



2026-2027

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 Enrollment Services 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

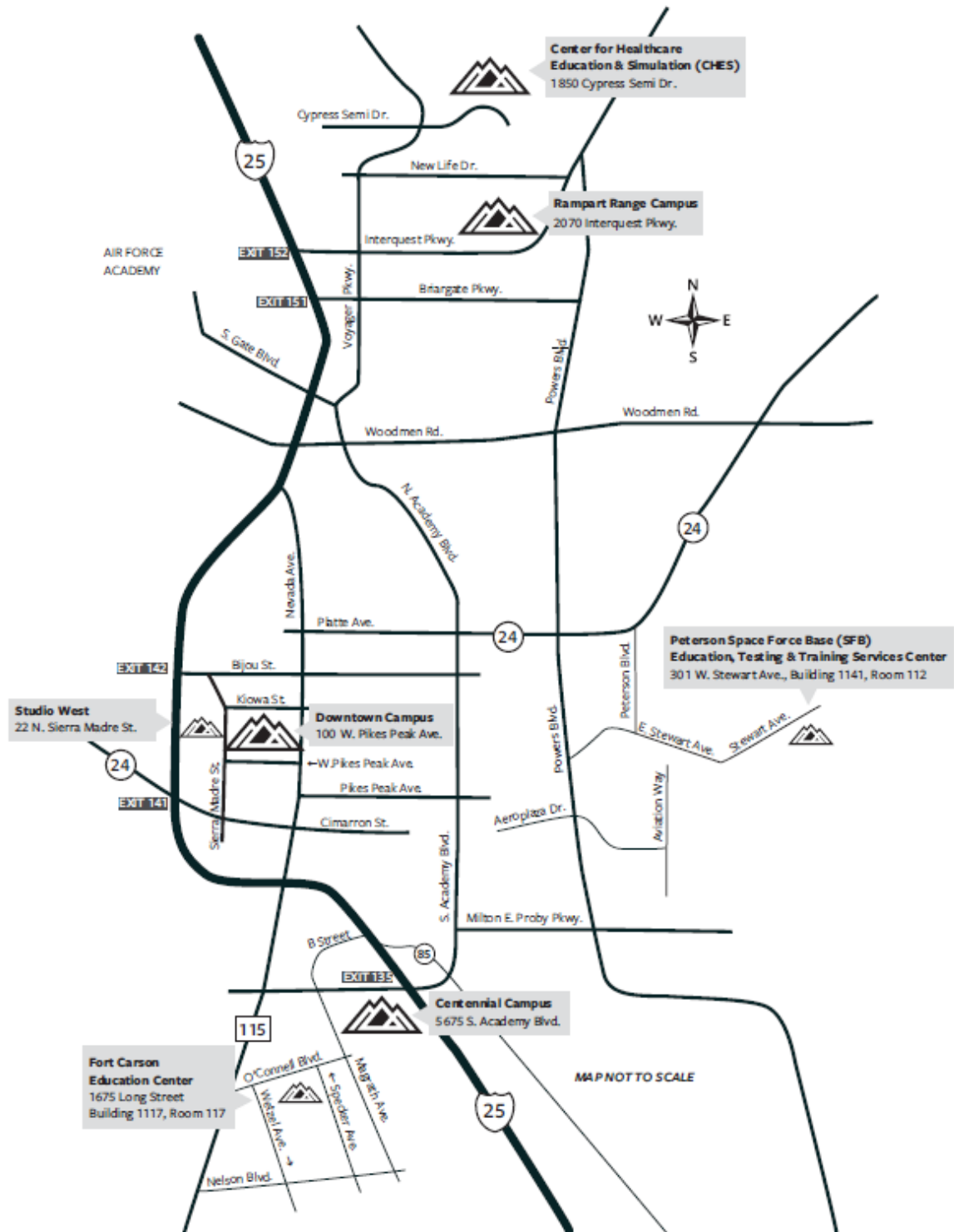
Peterson Space Force Base (SFB)

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

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 at Enrollment Services at all campuses and on the PPSC website. This catalog takes effect at the beginning of each academic year's summer registration.

Nondiscrimination Statement



The Colorado Community College System (CCCS) and Pikes Peak State College are committed to assuring equal employment opportunity and access to services, programs, and activities. In all aspects of the application and employment process, decisions shall be made based on merit, competence, performance, and business need without regard to race, color, religion, sex, disability, age, sexual orientation, gender identity or expression, pregnancy, creed, ancestry, national origin, marital status, genetic information, or military status, or any other protected status, in accordance with applicable law. All personnel responsible for employment decisions and the development and implementation of programs or activities are expected to support this commitment and give their cooperation to assure their individual conduct is in alignment with the CCCS commitment to equal opportunity.

The College has designated Kim Hennessy, Vice President for Human Resource Services, as Title IX Compliance/Equal Opportunity Officer with the responsibility to coordinate its civil rights compliance activities and grievance procedures under Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, and Title II of the Americans with Disabilities Act. For information, contact Kim Hennessy, Vice President for Human Resource Services, at 5675 South Academy Blvd, Colorado Springs, CO 80906 or at (719) 502.2600.

You may also contact the Office for Civil Rights, U.S. Department of Education, Region VIII, Federal Office Building, 1244 North Speer Boulevard, Suite 310, Denver, CO 80204, telephone (303) 844-3417.

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ALL ABOUT PPSC

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History of the College

In the late 1960s, Colorado Springs was on the move. The post-World War II American Dream was spreading, thanks to a G.I. Bill®* that funded higher education more than ever before. Baby boomers were becoming college-ready. Community colleges, which mixed academic and technical pathways, were the best investments cities could make.

Even though Colorado Springs was already home to the U.S. Air Force Academy, Colorado College, and the University of Colorado at Colorado Springs, a community college seemed a way to ensure that the boom would not go bust.

By 1968, El Paso County Community College (EPCC) opened, quickly dropping the cumbersome "county" from its name.

President Robert O. Hatton and three other staffers began the foundational work. To call the college's beginnings humble would be an understatement. The original nickname was "Safeway U"—because one of its buildings was a former Safeway store at Robinson Street and 25th. That campus grew quickly to eight buildings. EPCC also "repurposed" other buildings around town for various functions. The dedication of the Administrative offices, at 5 W. Las Vegas St., took place Nov. 20, 1968.

In the mid-70s, EPCC began to move away from a scattering of buildings toward one large central campus. EPCC negotiated for Ft. Carson surplus land (that the college had been leasing), and Congress approved. The Department of Defense sold the land to EPCC for \$1 to support access for military students and their families.

The new campus, dedicated on Aug. 18, 1976, received the name Centennial because of the U.S. Bicentennial and Colorado's Centennial year. A couple of years later, the college got a new name, one that reflected the heights of its ambitions.

Pikes Peak Community College was born on March 21, 1978. As had the city before it, but also not without controversy, the college dropped the possessive apostrophe in Pike's. (The name changed again, to Pikes Peak State College, in 2022, and the College's mission was expanded to include the offering of bachelor's degree programs).

In 1986, PPSC opened the Downtown Studio Campus at 19 N. Tejon (now a People's Bank). Its location in the heart of the city inspired a natural affinity for the arts and humanities. It moved in 1993 to the former St. Mary's High School, first leased and then acquired in 1993.

At the time the college was growing its downtown presence, the northern part of the county was sprouting suburbs filled with potential PPSC students. In 1986, PPSC began to use Rampart High School evenings and weekends as a north campus. In 1998, the college built the Rampart Range Campus, due east of the US Air Force Academy.

Through the following decades, with three major campuses and learning centers in District 49, Fort Carson, Peterson Space Force Base, and more, PPSC continued to grow.

With partners, faculty, staff, and students, PPSC has become the largest, most diverse higher-education institution in Southern Colorado, serving nearly 18,000 students and making a significant impact on the local economy. Recent expansions include the 2021 opening of the Center for Healthcare Education and Simulation (CHES), which provides state-of-the-art training for healthcare students, and the 2024 launch of the Delta Dental of Colorado Oral Health Career Center, further expanding opportunities in the dental field.

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

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 37
- 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 at Enrollment Services or online at 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.

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 provides important information for students, current as of its publication date.

Hierarchy of Policies: If any provision in this Handbook conflicts with State or Federal law, State Board for Community Colleges and Occupational Education Policies (BPs), or Colorado Community College System President's Procedures (SPs), the law, BPs, and SPs take precedence. BPs and SPs may change throughout the year and become effective immediately upon adoption by the Board or System President.

Student Responsibility: Students are expected to be familiar with and follow all BPs, SPs, and College directives, including the contents of this Handbook.

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

Disclaimer: Nothing in this Handbook creates—or should be interpreted as creating—an express or implied contract. The Handbook does not guarantee any specific process, procedure, practice, or benefit. The College reserves the right to modify,

change, delete, or add to the information in this 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). Pikes Peak State College offers several of its own bachelor's degrees, allowing students to earn a bachelor's degree without transferring to another institution.

Students may also choose to complete their associate degree, or the first two years of a four-year bachelor's degree, 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. Many 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 associate 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 associate of general studies (AGS) or associate of applied science (AAS) degrees also have pathways toward obtaining bachelor's degrees. Students should consult with their academic 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 (CTE) 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 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, 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, 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 you to Pikes Peak State College and show you around our campuses! Schedule a Campus Tour: Call: 719-502-2000 Online: pikespeak.edu/visit-campus

Tours are available at all PPSC locations.

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. This webpage provides detailed information about requirements, costs, and how to submit a request.

ACADEMIC CALENDAR

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

Summer 2026 [202710]

Important Dates

March 9	Registration Begins
July 15	Graduation Application Deadline

Holidays/Special Days

May 25	Memorial Day Holiday, Campuses Closed
June 19	Juneteenth, Campuses Closed
July 3-4	Independence Day Holiday, Campuses Closed

Full Semester 10 Week Term [F10]

May 28	Last Day to Register
May 26	Classes Begin
June 3	Non-participation
June 4	Drop Date
July 21	Withdraw Date
August 2	Classes End

1st Bi-semester [BI1]

May 25	Last Day to Register
May 26	Classes Begin
May 31	Non-participation
June 1	Drop Date
June 22	Withdraw Date
June 29	Classes End

2nd Bi-semester [BI2]

June 29	Last Day to Register
June 30	Classes Begin
July 5	Non-participation
July 6	Drop Date
July 27	Withdraw Date
August 2	Classes End

Weekend Start [WKC]

May 31	Last Day to Register
May 29	Classes Begin
June 7	Non-participation
June 8	Drop Date
July 20	Withdraw Date
August 2	Classes End

1st Tri-semester [TR1]

May 25	Last Day to Register
May 26	Classes Begin
May 27	Non-participation
May 28	Drop Date
June 12	Withdraw Date
June 17	Classes End

2nd Tri-semester [TR2]

June 17	Last Day to Register
June 18	Classes Begin
June 21	Non-participation
June 22	Drop Date
July 6	Withdraw Date
July 10	Classes End

3rd Tri-semester [TR3]

July 10	Last Day to Register
July 11	Classes Begin
July 12	Non-participation
July 13	Drop Date
July 28	Withdraw Date
August 2	Classes End

Colorado Online 10 Week Term [CZ2]

May 28	Last Day to Register
May 26	Classes Begin
June 3	Non-participation
June 4	Drop Date
July 21	Withdraw Date
August 2	Classes End

Colorado Online 7 Week Term [CZ4]

June 17	Last Day to Register
June 15	Classes Begin
June 21	Non-participation
June 22	Drop Date
July 23	Withdraw Date
August 2	Classes End

Military Session I [MI1]

June 7	Last Day to Register
June 8	Classes Begin
June 15	Non-participation
June 16	Drop Date
July 27	Withdraw Date
Aug 9	Classes End

Fall 2026 [202720]

Important Dates

March 9	Registration Begins
November 15	Graduation Application Deadline

Holidays/Special Days

September 7	Labor Day Holiday, Campuses Closed
September 8	Campuses Open - No classes
November 25	Campuses Open - No classes
November 26	Thanksgiving Holiday, Campuses Closed
November 27-29	Campuses Open - No classes
Dec 25-Jan 1	Campuses Closed

Full Semester 15 Week Term [F15]

August 19	Last Day to Register
August 17	Classes Begin
September 1	Non-participation
September 2	Drop Date
November 12	Withdraw Date
December 6	Classes End

Full Semester 12 Week Term [F12]

September 8	Last Day to Register
September 9	Classes Begin
September 20	Non-participation
September 21	Drop Date
November 18	Withdraw Date
December 6	Classes End

1st Bi-semester [BI1]

August 16	Last Day to Register
August 17	Classes Begin
August 23	Non-participation
August 24	Drop Date
September 29	Withdraw Date
October 11	Classes End

2nd Bi-semester [BI2]

October 11	Last Day to Register
October 12	Classes Begin
October 18	Non-participation
October 19	Drop Date
November 24	Withdraw Date
December 6	Classes End

Weekend Start [WKC]

August 23	Last Day to Register
August 21	Classes Begin
September 8	Non-participation
September 9	Drop Date
November 16	Withdraw Date
December 6	Classes End

Late Start [LAT]

September 22	Last Day to Register
September 23	Classes Begin
October 4	Non-participation
October 5	Drop Date
November 23	Withdraw Date
December 6	Classes End

1st Tri-semester [TR1]

August 16	Last Day to Register
August 17	Classes Begin
August 20	Non-participation
August 21	Drop Date
September 14	Withdraw Date
September 22	Classes End

2nd Tri-semester [TR2]

September 22	Last Day to Register
September 23	Classes Begin
September 27	Non-participation
September 28	Drop Date
October 20	Withdraw Date
October 27	Classes End

3rd Tri-semester [TR3]

October 27	Last Day to Register
October 28	Classes Begin
November 1	Non-participation
November 2	Drop Date
November 30	Withdraw Date
December 6	Classes End

CO Online 15 Week [CZ1]

August 19	Last Day to Register
August 17	Classes Begin
September 1	Non-participation
September 2	Drop Date
November 12	Withdraw Date
December 6	Classes End

CO Online 10 Week [CZ2]

September 23	Last Day to Register
September 21	Classes Begin
September 30	Non-participation
October 1	Drop Date
November 20	Withdraw Date
December 6	Classes End

CO Online 1st Bi-semester [CZ4]

August 19	Last Day to Register
August 17	Classes Begin
August 23	Non-participation
August 24	Drop Date
September 24	Withdraw Date
October 4	Classes End

CO Online 2nd Bi-semester [CZ5]

October 14	Last Day to Register
October 12	Classes Begin
October 18	Non-participation
October 19	Drop Date
November 30	Withdraw Date
December 6	Classes End

Military Session I [MI1]

August 23	Last Day to Register
August 24	Classes Begin
August 30	Non-participation
August 31	Drop Date
October 6	Withdraw Date
October 18	Classes End

Military Session II [MI2]

September 10	Last Day to Register
September 11	Classes Begin
September 20	Non-participation
September 21	Drop Date
November 5	Withdraw Date
November 19	Classes End

Military Session III [MI3]

October 18	Last Day to Register
October 19	Classes Begin
October 25	Non-participation
October 26	Drop Date
December 1	Withdraw Date
December 13	Classes End

Spring 2027 [202730]

Important Dates

October 26	Registration Begins
February 15	Graduation Application Deadline

Holidays/Special Days

March 22-28	Spring Break, Campuses Open - No classes
May 15	Graduation Ceremony

Full Semester 15 Week Term [F15]

January 21	Last Day to Register
January 19	Classes Begin
February 2	Non-participation
February 3	Drop Date
April 15	Withdraw Date
May 10	Classes End

Full Semester 12 Week Term [F12]

February 8	Last Day to Register
February 9	Classes Begin
February 21	Non-participation
February 22	Drop Date
April 21	Withdraw Date
May 10	Classes End

1st Bi-semester [BI1]

January 18	Last Day to Register
January 19	Classes Begin
January 25	Non-participation
January 26	Drop Date
March 2	Withdraw Date
March 13	Classes End

2nd Bi-semester [BI2]

March 13	Last Day to Register
March 14	Classes Begin
March 28	Non-participation
March 29	Drop Date
April 28	Withdraw Date
May 10	Classes End

Weekend Start [WKC]

January 24	Last Day to Register
January 22	Classes Begin
February 7	Non-participation
February 8	Drop Date
April 19	Withdraw Date
May 10	Classes End

Late Start [LAT]

February 22	Last Day to Register
February 23	Classes Begin
March 4	Non-participation
March 5	Drop Date
April 26	Withdraw Date
May 10	Classes End

1st Tri-semester [TR1]

January 18	Last Day to Register
January 19	Classes Begin
January 24	Non-participation
January 25	Drop Date
February 15	Withdraw Date
February 22	Classes End

2nd Tri-semester [TR2]

February 22	Last Day to Register
February 23	Classes Begin
February 28	Non-participation
March 1	Drop Date
March 29	Withdraw Date
April 5	Classes End

3rd Tri-semester [TR3]

April 5	Last Day to Register
April 6	Classes Begin
April 11	Non-participation
April 12	Drop Date
May 3	Withdraw Date
May 10	Classes End

CO Online 15 Week Term [CZ1]

January 21	Last Day to Register
January 19	Classes Begin
February 2	Non-participation
February 3	Drop Date
April 15	Withdraw Date
May 9	Classes End

CO Online 10 Week Term [CZ2]

February 24	Last Day to Register
February 22	Classes Begin
March 3	Non-participation
March 4	Drop Date
April 23	Withdraw Date
May 9	Classes End

CO Online 1st Bi-semester [CZ4]

January 21	Last Day to Register
January 19	Classes Begin
January 24	Non-participation
January 25	Drop Date
February 25	Withdraw Date
March 7	Classes End

CO Online 2nd Bi-semester [CZ5]

March 24	Last Day to Register
March 22	Classes Begin
March 28	Non-participation
March 29	Drop Date
April 29	Withdraw Date
May 9	Classes End

Military Session I [MI1]

January 24	Last Day to Register
January 25	Classes Begin
January 31	Non-participation
February 1	Drop Date
March 9	Withdraw Date
March 21	Classes End

Military Session II [MI2]

February 11	Last Day to Register
February 12	Classes Begin
February 21	Non-participation
February 22	Drop Date
April 8	Withdraw Date
April 22	Classes End

Military Session III [MI3]

March 28	Last Day to Register
March 29	Classes Begin
April 4	Non-participation
April 5	Drop Date
May 11	Withdraw Date
May 23	Classes End

GETTING STARTED

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Admissions Information

Pikes Peak State College is an open admission college. Students who are at least 17 years old are admitted to the college*. Students under 17 may request a waiver to attend PPSC.

