEWALL, Jeremy  
EMS Medical Director, Division of Health Sciences

DEAGUERO, Michael  
Equipment Mechanic II, Facilities & Operations

DEVAUX, Jason, J.D., Washington & Lee University, 1998  
Professor of Criminal Justice, Division of Business, Technology, & Public Service

DEWALD, Marian  
Administrative Assistant III, Enrollment Services

DIAS, Jason, Psy.D., University of the Rockies, 2010  
Professor of Psychology, Division of Arts, Humanities, & Social Sciences

DIAS, Elsa, Ph.D., Purdue University, 2004  
Professor of Political Science, Division of Arts, Humanities, & Social Sciences

DIVALERIO, Danielle  
LPN Faculty/Program Coordinator, Division of Health Sciences

DIVINE, Sarah, M.A. University of Denver, 2020  
Program Advisor, Advising & Testing

DROLET, Elizabeth  
Administrative Assistant III, Records

DUGARD, Tamara, M.S.N., Grand Canyon University, 2021  
Faculty of Nursing, Division of Health Sciences

DUMAINE, Pamela, M.A., Colorado Christian University, 2011  
Faculty of Math, Division of Science, Engineering, & Math

DUNGAN, Krystal, A.S., Pikes Peak State College, 2017  
I.T. Service Desk Specialist, Information Technology Support Services

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Police Officer II, Campus Police

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Manager of Audio Visual Services, Information Technology Support Services

ESPINOSA, Jose  
Custodian I, Facilities & Operations

EVERETT, Jami, A.G.S., Pikes Peak State College, 2013  
Network Operations Manager, Information Technology Support Services

EVERINGHAM, Neil, M.S.A., Central Michigan University, 2010  
Faculty of Computer Networking & Cyber Security, Division of Business, Technology, & Public Service

EWING, Kevin, M.S. University of Colorado, 2013  
Faculty of Mathematics, Division of Science, Engineering, & Math

FALZON, Lou  
Police Officer, Campus Police

FARRAR, Shae L., B.A., Regis University, 2005  
Assistant Director of Budget Services, Business Services

FELTS, Jason, B.A., University of North Texas, 2018  
Recreation & Wellness Coordinator, Fitness Center/Student Life

FINLEY, Priscilla  
Faculty Pay & Event Scheduling Coordinator, Instructional Support

FLEMING, Julie  
Assistant Director of Concurrent Enrollment, High School Programs

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Technician III, Military & Veterans Programs

FOLKERTS, Dakota, B.S., Nebraska Wesleyan University, 2021  
Instructional Liaison, Division of Technical & Professional Studies

FORAND, Emily, M.A., New Mexico State University, 2006  
Associate Professor of English, Division of Arts, Humanities, & Social Sciences

FOTH, Michael  
General Labor I, Facilities & Operations

FOX, Jenyva, A.A.S., Pikes Peak State College, 2003  
Faculty of Zookeeping, Division of Science, Engineering, & Math

FRANCIS, Audrey  
Custodian III, Facilities & Operations

FRASER-MILLS, Michelle, B.S., Colorado State University, 1987  
Senior 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  
eLearning Technologist & Training Course Designer, eLearning

FRISCHMANN, Christina "Nina"  
Faculty Pay & Online Course Scheduling Coordinator, Instructional Support

FRY, Randal  
Structural Trades I, Facilities & Operations

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Administrative Assistant III, Admissions, Recruitment, & Enrollment Services

GACCETTA-SHARP, Christine, B.S., Fort Hays State University, 2019  
Course Designer/OER Coordinator, eLearning

GAITERS-JORDAN, Jacquelyn, M.A., University of Colorado, 2005  
Vice President of Instructional Services, Instructional Services

GALLOP, Kayla  
Administrative Assistant II, Division of Science, Engineering, & Math

GARCIA, Amanda  
Health Sciences Lab Coordinator, Division of Health Sciences

GARCIA, Sylvia, B.A., University of Denver, 1974  
Director of Student Career Services, Student Career Services

GARCIA, Roberto, M.Ed., Harvard University, 1980; A.B., Princeton University, 1979  
Vice President of Student Services, VP Student Success

GARRETT, Barbara, Ed.D., Nova Southeastern University, 2006  
Coordinator of Teacher Preparation Education, Division of Business, Technology, & Public Service

GASTEIGER, Joe, M.S., University of Colorado, 2017  
Faculty of Physics, Division of Science, Engineering, & Math

GEHLING, Tanner  
Coordinator of Learning Commons Services, Learning Commons

GELLENBECK, James, B.S., Colorado State University, 2013  
Director of Procurement, Purchasing

GENDRON, Dawn, B.S., Minot State University, 1996  
Assistant Director of Marketing Operations, Marketing & Communications

GENSCHORCK, Laura A., A.G.S., Pikes Peak State College, 1995  
Human Resources Specialist II, Human Resource Services

GILES, Billie Jo, M.A., University of North Florida, 2016  
Assistant Professor of English, Division of Arts, Humanities, & Social Sciences

GILLESPIE, Carrie, B.A., The Colorado College, 2008  
Project Specialist, TRIO Student Support Services

GILSON, Richard, B.S.B., Murray State University, 2015  
Faculty of Computer Information Systems, Division of Business, Technology, & Public Service

GONZALES, Karyn  
Laboratory Technology I, Division of Health Sciences

GOYA, Kourtney  
Assistant Director of Concurrent Enrollment, High School Programs

GRACE, Gayle, B.Mus., Friends University, 1974  
Assistant Professor of Music, Division of Arts, Humanities, & Social Sciences

GRANDIEU, Patricia, Ph.D., University of Lorraine, 1999  
Executive Director of Institutional Effectiveness, Institutional Research

GREEN, Laura  
Administrative Assistant II, Division of Health Sciences

GREENLEAF, Melissa, M.A., University of Colorado, 2019  
Faculty of Geography/Earth Sciences, Division of Science, Engineering, & Math

GREGORY, Dana, D.P.T., Baylor University, 2007  
Faculty of Physical Therapy Assistant, Division of Health Sciences

GRIMM, Steven "Jack", B.S., University of Wisconsin, 1988  
Program Advisor, Advising & Testing

GRIPPO, Steven, B.A., University of Colorado, 2007  
Assistant to the Executive Dean of Arts, Humanities, & Social Sciences, Division of Arts, Humanities, & Social Sciences

GRUSZKOWSKI, April "Renee", B.A., George Mason University, 2009  
Application Developer, Information Technology Support Services

GUAJARDO, Jennifer, M.A., University of Colorado, 2017  
Program Advisor, Advising & Testing

GUERETTE, Brittany, A.A.S., Pikes Peak State College, 2024  
Faculty of Emergency Medical Services, Division of Health Sciences

GUNDERSON, Jason, M.A., Gallaudet University, 2015  
Faculty of American Sign Language, Division of Technical & Professional Studies

GUTSCHICK, James, B.A., Hastings College, 1999  
Faculty of Fire Science, Division of Business, Technology, & Public Service

GUY, Andre, A.A.S., Pikes Peak State College, 2021  
Program Specialist Coach, Academic Resources

HAAG, Kurt, M.S., Emporia State University, 2022  
Faculty of Math, Division of Science, Engineering, & Math

HALL, Dierdre, Ph.D., University of California, 2003  
Faculty of Environmental Science, Division of Science, Engineering, & Math

HAMMITT, Lee, B.A., Adams State University, 1995  
Human Resource Services Coordinator, Human Resource Services

HANS, Ashleigh  
Administrative Assistant III, Records

HARDANIAN, Lena  
I.T./ A.V. Technician, Information Technology Support Services

HARDY, Tiko, LSD, Psy.D., University of the Rockies, 2014  
Professor of Behavioral Health, Division of Art, Humanities, & Social Sciences

HARPER, Shelley, M.S., University of Texas, 2004  
Single Stop Resource Specialist, Single Stop Student Resources

HARRIS, Yolanda, M.A., University of Northern Colorado, 2003  
Director of Counseling Center

HARVEY, Sandi, M.A., Wichita State University, 2010  
Associate Professor of Anthropology, Division of Arts, Humanities, & Social Sciences

HAWKINS, Jennifer, B.A.S., Colorado State University, 2022  
Faculty of Dental Hygiene, Division of Health Sciences

HAZEL-DESTEFANO, Jeannie, A.A.S., Pikes Peak State College, 1998  
Program Assistant I, Accessibility Services

HEGEMAN, Haley, B.A., Florida College, 2009  
Technical & Professional Division Support Specialist, Division of Technical & Professional Studies

HENNESSY, Kim, J.D., University of Cincinnati, 1977  
Vice President of Human Resource Services

HERNANDEZ, Andrea, M.Ed., Weber State University, 2021  
Director of Student Experience, Student Life

HERNANDEZ, Hitcel G., A.A. Pikes Peak State College, 2024  
Recruitment & Admissions Specialist/Bilingual, Admissions, Recruitment, & Enrollment

HERRERA, Christopher  
Grounds & Nursery II, Facilities & Operations

HERRERA, Ilene  
Certified Nursing Assistant Faculty, Division of Health Sciences

HILL, Tamika, B.S.B., University of Colorado, 2015  
Payroll Manager, Financial Services

HILLYER, Audrey, M.A., DePaul University, 2004  
Faculty of English, Division of Art, Humanities, & Social Sciences

HINCAPIE, Andrew  
Faculty of English, Division of Art, Humanities, & Social Sciences

HINO, Gary, A.A.S., Pikes Peak State College, 2007  
Faculty of Culinary Arts, Division of Business, Technology, & Public Service

HINOJOSA, Moises, M.S., University of Phoenix, 2003  
Director of Accessibility Services, Accessibility Services

HOEBER, Christina  
Administrative Assistant II, Center for Excellence in Teaching & Learning

HOLECKOVA, Iveta, M.S., Utica College, 2005  
Faculty of Computer Science, Division of Business, Technology, & Public Service

HOLLING-MORRIS, Cynthia, M.A., California State University, 2003  
Faculty of Photography, Division of Arts, Humanities, & Social Sciences

HOLMES, Jennifer, M.S., University of Colorado, 2010  
Assistant Professor of Mathematics, Division of Science, Engineering, & Math

HOLMES, Susi  
Assistant to the Vice President of Instructional Services, Instructional Services

HOLZWARTH, Ryan  
Police Officer I, Campus Police

HORTON, Gary, M.S.C.J.A., Columbia Southern University, 2017  
Assistant Professor of Law Enforcement Services, Division of Business, Technology, & Public Service

HOWELL, Dionne, M.F.A., School of the Art Institute of Chicago, 2008  
Associate Professor of English, Division of Arts, Humanities, & Social Sciences

HUDDLESTON, Stefan, M.A., University of Colorado, 2020  
Reference & Research Specialist, Learning Commons

HUDGENS, Kevin, M.P.A., University of Colorado, 2015  
Senior Director of Admissions, Recruitment, & Enrollment Services

HUDSON, Robert, M.A., Ashford University, 2014  
Executive Dean of Business, Technology, & Public Service

HUGHES, Ernest, M.B.A., Colorado Technical University, 2016  
I.T. Physical & Digital Assets Manager, Information Technology Support Services

HULL, Misty, M.A., Colorado Christian University, 2001  
Associate Dean of Arts, Humanities, & Social Sciences, Division of Arts, Humanities, & Social Sciences

HUMPHREY, Michael  
Student Services Specialist II, Financial Aid

HURRELL, Danielle  
Administrative Assistant III, Admissions, Recruitment, & Enrollment Services

HUSS, Susan  
Administrative Assistant III, Advising & Testing

HYDE, ReeAnn, M.A., Fuller Theological Seminary, 1997  
Instructional Liaison, Advising & Testing

IWATSU, Nicole  
Custodian I, Facilities

IZOLD, Colleen  
Administrative Assistant II, Advising & Testing

IZOLD, Mark, M.S., Ohio State University, 1993  
Professor of Geology, Division of Science, Engineering, & Math

JACKSON, Ilah, B.S., University of New Mexico, 2000  
Faculty of Interpreter Prep Program, Division of Technical & Professional Studies

JACOBSON, Chad, A.A.S., Pikes Peak State College, 2006  
Student Services Specialist I, Advising & Testing

JANOS, Marcia, B.S., Oakland University, 1989  
Faculty of Pharmacy Technician, Division of Health Sciences

JARAMILLO, Larry  
Materials Handler I, Division of Technical & Professional Studies

JIMENEZ, JR., Paul  
Foundation Coordinator, Foundation

JOHNSON, Christine  
Clinical Coordinator, Division of Health Sciences

JOHNSON, Kendra  
Administrative Assistant III, Records

JOHNSON, Kristofor, B.A., University of Colorado, 2001  
Associate Professor of Fire Science, Division of Business, Technology, & Public Service

JOHNSON, Rhonda, M.B.A., University of Phoenix, 2010  
Associate Director, Financial Aid for Compliance & Fraud, Financial Aid

JONAS-MORRISON, Carol, M.S., New Mexico Institute of Mining & Technology, 1993  
Professor of Mathematics, Division of Science, Engineering, & Math

JONES, Catherine "Cici", A.A.S., Pikes Peak State College, 2008  
Student Services Specialist II, Financial Aid

JONES, Sierra, B.S., Pima Medical Institute, 2015  
Coordinator of VA Benefits Processing, Military & Veteran Programs

JORDAN, Althea, Ph. D., Northcentral University, 2016  
Faculty of Early Childhood Education, Division of Business, Technology, & Public Service

JORDAN, Andre, B.A. Washington State University, 2015  
Program Advisor, Advising & Testing



JULIAN, Julie, B.A., Pacific Christian University, 1993  
Director of Health Sciences Accreditation, Division of Health Sciences

KAMILAR, Cindy, Ph.D., University of Miami, 1993  
Professor of Psychology, Division of Arts, Humanities, & Social Sciences

KAMINSKY, Brandy, B.A., University of Colorado, 2021  
Recruitment & Admissions Specialist, Academic Resources

KAPLAN, Joyce, M.S., University of Idaho, 1992  
Executive Dean of Science, Engineering, and Math

KEAN, Chris  
Assistant Director of Military & Veterans Programs, Military & Veterans Program

KEEL, Kathie  
Learning Specialist, TRIO Student Support Services

KELLEY, Alfrado  
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 Arts, Humanities, & Social Sciences

KINSLOW, Christopher "Owen"  
Custodian I, Facilities & Operations

KIRILLOVA, Elena  
Coordinator of Application Processing, Admissions, Recruitment, & Enrollment Services

KIRKLAND, Kimberly  
Faculty of Medical Office Technology, Division of Health Sciences

KNIPP, Janae, M.A., SIT Study Abroad SIT Graduate Institute, 2018  
Assistant Director of Bilingual Services, Admissions, Recruitment, & Enrollment Services

KNUCKLE, Christopher  
Veterans Benefit Specialist, Military Veterans Program

KOBES-NEWCOMB, Stephanie, M.F.A., University of Colorado, 2010  
Faculty of Dance, Division of Arts, Humanities, & Social Sciences

KOHLER, Sarah, M.S., Midland University, 2019  
Testing Support Specialist, Advising & Testing

KOLTUN, Brook, M.S., Colorado State University, 2016  
Director of Advising & Testing, Advising & Testing

KORTHALS, Jessica, M.A.T., University of Northern Colorado, 2019  
Faculty of English, Division of Arts, Humanities, & Social Sciences

KRAFT, Brandi, M.S., University of North Dakota, 1993  
Student Success Coach, Learning Commons

KRAKOW, Robert  
Director of Cyber Security, Division of Business, Technology, & Public Service

KRUGER, Cecilia, A.A.S., Pikes Peak State College, 2003  
Administrative Assistant III, Division of Arts, Humanities, & Social Sciences

KRUTSINGER, Cynthia, M.A., University of Colorado, 2006  
Dean of Online Learning, eLearning

KUHN, William, M.A., University of Houston, 2016  
Faculty of Mathematics, Division of Science, Engineering, & Math

KURKOWSKI, Carol, Ph.D., Northcentral University, 2016  
Professor of Business, Division of Business, Technology, & Public Service

LABATE, Fabrizio, M.S., Colorado Technical University, 2013  
Assistant Chief Technology Officer, Information Technology Support Services

LABRECQUE, Catherine, M.S., Regis University, 2009  
Director of Law Enforcement Academy, Division of Business, Technology, & Public Service