Important: Admission to the college and declaring a major does not guarantee admission into a specific academic program.

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

International Students: F-1 visa international students have specific deadlines and requirements to apply for admission and an I-20. Visit www.pikespeak.edu/international for more information.

Admissions Procedure

Applying to PPSC is free—no essays, entrance tests, or application deadlines required. Students can apply at any time. Already Applied? Students who have attended or applied to PPSC within the last year remain active and do not need to reapply. Ready to Start? Visit www.pikespeak.edu/apply to begin your application

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.
- 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
 - 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.

- 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.
- 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.
- 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.

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) 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) to determine options for the student.

Registering for Classes

Students can register for classes for which they meet the pre-requisites. 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 to ensure they are registering for the correct courses to meet their goals.

To learn more about the steps and resources for registering for classes, visit www.pikespeak.edu/register.

TUITION AND FEES

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Tuition Classification

Students are classified as either a resident or non-resident of Colorado for tuition purposes at the time of admission. Colorado Tuition Classification is governed by State Law (Title 23, Article 7, of the Colorado Revised Statutes) and by judicial decisions that apply to all public institutions of higher education in Colorado and is subject to change at any time. Residency decisions do not transfer between Colorado colleges. Pikes Peak State College must apply the rules set forth in the residency statutes and is not free to make exceptions to the rules except as specifically permitted by law.

Changes in Tuition Classification

Any student who believes that the initial tuition classification decision is incorrect, their circumstances have changed, or they have additional information that would demonstrate eligibility to be reclassified, may submit documentation via pikespeak.edu/residency.

Deadlines

The final deadline to have your residency reclassified, for the term in which you are seeking reclassification, is the day before the next full-term semester begins.

College Opportunity Fund (COF)

The College Opportunity Fund (COF) is a trust fund created by the Colorado Legislature that provides a tuition stipend to eligible undergraduate students. COF is not a loan, does not affect financial aid, and does not need to be repaid. It is simply a tuition benefit provided by the State of Colorado to reduce the cost of in-state tuition.

To be eligible, students must be Colorado residents or otherwise qualify for in-state tuition rates. High school concurrent enrollment students and those using military or veteran benefits are also COF-eligible, regardless of residency status.

The stipend is paid on a per-credit-hour basis directly to the college where the student is enrolled. The amount is set each year by the Colorado General Assembly, and the current rate is posted on the COF website at www.cof.college-assist.org.

To receive the stipend, eligible undergraduate students must create a COF account at www.cof.college-assist.org and authorize COF in their PPSC Student Portal.

Estimated Per Credit Hour Base Tuition Calculation 2025-2026

Total estimated base in-state tuition	\$291.00
Minus estimated College Opportunity Fund Stipend	\$116.00
Student's estimated share of in-state tuition	\$175.00

Tuition and Fees (2025-2026)*

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

The in-state tuition rate for 2025-2026 is \$175.00 per credit hour after COF (see above). The out-of-state tuition rate for 2025-2026 is \$718.35 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/ for more information.

Student fees:

The student fee rate for 2025-2026 is \$16.94 per credit hour plus a \$17.55 registration fee, and a \$10.23 Bus Pass Fee.

Course fees:

Some courses have extra fees ranging from \$3.00 per credit hour to \$5,250.00 per course. Refer to 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 2026-2027 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.

Tuition Appeal/Adjustment

A Tuition Appeal is a formal process that allows students to request the removal of failed or withdrawn courses, corresponding grades (D, F, U, or W), and associated tuition from their student record. This process applies only when a student experiences a Qualifying Event during the semester that was beyond their control and not the result of personal choice.

Before submitting a Tuition Appeal, students are encouraged to review their financial aid and funding sources. Please contact the PPSC Financial Aid Office to determine whether deleting courses may affect reimbursement requirements.

Retroactive Withdrawal

Students who wish to withdraw from a class after the official withdrawal deadline may request a Retroactive Withdrawal through the Tuition Appeal process.

Please note:

- A withdrawal differs from a course deletion.
- Students remain financially responsible for withdrawn courses. • A "W" grade will appear on the transcript for each withdrawn class.

Processing Time

Tuition Appeals typically take 4–6 weeks to process.

Tuition Appeals do not address:

- Technology or access issues
- Problems with textbooks or other course materials
- Complaints involving faculty or staff members
- Concerns about accessibility accommodations

Tuition Adjustment Policy

To receive a tuition refund or adjustment, students must drop classes by the published deadline listed in the class schedule.

No refunds or adjustments are granted after this date, except in rare cases reviewed through the appeal process.

Appeal forms are available at Enrollment Services or online. Note that contract programs may follow different refund procedures.

Additional Information For detailed information about the Tuition Appeal process and qualifying events, please visit: pikespeak.edu/admissions/records/tuitionappeals.

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 the campus bookstores.

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

Open Educational Resources (OER) & Affordable Course Materials

Pikes Peak State College is committed to reducing the cost of education through Open Educational Resources (OER) and affordable course materials. OER are high-quality, openly licensed educational materials that are free or low-cost alternatives to traditional textbooks. Benefits of OER courses:

- Zero or significantly reduced textbook costs
- Immediate access to materials on the first day of class
- Digital materials available 24/7 through D2L

How to identify OER courses:

Students can easily identify courses using OER or affordable materials during registration. Look for the OER designation in the course schedule or visit our Affordable Materials page at pikespeak.edu/oer to search for courses with zero or low-cost materials.

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/. 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.

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. 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 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 for more information about available scholarships and how to apply. Questions can be directed to 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 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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Student Academic Load

On average, students must enroll in 30 credit hours per year to graduate from a 60-credit hour program in 2 years. To ensure on-time completion of a 60-credit hour degree in 2 years, students are encouraged to enroll in a minimum of 15 credit hours in the Fall and Spring. Students who enroll in 12 credits for the Fall and Spring terms and 6 credits for the Summer will also be considered on track to complete a 60-credit hour degree in 2 years.

Course Load

A standard full-time course load is 15 credit hours per semester; however, this may vary depending on the degree or certificate program. 12 credit hours is the minimum requirement for full-time enrollment. Enrollment in fewer than 12 credit hours is considered part-time.

Academic Time Status:

12+ credits = full-time*

9 – 11.99 credits = $\frac{3}{4}$ time

6 – 8.99 credits = $\frac{1}{2}$ time

.01 – 5.99 credits = less than $\frac{1}{2}$ time

0 credits = not enrolled

*Certain programs may define full-time differently for purposes of their own eligibility only (e.g., a student may be considered full-time in the Summer for purposes of eligibility for athletics with 6+ credits, and a student may be considered full-time for purposes of eligibility for veterans benefits with 7+ credits in a Summer term); these program-specific definitions shall have no bearing on a student's status as a Full-Time Student as defined in this procedure. For international students studying at a PPSC on a nonimmigrant visa, a full-time academic load in any term is 12+ credits. Eligibility for federal and state financial aid is determined by applicable law.

Enrollment Verifications are provided by the Records Office.

Maximum Credit Hours per Term

The maximum student credit load per term is 18 credit hours for undergraduates, unless an override has been granted by PPSC. Students seeking to enroll in more than 18 credit hours may do so with approval as follows: up to 21 credit hours requires an override from an academic advisor in Advising & Testing with a cumulative GPA of 3.0 or higher in college-level coursework; more than 21 and up to 24 credit hours requires Academic Executive Dean permission; and more than 24 credit hours requires approval from the Vice President for Instructional Services.

Certain State Board-approved career and technical programs may require enrollment of up to 24 credit hours per semester, in which case students may enroll in all required courses.

Change of Major/Program

Students may declare or change their program of study (major) at any time during the term in which they are enrolled. However, no more than three (3) active majors are permitted at any given time.

Before making a change, students are strongly encouraged to consult with an academic advisor in the Advising & Testing Office, as well as with the Financial Aid Office, to understand how a change in major/program may affect their educational plan and financial aid eligibility.

Students utilizing military or veteran education benefits should also verify how a change in major may impact their funding eligibility.

Please note: Changing a major will place the student under the curriculum and academic requirements of the new program as outlined in the current college catalog.

The Change of Major form is available at: 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 drop date for the course and will receive the grade earned on the examination as a final grade for the course. Students may attempt an examination for credit only once per course.

Domestic Transcripts for Transfer Credit to PPSC

Domestic transcripts refer to academic records from institutions located within the United States and its territories, including Puerto Rico, the U.S. Virgin Islands, Guam, the Northern Mariana Islands, and American Samoa.

Credits earned at regionally accredited colleges or universities, including Pikes Peak State College (PPSC), or from other approved educational institutions, may be applied toward fulfilling PPSC program requirements. Certain programs may have restrictions regarding the age of courses, particularly in technical or science related areas. Students should consult their specific program for applicable time limits.

- Courses with a grade of C- or higher may be accepted in transfer when they are applicable to PPSC programs and meet institutional requirements. Transfer credit will be awarded only upon receipt of an official transcript from the originating institution.
- Transcript evaluation will occur within 30 days after the student has been admitted and PPSC has received the official transcript. Evaluations are conducted on a rolling basis as transcripts are received.
- Students who change their major and wish to request a new transcript evaluation must submit the Request for Transcript Re-Evaluation Form.

Students seeking to replace a substandard grade earned at PPSC with transfer credit must meet with an academic advisor to initiate the request. If approved, the grade points associated with the original PPSC course will be excluded from the cumulative GPA. However, the original grade will remain on the official transcript.

Please note: Other institutions receiving a PPSC transcript are not required to honor PPSC's grade exclusion policy and may include all grades when calculating transfer GPA.

International Transcript Evaluation for Credit Transfer to PPSC

Students who have attended international institutions and wish to have their credits evaluated for transfer must first obtain a course-by-course credit evaluation from a recognized member of the National Association of Credential Evaluation Services (NACES). An official copy of this evaluation report must be sent directly to Pikes Peak State College (PPSC).

If students plan to pursue a program at PPSC that is similar to the one they studied at their previous international institution, some credits may be eligible for transfer. However, not all credits are guaranteed to transfer. Credit transferability is determined based on the following criteria:

- Course equivalency: The courses completed at the international institution must be comparable to those offered at PPSC.
- Course age limits: Some programs may have time restrictions on how old certain courses can be, particularly for technical or science-related coursework. Students should consult their specific program for any such guidelines.
- Minimum grade requirement: PPSC only accepts courses with a grade of C or better for transfer credit.
Course descriptions: Students may be required to provide English-translated course descriptions for any courses they wish to have evaluated for transfer.

Steps to transferring in college credits:

- Step 1: Apply for admission to Pikes Peak State College.
- Step 2: Declare a degree or certificate program.
- Step 3: Submit an official course-by-course evaluation report from a NACES-approved agency to the PPSC Records Office.

There are three options for submitting your official evaluation report:

Option 1: In Person

- Deliver the official evaluation report to the Records Office at the Centennial Campus.
- The report must be in a sealed envelope from the evaluation agency. *(Do not open the envelope)*

Option 2: Electronically

- PPSC accepts electronic transcript evaluations via secure portals from the following NACES-approved services:
 - Educational Credential Evaluators, Inc. (ECE)
 - World Education Services (WES)
 - The Evaluation Company (TEC)

Option 3: By Mail

- Request the evaluation agency to mail the official report directly to:
Pikes Peak State College
Attn: Records Office, Box C-8
5675 S. Academy Blvd.
Colorado Springs, CO 80906

Once received, the Records Office will review your evaluation to determine whether any credits can be transferred toward your declared program at PPSC.

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

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

Educational Credential Evaluators, Inc. (ECE)

Website: www.ece.org

Email: eval@ece.org

World Education Services (WES)

Phone: 1-800-361-3106

Website: www.wes.org

The Evaluation Company (TEC)

Phone: 1-646-475-2570

Website: www.evalcompany.com

Josef Silny & Associates

Phone: (305) 273-1616

Website: www.jsilny.com

Transcript Requests

Pikes Peak State College (PPSC) partners with Parchment to manage the ordering, processing, and secure delivery of official transcripts.

Ordering Official Transcripts

Current and Former Students: Official transcripts may be ordered directly through the Parchment website. If you do not already have a Parchment account, you will be prompted to create one during the ordering process.

Current Students: You may also order transcripts by logging into your myPikesPeak Portal, if you are an active student (defined as having taken a course within the last three semesters).

- Locate the Student Grades & Records card.
- Follow the link to order your official transcript through Parchment.

Transcript costs vary based on delivery method and destination. Exact pricing is shown before you enter your payment information.

Full instructions and current fees can be found at: pikespeak.edu/admissions/records/transcripts/request-transcripts.php.

Ordering Unofficial Transcripts

Current Students: Unofficial transcripts are available through your myPikesPeak Portal.

- Locate the Student Grades & Records card on the homepage.
- Click "View/Print Unofficial Transcripts."

Former Students: Unofficial transcripts are accessible for up to one year after leaving PPSC. After that time, only official transcripts may be ordered through Parchment.

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.

Grading System

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

Currently Approved Grades

Standard Grades:

Grade	Quality Points	Interpretation
A	4	Excellent or Superior
B	3	Good (Above Average Achievement)
C	2	Average
D	1	Deficient
F	0	Failure
I	N/A	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. PPSC may make exceptions on a case-by-case basis.

Pass/Fail Grades:

Grade	Quality Points	Interpretation
P	N/A	Pass
F	N/A	Fail

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.

Note: A request for the P/F option must be submitted to the Registrar's Office. The P/F option may not be appropriate for certain courses.

Developmental Grades:

Grade	Quality Points	Interpretation
P/A	N/A	Passing (A-level) work in a developmental course
P/B	N/A	Passing (B-level) work in a developmental course
P/C	N/A	Passing (C-level) work in a developmental course
F/D	N/A	Not-passing (D-level) work in a developmental course
F/F	N/A	Not-passing (F-level) work in a developmental course
I/F	N/A	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.

Note: 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. PPSC may make exceptions on a case-by-case basis.

Withdrawal Grades:

The "Withdrawal" grade is assigned when a student officially withdraws or is withdrawn for administrative reasons 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.