LACLAY, Emmett  
Custodian I, Facilities & Operations

LAGLE, Richard  
Pipe/Mechanical Trades III, Facilities & Operations

LANDIS, William, M.S., Minnesota State University, 2018  
Faculty of Outdoor Leadership and Recreation, Division of Science, Engineering, & Math

LAWRENCE, Shanutel  
Administrative Assistant III, eLearning

LEATHES, Jennifer, M.B.A., University of Phoenix, 2005  
Recruitment & Admissions Specialist, Admissions, Recruitment, & Enrollment Services

LEBSOCK, Zachary, M.A., University of Colorado, 2017  
Assistant Director of Recruitment, Admissions, Recruitment, & Enrollment Services

LEE, Scott  
General Labor I, Facilities

LEE, Tracy, M.S., University of Nebraska, 2014  
Professor of Biology, Division of Science, Engineering, & Math

LEE, Travis, A.A.S., Pikes Peak State College, 2009  
Faculty of Welding, Career Start, Division of Technical & Professional Studies

LEMA, Melissa, M.S., Northern Arizona University, 2001  
Professor of Biology, Division of Science, Engineering, & Math

LEONIS, Marlene  
Administrative Assistant II, Division of Arts, Humanities, & Social Sciences

LICHT, Deborah, Ph.D., Harvard University, 2001  
Professor of Psychology, Division of Arts, Humanities, & Social Sciences

LIKINS, Andrew R., M.A., Azusa Pacific University, 2002  
Associate Professor of English as a Second Language, Division of Arts, Humanities, & Social Sciences

LIKINS, Heidi, M.S.N., Grand Canyon University, 2018  
Faculty of Nursing, Division of Health Sciences

LIONEL, William, B.A., University of California, 1992  
Success Coach, Career Services

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Police Officer I, Campus Police

LOGUE, Joshua  
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Manager of Student Accounts, Financial Services

LOPEZ, Kassy, Ph.D., Grand Canyon University, 2020  
ASPIRE Scholar Program Manager, Division of Arts, Humanities, & Social Sciences

LOVEJOY, McKenna, Ph.D., University of Colorado, 2017  
Faculty of Mathematics, Division of Science, Engineering, & Math

LOVELL, Thomas, Ph.D., University of Utah, 2006  
Associate Professor of English, Division of Arts, Humanities, & Social Sciences

LOWDEN, Brandan, M.S., Kansas State University, 2012  
Associate Dean of Math & Engineering, Division of Science, Engineering, & Math

LUCERO, Jacob  
Police Officer I, Campus Police

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Director of Nursing Education Practices

MACEDO, Lisa, M.F.A., George Mason University, 2018  
Faculty of English, Division of Arts, Humanities, & Social Sciences

MADSEN, Jenny  
Student Services Specialist II, Financial Aid

MALIN, Sarah, M.A.Ed., Fort Lewis College, 2023  
Disability Specialist, Accessibility Services

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MANGOLD, Amanda, B.S., Liberty University, 2021  
TPS Program Support Specialist, Division of Technical & Professional Studies

MANNERING, Julie, M.S., University of Phoenix, 1999  
Associate Professor of Computer Information Systems, Division of Business, Technology, & Public Service

MAREAN, Amber, Ph.D., University of Colorado, 2012  
Professor of Biology, Division of Science, Engineering, & Math

MAREK, Sarah, M.B.A., University of the People, 2023  
Accounts Receivable Staff Accountant, Financial Services

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MARTIN, Kendra, A.A.S., Pikes Peak State College, 1995  
FLAC Specialist, Human Resource Services

MARTIN, Paul, A.A.S., Pikes Peak State College, 2001  
I.T./A.V. Technician Coordinator, Information Technology Support Services

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A.V. Systems Analyst, Information Technology Support Services

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Third Party Coordinator, Financial Services

MASON, Jennifer, B.S.N., Chamberlain College of Nursing, 2012  
Faculty of Nursing, Division of Health Sciences

MATTHEWS, Adam, B.S., Ithaca College, 1998  
Faculty of Radio & Television, Division of Technical & Professional Studies

MAXWELL, Graham, B.S.B., University of Colorado, 2015  
Admissions Processing Specialist, Admissions, Recruitment, & Enrollment Services

MAYER, Sarah, M.A., Colorado State University, 2020  
Program Advisor, Advising & Testing

MCCLUGGAGE, Bruce, M.A., Fuller Theological Seminary, 2005  
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MCDADE, Timothy  
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MCPHERSON, Sharon, M.A., California State University, 1994  
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MELBY, Darlene  
Vice President for Administrative Services, President's Office

MERSON, Michael, M.C.J., University of Colorado, 2010  
Faculty of Criminal Justice, Division of Business, Technology, & Public Service

MESA, Maria, PhD in Education, Northcentral University, 2020  
Associate Vice President for Student Services

MIELKE, Alyse, A.S., Kaplan University, 2011  
Accounting Technician III, Financial Services

MIKESELL, Leslie, Ph.D., Michigan State University, 2012  
Associate Dean of Science & CTE, Division of Science, Engineering, & Math

MILLER, Jane  
Faculty of Architectural & Engineering Design Studies, Division of  
Technical & Professional Studies

MILLER, Joseph, DScPT, Baylor University, 2011  
Faculty of Physical Therapy Assistant, Division of Health Sciences

MILLER, Julie, A.G.S., Pikes Peak State College, 1991  
Assistant Registrar, Records

MILLER, Krystal, M.S., Colorado Technical University, 2004  
Faculty of Math, Division of Science, Engineering, & Math

MILLER, Sylva, M.S., Utah State University, 2001  
Professor of English, Division of Arts, Humanities, & Social  
Sciences

MILLS, David  
Faculty for Transportation, Division of Technical & Professional  
Studies

MILLS, Ralph  
Faculty of Automotive Collision Technology, Division of Technical  
& Professional Studies

MITCHELL, Marcellus  
Custodian I, Facilities & Operations

MOBOLADE, Abbey, M.S., Western Governors University, 2016  
Assistant Professor of Nursing, Division of Health Sciences

MOLLY, Rebecca  
Accounting Tech II, Financial Services

MOORE, Nichole, M.S., Colorado State University, 2005  
Professor of Nursing, Division of Health Sciences

MORALES, Yolanda  
Custodian I, Facilities & Operations

MORGAN, Amanda, M.H.R., University of Oklahoma, 2011  
Faculty of Nursing Assistant, Division of Health Sciences

MORGAN, Taylor, B.S., Purdue University Global, 2017  
SIM Technology Specialist, Division of Health Sciences

MORRIS, John, M.S., Texas A & M, 2015  
Faculty of Math, Division of Science, Engineering, & Math

MORRIS, Kenneth, M.P.A., University of Colorado, 1992  
Professor of Criminal Justice, Division of Business, Technology, &  
Public Service

MORRISON, Jennifer, M.S., Troy University, 2002  
Assistant Director of Admissions, Admissions, Recruitment, &  
Enrollment Services

MORRISON, John, B.S., University of St. Thomas, 2024  
I.T. Service Desk Specialist, Information Technology Support  
Services

MOSS, Kristina, M.S., Regis University, 2012  
Assistant Director FA for Customer Services & Technology,  
Financial Aid

MUEHLEISEN, Martha, M. Mus., John Hopkins University, 2007  
Faculty of Music, Division of Arts, Humanities, & Social Sciences

MUHAMAD, Shaie, B.A., University of Colorado, 2021  
Recruitment & Admissions Specialist, Enrollment Services

MULLANE, Laura, B.S., University of North Georgia, 2008  
Project Director of TRIO Student Support Services

MUNICK, Warren, M.A., Miami University, 1975  
Assistant Professor of Economics, Division of Business,  
Technology, & Public Service

MURPHY, Dawn, Ph.D., Texas Women's University, 2020  
Faculty of Nursing, Division of Health Sciences

MURPHY, Lindsey, M.S.M., Colorado Technical University, 2007  
Instructional Coordinator, Division of Health Sciences

NATALI, Dennis, Ph.D., Colorado State University, 2014  
Professor of Business, Division of Business, Technology, & Public  
Service

NAVA RUMBO, Stefanie, B.A., University of Colorado 2023  
Student Support Specialist, Student Life

NELSON, Donna, B.S., National American University, 2021  
Chief Development Officer, Office of the President

NEPPL, Kaeley, B.S.Ed., University of Nebraska, 2006  
Associate Dean of Technical & Professional Studies, Division of  
Technical & Professional Studies

NEUFELD, Matthew, A.A.S., Denver Technical College, 2002  
I.T. Service Desk Specialist, IT Support Services

NEWMAN, Hannah, M.S., Georgia Southern University, 2019  
Assistant Director, Institutional Effectiveness

NEWTON, Leslie, M.A., University of Tulsa, 2011  
Faculty of English, Division of Arts, Humanities, & Social Sciences

NGO, Van, A.A.S., Pikes Peak State College, 2018  
Staff Accountant, Financial Services

NIKOLAI, Gloria, M.A., University of Colorado, 1992  
Professor of Sociology, Division of Arts, Humanities, & Social  
Sciences

NOBLE, Chad, M.A., University of Colorado, 2018  
Lead Coach, COSI Finish What You Started Program

NOVACK, Monica, M.S., University of Colorado, 1992  
Assistant Professor of Computer Information Systems, Division of  
Business, Technology, & Public Service

NYMAN, Randee, D.N.P., Grand Canyon University, 2021  
Professor of Nursing, Division of Health Sciences

O'BRIEN, Alex, A.A.S., Pikes Peak State College, 2015  
Faculty of Zoo Keeping, Division of Science, Engineering, & Math

ORTIZ, Beatriz  
Administrative Assistant II, Concurrent Enrollment

OSWANDEL, David, M.S., University of Colorado, 2018  
Faculty of Biology, Division of Science, Engineering, & Math

OVERGAARD, Barbara, M.A., William Carey International  
University, 1984  
Faculty of English as a Second Language, Division of Arts,  
Humanities, & Social Sciences

OWEN, Andrea, A.A., Pikes Peak State College, 2022  
Allied Health Program Support Specialist, Division of Health Sciences

OWEN, Ashley, B.A., University of Colorado, 2016  
Transition Specialist, TRIO Student Support Services

PADEWAY, Patricia, M.H.R.M., Colorado State University, 2019  
Director of Recruitment & Classification, Human Resource Services

PARADISO, Michael, A.A.S., Pikes Peak State College, 2012  
Faculty of Culinary Arts, Division of Business, Technology, & Public Service

PARENT, Cyrille, M.A., University of Paris, 1995  
Chief Technology Officer, Information Technology Support Services

PARKER, Carol A., A.A.S., Pikes Peak State College, 2003  
Laboratory Coordinator I, Accessibility Services

PARKER, Carol J., M.L.A., Fort Hays State University, 2011  
Assistant Professor of English, Division of Arts, Humanities, & Social Sciences

PARRISH, Renee, B.A., Regis University, 2013  
I.T. Budget Finance Data Analyst, Information Technology Support Services

PARTON, Nicholas  
Regular Faculty, Division of Health Sciences

PECK, James III, A.G.S., Pikes Peak State College, 2022  
SIM Technology Specialist, Division of Health Sciences

PEEBLES, Christine, J.D., University of San Diego School of Law, 1999  
Faculty of Philosophy, Division of Arts, Humanities, & Social Sciences

PEMBERTON, Victoria, B.A. University of Colorado, 2024  
Administrative Assistant III, Instructional Support

PEREZ, Sabrina, B.S., University of Phoenix, 2010  
Faculty of Dental Assisting, Division of Health Sciences

PERRY, Jeffrey R., A.A.S., Central New Mexico Community College, 2006  
Cloud Applications Administrator, Information Technology Support Services

PERRY, S. Michele, M.B.A. California Lutheran University, 2008  
Senior Director for Budget & Business Services

PETRUCCI, John  
Pipe/Mechanical Trades II, Facilities & Operations

PHALEN, Karen, M.S., Western Governors University, 2021  
Faculty of Nursing, Division of Health Sciences

PHARR, Zachary, M.S., University of Central Arkansas, 2010  
Digital Communication Specialist, Enrollment Services

PIERCE, C. Dallas, M.B.A., Liberty University, 2006  
Faculty of Accounting, Division of Business, Technology, & Public Service

PIERCE, Heather, M.A., DePaul University, 2023  
Executive Dean of Technical & Professional Studies

PEITROWICZ, Marta  
Custodian III, Facilities & Operations

PINELL, Mara, B.S.W., Colorado State University, 2019  
Assistant to the Executive Dean, Division of Business, Technology, & Public Service

PLUNKETT, Brandon, M.S.W., University of Kentucky, 2024  
Faculty of Social Work, Division of Business, Technology, & Public Service

POSORSKI, Ewa, M.S., Massachusetts College of Pharmacy and & Health Sciences, 2013  
Dental Center Director, Division of Health Sciences

POSS, Emily, M.A., Saint Mary's University, 2015  
Mental Health Counselor, Counseling Center

POWERS, Larissa, M.LIS., San Jose State University, 2019  
Lead Reference and Research Librarian, Academic Resources

POYTHRESS III, George, A.A.S., Air University, 1988  
Military & Veteran Enrollment Specialist, Military & Veterans Programs

PRITCHETT HILLIARD, Nichole, M.S., Capella University, 2008  
Dean of Students, Student Services

PROVENCHER, Steven, B.S., Northern Arizona University, 2021  
Procurement & Contracts Agent, Purchasing

PUMILIA, Brian, B.A., Northern Illinois University, 2000  
Assistant to the VP of Student Experience & Equity/Commencement Coordinator

QUINN, Laura, M.S.Ed., Queens College/City University of NY, 1997  
Testing & Entrance Advising Specialist, Advising & Testing

RADCLIFFE, Matthew  
Executive Director, Marketing & Communications

RAIDER, Carl  
Faculty of Sterile Processing Program, Division of Health Sciences

RAJAB, Kelly  
Director of Foundation Finance & Operations, Foundation

RAMEY, Kristi, B.S., North Georgia College, 1989  
Faculty of Physical Education, Division of Science, Engineering, & Math

RAMIREZ, Joel  
Faculty of Computer Networking & Cyber Security, Division of Business, Technology, & Public Service

RAMOS, Adriana, B.A., Florida International University, 2022  
Program Scholar Advisor, Academic Resources

RAWLINGS, Lina, Ph.D., Liberty University, 2023  
Faculty of Communication Arts, Division of Art, Humanities, & Social Sciences

REED, Amy, B.S., Colorado State University, 1983  
Faculty of Dental Assisting, Division of Health Sciences

REYES, Samantha, B.B.A., Texas A & M University, 2019  
General Staff Accountant, Financial Services

RIDDLE, Ken, M.S., Colorado Technical University, 2000

Professor of Computer Science, Division of Business, Technology,  
& Public Service

RIOS-SCELSO, Tassandra, M.A., SIT Graduate Institute, 2018  
Digital Communication Specialist, Marketing & Communications

RITTER, Crystal, A.A., Pikes Peak State College, 2007  
Administrative Assistant III, Division of Science, Engineering, &  
Math

RIX, Sheryl, Ph.D., University of California, 2009  
Faculty of Communications, Division of Arts, Humanities, & Social  
Sciences

ROBAK, Dana  
Administrative Assistant III, Division of Business, Technology, &  
Public Service

ROBERTS, Benjamin, B.A.S., Pikes Peak State College, 2022  
EMS Faculty, Division of Health Sciences

ROBERTS, Calvin  
Faculty of Machining, Division of Technical & Professional  
Studies

ROBERTS, Gary  
Materials Handler II, Bookstore

ROBINSON, Athena, B.S., University of Colorado, 2016  
Science Lab Manager, Division of Science, Engineering, & Math

ROBINSON, Constance, B.S., Regis University, 2004  
Program Assistant I, Instructional Support

ROBINSON, Trenten, M.A., Colorado State University, 2019  
Faculty Pay & Training Coordinator, Instructional Services

ROGERS, James  
Custodian II, Facilities

ROHLFING, Glenn, M.A., University of Colorado, 2005  
Associate Professor of History, Division of Arts, Humanities, &  
Social Sciences

ROLLINS, Susan, M.A.T., The Colorado College, 2011  
Faculty of Mathematics, Division of Science, Engineering, & Math