Grade	Quality Points	Interpretation
W	N/A	Student withdrew prior to withdrawal deadline
WX	N/A	Administrative withdrawal by appeal or institutional error
WD	N/A	Administrative withdrawal

Transfer Grades:

Grade	Quality Points	Interpretation
A*	N/A	Transfer equivalent to an "A" standard grade
B*	N/A	Transfer equivalent to an "B" standard grade
C*	N/A	Transfer equivalent to an "C" standard grade
D*	N/A	Transfer equivalent to an "D" standard grade
F*	N/A	Transfer equivalent to an "F" standard grade
S*	N/A	Transfer equivalent to an "S" standard grade
P*	N/A	Transfer equivalent to an "P" standard grade

Note: "C" or better grades will be accepted in transfer. PPSC may choose to transfer "D" grades on a case-by-case basis. PPSC will determine by program whether a "D" grade may be used to meet degree or certificate requirements. Even if PPSC 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:

Grade	Quality Points	Interpretation
*	N/A	Transfer Grade
AU	N/A	Audit (Not counted in GPA, Attempted, or Earned)
AW	N/A	Administrative Withdrawal (Prior to Summer 2021)
CNV	N/A	No Grade (Used for High School Level classes only)
CPL	N/A	Credit for Prior Learning (Prior to Fall 2015)
CR	N/A	Credit
IP	N/A	In Progress
NC	N/A	No Credit
PLA	N/A	Prior Learning Assessment
S	N/A	Satisfactory (Prior to Summer 2021)
S/A	N/A	Satisfactory (A-level) work in a developmental course (Prior to Summer 2021)
S/B	N/A	Satisfactory (B-level) work in a developmental course (Prior to Summer 2021)
S/C	N/A	Satisfactory (C-level) work in a developmental course (Prior to Summer 2021)
SP	N/A	Placeholder/Satisfactory Progress
U	N/A	Unsatisfactory (Prior to Summer 2021)
U/D	N/A	Unsatisfactory (D-level) work in a developmental course (Prior to Summer 2021)
U/F	N/A	Unsatisfactory (F-level) work in a developmental course (Prior to Summer 2021)
Z	N/A	Placeholder/Missing Grades

Grading Options**AU - Audit:**

Auditing a course allows students to attend and participate in class activities without receiving a grade or academic credit.

Audit Options

1. Regular Audit - Students auditing under this option pay the full in-state or out-of-state tuition and applicable fees.
2. Veteran Audit - Veterans may audit one class per semester at no cost, as long as funding and class space are available.

- Veterans must submit a request through the audit website.
- Requests are reviewed by the Admissions Office.
- Approved veterans will be registered 1–2 days before the semester begins if space and funding are available.

How to Request an Audit: Students must submit an audit request through the audit website by the deadline listed in the course schedule.

Eligibility: Students must meet all course prerequisites. Some courses are not available for audit; see the audit website for a full list of excluded courses.

Costs and Restrictions:

- Audited courses are not eligible for the College Opportunity Fund (COF) stipend.
- Audited courses do not count toward financial aid, Department of Defense, or VA education benefits.

- Audited courses cannot be applied toward degrees or certificates.
- The audit option applies only to PPSC courses and does not include Colorado Consortium classes.

Registration Changes: After the posted drop date, students cannot change their registration status from credit to audit or from audit to credit unless approved in writing by the appropriate Division Executive Dean and the Vice President for Instructional Services.

CPL - Credit for Prior Learning (CPL)

Before Fall 2015, the symbol "CPL" indicates that the associated course and credits were granted in accordance with CCCS Board Policy 9-42, Credit for Prior Learning. For information effective from Fall 2015 onward, refer to Prior Learning Assessment (PLA).

I – Incomplete

An Incomplete grade is a temporary grade used when a student, due to documented illness or other circumstances beyond their control, is unable to complete course requirements by the end of the semester. To qualify, the student must have completed at least 75% of all course assignments and exams with a grade of C or better.

Requesting an Incomplete:

- The student is responsible for initiating the request for an Incomplete grade directly with the faculty/instructor before the end of the term. Students are encouraged to communicate early with their faculty/instructors if they experience difficulties completing coursework.
- The faculty/instructor will determine whether the student has a reasonable chance of successfully completing the remaining coursework within the agreed timeframe. The faculty/instructor has the final say on whether to grant an incomplete grade. If a resolution cannot be reached with the instructor, the student should contact the Division Associate Dean for assistance.
- The student must provide documentation supporting the reason for the request.

• If approved, the faculty/instructor will complete an Incomplete Grade Contract outlining the work to be finished and the completion deadline. The contract must be submitted to Registrar/Records Office with final grades for the semester.

- The faculty/instructor must record the Incomplete grade on the official grade roster in a timely manner.

Military and Emergency Service Exceptions:

Military personnel and emergency management officials called to temporary duty (TDY) or other required service during the semester should contact their instructor for special consideration.

- Official documentation of the assignment is required.
- The request must be approved by the Vice President for Instructional Services.
- If an Incomplete is not possible due to TDY length or timing, students should meet with Military and Veterans Programs to discuss other options.

Department of Defense Incomplete Grade Timeframes:

- Army: 180 days
- Navy: 180 days
- Air/Space Force: 12 months or school policy, whichever is sooner
- Marines: 6 months
- Coast Guard: 6 months

Conversion of Incomplete Grades:

If an Incomplete grade is not converted to a final letter grade by the instructor within one subsequent semester (excluding summer), it will automatically convert to an F. If the student's performance at the time of the Incomplete would have earned a higher letter grade, faculty are encouraged to submit that earned grade before the automatic conversion occurs.

PLA - Prior Learning Assessment (PLA)

Effective Fall 2015, the symbol "PLA" indicates that the associated course and credits were granted in accordance with CCCS Board Policy 9-42, Prior Learning Assessment. For information prior to Fall 2015, refer to Credit for Prior Learning (CPL).

S/U and P/F - Satisfactory/Unsatisfactory and Pass/Fail

Students may choose to take up to six (6) credit hours per semester on a Satisfactory/Unsatisfactory or Pass/Fail grading basis. A maximum of 15 total credit hours may be taken under this option while enrolled at Pikes Peak State College.

Note: Courses that are only offered on an S/U, P/F basis count toward this 15-hour maximum.

Approval and Registration:

- Students must obtain prior approval from the appropriate Division Dean for each course, unless the course is only offered with the S/U or P/F grading option.
- The S/U or P/F grading option must be selected at the time of registration.
- After the drop/add period, this grading option cannot be changed, except with written recommendation from the Division Dean and approval from the Vice President for Instructional Services.

Grading Standards:

- A grade of C or higher is considered Satisfactory/Pass (S/P)
 - This grade does not affect the Grade Point Average (GPA) but increases the total number of credit hours passed.
- Grades of D or F are considered Unsatisfactory/Fail (U/F)
 - These grades affect the GPA and increase the total number of credit hours attempted.

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.

Non-Participation Procedure

To enhance students' success at Pikes Peak State College (PPSC), students are expected to attend all scheduled class sessions. PPSC monitors participation and may drop a student from a class for non-participation when the student does not actively participate or attend the class in person, from the start date of the class to the drop date.

For online courses, and/or hybrid courses where the online components start first, student participation or attendance is defined as accessing the course and completing at least one academic activity related to the course content/curriculum by 11:59 pm on the day before the drop date.

Faculty/instructors then have from 12:00 am until 9:00 pm on the drop date to report non-participation.

Faculty/instructors are encouraged to clarify in the course syllabus which activities qualify as academic activities. Participation in any academic activity completed before the drop date counts towards academic engagement. Examples of academic activities include:

- Attending a live synchronous class, lecture, recitation, or field or laboratory activity, in-person, or online, where there is an opportunity for interaction between the faculty/instructors and students.
- Submitting an academic assignment.
- Taking an assessment or an exam.
- Participating in an interactive tutorial, webinar, or other interactive computer-assisted instruction; or
- Participating in an instructor-directed study group within the course, group project, or actively contributing to online discussions by providing substantive responses that advance the conversation through new insights, relevant examples, or thoughtful questions.

Examples of non-academic activities include:

- Completing a quiz about syllabus content
- Welcome/Introduction discussion unrelated to course concepts;
- Preliminary conversation with faculty/instructor about what the course will cover;
- Emailing the faculty/instructor with a question about course-related content;
- Logging into an online class or tutorial without any further participation; or
- Participating in academic counseling or advising.

Students who are dropped for non-participation in error have 5 business days from the date they were dropped to request re-enrollment. Re-admittance requires prior instructor approval, a clear explanation of the circumstances, and in some cases, the permission of an Executive Dean.

Students who decide they no longer want to be enrolled in class(es), must drop class(es) by the drop date listed on the Academic Calendar. If students do not drop class(es) by the deadline, they will be financially responsible for class tuition and fees. Dropping a course or being removed for non-participation can have financial consequences for students using financial aid and/or military benefits.

Exceptions: The attendance policy for specific programs (such as the health sciences) may differ because of clinical requirements or rules set by approving agencies or some in-person courses with limited seating. If a course has an exception, this will be noted in the syllabus, and the non-participation date will be clearly stated. Best efforts will be made to provide syllabi three days prior to the start date of the course.

Grade Changes

Grade changes are only granted for valid reasons, such as errors in calculation, posting, or recording, or to replace an Incomplete grade. Additional work after the term ends is not an acceptable reason for a grade change.

General Procedures for a Grade Change:

- Students have one full year from the time in which the grade was issued to submit a written request for a grade reevaluation to their instructor.
- Students should first discuss the grade with the instructor. If the instructor agrees, they will submit the grade change for approval. If not, students may appeal to the department chair, division dean, or Vice President for Instructional Services (or designee) for a final decision.
- An Incomplete grade must be resolved by completing remaining coursework by the date on the Incomplete Course Agreement form, or no later than the end of the next full 15-week semester, after which the instructor submits the final grade for approval. Coursework not completed on time will

result in a Failing (F) grade, and students cannot re-enroll in a class while an Incomplete course is pending.

Grade Point Average (GPA) Calculation

Grade points measure the level of achievement for the credit hours completed. To calculate the GPA, multiply the number of grade points by the number of credit hours received for each course. Total the number of credits and the number of grade points separately. Divide the total grade points by the total credits. 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.

A = 4 grade points
B = 3 grade points
C = 2 grade points
D = 1 grade point
F = 0 grade points

Example Calculation:

Course	Credits	Grade	Grade Points	GPA
ACC 1021 – Accounting Principles I	4 credits	B 3 grade points	12	3.0
HUM 1021 – Early Civilization	3 credits	C 2 grade points	6	2.0
FIN 2040 – Law & Banking Principles	2 credits	A 4 grade points	8	4.0
ENG 1021 – English Composition I	3 credits	A 4 grade points	12	4.0
TOTAL	12 credits	Credits x Grade Point Total/ Total Credits = GPA	38	3.16

Prerequisite Courses

Prerequisites are requirements students must meet before enrolling in a course or program. A prerequisite may be a completed course, a demonstrated skill, or a test score. Some placement test results may also be used to meet prerequisite requirements. Prerequisites ensure students have the background knowledge needed to succeed in higher-level coursework. PPSC follows Colorado Community College System (CCCS) Procedure SP 9-71, which outlines policies for prerequisites and corequisites.

Finding Prerequisites

Prerequisites and corequisites are listed in each course description in the college catalog and are enforced during registration. Students who attempt to register for a course without meeting the prerequisite will receive a registration error.

Students who need help understanding prerequisites or determining if they meet them are encouraged to meet with an advisor. Advisors can review academic history, confirm placement, and help students plan their course sequence.

Types of Prerequisites

- **Course-Based Prerequisites:** Require successful completion of a specific course before moving to the next level. Example: BIO 1111 must be completed before enrolling in BIO 2101.
- **College Readiness Prerequisites:** May be met through SAT or ACT scores, placement exams (Accuplacer), AP, IB, CLEP, or DSST scores, previous college credit with a grade of C– or better, or certain high school courses and GPA completed in the last five years.
- **Program-Specific Requirements** Some programs, such as Nursing, Dental Hygiene, and Sign Language Interpreter Preparation, require additional prerequisites and have expiration dates on some courses. Students should refer to specific program descriptions and department websites for detailed requirements.

Meeting Prerequisite Requirements

Students may meet prerequisite requirements in the following ways:

- **Completion of Required Coursework:** The prerequisite course must be completed with a grade of C or better.
- **Submission of Official Transcripts:** Transfer students should send their official domestic or international transcripts to the Records Office for evaluation. For more information about transferring to PPSC, see the Academic Standards section of the catalog. For information about active-duty military and veteran transcripts, see the Military, Veterans, and Family Members section of the catalog.
- **Submission of Unofficial Transcripts:** If you are not requesting transfer credit, or are a Visiting Summer Student (VSS), and are submitting unofficial transcripts to verify a completed prerequisite, you may send them to the Advising and Testing Office for review and assistance. For more information on VSS or Guest Student, please refer to the Getting Started section of the catalog. If you are requesting a prerequisite waiver or to show proof of current prerequisite course enrollment, in certain cases, faculty may authorize registration using the electronic Registration Add/Drop Form.
- **Submission of Test Scores:** SAT, ACT, or placement exam scores from the last five years, may be submitted to the Testing Center for evaluation.
- **Taking a Placement Exam:** Students may complete a placement exam such as the Accuplacer.
- **Submission of Official College Credit Exam Scores:** AP, IB, CLEP, or DSST scores from the last fifteen years, may be submitted to the Records Office for evaluation.

Additional Options

- **In-Progress Coursework at PPSC:** Students currently enrolled in a prerequisite at PPSC may register for the next course for the following term.
- **In-Progress Coursework at Another Institution or Prerequisite Override:** Students may give the Advising Office an unofficial transcript that shows their final grade, or they may submit an official transcript to Records. We cannot accept transcripts with courses still in progress. In certain cases, faculty may authorize registration when a prerequisite course is in progress at another institution or a prerequisite override using the electronic Registration Add/Drop Form.
- **Prior Learning Assessment (PLA):** Students may earn credit for previous learning through training, work experience, or testing. PLA credit is awarded after a faculty review of submitted materials. Please see Prior Learning Assessment (PLA) section in the catalog, for more information.
- **Course Substitutions:** Requests to substitute a prerequisite or corequisite must be approved by the department chair using the electronic Registration Add/Drop Form.

Corequisite Courses

A corequisite is a course that must be taken during the same semester as another course. Corequisites provide support or additional instruction needed for success in both courses. Corequisites are commonly used in paired instruction models, such as a college-level English or math course paired with a support course, and in programs that require courses to be taken together.

Examples of Corequisites

- Enrollment in a college-level English course and a related support course during the same term.
- Nurse Aide and EMT courses that require another course taken in the same semester.

Identification of Corequisites

Corequisites are shown in the college's online registration system (Navigate360) with the label 'requisite.' If a course has a corequisite, students will be asked to add the required course when they register. For paired college-level and support courses, students who placed into college-level classes should choose a section that does not have the 'requisite' label.

Corequisite Enrollment Policy

- Concurrent Enrollment: Students must enroll in both the main course and the corequisite in the same academic term.
- Linked Instruction: Corequisite courses are designed to support the primary course.
- Mandatory Registration: Enrollment in one course requires enrollment in the other. Dropping or withdrawing from one course may result in dropping or withdrawing from both courses.

Repeated Courses

General Information

- All college-level courses may be repeated. Each course registration and grade received will be listed on the transcript. The highest grade will be used in GPA calculation. There will be no limitations on course grades that are eligible for repeat. All credit hours earned for initial and repeated courses will be deducted from a student's remaining COF stipend eligible hours.
- If the same grade is earned two or more times for a repeated course, the most recent instance of the duplicate grade will be included in the term and cumulative GPA.
- Repeated courses may be applied only once to a certificate or degree, except for variable credit courses and designated courses that may be repeated for professional or personal development. State Faculty Curriculum Committee will designate courses that may be repeated based on program requirements.
- PPSC has the discretion to deny repeat enrollment in a course beginning with the second repeat on a case-by-case basis for reasons which may include, but are not limited to, financial and educational best interests of the student and course availability.

Repeated Courses on Transcripts

The Repeat designation on a transcript will be marked as I (Include) or E (Exclude). Courses marked Include are counted in both credit hours and GPA calculations. Courses marked Exclude are omitted from earned credit hours and GPA calculations.

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

Academic Renewal

To help PPSC students achieve success, returning students may request a one-time academic renewal from PPSC where up to 30 credit hours of poor academic performance may be excluded from their GPA calculation. The following procedures apply to applications 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 2.00 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 2.00 term GPA during the last semester of attendance at the four-year institution.
- A maximum of 30 credit hours can be excluded from the GPA.
- Grades approved for academic renewal remain on the transcript but are excluded from the GPA calculations.
- Academic renewal applies to D and F grades only.
- Students can only apply for academic renewal once, and if awarded, it is not reversible.