ROMERO-RODRIGUEZ, Charleigh, B.A., University of Denver,  
2024  
Enrollment Services Specialist, Admissions, Recruitment, &  
Enrollment Services

ROMO, Enrique, Ph.D., University of Texas, 2012  
Vice President for Student Experience, Diversity, and Equity

RONK, Janel  
Police Officer I, Campus Police

ROSCOE, Maija  
Police Officer II, Campus Police

ROSENBERG, Lisa, B.A., York College, 1988  
Instructional Liaison, Transfer Partnerships, Advising & Testing

ROSKOP, Nathan, M.S., Worcester Polytechnic Institute, 2002  
Faculty of Cyber Security, Division of Business, Technology, &  
Public Service

ROTH, Douglas, M.S., University of Texas, 1996  
Associate Professor of Mathematics, Division of Science,  
Engineering, & Math

ROUTH, Lisa, Ph.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 Science, Engineering, & Math

RUIZ, Michael, B.S., Colorado School of Mines, 2021  
Application Developer, Information Technology Support Services

RUIZ, Kandy, B.S., B.A., Colorado State University, 2013  
Program Director of Single Stop Services, Single Stop/Student  
Experience

RYAN, Lily, AA., Arapahoe Community College, 2016  
Accounts Payable Specialist, Financial Services

SALDANA, Cecilia, B.Eng., Technological Institute of Juarez City,  
1994  
Testing Coordinator, Advising & Testing

SANCHEZ, Yanin, M.B.A., New Mexico State University, 2023  
Financial Aid Advisor, Financial Aid

SANDEE, Ryan, M.S., University of Colorado, 2018  
Assistant Professor of Mathematics, Division of Science,  
Engineering, & Math

SANDMORE, Christianne, A.A., Pikes Peak State College, 2008  
Administrative Assistant II, Division of Technical & Professional  
Studies

SANDOVAL, Virginia  
Administrative Assistant III, Facilities & Operations

SATTERFIELD, Laci  
Student Conduct Management Specialist, Dean of Students

SAUER, April  
Administrative Assistant III, Admissions, Records

SCHAFER, Clint, M.S., Colorado Technical University, 1996  
Faculty of Computer Information Systems, Division of Business,  
Technology, & Public Service

SCHANTZ WILCOX, Andrea, Ph.D., University of Colorado, 1993  
Faculty of Biology, Division of Science, Engineering, & Math

SCHILLING, L. Elisabeth, Ph.D., Claremont Graduate University,  
2014  
Associate Professor of English, Division of Arts, Humanities, &  
Social Sciences

SCHLAUFMAN, Scott, M.Acc., Metropolitan State University, 2018  
Assistant Controller, Financial Services

SCHMIDT, Nick  
Administrative Assistant III, Division of Business, Technology, &  
Public Service

SCHNACKEL, Ryan, B.A., Fort Lewis College, 2006  
Copy and Print Operations Manager, Publications & Printing

SCHNEIDER, Christine, A.A.S., Pikes Peak State College, 1994  
Program Assistant I, Instructional Support

SCHOCH, Brandon  
Police Officer I, Campus Police

SCHROTH, Ian  
Faculty of Automotive Service Technology, Division of Technical & Professional Studies

SCHOOLCRAFT, Deidre, M.A., University of Northern Colorado, 1992  
Executive Dean of Arts, Humanities, & Social Sciences, Division of Arts, Humanities, & Social Sciences

SCOBEE, Roland  
Director of Facilities & Operations, Facilities & Operations

SELIGOVA, Ivana, M.S., Slovak Republic, 2004  
Assistant Professor of Mathematics, Division of Science, Engineering, & Math

SELLS, Norma Jean, B.S., Colorado State University, 1997  
Default/Debt Management Advisor, Financial Aid

SERNA, Melissa, A.A.S., Everest College, 2002  
Faculty of Medical Assistant Professional, Division of Health Sciences

SERVOSS, Tanner, B.S., Northland College, 2013  
Financial Aid Advisor, Financial Aid

SHARP, Amie, M.F.A., Seattle Pacific University, 2008  
Associate Professor of English, Division of Arts, Humanities, & Social Sciences

SHAVER, Sarah, M.F.A., Texas Tech University, 2006  
Faculty of Theatre, Division of Arts, Humanities, & Social Sciences

SHEARN, Jenna, M.A.T., The Colorado College, 2008  
Professor of Multimedia Graphic Design, Division of Technical & Professional Studies

SIMRAK, Michael, M.A. Purdue University, 2018  
Faculty of Political Science, Division of Art, Humanities, & Social Sciences

SINES, Christine, A.A.S., Pikes Peak State College, 2021  
Faculty of Emergency Medical Services, Division of Health Sciences

SINGH, Angelina, M.Com., Figi International University, 2021  
Assistant to the Vice President of Strategic Partnerships, High School Programs

SMART, Lance  
Structural Trades II, Facilities & Operations

SMITH, Aaron  
Custodian I, Facilities

SMITH, Charlene, A.A.S., Pikes Peak State College, 2014  
Faculty of Medical Office Technology, Division of Health Sciences

SMITH, Jeffrey  
Electrical Trades II, Facilities & Operations

SNOW, Cary, Ph.D., Indiana Wesleyan University, 2024  
Director of Culinary Arts & Hospitality Studies, Division of Business, Technology, & Public Service

SNYDER, Stephanie, B.A., Western State University, 2009  
Registrar, Director of Records

SOLOMON, Mandy, M.A., Eastern Illinois University, 2003  
Assistant Professor of English, Division of Arts, Humanities, & Social Sciences

SPURGEON, Jennifer, B.I.S., Remington College, 2004  
Senior Accountant, Financial Services

STARKIE, Jessica, B.S., Colorado State University, 2011  
Disability Specialist, Accessibility Services

STEPHENS, Lawton, M.S.W., University of Georgia, 2018  
Coordinator of Accommodative Testing, Accessibility Services

STEPHENSON, Eric, M.A., University of Colorado, 1996  
Associate Professor of English, Division of Arts, Humanities, & Social Sciences

STOCKMOE, Sydney, M.S.Ed., Baylor University, 2019  
Digital Communication Specialist, Marketing & Communications

STRAND, Peter, B.A., University of Colorado, 1991  
Professor of Multimedia Graphic Design, Division of Technical & Professional Studies

STRATTON, Pamela, A.A.S., Pueblo Community College, 1994  
Administrative Assistant III, Instructional Support

STREBEL, Chera  
Accounting Technician III, Financial Services

STUBER, Jeffrey, B.A., National Labor College, 2010  
Professor of Industrial Mechatronic Maintenance, Division of Technical & Professional Studies

STUEVER-WILLIFORD, Marley, M.A., Bowling Green State University, 2021  
Program Scholar Advisor, Academic Resources

STURDEVANT, Katherine, M.A., San Francisco State University, 1981  
Professor of History, Division of Arts, Humanities, & Social Sciences

SUE, Nadia  
Administrative Assistant II, Division of Science, Engineering, & Math

SULLIVAN, Devon, B.S. Montana State University, 2005  
Faculty of Industrial Systems Technology, Division of Technical & Professional Studies

SUSTARSIC HARVEY, March, M.A., Ohio University, 2001  
Professor of Spanish, Division of Arts, Humanities, & Social Sciences

SWARTWOOD, Ronald, M.S., Regis University, 2007  
Director of Financial Aid, Financial Aid

SWARTZ, Jennifer, Ph.D., University of Virginia, 2008  
Faculty of Biology, Division of Science, Engineering, & Math

SZARKE, Dawn  
Regular Faculty, Division of Health Sciences

TAMBLYN, Jeffrey D., A.G.S., Pikes Peak State College, 1995  
Purchasing Agent I, Procurement

TANELORN, Jackal, M.A., Florida International University, 2013  
Program Scholar Advisor, Academic Resources

TAPIA, Milena, B.S., University of Colorado, 2021  
Health Sciences Simulation Coordinator, Division of Health Sciences

TAYLOR, Laurie  
Administrative Assistant III, Division of Arts, Humanities, & Social Sciences

TAYLOR, Ritika, M.S.N., Liberty University, 2014  
Faculty of Nursing Assistant, Division of Health Sciences

TECLE, Habtom  
Administrative Assistant III, Facilities & Operations

TEKUBIE, Jodi  
Technician IV, Admissions, Recruitment, & Enrollment Services

THANGAVELU, Chander, M.S., University of Colorado, 2021  
Faculty of Computer Science, Division of Business, Technology, & Public Service

THEARD, Cynthia, A.G.S., Pikes Peak State College, 2005  
Student Services Specialist II, Financial Aid

THEE, Nicole, B.S., Northern Arizona University, 2019  
Financial Aid Advisor, Financial Aid

THOMAS, Anthony, A.S., American Public University, 2021  
Information Technology Lab Coordinator, Division of Business, Technology, & Public Service

THOMAS, Heather, B.S.B., University of Colorado, 2006  
HRS Data & Systems Manager, Human Resource Services

THORNE, Gina, M.A., University of Wyoming, 1998  
Professor of Sociology, Division of Arts, Humanities, & Social Sciences

THORNSBY, Janna, M.A., University of Colorado, 1988  
Testing Support Specialist, Advising & Testing

THRELFALL, Albert L., M.S., University of Alabama, 1991  
Professor of Biology, Division of Science, Engineering, & Math

TIMCO, Lance, M.F.A., University of Dallas, 1991  
Faculty of Art, Division of Arts, Humanities, & Social Sciences

TJADEN, Jessica  
Assistant to the Associate Vice President, Academic Resources Division

TOLLIVER, Gary  
Pipe/Mechanical Trades II, Facilities & Operations

TOMRDLE, Jacqueline, M.Ed., University of Massachusetts, 2020  
eLearning Coordinator/Senior Learning Designer, eLearning

TONER, Debra  
MVP Technician III, Military Veterans Program

TOOLEY, Hannah, M.A., Western Illinois University, 2021  
Course Designer, LMS Admin

TRAPP, Callen, M.A., University of Idaho, 2022  
Program Advisor, Advising & Testing

TRUJILLO, Esther  
Administrative Assistant III, Records

TRUJILLO, Kristina, M.B.A., Colorado Mesa University, 2018  
Assistant Director of Communication Technology, Marketing & Communications

TRUJILLO-FERGUS, Antoinette, B.S.B., University of Phoenix, 2019  
Faculty of Surgical Technology, Division of Health Sciences

TUMA, Betsy, M.F.A., Radford University, 2019  
Faculty of Multimedia Graphic Design, Division of Technical & Professional Studies

TUNSON, Sharon, M.A., University of Phoenix, 1998  
Assistant Dean of High School Programs & Concurrent Enrollment, High School Programs

TURECHEK, Patrick  
I.T./A.V. Technician, Information Technology Support Services

TYRRELL, Rachel, B.S., Greenville University, 2020  
Content Coordinator, Marketing & Communications

VANLANDINGHAM, Alicia, B.A., University of Colorado, 2006  
Behavioral Health Workforce Manager, Division of Arts, Humanities, & Social Sciences

VELAZQUEZ, Laura, A.A.S., Pueblo Community College, 2018  
Faculty of Surgical Technology, Division of Health Sciences

VIGIL, Gary  
Grounds & Nursery III, Facilities & Operations

VILLARREAL, Erika  
Faculty of Nursing, Division of Health Sciences

WADMAN, Nate, B.S., Colorado State University, 1996  
Faculty of Computer Networking & Cyber Security, Division of Business, Technology, & Public Service

WAIT, Pamela Jean, B.S.N., University of Colorado, 2004  
Faculty of Nursing Assistant, Division of Health Sciences

WALKER, Gary, M.F.A., Spalding University, 2009  
Associate VP of Instructional Services & CPL, Instructional Services

WALKER, Jo, B.S., Texas A & M University, 1986  
Director of Capital Projects, Facilities & Operations

WALLACE, Krista, M.A., University of Colorado, 2021  
Coordinator of Promise Scholars Programs, Academic Resources

WALLEN-SENA, Gwendolyn, M.A., University of Colorado, 2014  
Assistant Professor of Anthropology, Division of Arts, Humanities, & Social Sciences

WARD, Alexander, B.A., University of Colorado, 2019  
Assistant Director, Advising & Testing

WARD, JR., James, Ph.D., Texas Tech University, 2023  
Regular Faculty, Division of Science, Engineering, & Math

WARD, Teresa, M.B.A., Colorado Technical University, 2011  
Director of Emergency Services Administration, Division of  
Business, Technology, & Public Service

WATERMAN, John, B.S., Regis University, 2019  
Procurement & Contract Agent, Procurement

WEBBER, Nile  
Police Officer I, Campus Police

WHEELER, Brian, B.S., Colorado State University, 2004  
Faculty of Radio & Television, Division of Technical &  
Professional Studies

WHEELER, Katie, M.A., University of Colorado, 2009  
Professor of Communication, Division of Arts, Humanities, &  
Social Sciences

WHITE, Danielle  
Administrative Assistant III, Division of Business, Technology, &  
Public Services

WHITE, Hunter, M.A., University of Illinois, 2022  
Instructional Liaison, Advising & Testing

WHITE, Matthew  
General Labor I, Facilities & Operations

WHITTEN, Kimberly, M.Ed., Colorado State University, 2015  
Director of Simulation Operations, Division of Health Sciences

WIDMAR, Robin, A.A.S., Pikes Peak State College, 2011  
Emergency Services & Clery Compliance Coordinator, Campus  
Police

WILLIS, Robert, A.A.S., Denver Technical College, 2001  
Cloud and Client Services Manager, Information Technology  
Support Services

WILSON, Corrina  
Accounts Receivable Specialist, Financial Services

WITT-AGNEW, Sheila  
Program Assistant I, eLearning

WOLF, Alyssa  
Procurement Agent, Purchasing

WOLFORD, Tulio  
Faculty of Computer Information Systems, Division of Business,  
Technology, & Public Service

WRIGHT-GILES, Karla, D.M., Colorado Technical University, 2014  
Associate Professor of Business, Division of Business,  
Technology, & Public Service

WULF, Lincoln, M.S., Friends University, 2011  
Associate Vice President for Academic Resources

WYNN, Andrew  
Structural Trades I, Facilities & Operations

YANKOWSKI, Sarah  
Faculty of RN-BSN, Division of Health Sciences

YOUSEF, Rushdi, Ph.D., Martin Luther University, 2004  
Professor of Chemistry, Division of Science, Engineering, & Math

ZALLAR, Valerie  
Faculty of Mathematics, Division of Science, Engineering, & Math

ZEIKUS, Madeline, M.A., Academy of Art University, 2020  
Faculty of Art, Division of Arts, Humanities, & Social Sciences

ZIMBLEMAN, Dana, M.A., Auburn University, 1991  
Professor of English, Division of Arts, Humanities, & Social  
Sciences

ZYONSE, Laura  
Faculty of Early Childhood Education, Division of Business,  
Technology, & Public Service



# CAMPUS DIRECTORY

	Centennial Campus	Downtown Campus	Rampart Range Campus
	Room • Phone:	Room • Phone:	Room • Phone:
Administrative Services, Vice President	A-324 • 502-2427		S-202 • 502-2200
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	
Arts, Humanities, and Social Sciences Division			
Articulation, High School	A-220 • 502-3111		
Accessibility Services	A-130 • 502-3333	S-129 • 502-3333	S-201 • 502-3333
Aspen Market Cafe	A-211 • 502-4555		
Bookstore	C-102 • 502-2665	S-104 • 502-2663	N-101 • 502-2664
Business, Technology, and Public Service Division	F-300 • 502-3300		
Campus Activities	A-210 • 502-2500	N-106 • 502-2091	S-207 • 502-2091
Campus Center Meeting Rooms	A-210 • 502-2089		
Campus Police	A-100 • 502-2900	S-101 • 502-2900	N-106 • 502-2900
Canvas Community Food Pantry			N-204 • 502-4213
Career Services	A-316 • 502-2360		
Career Start	A-220 • 502-3111		
Cashier	A-101 • 502-2086	S-100 • 502-2086	S-102c • 502-2444
Computer Access Center (Accessibility Services)	A-130 • 502-3030	S-126	
Concurrent Enrollment	A-220 • 502-3111		
Copy Center	C-101 • 502-2111		
Counseling Center	A-141 • 502-4782	S-126 • 502-4689	N-107c • 502-4782
Credit for Prior Learning	A-106 • 502-2302		
Dean of Students	A-106 • 502-2367		
Degree Start	A-220 • 502-3111		
Educational Opportunity Center TRIO	A-110 • 502-3028		
eLearning	A-229 • 502-3555		
English as a Second Language	F-200 • 502-3535		
eXtra Music 102.1 FM	A-153 • 502-3166		
Facilities & Operations	B-229 • 502-2800	N-103 • 502-2800	N-109 • 502-2800
Financial Aid	A-110 • 502-3000	S-100 • 502-3000	
Financial Services	A-101 • 502-2300		
First Aid/Medical Assistance	A-100 • 502-2911	S-101 • 502-2911	N-106 • 502-2900
Fitness Center/Gymnasium	A-262 • 502-2555		
Food Services	A-211 • 502-2038		W-103 • 502-2042
Foundation	A-324 • 502-2244		
Health Sciences Division	F300 • 502-3400		W-209 • 502-3400
High School Programs	A-220 • 502-3111		