Notwithstanding the above procedures, PPSC may automatically grant academic renewal for students through the statewide Colorado Reverse Transfer Program if the student's four-year institution data shows they have been successfully progressing, and granting academic renewal will result in the awarding of an associate's degree.

NOTE: Federal and state financial aid eligibility rules require all attempted credits be included when determining the length of time to completion. Therefore, coursework excluded as part of the Academic Renewal is included when calculating financial aid eligibility.

Academic Progress

Application & Basis

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

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 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.

PPSC Appeals Process

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

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

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

Academic Concerns

Any student who wishes to pursue an 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 faculty/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 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 at least 25% of their credits at the College that will award their degree or certificate. A College may consider an appeal from a student who is transferring from another CCCS College and has not met the 25% requirement. To approve the appeal, the College must be able to clearly explain and support its decision.

Two or more CCCS Colleges may also create a Memorandum of Understanding (MOU) that allows students to finish a degree or certificate without completing 25% of their credits at one College. The MOU must be signed by all participating Colleges, shared with the Vice Chancellor for Academic and Student Affairs, and sent to the Higher Learning Commission.

Term Academic Honors

Pikes Peak State College (PPSC) recognizes exceptional academic achievement each term through its Term Academic Honors program. Students who meet the eligibility requirements will receive an official notation for that term on their academic transcript.

To qualify for Term Academic Honors, students must meet the following Term Grade Point Average (GPA) criteria:

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

Grades of “P” (Pass) and grades earned in Developmental Education coursework are excluded from the GPA calculation. Students must complete a minimum of six (6) eligible credit hours during the term to be considered for Term Academic Honors.

Graduation Honors

Pikes Peak State College (PPSC) recognizes outstanding academic achievement at the time of graduation through its Graduation Honors program. Students who meet the eligibility requirements will receive an official notation on their academic transcript.

To qualify for Graduation Honors, students must earn a cumulative grade point average (GPA) of 3.50 or higher in college-level coursework completed at PPSC. Only courses completed at PPSC are included in the GPA calculation. In addition, students must complete a minimum of 15 college-level credits at PPSC to be eligible.

The levels of Graduation Honors are as follows:

- Cum Laude (with honor): 3.50 – 3.749
- Magna Cum Laude (with great honor): 3.75 – 3.99
- Summa Cum Laude (with highest honor): 4.00

Application for Degree or Certificate

Before applying for graduation, students are strongly encouraged to meet with their program faculty advisor or an academic advisor in the Advising Office to confirm that they are on track to complete their program requirements. Once students have verified that they are ready to graduate, they must submit an official Application for Graduation by the published deadlines. The application and deadline information can be found at pikespeak.edu/admissions/records/graduation.

To qualify for graduation from Pikes Peak State College, students must:

1. Complete all degree or certificate requirements as outlined in their academic program in the college catalog.
2. Earn at least 15 credits in their declared academic program while enrolled at PPSC.
3. Maintain an overall GPA of 2.0 or higher.

An application for graduation is required to receive a degree or certificate, even if the student does not plan to participate in the commencement ceremony.

The best time to apply is immediately after registering for the final semester, and no later than the posted deadline.

Application Deadlines

- Spring: March 15
- Summer: July 15
- Fall: November 1

Degree and Certificate Evaluation and Award

After submitting graduation application, the Records Office will review the student's academic history to verify completion of all program requirements. Results of the degree or certificate audit will be sent to the student's college-assigned email address. The audit process may take 1 to 4 months, depending on the term and time of year, and applications are processed in the order received.

Until all evaluations and supporting documentation are finalized, the Records Office reserves the right to make any necessary changes to the degree audit to reflect the most accurate and official record of the students progress toward graduation.

Degrees and certificates are awarded during the semester in which all requirements are completed.

Graduation Process and Commencement Participation

Submitting a graduation application is the first step in the process of earning a degree or certificate. The application notifies the Records Office that a student believes all program requirements will be completed by the end of a specific term. Earning a degree or certificate occurs when all academic and institutional requirements have been officially verified and the credential is posted to the student's transcript. This is the formal conferral of the credential and represents the student's official completion of the program.

The graduation, or commencement, ceremony is a separate, celebratory event that recognizes students who have completed or are nearing completion of their programs. Participation in the ceremony does not constitute the official conferral of a degree or certificate, nor does it guarantee that all requirements have been met. For more information on the commencement ceremony, please see Graduation Ceremony, visit the Commencement Ceremony webpage, or contact our commencement team at Commencement@PikesPeak.edu.

Diploma Processing and Distribution

Diplomas are not issued at the commencement ceremony. Once a degree or certificate has been posted to a student's transcript (typically 4 to 6 weeks after the end of the semester), the diploma or certificate will be mailed approximately 8 weeks later to the address listed on the graduation application. In addition to the printed diploma or certificate, a digital copy will be sent to the student's personal or college-assigned email address.

It is the student's responsibility to ensure that the mailing address provided remains valid. If an address changes after applying, students should update their information through the student portal and notify the Records Office at records@pikespeak.edu or by replying to the audit notification email.

Incomplete Degree or Certificate Requirements

If the degree or certificate requirements are not met, the application will remain on file for one additional semester. After one semester has passed and degree or certificate requirements remain unmet, student must re-apply for graduation.

Auto-Conferral

Midway through each semester, summer, fall, and spring, the Records Office reviews the academic records of students who have attended PPSC within the previous three semesters. Students who meet the eligibility requirements for a degree or certificate, based on courses completed at PPSC, will be automatically awarded their credential. All awards will be officially posted at the end of the semester.

Graduation/Commencement Ceremony

Each May, PPSC hosts a commencement ceremony to honor graduating students. To participate, anticipated graduates must have a graduation application on file for the equivalent academic year and complete a commencement ceremony registration form. Once registered for the ceremony, anticipated graduates will receive a series of emails to their preferred email address containing information about the commencement ceremony from the Commencement Office. Caps, gowns, tassels and instructions on the ceremony are all available through the Commencement Office. If you are eligible, join us for this festive celebration of your success! The 2027 ceremony will include eligible participants who graduated with a degree or certificate after the Summer 2026 or Fall 2026, and anticipated graduates in Spring 2027.

Participation in the commencement ceremony does not imply that a degree or certificate has been awarded. Degrees and certificates are conferred by the Records Office, and all degree requirements must be met before a degree or certificate is awarded.

Assessment of Learning Improvement

Pikes Peak State College is committed to a learning improvement approach to assessment for the purpose of understanding, confirming, and improving student learning and educational quality.

Assessment is an 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 both regional and programmatic accreditation standards.

With support from divisional leadership, the primary goal is to use evidence gathered through the assessment process to improve teaching, learning, and the overall quality of academic departments, thereby enabling the College to better meet the needs of students and the community it serves. Academic departments regularly assess and document what students know or are able to do upon completion of individual courses and programs.

Assessment of student learning focuses on a set of essential skills, also known as general education learning outcomes. In Fall 2016, PPSC adopted the statewide GT Pathways 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.

Assessment of student learning in Career and Technical Education degree programs also 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.

For more information about PPSC's assessment of student learning framework, please visit 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.

STUDENT CONDUCT

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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/instructors, 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 faculty/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 faculty/instructors. 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 faculty/instructors) 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 19-60b, regarding Student Disability Services and SP 16-70a regarding animals on campus 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 SP 19-10a, Firearms and Weapons on Campus, and SP19-10b, Bullying and Violence.

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 19-60a, Civil Rights and Sexual Harassment 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.
- SP 19-10a, Firearms and Weapons on Campus, and SP 19-10b, Bullying and Violence.

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 4-32a, Student Electronic Communication 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 19-10a, Firearms and Weapons 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, Student Behavioral Expectations and Responsibilities; System President's Procedure (SP) 4-31a, Student Complaint Procedure.

Application

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

Basis

Students are expected to adhere to the Code of Student Behavioral Expectations and Responsibilities 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 Code of Student Behavioral Expectations and Responsibilities 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. Known at PPSC as Code of Student Behavioral Expectations and Responsibilities. May be referred to as "Code," "Code of Conduct" and/or "Code of Student Behavioral Expectations and Responsibilities" in this catalog.

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, they are 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]), they 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, they 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 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, they 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 of Conduct 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/.

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, Student Complaint Procedure, 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 their 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 their 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 their 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 them 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 Student Grievance Procedure; SP 4-31a Student Complaint Procedure

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) 19-60a, Civil Rights and Sexual Harassment 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, Application and Enrollment, 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 Behavioral Expectations and Responsibilities Resolution Procedure.

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.

Additional Military-Affiliated Student Complaint Notice

Pikes Peak State College abides by DoD Directive 1322.08E and follows all existing institution policies and processes for receiving, tracking, investigating, and resolving student complaints, including those submitted through the Department of Defense Postsecondary Education Complaint System (PECS). Complaints received via PECS are routed to the Director of Military & Veteran Programs and reviewed in coordination with the Senior Student Affairs Officer and other College leadership, consistent with the procedures described above.

Civil Rights and Sexual Misconduct Resolution Process

Reference

Board Policy (BP) 19-60, Prohibition of Discrimination, Harassment, or Retaliation; System Procedure (SP) 19-60a, Civil Rights and Sexual Misconduct Resolution Process.

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 Behavioral Expectations and Responsibilities;
- 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 opposing 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 Behavioral Expectations and Responsibilities: <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
Web: 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

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/instructor 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 faculty/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 faculty/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/instructors 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 persons with disabilities, 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/instructors 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/instructor 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.

Additionally, all students and faculty/instructors 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/instructors, 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, 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](https://www.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, and Weapons.

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. 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.

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 their designee. The decision of the Chief of Police or their 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 someone is in need of support. PPSC is at 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

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. For non-emergencies, or to follow up after calling 911, contact PPSC Campus Police at 719-502-2900.

All emergencies and suspected criminal activity must be promptly reported to the Campus Police Department, which has offices at all campuses. PPSC Campus Police officers are commissioned as State peace/police officers with full police authority, the same as any other law enforcement agency in the State of Colorado.

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)

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/or 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.

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 Campus Safety 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.

SERVICES FOR STUDENTS

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Accessibility Services

Centennial • A-130 • 719-502-3333

Downtown • S201 • 719-502-3333

Rampart Range • S-129 • 719-502-3333

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.

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

Learn more about accessibility services - <https://www.pikespeak.edu/student-support/accessibility-services/index.php>.

Advising and Testing

Centennial • A-121

Rampart Range • S-101

Downtown • S-104

Vision of Advising & Testing

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

Advising & Testing empowers the college community to harness their potential and achieve their dreams through the discovery and development of personalized education and career paths.

Meeting with an Academic Advisor

Advising is done by appointment and available in-person, over the phone, or via online video. Students make an appointment through Navigate.

Advisors assist students in successfully transitioning into college and the PPSC community. During an advising appointment, advisors will:

- Help students determine the best path to complete their goals
- Explain prerequisites, verify prerequisites, and discuss academic history
- Provide course recommendations and create personalized degree and certificate plans for students
- Assist students with accessing Navigate and their student portal for registration
- Discuss transfer opportunities
- Connect students to PPSC's student services and support services
- Assist students with understanding academic standing, financial aid and/or academic probation or suspension

Testing for the PPSC Community

Advising & Testing empowers the college community to harness their potential and achieve their dreams through the discovery and development of personalized education and career paths.

The Testing Center is committed to providing exceptional, accessible, and comprehensive testing services for Pikes Peak State College and the surrounding community. All tests are administered under standardized conditions that are efficient, fair, and secure.

The Testing Center provides the following services for students, staff, faculty, and community members. Appointments are required and tests are administered in-person at Centennial, Rampart, and military bases. Limited testing services are available virtually.

- **Course placement using Multiple Measures.** This includes ACT scores, SAT scores, PSAT scores, GED scores, recent high school transcripts, coursework completed at other colleges and universities, and other measures.
- **Accuplacer placement testing.** Placement testing is available for students wanting to place into college-level courses if other placement measures do not indicate college readiness.
- **Standardized and professional certification testing.** Various national standardized tests are offered including: CLEP,

DSST, TEAS (nursing admissions), GED, and dozens of industry certification tests (i.e., registered medical assistant).

- **Test proctoring for make-up tests for PPSC courses** for students with extenuating circumstances, such as illness or family emergencies. Make-up testing is on an individual basis and is arranged by the instructor with the Testing Center.

Accuplacer testing is available at the Fort Carson office on a walk-in basis. Contact PPSC at the Fort Carson Education Center at: mvp@pikespeak.edu, 719-502-4200. Accuplacer testing is also available at Peterson SFB on a walk-in basis. Contact PPSC at the Peterson SFB MVP office at: mvp@pikespeak.edu, 719-502-4300.

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.

Auxiliary Services

Pikes Peak State College Auxiliary Services provides resources that support student success and daily campus life. Student-focused services include the Bookstore, Copy Center, Cafés, Vending Machines, and Mailroom & Package Services, all designed to make learning more accessible and convenient.

Bookstore

Centennial • C-102 • 719-502-2665

Rampart Range • N-101 • 719-502-2664

The Bookstore at Pikes Peak State College is operated by Barnes & Noble College, providing students with access to required textbooks, course materials, and school supplies. The bookstore serves as a one-stop shop for academic needs, offering both new and used textbooks, as well as digital course materials and rentals to help students manage costs. Beyond academics, the store typically carries PPSC-branded apparel and merchandise, allowing students to show their school spirit. Barnes & Noble College also provides services like textbook buyback programs and price matching to support student affordability.

Café (Southwest Foodservice Excellence)

Centennial Aspen Café • 719-502-2000

Rampart Café • 719-502-2000

The Southwest Foodservice Excellence cafes at Pikes Peak State College's Centennial and Rampart campuses offer students, faculty, and staff convenient access to a variety of fresh dining options, including hot sandwich options, grab-and-go items, espresso coffee, beverages, and snacks to fuel their day on campus.

Copy Center

Centennial • C-101 • 719-502-2111

Services are available to students, faculty, and staff. The Copy Center offers black and white and color copies, posters and banners, design and layout services, and finishing such as binding, folding, and hole punching.

Mailroom and Package Services

Centennial • C-101

Provides inter-campus mail distribution, package handling, and outgoing shipping services for students, faculty, and staff. Services are available to students, faculty, and staff.

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. Campus Police 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.

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, 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.

Information Technology Support Services (ITSS)

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

24-7 Support • help.pikespeak.edu • 1-888-800-9198

The ITSS department provides a wide range of technology services to the College community, including:

- Enterprise systems and cloud services
- Desktop and server support

- Network and telecommunications
- Internet connectivity and security
- Instructional technology and computer labs
- Administrative and academic systems

ITSS partners with college divisions to implement new technologies and ensure reliable, secure access for students, faculty, and staff. ITSS collaborates with the Colorado Community College System for shared systems but does not provide direct support to other State entities.

Student Technology Services

- Accounts & Email: Current students receive a computer account and college email address.
- Wi-Fi Access: Free Wi-Fi is available at all campuses.
- Classroom & Lab Computers: All computers are networked with Internet access.

Important: Students are responsible for saving coursework to their personal storage.

Accessibility and Security

- Accessibility: Technology accommodations are available for students with disabilities. Contact Accessibility Services for assistance.
- Security: Multi-Factor Authentication (MFA) and Microsoft 365 tools are provided to protect accounts and data.

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

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, 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, interactive medical models, State Park passes and Inter-Library Loan services.

Computer Access

The Learning Commons at Centennial campus has 50+ computers including both PCs and Macs. The Centennial Campus Learning Commons includes a multimedia area available for students emphasizing Multimedia Graphic Design (MGD) and Computer Aided Drafting and Design - Mechanical programs. These machines are available for all students, faculty, and staff with preference given to those students currently enrolled in MGD and CAD classes.

Rampart Range Learning Commons. Located in the main space of the library, it is equipped with computers including both PCs and Macs. Each computer has access to the Internet, as well as the instructional network, and is provided to assist students with the completion of coursework.

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 provide 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 for email counselingcenter@pikespeak.edu. 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.

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.

Records and Registrar

Centennial • A-107 • 719-502-3000

Downtown • S-100 • 719-502-3000

Rampart Range • S-102 • 719-502-3000

All student enrollment records at Pikes Peak State College (PPSC) are maintained by Student Services. Students may review their records and request that information be corrected or designated as confidential. Official transcripts are available upon request through Parchment. Instructions for requesting transcripts can be found online at www.pikespeak.edu/records/request-transcripts.