High School Articulation	A-220 • 502-3111		
Human Resource Services	B-200 • 502-2600		
Information Technology Support Services (ITSS) Computer Labs Service Desk	B-201 • 502-4800 A-300 • 502-2442 A-111 • 502-4800	N-105 • 502-4800 N-106 • 502-2443 502-4800	E-204 • 502-4800
Instructional Services, Vice President	A-324 • 502-3078		
Interpreting Services (Sign Language)	A-115 • 502-3026		
Law Enforcement Academy	F-300 • 502-3132		
Learning Commons -Tutoring	A-200 • 502-3444	N-204 • 502-2318	N-200 • 502-3190
Library	A-201 • 502-2400		N-201 • 502-2440
Marketing & Communication	A-324 • 502-2082		
Military & Veterans Programs	C-222 • 502-4100 502-4200 / 502-4300		
Ombuds	B-200 • 502-2006		
Pivot Program	A-220 • 502-3111		
PPSC -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	
Recreation & Wellness	A-262 • 502-2555		
Recruitment	A-106 • 502-2018	S-122b • 502-2088	S-102 • 502-2000
Scholarships	A-324 • 502-2039		
Science, Engineering, and Math Division	F-300 • 502-3600		W-209 • 502-3600
Student Government	A-204 • 502-2104	N-106 • 502-2103	S-207 • 502-2098
Student Services, Vice President	A-324 • 502-3527		
Student Services	A-107 • 502-3000	S-100 • 502-3000	S-102 • 502-3000
Technical and Professional Studies Division	F-300 • 502-3200	S-210 • 502-3200	
Transfer from PPSC		S-218 • 502-3237 S-122 • 502-3002	
TRIO Student Support Services	A-130 • 502-3222		
Veterans Upward Bound	C-220 • 502-4545		
Workforce Development	A-223 • 502-2404		

# INDEX

## A

AAS Requirements	94
About this Catalog	3
Academic Calendar	8
Academic Concerns	21
Academic Honesty	34
Academic Progress	21
Academic Renewal	20
Academic Standards	16
Accessibility Services	40
Accommodations for Student Pregnancy or Related Conditions	36
Accounting AAS	96
Accounting Courses	192
Active Duty and Family Members/Guard and Reserve	47
Activities and Events	46
Admissions Information	11
Admissions Procedure	11
Advanced Paramedic Practitioner, BAS	174
Advising and Testing	41
Agriculture Crops and Soils Course	193
Alcohol and Drug Policies	34
All About PPSC	5
Allied Health AAS	97
Allied Health AS	84
American Opportunity Tax Credit	14
American Sign Language Courses	193
Annual Security Report	39
Anthropology AA	59
Anthropology Courses	194
Application for Certificate or Degree	22
Approved Elective Course List for AA Degrees and Course of Study	54
Approved Elective Course List for AS Degrees	84
Arabic Courses	195
Architectural Engineer / Construction Management AAS	98
Architectural Engineer/Construction Management Courses	195
Art - Art History AA	60
Art - Studio Art AA	60
Art Courses	196
Articulation Agreements	52
Assessment of Student Learning	22
Associate of Applied Science Degrees (AAS) and Certificates	94
Associate of Applied Sciences Degree Programs and Certificates	96
Associate of Arts Degrees (AA)	53
Associate of Arts Degrees and Courses of Study	59
Associate of Engineering Science Degree	173
Associate of General Studies Degree (AGS)	93
Associate of Science Courses of Study	83
Associate of Science Degree (AS)	84
Astronomy Courses	199
Automotive Collision Technology AAS	100
Automotive Collision Technology Courses	199
Automotive Service Technology Courses	201
Automotive Technology AAS	102

## B

Bachelor of Applied Science Course of Study	174
Bachelor of Science in Nursing Course Completion Program	177
Behavioral Health AAS	105
Behavioral Health BAS	174
Behavioral Health Courses	203
Behavioral Intervention Team (BIT)	38
Biology AS	85
Biology Courses	204

Books	14
Broadcasting and Electronic Media AAS	107
Building and Construction Technology AAS	109
Business & Technology Education Courses	206
Business AA	61
Business Administration AAS	112
Business Courses	205

## C

Campus Directory	322
Campus Map	2
Campus Police Department	38, 41
Career and Technical Education Programs	6
Career Services	41
Career Start	52
Carpentry Courses	207
Certificate Requirements	94
Change of Major/Program	16
Chemistry AS	86
Chemistry Courses	208
Child Care	41
Chinese Courses	209
Civil Rights and Sexual Misconduct Resolution Process	31
Class Format Options	50
Classroom Attendance Procedure	34
CO Online (Sections CZ1, CZ2, CZ4, CZ5)	51
CO Online @ PPSC (Sections 1N1, 2N1, 3N1, etc.)	51
Code of Student Behavioral Expectations and Responsibilities (Code)	24
College Administrative Staff	307
College Composition and Reading Course	209
College Opportunity Fund (COF)	13
College Preparatory Programs	50
Colorado ASSET Bill	13
Colorado Community College System	307
Communication AA	62
Communication Courses	209
Comprehensive Higher Education Certificate	178
Computer & Networking Technology Courses	210
Computer Aided Drafting and Design - Mechanical AAS	114
Computer Aided Drafting Courses	211
Computer Information Systems AAS	120
Computer Information Systems Courses	214
Computer Labs	41
Computer Networking Technology AAS	121
Computer Science AS	86
Computer Science Courses	216
Computer Web-Based Courses	217
Concurrent Enrollment	52
Conduct in College Buildings	34
Construction Technology Courses	217
Copy Center	42
Counseling Courses	220
Course Descriptions	179
Course Numbering System	179
Courses in this Catalog	179
Credit by Examination	16
Credits in Residence	22
Criminal Justice AA	63
Criminal Justice AAS	122
Criminal Justice Courses	222
Culinary Arts AAS	124
Culinary Arts Courses	223
Cybersecurity AAS	129
Cybersecurity BAS	175

**D**

Dance AA .....	64
Dance Courses .....	226
Data Science Courses.....	228
Degree & Program Requirements .....	53
Degree and Certificate Criteria.....	49
Degree Eligibility.....	50
Degree Start .....	52
Dental Assisting AAS .....	130
Dental Assisting Courses .....	228
Dental Hygiene .....	131
Dental Hygiene Courses .....	229
Developmental Courses.....	179
Diesel Power Mechanics Courses .....	231
Diesel Technology AAS.....	133
Dietetics AS .....	87
Driving Courses .....	234

**E**

Early Childhood Education AAS .....	159
Early Childhood Education Courses .....	234
Early Childhood Education Teacher Preparation AA.....	65
Earned Income Tax Credit/Child Tax Credit.....	15
Economics AA .....	65
Economics Courses.....	236
Education Courses .....	236
Educational Opportunity Center TRIO .....	43
Educational Programs.....	49
Electricity Industrial Commercial Courses .....	237
Electronics Courses .....	237
Elementary Education [Teacher] Preparation AA .....	66
Emergency Management and Planning Courses .....	239
Emergency Medical Services AAS .....	137
Emergency Medical Services Courses .....	240
Emergency Notification System.....	39
Emergency Service Administration BAS.....	176
Emergency Service Administration Courses.....	244
Employment Opportunities .....	15
Engineering Courses.....	245
Engineering Graphics Technology Courses.....	246
English AA .....	67
English as a Second Language Courses .....	248
English as a Second Language Preparatory Program .....	50
English Courses.....	246
English Preparatory Program.....	01
Entrepreneurship Course.....	248
Environmental Science AS.....	87
Environmental Science Courses .....	248
Environmental Sustainability Studies AA.....	68
Ethnic Studies Course.....	248
eXtra Music 102.1 FM .....	46