The College may release directory information upon legitimate request. Directory information includes a student's name, semesters of attendance, most recent previous institution attended, major field of study, and any degrees or awards received. Students who wish to restrict the release of directory information must submit a written request. The form is available at www.pikespeak.edu/records/request-transcripts.

All students enrolled at PPSC are considered independent; therefore, information other than directory information will not be disclosed to parents, guardians, or other individuals or agencies without the student's written authorization. Students may grant such authorization by completing the FERPA Student Consent Form.

No transcript or other information, beyond that defined as directory information, will be released without written consent specifying the information to be disclosed. The College complies with federal and state regulations requiring the release of student

records to authorized government representatives when applicable.

Information regarding the Family Educational Rights and Privacy Act (FERPA) is available in Enrollment Services and online at <https://studentprivacy.ed.gov/ferpa>.

All application and records materials submitted to PPSC become the property of the College.

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

Rampart Range • S-102f (by appointment)

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.

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 • advising@pikespeak.edu

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 • A-300 • 719-502-3444

Downtown Campus • S-117 • 719-502-2443

Rampart Range • N-200 • 719-502-3190

**Center for Healthcare Education & Simulation •
112 & 213**

www.pikespeak.edu/learning-commons/tutoring

The Tutoring Center's mission is to support student success by providing inclusive, collaborative, and process-focused academic support. We meet students where they are and guide them in developing skills, confidence, and habits that foster persistence, independent learning, and lifelong scholarship. Through our welcoming environment, we support all students at every stage of their academic journey, partner with faculty to enhance learning, and cultivate a sense of belonging that strengthens our campus community.

The Tutoring Center provides free, high-quality tutoring across a variety of subjects, including math, writing, science, and more. Our trained peer and professional tutors are here to support your learning—whether you are working on assignments, exam prep, study skills or time management. To get the most out of tutoring, come prepared with relevant course materials including notes, textbook, and assignment instructions.

Visit the Tutoring Center website (www.pikespeak.edu/learning-commons/tutoring) for available services, locations & hours, subject availability, appointment making, and steps to becoming a tutor. You can also stop by your campus Tutoring Center to get started!

STUDENT ENGAGEMENT & LEADERSHIP

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Student Engagement and Leadership

Centennial • A-205 • 719-502-2522

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

Rampart Range • S-207 • 719-502-2577

Student Activities and Programs

Student Engagement & 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 fostering a positive and inclusive campus community. The Student Engagement & 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 Engagement & 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 a wide variety of activities to build community. When The Grove is not in use for a program, this facility serves as a space for comfort and concentration where students can find a lounge area, study space, TV, music, and games. The Student Engagement & 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 Engagement & Leadership office is in room A-205.

The Downtown 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 Engagement & Leadership office. The Student Engagement & Leadership office is located on the second floor in room S-207 at the Rampart Range Campus. The Student Engagement & Leadership desk at the Downtown Campus is located on the first floor of the South Building in the Learning Commons.

Mission Statement: Student Engagement & 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 Campus allows 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 incentivize 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 Engagement & Leadership front desks at the Centennial and Rampart Range Campuses or if you are a student at the Downtown Campus you may obtain your Student ID Card from the Student Engagement & 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.

The Student Engagement & 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 leads and supports campus-wide efforts to integrate environmental responsibility, social equity, and economic resilience into learning, operations, and campus culture. Guided by the United Nations Sustainable Development Goals, the office works collaboratively with students, faculty, staff, and community partners to address sustainability challenges and create meaningful, real-world impact. The Office of Sustainability was established in the 2010-2011 school year following a student-led initiative approved through student government elections and remains the only dedicated Office of Sustainability at a Colorado community college or Colorado two-year institution. Sustainability at PPSC connects classroom learning with hands-on experience, preparing students to engage with complex global and local issues while gaining skills that enhance academic and career pathways regardless of degree path. The mission of the Office of Sustainability is to foster a culture of resource conservation, social equity, and environmental stewardship across the college. The Green Campus Fee of \$0.39 per credit hour supports a sustainability coordinator and operating budget, ensuring student-driven sustainability initiatives across PPSC campuses and the Colorado Springs community.

Services and Programs

Employment & Student Leadership Development: The office provides employment and leadership opportunities for students, supporting them as sustainability ambassadors and project leaders in the community.

Engagement & Education: The office partners with faculty and staff to plan events, workshops, trainings, and educational opportunities that build sustainability literacy and campus engagement.

Academic Integration: The office supports faculty in incorporating sustainability concepts and applied projects into courses across disciplines.

Campus Operations: The office advises staff and departments on reducing waste, increasing resource efficiency, and advancing sustainable purchasing and practices.

Strategic Planning & Assessment: The office collaborates with administrators to integrate sustainability into institutional planning and conducts college-wide sustainability assessments.

Community Partnerships & Outreach: The office partners with local organizations and institutions of higher education to exchange resources, develop projects, and strengthen regional sustainability efforts.

To learn more and get involved, visit our website: www.pikespeak.edu/sustainability or email sustainability@pikespeak.edu. The Office of Sustainability is located at the Centennial Campus in the Cheyenne Building in room C-203.

Recreation and Wellness

Centennial • A-262 • 719-502-2555

The Office for Recreation and Wellness is located at the Centennial Campus Fitness Center in 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 by semester. Open gym activities include basketball, volleyball and spike ball. The recreation program includes intramural sports, sport clubs and wellness events. 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 the office at 719-502-3514 or email RecAndWellness@pikespeak.edu.

PPSC Clubs and Organizations

PPSC Clubs and 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 by an executive board comprised of the President, Vice President, SSAC Rep, and various Senators. Joint sessions and meetings are open to the student public on a bi-weekly basis. 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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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

Discover vibrant programs and events at Pikes Peak State College that celebrate culture, identity, and community all year! Through the Student Engagement & Leadership office, PPSC hosts engaging events designed for students, with select programs also open to the public. Many events are free and created to educate, connect, and inspire.

Featured programs and celebrations include:

- September/October - Hispanic Heritage Month
- October - Domestic Violence Awareness Month and LGBTQIA+ History Month
- November - Native American History Month
- February - Black History Month
- March - Women's History Month
- April - Sexual Assault Awareness Month
- May - Asian, Native Hawaiian, and Pacific Islander History Month
- June - Pride Month
- July - Disability Pride Month

Whether you're looking to learn something new, connect with others, or celebrate culture and history, there's something for everyone at PPSC. For event details or questions about public attendance, contact the Student Engagement & Leadership Office at 719-502-2522.

Bookstore (Barnes and Noble College)

The Bookstore provides textbooks, course materials, supplies, technology, and PPSC merchandise. Services include textbook purchase, rental, Inclusive Access, and scheduled buyback events.

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, or call the Workforce Development Division at 719-502-2404.

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.

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.

Parking Services

Auxiliary Services manages students, visitors, and community parking hang tags, and accessible spaces. Functions as the Parking liaison with the Antler Hotel to manager leased parking in the hotel garage.

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.

Vending & Micro-Markets

Coca-Cola and Canteen vending services provide beverages, snacks, and fresh food options across campuses. Micro-markets offer expanded grab-and-go selections with cashless checkouts.

MILITARY, VETERANS, AND FAMILY MEMBERS

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Department of Military and Veterans Programs (MVP)

MVP is here to serve our active duty, veteran, and family members in supporting your educational goals. PPSC is a proud participant in the Department of Defense Memorandum of Understanding, approved for Veterans Affairs (VA) education benefits, Active-Duty Tuition Assistance (TA), My Career Advancement Account (MyCAA) spouse scholarships, and Colorado National Guard State TA.

All locations provide walk-in student support. Call or email at mvp@pikespeak.edu.

Tuition Rate for Military Affiliated Students

Military and Veteran Affiliated students who indicate their military affiliation on their PPSC application will receive instate tuition rates and be eligible for the Colorado Opportunity Fund (COF). Instate rates will apply no matter where you live.

Active-Duty Servicemembers tuition rate for online classes is capped at the TA cap (currently \$250 per credit hour).

MVP Services by Location

Centennial • C-222 • 719-502-4100

- School Certifying Officials/VA Education Benefit processing
- Assistance applying for benefits
- Textbook Lending Library
- TRIO Support
- Student success support
- Programming, activities, and networking opportunities
- Mandatory VA Educational Benefit Briefs
- Admissions, Advising, and Registration

Fort Carson Education and Training Center

Building 1117 • Room 117 • 719-502-4200

- ArmyIgnitED account setup and TA request support
- MyCAA support / Education and Training Plan preparation
- Evaluated Degree Plans
- Admissions
- Advising
- Course Registration
- Placement Testing/Placement Exemption
- CLEP/DSST Testing
- Joint Service Transcript (JST) evaluation
- On Post Classes

Peterson Space Force Base Education, Testing & Training Services Center

Building 1141 • Room 112 • 719-502-4300

- Open Monday through Wednesday 8:00 – 5:00
- Air Force Virtual Education Center account setup and tuition assistance request support
- Navy, Marine, Coast Guard Tuition Assistance support
- Evaluated Degree Plans
- Admissions
- Advising
- Course Registration
- Placement Testing/Placement Exemption
- CLEP/DSST Testing
- On Post Classes

Rampart Range Campus

Room S102F • 719-502-4500

- Open Thursdays 8:00 – 5:00
- Active-duty and Veteran Educational Benefit user support
- Admissions, Advising, and Registration

Downtown Campus

Room S126 • 719-502-4400

- Open Wednesdays 8:00 – 5:00
- Active-duty and Veteran Educational Benefit user support
- Admissions, Advising, and Registration

Virtual Student Support

pikespeak.edu/mvp

- Steps to apply for all DOD and VA Educational Benefits (checklists)
- Request MyCAA Education and Training Plan
- Virtual Office Hours for Distance Learners
- Information on events, activities, and community support
- Getting started how-to videos

Veterans Upward Bound

Centennial • C220 • 719-502-3444 • vub@csupueblo.edu

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

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General Education Philosophy

Pikes Peak State College believes that general education is important for student development. As stated by the Colorado Community College System, “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 part of every student’s course of study, regardless of emphasis” (SP9-30a). The intent of general education is to provide students with the opportunity to develop knowledge and skills related to written communication, quantitative literacy, creative thinking, critical thinking, oral/presentational communication, information literacy, civic engagement, diversity and global learning, inquiry and analysis, and problem solving.

Degree and Certificate Options

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

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

AA/AS Degrees with Designation

A Degree with Designation (DwD) is part of a statewide transfer agreement in the Colorado Community College System. This agreement is shared by Colorado community colleges and four-year colleges and universities.

With a Degree with Designation, you can:

- Earn a 60-credit Associate of Arts (AA) or Associate of Science (AS) degree in a specific field (such as Business)
- Transfer to a university with junior status
- Complete your bachelor’s degree in no more than 60 additional credits (120 credits total), unless an approved exception exists

If you attend full-time (15 credits per semester), do not need developmental courses, and follow the recommended plan, you can finish your bachelor’s degree in four years.

AA/AS Degrees Without Designation

Some AA and AS degree programs are not part of the statewide transfer agreements. These degrees will be listed as Associate of Arts or Associate of Science **without** a discipline designation.

These degrees may still transfer through individual agreements between community colleges and universities. Students should meet with an academic or faculty advisor to understand transfer options.

Examples of disciplines without a Degree with Designation include:

- Allied Health
- Environmental Sustainability Studies
- Humanities
- Professional Writing
- Social Work

Associate of General Studies (AGS) Degree

The Associate of General Studies (AGS) degree offers the most flexibility. It allows students to combine career and transfer courses. Some credits may not transfer.

Associate of Applied Science (AAS) Degrees and Certificates

AAS degrees and certificate programs are designed to prepare students to enter the workforce. These programs are part of Career and Technical Education.

Associate of Engineering Science (AES) Degree

The Associate of Engineering Science (AES) degree is for students who plan to continue into a four-year engineering program.

Bachelor of Applied Science (BAS) Degree

The Bachelor of Applied Science (BAS) degree is designed for students seeking career advancement in specific workforce fields. This degree primarily serves students who have completed an Associate of Applied Science (AAS) degree or a related certificate.

BAS programs build upon the curriculum of an AAS degree and are often considered “stackable” degrees. All technical and general education coursework completed in an AAS degree applies toward BAS degree requirements.

Because general education requirements vary among AAS degrees, PPSC provides flexibility in structuring these requirements. All general education courses completed as part of an AAS degree count toward the BAS general education requirements.

The BAS degree follows a true 2+2 format and supports workforce advancement and leadership development.

BAS Degree Requirements

- Total of 120 credit hours
- At least 30 credits must be completed at PPSC
- Admission requirements may vary by program
- Academic advising is strongly recommended

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

General Education and GT Pathways

All degree programs include General Education coursework that supports a well-rounded education.

All AA and AS degrees include State-Guaranteed General Education Transfer courses, known as GT Pathways. Students who earn a grade of C- or higher in GT Pathways courses are guaranteed transfer to all public Colorado colleges and universities. These courses apply to GT Pathways requirements in AA, AS, and many bachelor's degree programs.

GT Pathways does not apply to all degrees. Students should consult with an advisor at their current or intended transfer institution to ensure coursework meets degree requirements.

For additional information, refer to the Guaranteed Transfer (GT) Pathways General Education Curriculum at <https://cdhe.colorado.gov/guaranteed-transfer-pathways-general-education-curriculum>.

Degree Eligibility

Students who earn an Associate of General Studies (AGS) degree may later pursue an Associate of Arts (AA), Associate of Science (AS), or Associate of Applied Science (AAS) degree. Students who earn an Associate of Applied Science (AAS) degree may later pursue an AA, AS, or AGS degree.

Students who complete the requirements for an AA or AS degree at PPSC are not eligible to earn an AGS degree afterward.

PPSC will accept up to 45 applicable credits toward a second degree or certificate. Students who have already earned an associate degree or higher from an accredited institution are generally not eligible to earn another associate degree from PPSC in the same or a closely related program. Students may request an appeal to be considered for an exception.

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 0077 Special Topics
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 0120	Math for Clinical Calc Support
MAT 0140	Career Math Support
MAT 0160	Financial Mathematics Support
MAT 2000	Algebraic Literacy Support
MAT 0240	Math for Liberal Arts Support
MAT 0250	Quantitative Literacy
MAT 0260	Intro to Statistics Support
MAT 0300	Algebraic Literacy
MAT 0340	College Algebra Support

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 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 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.

PPSC CO Online @ Consortium (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.

PPSC 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 1015-1N1).

- 1N* sections are Full semester courses
- 2N* sections are 1st Bi-Semester courses
- 3N* sections are 2nd 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 1015 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 example, BUS 1015 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

Online Programs

At PPSC, we offer a growing number of associate degrees, bachelor's degrees, and certificate programs that can be completed fully online. For a full list of programs that are offered fully online, visit <https://www.pikespeak.edu/academics/elearning/online-bachelor-associate-degrees-certificates.php>.

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 or call 719-502-3000. Military and Veteran students, contact Department of Military & Veterans Programs at 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 Enrollment Services 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.

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.

High School Student Records and College Credit Opportunities

Pikes Peak State College (PPSC) welcomes high school students who wish to begin their college education while completing their high school diploma. Under the Family Educational Rights and Privacy Act (FERPA), all students enrolled in PPSC courses, including concurrently enrolled high school students, are considered independent students. Therefore, information from a student's educational record will not be released to parents or guardians without the student's written consent. Students may authorize the release of non-directory information to a parent, guardian, or other individual or agency by completing the "Release of Non-Directory Information" form.

PPSC offers several programs that allow high school students to earn college credit and, in some cases, industry-recognized credentials while still in high school. For more information about these opportunities, visit www.pikespeak.edu/hsp.

DEGREE & PROGRAM REQUIREMENTS

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Associate of Arts Degrees (AA)

The Associate of Arts Degrees 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 foundation for the continued study of arts and humanities, communication, or social and behavioral science.

There are two paths for earning an Associate of Arts degree: a Degree with Designation and the general Associate of Arts (AA). Some AA degrees follow a specific course of study to comply with transfer guides, such as Humanities and Social Work.

Degrees with Designation allow you to graduate from a community college with a 60-credit Associate of Arts (AA) or Associate of Science (AS) degree, enroll with junior status at a university and complete the bachelor's degree in a specific discipline for a total of 120 credits. Completing the Degree with Designation, as stated, ensures the guaranteed transfer of courses. The following pages detail the Degree with Designation options.

The general Associate of Arts, which can be seen below, has prescribed general education courses and a variety of electives to allow you to tailor your degree. To maximize the transferability of your degree, consult with your destination institution, your academic advisor, and take Guaranteed Transfer Pathways (GT) courses. Note: verify if your destination institution has a language requirement other than English, as that might influence the electives you choose. Completing the degree before transferring increases transferability of your credits.

Students must earn a C or better for courses to transfer. Courses numbered below 1000 do not apply toward degrees. At least 15 of these credit hours must be earned from 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

*Both MAT 1220 and MAT 1230 must be taken to count as the Math requirement.

Arts and Humanities / Social and Behavioral Sciences

Fifteen (15) credit hours

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

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

One additional GT Pathways course from Arts and Humanities, History, or Social and Behavioral Sciences (AH1, AH2, AH3, AH4, HI1, SS1, SS2, SS3)

GT-AH1:	ART 1110, ART 1111, ART 1112, ART 1113, COM 1300, COM 2400, DAN 1025, DAN 1050, ENG 2021, MUS 1020, MUS 1021, MUS 1022, MUS 1023, MUS 1025, SPA 2061, 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 2068
GT-AH3:	PHI 1011, PHI 1012, PHI 1013, PHI 1014, PHI 1015, PHI 1016, PHI 1042, PHI 2005, PHI 2014, PHI 2018
GT-AH4:	ASL 2221, ASL 2222, FRE 1011, FRE 1012, FRE 2011, FRE 2012, GER 1011, GER 1012, GER 2011, GER 2012, ITA 2011, ITA 2012, JPN 2011, JPN 2012, RUS 2011, RUS 2012, SPA 1011, SPA 1012, SPA 2011, SPA 2012, SPA 2061
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 2300, HIS 2500, HIS 2510, HIS 2610
GT-SS1:	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:	ANT 1001, ANT 1003, ANT 2115, ANT 2125, ANT 2130, ANT 2317, 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, SUS 1001, SUS 2001, WST 2000

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 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 2121, BIO 2124, 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 1111, PHY 1112, PHY 2111, PHY 2112, SCI 1055*, SCI 1056*

GT-SC2: AST 1140, AST 1150, AST 1160, BIO 1003, BIO 1016, ENV 1010, GEO 1060, GEY 1108, SCI 1105

*SCI 1055 and SCI 1056 must both be taken to count as a Natural and Physical Science course.

Electives

Twenty-three (23) credit hours selected from the AA approved course list can be found on page 56.

Total Credit Hours

60

Approved Elective Course List for AA Degrees and Course of Study

Electives are select courses you can choose as a part of your degree path, allowing you to study topics that interest you. Electives, when added to your core course requirements for your chosen major or course of study, make up the total number of credits needed to complete your degree. If you follow the degree specifications and graduate with an Associates of Arts before transferring to a Colorado 4-year public university, you will be enrolled with a junior status at the university and will be able to complete the bachelor's degree with no more than an additional 60 credits (for a total of 120 credits). If you transfer before completing the degree, check with your destination institution to find out which credits they will accept. If the courses you select are GT Pathway courses, they count as general education courses and are guaranteed to transfer to all Colorado public institutions.

Arts and Humanities

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
DAN 1044	Tap II	1
DAN 1050	Dance History: AH1	3
DAN 1051	Belly Dance I	1
DAN 1052	Belly Dance II	1
DAN 2011	Dance Composition & Improvisation I	3
DAN 2012	Dance Composition & Improvisation II	3
DAN 2021	Dance Performance I	2
DAN 2022	Dance Performance II	2
DAN 2024	Dance for Musical Theatre I	3
DAN 2025	Dance for Musical Theatre II	3
DAN 2051	Belly Dance III	1
DAN 2054	Methods of Teaching Dance	2
DAN 2055	Dance for Camera	2
ENG 1021	English Composition I: CO1	3
ENG 1022	English Composition II: CO2	3
ENG 1031	Technical Writing I: CO1	5
FRE 1001	Conversational French I	3
FRE 1011	French Language I: AH4	5
FRE 1012	French Language II: AH4	5
FRE 2011	French Language III: AH4	3
FRE 2012	French Language IV: AH4	3
GER 1011	German Language I: AH4	5
GER 1012	German Language II: AH4	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

[illegible]

ENG 2027	Poetry Writing	3	BIO 1006	Basic Anatomy & Physiology	4
ENG 2030	Creative Nonfiction	3	BIO 1048	Basic Ecology	4
ENG 2031	Literary Magazine	3			
ENG 2035	Rhetoric & Propaganda	3	BIO 1111	GenBio I: Molecular & Cellular Biology w/Lab: SC1	5
HIS 2765	Writing About History: CO3	3	BIO 1112	GenBio II: Ecology & Organismic Biology w/Lab: SC1	5
JOU 1005	Introduction to Mass Media: SS3	3	BIO 2101	Human Anatomy & Physiology I w/Lab: SC1	4
JOU 1006	Media News & Reporting	3	BIO 2102	Human Anatomy & Physiology II w/Lab: SC1	4
JOU 1021	Photojournalism	3	BIO 2103	Advanced Human Anatomy	2
JOU 2006	Intermediate Newswriting & Editing	3	BIO 2104	Microbiology w/Lab: SC1	4
JOU 2015	Publications Production & Design	3	BIO 2116	Human Pathophysiology	4
JOU 2025	New Media	3	BIO 2121	Botany w/Lab: SC1	5
JOU 2031	Introduction to Public Relations	3	BIO 2124	Genetics: SC1	4
JOU 2041	Feature & Magazine Writing	3	CHE 1009	General, Organic, and Biochemistry	4
History			CHE 1011	Introduction to Chemistry I w/Lab: SC1	5
HIS 1110	The World: Antiquity–1650: HI1	3	CHE 1012	Introduction to Chemistry II w/Lab: SC1	5
HIS 1120	The World: 1650-Present: HI1	3	CHE 1111	General College Chemistry I w/Lab: SC1	5
HIS 1210	U.S. History to Reconstruction: HI1	3	CHE 1112	General College Chemistry II w/Lab: SC1	5
HIS 1220	U.S. History since the Civil War: HI1	3	CHE 2111	Organic Chemistry I w/Lab	5
HIS 1310	Western Civilization: Antiquity-1650: HI1	3	CHE 2112	Organic Chemistry II w/Lab	5
HIS 1320	Western Civilization: 1650-Present: HI1	3	CSC 1005	Computer Literacy	3
HIS 2000	History of Science & Technology: HI1	3	CSC 1019	Introduction to Programming: Programming Language)	3
HIS 2005	Women in World History: HI1	3	CSC 1020	Problem Solving With (Software Package)	3
HIS 2015	20th Century World History: HI1	3	CSC 1026	Game Design & Development	3
HIS 2105	Women in U.S. History: HI1	3	CSC 1060	Computer Science I: (Language)	4
HIS 2110	African American History: HI1	3	CSC 1061	Computer Science II: (Language)	4
HIS 2115	American Indian History: HI1	3	CSC 2025	Computer Architecture/Assembly Language Programming	4
HIS 2125	American Environmental History: HI1	3	CSC 2030	C Programming: Platform	3
HIS 2130	History of the American West: HI1	3	CSC 2033	Object-Oriented Programming: (Language)	3
HIS 2135	Colorado History: HI1	3	CSC 2036	C# Programming	4
HIS 2140	Civil War Era in American History: HI1	3	CSC 2040	Java Programming	3
HIS 2145	U.S. History Since 1945: HI1	3	CSC 2046	Mobile App Development : (Platform)	3
HIS 2200	History of Latin America: HI1	3	CSC 2067	Object-Oriented Analysis & Design	3
HIS 2300	The Middle Ages: HI1	3	ENV 1010	Natural Disasters: SC2	3
HIS 2500	History of Islamic Civilization: HI1	3	ENV 1111	Environmental Science w/Lab: SC1	4
HIS 2510	Modern Middle East: HI1	3	GEO 1011	Physical Geography: Landforms w/Lab: SC1	4
HIS 2610	History of Modern China: HI1	3	GEO 1012	Physical Geography: Weather, Climate & Ecosystems w/Lab: SC1	4
Mathematics			GEY 1108	Geology of U.S. National Parks: SC2	3
MAT 1220	Integrated Math I: MA1	3	GEY 1111	Physical Geology w/Lab: SC1	4
MAT 1230	Integrated Math II: MA1	3	GEY 1112	Historical Geology w/Lab: SC1	4
MAT 1240	Mathematics for the Liberal Arts: MA1	4	GEY 1135	Environmental Geology w/Lab: SC1	4
MAT 1260	Introduction to Statistics: MA1	3	GEY 1155	General Oceanography with Lab: SC1	3
MAT 1320	Finite Mathematics: MA1	4	HWE 1019	Skills & Methods of Teaching Fitness Instruction	3
MAT 1340	College Algebra: MA1	4	HWE 1050	Human Nutrition	3
MAT 1400	Survey of Calculus: MA1	4	HWE 1061	Fitness & Wellness	2
MAT 1420	College Trigonometry: MA1	3	HWE 1062	Health & Wellness	3
MAT 1440	Pre-Calculus: MA1	5	HWE 1064	Weight Management & Exercise	2
MAT 2410	Calculus I: MA1	5	HWE 1068	Certified Personal Trainer Preparatory Course	3
MAT 2420	Calculus II: MA1	5	HWE 2060	Exercise, Nutrition & Body Composition	3
MAT 2430	Calculus III: MA1	4	HWE 2064	Health & Wellness Coaching	3
MAT 2431	Calculus III with Engineering Applications: MA1	5	MET 1050	General Meteorology w/Lab: SC1	4
MAT 2520	Discrete Mathematics: MA1	4	PHY 1105	Conceptual Physics w/Lab: SC1	4
MAT 2540	Linear Algebra	3	PHY 1111	Physics: Algebra-Based I w/Lab: SC1	5
MAT 2560	Differential Equations: MA1	3	PHY 1112	Physics: Algebra-Based II w/Lab: SC1	5
MAT 2562	Differential Equations with Linear Algebra: MA1	4	PHY 2111	Physics: Calculus-Based I w/Lab: SC1	5
Natural and Physical Sciences			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			
AST 1110	Planetary Astronomy w/Lab: SC1	4	Social and Behavioral Sciences		
AST 1120	Stellar Astronomy w/Lab: SC1	4	ANT 1001	Cultural Anthropology: SS3	3
AST 1140	Astronomy of Ancient Cultures: SC2	3	ANT 1003	Introduction to Archaeology: SS3	3
AST 1150	Astrobiology: Life in the Universe: SC2	3	ANT 1101	Exploring Other Cultures I	3
AST 1160	Cosmology: Origin and Evolution of the Universe: SC2	3	ANT 2101	Exploring Other Cultures II	3
BIO 1003	Principles of Animal Biology: SC2	3			
BIO 1004	Biology: A Human Approach: SC1	4			
BIO 1005	Science of Biology w/Lab: SC1	4			

ANT 2115	Native Peoples of North America: SS3	3	BUS 2003	Introduction to International Business	3
ANT 2125	Anthropology of Religion: SS3	3	BUS 2016	Legal Environment of Business	3
ANT 2130	Sex, Gender & Culture: SS3	3	BUS 2017	Business Communication & Report Writing	3
ANT 2218	Archaeology of the Bible	3	BUS 2026	Business Statistics	3
ANT 2317	Human Prehistory: SS3	3	CIS 1004	Word Processing with Assistive Technology	3
ANT 2545	Anthropology of Energy	3	CIS 1010	Introduction to Computing Technology: (Device)	1
ANT 2550	Medical Anthropology: SS3	3	CIS 1015	Introduction to Computer Information Systems	3
CRJ 1010	Introduction to Criminal Justice: SS3	3	CIS 1018	Introduction to PC Applications	3
CRJ 1012	Procedural Criminal Law	3	CIS 1024	Introduction to Operating Systems	3
CRJ 1025	Policing Systems	3	CIS 1028	Operating System: Using (Operating System)	3
CRJ 1027	Crime Scene Investigation	3	CIS 1055	Complete Spreadsheets: (Software package)	3
CRJ 1035	Judicial Function	3	CIS 2067	Management of Information Systems	3
CRJ 1045	Correctional Process	3	CIS 2089	Capstone	3
CRJ 2005	Principles of Criminal Law	3	ECE 1011	Introduction to Early Childhood Education	3
CRJ 2009	Criminal Investigation I	3	ECE 1031	Guidance Strategies for Young Children	3
CRJ 2010	Constitutional Law	3	ECE 1045	Introduction to Early Childhood Education Techniques	3
CRJ 2016	Juvenile Law & Procedures	3	ECE 1925	School Age Lab Techniques	3
CRJ 2020	Human Relations & Social Conflict	3	ECE 2051	Nutrition, Health & Safety	3
CRJ 2025	Crisis Intervention	3	ECE 2061	Observation & Assessment of Young Children's Development, Learning, & Programs	1
CRJ 2030	Criminology	3	ECE 2079	Seminar	1-6
CRJ 2031	Introduction to Forensic Science & Criminalistics	3	ECE 2089	Capstone: Early Childhood Education	5
CRJ 2036	Criminal Justice Research Methods	3	ECE 2101	Working with Families & Communities	3
CRJ 2057	Victimology	3	ECE 2371	Theories & Techniques of Social & Emotional Growth	3
CRJ 2068	Criminal Profiling	3	ECE 2381	ECE Child Growth & Development	3
ECO 2001	Principles of Macroeconomics: SS1	3	ECE 2411	Administration: Human Relations for Early Childhood Education	3
ECO 2002	Principles of Microeconomics: SS1	3	ECE 2601	The Exceptional Child	3
ECO 2045	Environmental Economics: SS1	3	ECE 2615	Exceptional Child Lab Techniques	3
GEO 1005	World Regional Geography: SS2	3	ECE 2621	Curriculum Development: Methods & Techniques	3
GEO 1006	Human Geography: SS2	3	ECE 2631	Language & Cognition for the Young Child	3
JOU 1005	Introduction to Mass Media: SS3	3	ECE 2641	Creativity & the Young Child	3
PSC 1011	American Government: SS1	3	ECE 2661	Science/Math & the Young Child	3
PSC 1025	American State & Local Government: SS1	3	EDU 2211	Introduction to Education	3
PSC 1050	Current Political Issues: SS1	3	EDU 2341	Multicultural Education	3
PSC 2005	International Relations: SS1	3	EDU 2611	Teaching, Learning & Technology	3
PSC 2020	Introduction to Political Science: SS1	3	EDU 2631	Teaching & Learning Online	3
PSC 2025	Comparative Government: SS1	3	EGG 1020	Engineering Methodologies	3
PSY 1001	General Psychology I: SS3	3	EGG 2020	Thermodynamics	3
PSY 1002	General Psychology II: SS3	3	EGG 2050	Engineering Economics	3
PSY 2105	Psychology of Gender: SS3	3	EGT 2303	Applied Dimension & Tolerance	3
PSY 2107	Human Sexuality: SS3	3	EGT 2305	Geometric Dimension & Tolerance	3
PSY 2221	Social Psychology: SS3	3	EMS 1021	EMT Fundamentals	3
PSY 2222	The Psychology of Death & Dying: SS3	3	ENP 1005	Introduction to Entrepreneurship	3
PSY 2331	Positive Psychology: SS3	3	FIN 2010	Principles of Finance	3
PSY 2332	Psychology of Adjustment	3	HPR 1013	AHA Heartsaver First Aid CPR & AED	0.5
PSY 2333	Health Psychology: SS3	3	HWE 1061	Fitness & Wellness	2
PSY 2440	Human Growth & Development: SS3	3	HWE 1062	Health & Wellness	3
PSY 2441	Child Development: SS3	3	HWE 1065	Introduction to Exercise Health Sciences	3
PSY 2551	Child Abuse & Neglect	3	HWE 2060	Exercise, Nutrition & Body Composition	3
PSY 2552	Psychopathology: SS3	3	MAN 2000	Human Resource Management I	3
PSY 2660	Introduction to Evolutionary Psychology	3	MAN 2016	Small Business Management	3
PSY 2661	Brain & Behavior	3	MAN 2026	Principles of Management	3
PSY 2771	Psychology of Personality: SS3	3	MAN 2046	Critical Issues in Marketing & Management	3
SOC 1001	Introduction to Sociology I: SS3	3	MAR 2016	Principles of Marketing	3
SOC 1002	Introduction to Sociology II: SS3	3	MAR 2020	Principles of Advertising	3
SOC 2005	Sociology of Family Dynamics: SS3	3	MAR 2049	Strategic Marketing	3
SOC 2007	Environmental Sociology: SS3	3	MGD 1002	Introduction to Multimedia	3
SOC 2016	Sociology of Gender: SS3	3	MGD 1007	History of Design	2
SOC 2018	Sociology of Diversity: SS3	3	MGD 1011	Adobe Photoshop I	3
SOC 2020	Sociology of Religion: SS3	3	MGD 1012	Adobe Illustrator I	3
SOC 2031	The Sociology of Deviant Behavior: SS3	3	MGD 1013	Adobe InDesign	3
SOC 2037	Sociology of Death & Dying: SS3	3	MGD 1014	Typography I	3
WST 2000	Introduction to Women's & Gender Studies: SS3	3	MGD 1017	Introduction to Visual Communications	3
Other Approved Electives			MGD 1020	Production Design	3
ACC 2011	Intermediate Accounting I	4	MGD 1034	Drawing for Illustrators	3
ACC 2012	Intermediate Accounting II	4	MGD 1041	Web Design I	3
ACC 2016	Governmental & Not-for-Profit Accounting	3			
ACC 2026	Cost Accounting	3			
ACC 2087	Cooperative Education	3			
BUS 1015	Introduction to Business	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
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: C01	3
AND		
ENG 1022	English Composition II: C02	3
OR		
ENG 1022	English Composition II: C02	3
AND		
ENG 2001	English Composition III: C03	3
or		
HIS 2765	Writing About History: C03	(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 55.