**F**

Faculty & Staff.....	308
Faculty and Instructor Resource Guide.....	5
Finance Courses .....	249
Financial Aid .....	14
Fire Science Technology AAS.....	139
Fire Science Technology Courses.....	249
Fire Science Wildland AAS .....	140
Fire Science Wildland Courses .....	251
Firearms on Campus.....	36
Foundation Scholarships .....	15
French AA .....	69
French Courses .....	251

**G**

General Education Electives for AAS Degrees & Certificates .	94
Geography AA .....	70
Geography Courses .....	251
Geology AS .....	89
Geology Courses.....	252
German Courses.....	252
Getting Started .....	11
Grade Changes .....	20
Grading Options.....	19
Grading System .....	17
Graduation Ceremony .....	22
Graduation Honors .....	22
Grants .....	15

**H**

Health and Wellness Courses.....	253
Health Professional Courses.....	253
Health, Wellness and Fitness AAS.....	141
Heating, Air Conditioning and Refrigeration Technology AAS142	
Heating, Air Conditioning and Refrigeration Technology	
Courses .....	254
High School Student Records .....	52
History AA.....	70
History Courses.....	256
History of the College .....	5
Hospitality and Resort Management AAS .....	144
Hospitality Courses.....	258
How to Calculate Your GPA .....	20
Humanities AA .....	71
Humanities Courses .....	259
Hybrid Classes (Sections 1H1, 2H1, 3H1, etc.).....	51
Hyflex Classes.....	51

**I**

Independent Study .....	179
Independent Study Courses.....	51
Industrial Mechatronics Maintenance Courses .....	259
Industrial Mechatronics Maintenance Technology AAS .....	144
Information Technology Support Services .....	42
Integrative Health Professions Courses .....	260
Interior Design AAS.....	146
Interior Design Courses.....	260
International Transcript Evaluations .....	16
Interpreter Prep Program Courses.....	262
Italian Courses.....	263

**J**

Japanese Courses .....	264
Journalism AA .....	23
Journalism Courses .....	264

**L**

Law Enforcement Academy Certificate .....	146
Law Enforcement Courses .....	265
Learning Commons .....	42
Literature Courses.....	265
Loans.....	15
Locations and Facilities.....	6

**M**

Machining Courses.....	266
Machining Technology AAS .....	147
Management Courses .....	268
Manufacturing Technology Courses .....	269
Marketing Courses .....	269
Master Course Crosswalk .....	180
Math Courses .....	270

Mathematics AS.....	89
Mathematics Preparatory Program.....	50
Maximum Course Load .....	16
Mechanical Engineering AES .....	173
Medical Assistant AAS .....	150
Medical Assistant Professional Courses .....	272
Medical Office Technology Certificates .....	151
Medical Office Technology Courses .....	272
Medical Professional Track AS.....	90
Mental Health Counseling.....	42
Meteorology Course.....	273
Military and Veteran Affiliated Students.....	47
Military, Veterans, and Family Members .....	47
Mission Statement .....	5
Multimedia Graphic Design AAS .....	153
Multimedia Graphic Design Courses .....	273
Multipurpose Areas .....	44
Music AA.....	73
Music Courses .....	276

**N**

Natural Resources Courses .....	279
Nursing AAS .....	156
Nursing Assistant Courses .....	283
Nursing Courses .....	200

**O**

Occupational Safety Technician Courses .....	283
Off Campus Courses.....	179
Office of Sustainability.....	44
Officers of the College .....	307
Ombuds.....	42
Online Classes .....	51
Options for Current High School Students .....	52
Other Programs and Courses of Study .....	178

**P**

Paralegal Courses.....	283
Paralegal/Legal Assistant AAS.....	158
Para-Professional Education .....	178
Park Ranger Course.....	285
Parking and Traffic Regulations.....	37
Pharmacy Technician AAS.....	159
Pharmacy Technician Courses.....	286
Philosophy AA.....	74
Philosophy Courses .....	286
Phlebotomy Certificate .....	161
Physical Education Courses .....	287
Physical Therapist Assistant AAS.....	161
Physical Therapy Assistant Courses .....	288
Physics AS .....	91
Physics Courses .....	290
Pikes Peak State College .....	1
Pikes Peak State College Advisory Council .....	307
Pivot.....	52
Planning for a Bachelor's Degree/Transfer Programs .....	6
Plumbing Courses.....	290
Political Science AA .....	74
Political Science Courses .....	290
PPSC All Student Handbook.....	6
PPSC Clubs and Organizations .....	45
PPSC-TV.....	46
Prerequisite Courses .....	20
Prior Learning Assessment (PLA).....	51
Professional Photography AAS .....	162
Professional Photography Courses.....	291
Professional Writing & Communication AA.....	75
Programs .....	15
Psychiatric Technician Courses .....	292
Psychology AA .....	76

Psychology AS.....	92
Psychology Courses .....	292
Public Health AA.....	77
Public Security Management Courses .....	294

**R**

Radio and Television Courses .....	295
Radiologic Technology AAS.....	163
Radiologic Technology Courses.....	296
Records & Registrar .....	42
Recreation and Wellness.....	45
Registering for Classes .....	12
Remote Classes .....	51
Repeated Courses.....	20
Required Disclosures.....	5
Research Activities.....	23
Residency Classification Appeals.....	14
Restricted Attendance .....	34
RN-BSN .....	177
Robotics and Automation Systems Technology AAS .....	164
Russian Courses .....	297

**S**

Science Courses.....	297
Secondary Education Teacher Preparation AA, AS.....	178
Selected Topics .....	179
Service Learning .....	51
Services for Students.....	40
Services for the Community .....	46
Sex Offender Information .....	39
Sign Language Interpreter Preparation AAS .....	167
Smoking on College Grounds .....	35
Social Work Courses .....	298
Social Work Transfer AA.....	78
Sociology AA .....	79
Sociology Courses .....	298
Spanish AA .....	80
Spanish Courses .....	290
State Board for Community Colleges & Occupational Education .....	307
State-Guaranteed Curriculum .....	179
Sterile Processing Technology Courses .....	300
Student Activity & Programs .....	44
Student Activity Fees .....	14
Student Complaint Procedure .....	29
Student Conduct .....	24
Student Disciplinary Procedure .....	26
Student Experience & Leadership.....	44
Student Government Association.....	45
Student ID Cards.....	44
Student Type .....	11
Surgical Technology AAS.....	168
Surgical Technology Courses.....	300
Sustainability Studies Courses.....	301

**T**

Term Academic Honors.....	22
Testing Centers .....	41
The Studio West Art Gallery .....	46
Theatre AA .....	81
Theatre Courses .....	301
Title IX Protections Against Harassment.....	36
Traditional Classes.....	50
Transcript Requests.....	17
Transfer Events .....	43
Transfer to PPSC .....	16
Translation and Interpretation Courses .....	302
TRIO-Student Support Services .....	43
Tuition.....	13
Tuition Adjustment.....	14

Tuition and Fees.....13  
Tuition and Fees (2024-2025)\* .....13  
Tutoring Services.....43

**U**  
Use of College Facilities ..... 7

**V**  
Values ..... 5  
Veterans /GI Bill® Benefit Users.....48  
Veterans Upward Bound .....48  
Veterinary Assistant Certificate ..... 169  
Veterinary Technology Courses ..... 302  
Vision Statement..... 5  
Visit Us ..... 7

**W**  
Welding AAS ..... 169  
Welding Courses ..... 303  
Western Undergraduate Exchange (WUE) Program .....13  
Women and Gender Studies Courses ..... 304  
Work Experience Courses..... 179  
Workforce Development .....46  
World Languages AA .....82

**Z**  
Zoo Keeping Courses ..... 304  
Zoo Keeping Technology AAS ..... 171



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