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

History

Three (3) credit hours. Full list of requirements can be found on page 55.

- GT - One GT Pathways History course (HI1)

Social and Behavioral Sciences

Six (6) credit hours. Full list of requirements can be found on page 55.

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

Natural and Physical Sciences

Eight (8) credit hours. Full list of requirements can be found on page 55.

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

Additional Required Courses

Twenty-two (22) credit hours. Full list of requirements can be found on page 55.

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 56.

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.

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)
AND		
ENG 1022	English Composition II: CO2	3
OR		
ENG 1022	English Composition II: CO2	3
AND		
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 55.

- GT - Two GT Pathways Arts and Humanities courses (AH1, AH2, AH3, AH4), *EXCEPT* the courses listed in the Additional Required Courses section below

History

Three (3) credit hours. Full list of requirements can be found on page 55.

- GT - One GT Pathways History course (HI1)

Social and Behavioral Sciences

Six (6) credit hours. Full list of requirements can be found on page 55.

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

Natural and Physical Sciences

Seven or eight (7 or 8) credit hours. Full list of requirements can be found on page 55.

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

Additional Required Courses

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 56. **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.

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
AND		

ENG 1022	English Composition II: CO2	3
OR		

ENG 1022	English Composition II: CO2	3
AND		

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 55.

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

History

Three (3) credit hours. Full list of requirements can be found on page 55.

- GT - One GT Pathways History course (HI1)

Social and Behavioral Sciences

Six (6) credit hours. Full list of requirements can be found on page 55.

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

Natural and Physical Sciences

Seven (7) credit hours. Full list of requirements can be found on page 55.

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

Additional Required Courses

Twenty-one (21) credit hours

Please note: if these credits are not required for the major at a receiving four-year institution, they will be applied to the bachelor's degree as elective credit towards graduation. Please check with the receiving institution to determine in which way these courses will be applied.

ART 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	(3)

Studio Art course	3

Electives

Eight (8) credit hours selected from the AA approved course list on page 56.

Total Credit Hours	60

Additional information available on the Art - Studio Art Department website at 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)
AND		

ENG 1022	English Composition II: CO2	3
OR		

ENG 1022	English Composition II: CO2	3
AND		

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 55.

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 55.

- 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 55.

GT – Two GT Pathways Natural and Physical Sciences 7
courses (SC1), one must be with laboratory

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 56.

Total Credit Hours 60

Additional information available on the Business Department website at 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)
AND		
ENG 1022	English Composition II: CO2	3
OR		
ENG 1022	English Composition II: CO2	3
AND		
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 55.

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

History

Three (3) credit hours. Full list of requirements can be found on page 55.

- GT - One GT Pathways History course (HI1)

Social and Behavioral Sciences

Six (6) credit hours. Full list of requirements can be found on page 55.

GT – Two GT Pathways Social and Behavioral Sciences 6
course (SS1, SS2, SS3)

Natural and Physical Sciences

Seven (7) credit hours. Full list of requirements can be found on page 55.

GT - Two GT Pathways Natural and Physical Sciences courses (SC1, SC2). One of these courses must have the required laboratory (SC1).

Additional Required Courses

Fifteen (15) credit hours. Full list of requirements can be found on page 55.

Please note: if these credits are not required for the major at a receiving four-year institution, they will be applied to the bachelor's degree as elective credit towards graduation. Please check with the receiving institution to determine in which way these courses will be applied.

COM 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 56.

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.

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.

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: C01 3
AND

ENG 1022 English Composition II: C02 3
OR

ENG 1022 English Composition II: C02 3
AND

ENG 2001 English Composition III: C03 3
or
HIS 2765 Writing About History: C03 (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 55.

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

History

Three (3) credit hours

- GT - One GT Pathways History course (HI1)

Social and Behavioral Sciences

Six (6) credit hours. Full list of requirements can be found on page 55.

- SOC 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 55.

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

Additional Required Courses

Twenty-seven (27) credit hours

Please note: if these credits are not required for the major at a receiving four-year institution, they will be applied to the bachelor's degree as elective credit towards graduation. Please check with the receiving institution to determine in which way these courses will be applied.

- COM 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 56.

Total Credit Hours

60

Additional information available on the Criminal Justice Department website at 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)
AND		
ENG 1022	English Composition II: CO2	3
OR		
ENG 1022	English Composition II: CO2	3
AND		
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

Arts and Humanities

Six (6) credit hours. Full list of requirements can be found on page 55.

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

Natural and Physical Sciences

Seven (7) credit hours. Two GT Pathways Natural & Physical Science courses (GT-SC1, GT-SC2); one of these courses must have the required laboratory (GT-SC1). Full list of requirements can be found on page 55.

Additional Required Courses

DAN 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.

Early Childhood Teacher Education

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 Teacher Education degree program, students should be able to:

- Apply developmentally appropriate teaching strategies to support the learning and development of young children
- Establish positive relationships with children, families, and communities
- Create differentiated instruction based on observations and assessment of young children
- Use developmentally appropriate guidance strategies to promote positive behavior in young children
- Demonstrate professionalism in early childhood education

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

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

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.

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.

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)
AND		
ENG 1022	English Composition II: CO2	3
OR		
ENG 1022	English Composition II: CO2	3
AND		
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

Arts and Humanities

Six (6) credit hours. Full list of requirements can be found on page 55.

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

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 55.

- 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 55.

- 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 56.

Total Credit Hours 60

Additional information available on the Economics Department website at www.pikespeak.edu/programs/economics.

Elementary Teacher Education

Associate of Arts Degree with Designation

Recommended basic skills courses are

- College Readiness in English
- College Readiness for Quantitative Literacy

Elementary Teacher Education 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 Teacher Education 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

Field of Study

Ten (10) credit hours

EDU 2088	Practicum II	1
or		(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.

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.

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
AND		
ENG 1022	English Composition II: CO2	3
OR		
ENG 1022	English Composition II: CO2	3
AND		
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 55.

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

Note: GT-AH2 Literature (LIT) courses will not be accepted to fulfill this requirement.

History

Three (3) credit hours. Full list of requirements can be found on page 55.

- GT - One GT Pathways History course (HI1)

Social and Behavioral Sciences

Six (6) credit hours. Full list of requirements can be found on page 55.

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

Natural and Physical Sciences

Seven (7) credit hours. Full list of requirements can be found on page 55.

- GT - Two GT Pathways Natural and Physical Sciences courses (SC1). One must be with laboratory (GT-SC1).

Additional Required Courses

Eighteen (18) credit hours

Please note: if these credits are not required for the major at a receiving four-year institution, they will be applied to the bachelor's degree as elective credit towards graduation. Please check with the receiving institution to determine in which way these courses will be applied.

COM 1150	Public Speaking	3
or		
COM 1250	Interpersonal Communication: SS3	(3)
or		
COM 2250	Organizational Communication	(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 2025	Introduction to Shakespeare: AH2	3
LIT 2046	Literature of Women: AH2	3
LIT 2055	Children's Literature: AH2	3
LIT 2058	Latinx Literature: AH2	3
LIT 2068	Celtic Literature: AH2	3

Electives

Eight (8) credit hours selected from the AA approved course list can be found on page 56.

Recommended Courses

ENG 2021	Creative Writing I: AH1	3
ENG 2022	Creative Writing II	3
ENG 2027	Poetry Writing	3
ENG 2031	Literary Magazine	3
HIS 1320	Western Civilization: 1650-Present: HI1	3
HUM 1003	Introduction to Film Art: AH2	3
JOU 1005	Introduction to Mass Media: SS3	3
PHI 1011	Introduction to Philosophy: AH3	3

Total Credit Hours 60

Additional information available on the English Department website at 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
AND		
ENG 1022	English Composition II: CO2	3

OR

ENG 1022	English Composition II: CO2	3
AND		
ENG 2001	English Composition III: CO3	3

Oral Communication

Three (3) credit hours. Choose one of the following:

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 options/requirements can be found on page 55.

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

Required Course

PHI 2018	Environmental Ethics: AH3	3

Suggested Course

PHI 2005	Business Ethics: AH3	3

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
GEO 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 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: C01	3
AND		
ENG 1022	English Composition II: C02	3
OR		
ENG 1022	English Composition II: C02	3
AND		
ENG 2001	English Composition III: C03	3
or		
HIS 2765	Writing About History: C03	(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 55.

- GT - One GT Pathways History course (HI1)
- CSU-Ft. Collins requires two non-US history courses.

Social and Behavioral Sciences

Three (3) credit hours. Full list of requirements can be found on page 55.

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

Natural and Physical Sciences

Seven (7) credit hours. Full list of requirements can be found on page 55.

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

Additional Required Courses

Ten (10) credit hours

FRE 1011	French Language I: AH4	5
FRE 1012	French Language II: AH4	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 56. 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.

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: C01	3
or		
ENG 1031	Technical Writing I: C01	(3)
AND		
ENG 1022	English Composition II: C02	3
OR		
ENG 1022	English Composition II: C02	3
AND		
ENG 2001	English Composition III: C03	3
or		
HIS 2765	Writing About History: C03	(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 55.

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

History

Three (3) credit hours. Full list of requirements can be found on page 55.

- GT - One GT Pathways History course (HI1)

Social and Behavioral Sciences

Six (6) credit hours. Full list of requirements can be found on page 55.

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

Natural and Physical Sciences

Seven (7) credit hours. Full list of requirements can be found on page 55.

- GT - Two GT Pathways Natural and Physical Sciences courses (SC1, SC2), one 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 56.

Maximum of six (6) credit hours may be in GEO prefix. Number of elective credits may vary according to receiving institution. You are advised to contact an advisor at the receiving institution.

Total Credit Hours **60**

Additional information available on the Geography Department website at www.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: C01	3
AND		
ENG 1022	English Composition II: C02	3
OR		
ENG 1022	English Composition II: C02	3
AND		
ENG 2001	English Composition III: C03	3
or		
HIS 2765	Writing About History: C03	(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 55.

- 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
• University of Colorado Boulder requires either HIS 1310 or HIS 1320 to fulfill this requirement.		

Social and Behavioral Sciences

Six (6) credit hours. Full list of requirements can be found on page 55.

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

Natural and Physical Sciences

Seven (7) credit hours. Full list of requirements can be found on page 55.

- GT - Two GT Pathways Natural and Physical Sciences courses (SC1, SC2). One course must be with required lab.

Additional Required Courses

Fifteen (15) credit hours

Please note: if these credits are not required for the major at a receiving four-year institution, they will be applied to the bachelor's degree as elective credit towards graduation. Please check with the receiving institution to determine in which way these courses will be applied.

COM 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 56.

Note: Students planning to transfer to CSU-Ft. Collins are advised to complete at least two semesters of one college-level world language.

Total Credit Hours 60

Additional information available on the History Department website at www.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
AND		
ENG 1022	English Composition II: CO2	3
OR		
ENG 1022	English Composition II: CO2	3
AND		
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 55.

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

Two GT Pathways Social and Behavioral Sciences courses from two different areas (SS1, SS2, SS3)

One additional GT Pathways course from Arts and Humanities or Social and Behavioral Sciences (AH1, AH2, AH3, AH4, SS1, SS2, SS3)

Suggested Courses

GT-AH2		
HUM 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

History

Three (3) credit hours

One guaranteed transfer course from History (HI1)

Natural and Physical Sciences

Seven (7) credit hours GT Pathways Natural and Physical Sciences courses (SC1, SC2), including at least one (1) lab course (SC1, SC2). Additional credit hours over seven (7) will be applied to the

electives category. Full list of requirements can be found on page 55.

Electives

Twenty-three (23) credit hours selected from the AA approved course list can be found on page 56.

Suggested Courses

ANT 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 60

Additional information available on the Humanities Department website at 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
AND		
ENG 1022	English Composition II: CO2	3
OR		
ENG 1022	English Composition II: CO2	3
AND		
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 55.

Preferred Courses

MAT 1240	Mathematics for the Liberal Arts: MA1	4

Arts and Humanities

Six (6) credit hours. Two GT Pathways Arts & Humanities courses (GT-AH1, GT-AH2, GT-AH3, or GT-AH4). Full list of requirements can be found on page 55.

History

Three (3) credit hours. One GT Pathways History course (GT-HI1).

Social and Behavioral Sciences

Six (6) credit hours. Two GT Pathways Social & Behavioral Science courses (GT-SS1, GT-SS2, or GT-SS3).

Natural and Physical Sciences

Seven (7) credit hours. Two GT Pathways Natural & Physical Science courses (GT-SC1, GT-SC2); one of these courses must have the required laboratory (GT-SC1). Full list of requirements can be found on page 55.

Additional Required Courses

Twelve (12) credit hours

JOU 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 56. Electives CANNOT be additional JOU courses.

Total Credit Hours 60

Additional information available on the Journalism Department website at 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
AND		
ENG 1022	English Composition II: CO2	3
OR		
ENG 1022	English Composition II: CO2	3
AND		
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 55.

- GT - One GT Pathways History course (HI1)

Social and Behavioral Sciences

Six (6) credit hours. Full list of requirements can be found on page 55.

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

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

Natural and Physical Sciences

Seven (7) credit hours. Full list of requirements can be found on page 55.

- GT - Two GT Pathways Natural and Physical Sciences courses (SC1, SC2). One of these courses must have the required laboratory (SC1)

Additional Required Courses

Twenty-six (26) credit hours

Please note: if these credits are not required for the major at a receiving four-year institution, they will be applied to the bachelor's degree as elective credit towards graduation. Please check with the receiving institution to determine in which way these courses will be applied.

MUS 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.

Philosophy

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	3
or		
ENG 1031	Technical Writing 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
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 55.

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

History

Three (3) credit hours. Full list of requirements can be found on page 55.

- GT - One GT Pathways History course (HI1)

Social and Behavioral Sciences

Six (6) credit hours. Full list of requirements can be found on page 55.

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

Natural and Physical Sciences

Seven (7) credit hours. Full list of requirements can be found on page 55.

- GT - Two GT Pathways Natural and Physical Sciences courses (SC1, SC2). One of these courses must have the required laboratory (SC1).

Additional Required Courses

Fifteen (15) credit hours

Please note: if these credits are not required for the major at a receiving four-year institution, they will be applied to the bachelor's degree as elective credit towards graduation. Please check with the receiving institution to determine in which way these courses will be applied.

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

Electives

Fourteen (14) credit hours selected from the AA approved course list can be found on page 56.

Total Credit Hours 60

Additional information available on the Philosophy Department website at www.pikespeak.edu/programs/philosophy.

Political Science

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: C01	3
AND		
ENG 1022	English Composition II: C02	3
OR		
ENG 1022	English Composition II: C02	3
AND		
ENG 2001	English Composition III: C03	3
or		
HIS 2765	Writing About History: C03	(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 55.

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

History

Three (3) credit hours. Full list of requirements can be found on page 55.

- GT - One GT Pathways History course (HI1)

Social and Behavioral Sciences

Six (6) credit hours

ECO 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 55.

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

Additional Required Courses

Twelve (12) credit hours

Please note: if these credits are not required for the major at a receiving four-year institution, they will be applied to the bachelor's degree as elective credit towards graduation. Please check with the receiving institution to determine in which way these courses will be applied.

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 56.

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.

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

Written Communication

Six (6) credit hours

ENG 1021	English Composition I: CO1	3
or		
ENG 1031	Technical Writing 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
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 55.

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

History

Three (3) credit hours. Full list of requirements can be found on page 55.

- GT - One GT Pathways History course (HI1)

Social and Behavioral Sciences

Six (6) credit hours. Full list of requirements can be found on page 55. 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 55.

- 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 56.

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.

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

Written Communication

Six (6) credit hours

ENG 1021	English Composition I: C01	3
or		
ENG 1031	Technical Writing I: C01	(3)
AND		
ENG 1022	English Composition II: C02	3
OR		
ENG 1022	English Composition II: C02	3
AND		
ENG 2001	English Composition III: C03	3
or		
HIS 2765	Writing About History: C03	(3)

Mathematics

Three (3) credit hours

MAT 1260	Introduction to Statistics: MA1	3

Arts and Humanities

Six (6) credit hours. Full list of requirements can be found on page 55.

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

History

Three (3) credit hours. Full list of requirements can be found on page 55.

- GT - One GT Pathways History course (HI1)

Social and Behavioral Sciences

Six (6) credit hours. Full list of requirements can be found on page 55.

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 55.

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

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.

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.

Additional Notes

- Students should maintain a cumulative GPA of 2.5 or higher for optimal transfer opportunities
- Some institutions require separate application to the Social Work program
- All institutions require background checks and fingerprinting for field placement
- Students should work with advisors to select the most appropriate electives for their career goals

Program Learning Outcomes

Upon completion of the Social Work 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: C01	3
AND		
ENG 1022	English Composition II: C02	3
OR		
ENG 1022	English Composition II: C02	3
AND		
ENG 2001	English Composition III: C03	3
or		
HIS 2765	Writing About History: C03	(3)

Oral Communication

Three (3) credit hours

Suggested Course

COM 1150	Public Speaking	3

Mathematics

Three (3) credit hours

Required Course

MAT 1260	Introduction to Statistics: MA1	3

Arts and Humanities

Six (6) credit hours. Full list of requirements can be found on page 55.

Required Courses

PHI 1013	Logic: AH3	3
One additional GT-AH course from a different area (AH1, AH2, or AH4)		3

Social and Behavioral Sciences

Six (6) credit hours

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)

Recommended Courses

HIS 1110	The World: Antiquity–1500: HI1	3
HIS 1120	The World: 1500–Present: 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). Full list of requirements can be found on page 55.

Required Courses

BIO 1005	Science of Biology w/Lab: SC1	4
Three - four (3-4) credit hours from SC1 or SC2		3-4

Additional Required Courses

Twenty-six (26) credit hours

COM 2063	Conflict Resolution	1
CSL 2054	Trauma Informed Care	1
PSY 1002	General Psychology II: SS3	3
SOC 2018	Sociology of Diversity: SS3	3
SWK 1000	Introduction to Social Work	3
SWK 1100	Social Welfare and Community Agencies	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
WST 2000	Introduction to Women's & Gender Studies: SS3	3

Total Credit Hours

60

Additional information available on the Social Work Department website at 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 the scientific study of societies, institutions, and social relationships. Questions that interest sociologists include how societies are held together, who benefits most from dominant social structures, how individuals experience restrictions placed on them and how do individuals affect change. Sociologists study many topics including family, the environment, gender, diversity, deviance, religion, death and dying, and more.

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
- Use the tools of sociology to analyze social realities
- Communicate effectively sociological content in a written format
- Apply knowledge of key sociological concepts
- Provide credible sources and citations to support sociological analysis
- Explain diverse perspectives

Written Communication

Six (6) credit hours

ENG 1021	English Composition I: C01	3
or		
ENG 1031	Technical Writing I: C01	(3)
AND		
ENG 1022	English Composition II: C02	3
OR		
ENG 1022	English Composition II: C02	3
AND		
ENG 2001	English Composition III: C03	3
or		
HIS 2765	Writing About History: C03	(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 55.

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

History

Three (3) credit hours. Full list of requirements can be found on page 55.

- GT - One GT Pathways History course (HI1)

Social and Behavioral Sciences

Six (6) credit hours. Full list of requirements can be found on page 55.

- GT - Two GT Pathways Social and Behavioral Sciences courses (SS1, SS2, SS3). 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 55.

- 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 56.

Please note: Additional SOC courses beyond the 5 courses (15 credit hours) identified above may not count toward the Sociology major at the receiving four-year institution.

Total Credit Hours 60

Additional information available on the Sociology Department website at 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: C01	3
AND		
ENG 1022	English Composition II: C02	3
OR		
ENG 1022	English Composition II: C02	3
AND		
ENG 2001	English Composition III: C03	3
or		
HIS 2765	Writing About History: C03	(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 55.

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

Natural and Physical Sciences

Seven (7) credit hours. Full list of requirements can be found on page 55.

- GT - Two GT Pathways Natural and Physical Sciences courses (SC1, SC2). One of these courses must have the required laboratory (SC1)

Additional Required Courses

Thirteen (13) credit hours

Please note: if these credits are not required for the major at a receiving four-year institution, they will be applied to the bachelor's degree as elective credit towards graduation. Please check with the receiving institution to determine in which way these courses will be applied.

COM 1150	Public Speaking (recommended)	3
or		
COM 1250	Interpersonal Communication: SS3	(3)
SPA 1011	Spanish Language I: AH4	5
SPA 1012	Spanish Language II: AH4	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 56. 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.

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

Written Communication

Six (6) credit hours

ENG 1021	English Composition I: C01	3
AND		
ENG 1022	English Composition II: C02	3
OR		
ENG 1022	English Composition II: C02	3
AND		
ENG 2001	English Composition III: C03	3
or		
HIS 2765	Writing About History: C03	(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 55.

- GT - One GT Pathways History course (HI1)

Social and Behavioral Sciences

Six (6) credit hours. Full list of requirements can be found on page 55.

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

Natural and Physical Sciences

Seven (7) credit hours. Full list of requirements can be found on page 55.

- GT - Two GT Pathways Natural and Physical Sciences courses (SC1, SC2). One of these courses must have the required laboratory (SC1).

Additional Required Courses

Eighteen (18) credit hours

Please note: if these credits are not required for the major at a receiving four-year institution, they will be applied to the bachelor's degree as elective credit towards graduation. Please check with the receiving institution to determine in which way these courses will be applied.

THE 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

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.

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.

There are two paths for earning an Associate of Science degree: a Degree with Designation and the general Associate of Science (AS). Some AS degrees follow a specific course of study to comply with transfer guides, such as Allied Health, Dietetics, Environmental Science, and the Medical Professional Track.

Degrees with Designation allow you to graduate from a community college with a 60-credit Associate of Arts (AA) or Associate of Science (AS) degree, enroll with junior status at a university and complete the bachelor's degree in a specific discipline for a total of 120 credits. Completing the Degree with Designation, as stated, ensures the guaranteed transfer of courses. The following pages detail the Degree with Designation options.

The general Associate of Science, which can be seen below, has prescribed general education courses and a variety of electives to allow you to tailor your degree. To maximize the transferability of your degree, consult with your destination institution, your academic advisor, and take Guaranteed Transfer Pathways (GT) courses. Note: verify if your destination institution has a language requirement other than English, as that might influence the electives you choose. Completing the degree before transferring increases transferability of your credits.

Students must earn a C or better for courses to transfer. Courses numbered below 1000 do not apply toward degrees. At least 15 of these credit hours must be earned from PPSC.

Written Communication

Six (6) credit hours

ENG 1021	English Composition I: C01	3
ENG 1022	English Composition II: C02	3
OR		
ENG 1022	English Composition II: C02	(3)
ENG 2001	English Composition III: C03	(3)
or		
HIS 2765	Writing About History: C03	(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 1260, MAT 1320, MAT 1340, MAT 1400, MAT 1420, MAT 1440, MAT 2410, MAT 2420, MAT 2430, MAT 2431, MAT 2520, MAT 2560

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 2300, HIS 2500, HIS 2510, HIS 2610

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, ENG 2021, 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 2068

GT-AH3: PHI 1011, PHI 1012, PHI 1013, PHI 1014, PHI 1015, PHI 1016, PHI 1042, PHI 2005, PHI 2014, PHI 2018

GT-AH4: ASL 2221, ASL 2222, FRE 1011, FRE 1012, FRE 2011, FRE 2012, GER 1011, GER 1012, GER 2011, GER 2012, ITA 2011, ITA 2012, JPN 2011, JPN 2012, RUS 2011, RUS 2012, SPA 1011, SPA 1012, SPA 2011, SPA 2012, SPA 2061

Social and Behavioral Sciences

Six (6) credit hours. Two GT Pathways courses (SS1, SS2, SS3).

GT-SS1: 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: ANT 1001, ANT 1003, ANT 2115, ANT 2125, ANT 2130, ANT 2317, 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, SUS 1001, SUS 2001, WST 2000

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 2121, BIO 2124, CHE 1011, CHE 1012, CHE 1111, CHE 1112, ENV 1111, GEO 1011, GEO 1012, GEO 1060, GEY 1111, GEY 1112, GEY 1135, GEY 1155, MET 1050, PHY 1105, PHY 1111, PHY 1112, PHY 2111, PHY 2112, SCI 1055*, SCI 1056*

*SCI 1055 and SCI 1056 must both be taken to count as a Natural and Physical Science course.

Additional Required Courses and Electives

Twenty-one (21) credit hours selected from the AS approved course list.

Total Credit Hours

60

Approved Elective Course List for AS Degrees

Electives are select courses you can choose as a part of your degree path, allowing you to study topics that interest you. Electives, when added to your core course requirements for your chosen major or course of study, make up the total number of credits needed to complete your degree. If you follow the degree specifications and graduate with an Associates of Science before transferring to a Colorado 4-year public university, you will be enrolled with a junior status at the university and will be able to complete the bachelor's degree with no more than an additional 60 credits (for a total of 120 credits). If you transfer before completing the degree, check with your destination institution to find out which credits they will accept. If the courses you select are GT Pathway courses they are guaranteed to transfer to any Colorado 4-year public university.

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 three credits can be selected from the Associate of Arts Approved Electives list.

Engineering

EGG 1020	Engineering Methodologies	3
EGG 1025	Principles of Aerospace	3
EGG 1040	Engineering Projects	3
EGG 1060	Introduction to Engineering Computing	4
EGG 1065	Logic Design I	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 2041	Circuit Analysis I	4
EGG 2050	Engineering Economics	3

Mathematics

MAT 1260	Introduction to Statistics: MA1	3
MAT 1320	Finite Mathematics: MA1	4
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 2540	Linear Algebra	3
MAT 2560	Differential Equations: MA1	3
MAT 2562	Differential Equations with Linear Algebra: MA1	4

Natural and Physical Sciences

ANT 1005	Biological Anthropology with Laboratory: SC1	4
ANT 2315	Introduction to Forensic Anthropology with Lab: SC1	3
AST 1110	Planetary Astronomy w/Lab: SC1	4
AST 1120	Stellar Astronomy w/Lab: SC1	4
AST 1150	Astrobiology: Life in the Universe: SC2	3
AST 1160	Cosmology: Origin and Evolution of the Universe: SC2	3
BIO 1004	Biology: A Human Approach: SC1	4
BIO 1005	Science of Biology with 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 2108*	General College Microbiology with Lab: SC1	5
BIO 2116	Human Pathophysiology	4
BIO 2121	Botany w/Lab: SC1	5
BIO 2124	Genetics: SC1	4
CHE 1011	Introduction to Chemistry I with Lab: SC1	5
CHE 1012	Introduction to Chemistry II with Lab: SC1	5
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
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 & Ecosystems w/Lab: SC1	4
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 1105	Conceptual Physics with 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
SCI 1055	Integrated Science I-Physics & Chemistry with Lab: SC1	4
SCI 1056	Integrated Science II-Earth & Life Sciences with Lab: SC1	4

Technology

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 1029	Introduction to Secure Coding	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
CSC 2030	C Programming: Platform	3
CSC 2033	Object-Oriented Programming: (Language)	3
CSC 2036	C# Programming	4
CSC 2040	Java Programming	3
CSC 2041	Advanced Java Programming	3
CSC 2045	Secure Software Development: (Language)	3
CSC 2046	Mobile App Development: (Platform)	3
CSC 2067	Object-Oriented Analysis & Design	3
CSC 2080	Internship	2

Data Science

DAT 1001	Introduction to Data Science	3

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
AND		
ENG 1022	English Composition II: CO2	3
OR		
ENG 1022	English Composition II: CO2	3
AND		
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 83. 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 60

Additional information available on the Pre-Allied Health Department website at 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)
AND		
ENG 1022	English Composition II: CO2	3
OR		
ENG 1022	English Composition II: CO2	3
AND		
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 83.

Total Credit Hours 60

Additional information available on the Biology Department website at 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)
AND		
ENG 1022	English Composition II: CO2	3
OR		
ENG 1022	English Composition II: CO2	3
AND		
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

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.

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: C01	3
or		
ENG 1031	Technical Writing I: C01	(3)
AND		
ENG 1022	English Composition II: C02	3
OR		
ENG 1022	English Composition II: C02	3
AND		
ENG 2001	English Composition III: C03	3
or		
HIS 2765	Writing About History: C03	(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

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.

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

Mathematics

Three (3) credit hours

MAT 1260	Introduction to Statistics: MA1	3

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).		
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.

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

Arts and Humanities

Six (6) credit hours

Required Course

PHI 2018	Environmental Ethics: AH3	3

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 83.

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.

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

AND

ENG 1022	English Composition II: CO2	3

OR

ENG 1022	English Composition II: CO2	3

AND

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

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 83.

Total Credit Hours 60

Additional information available on the Geology Department website at 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)
AND		
ENG 1022	English Composition II: CO2	3
OR		
ENG 1022	English Composition II: CO2	3
AND		
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

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 & 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 83.

Total Credit Hours 60

Additional information available on the Mathematics Department website at 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
AND		
ENG 1022	English Composition II: CO2	3
OR		
ENG 1022	English Composition II: CO2	3
AND		
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

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 83. 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 Medical Professional Department website at 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.

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
AND		
ENG 1022	English Composition II: CO2	3
OR		
ENG 1022	English Composition II: CO2	3
AND		
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

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

Natural and Physical Sciences

Ten (10) credit hours

PHY 2111	Physics: Calculus-Based I w/Lab: SC1	5	hours, at least 36 of which must be Colorado State-Guaranteed Courses.
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 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 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.

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

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)
AND		
ENG 1022	English Composition II: CO2	3
OR		
ENG 1022	English Composition II: CO2	3
AND		
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 83.

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.

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. Transferability of this customized degree program depends upon the courses taken and the receiving institution.

There must be at least 15 credits of GT Pathways courses in the 60 credit hours of the degree. Credits earned over ten years will be evaluated on a course-by-course basis. Courses must be numbered at or above 1000 to apply towards this degree.

A grade of D will count toward an AGS as long as the cumulative grade point average of 2.0 (a C average).

At least 15 of these credit hours (25% of total credits) must be earned from PPSC.

If you intend to transfer with your degree, consult with your destination institution, your academic advisor, and take Guaranteed Transfer Pathways (GT) courses to increase transferability. Note: verify if your destination institution has a language requirement other than English, as that might influence the electives you choose.

Prescribed General Education Courses (15 credit hours)

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)

Any GT Pathways Arts and Humanities course (AH1, AH2, AH3, AH4)

or

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
JPN 1011	Japanese Language I	5
JPN 1012	Japanese Language II	5
RUS 1011	Russian Language I	5
RUS 1012	Russian Language II	5

Mathematics (minimum 3 credit hours)

Any course 1000 level and over

Social and Behavioral Sciences (minimum 3 credit hours) or Public Speaking

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

or

COM 1150	Public Speaking	3

Natural and Physical Sciences (minimum 3 credit hours)

Any GT Pathways Natural and Physical Sciences course (SC1, SC2)

or

HWE 1050	Human Nutrition	3

Additional Required General Education Electives (15 credit hours)

To include:

Any 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
or		
CSC 1005	Computer Literacy	(3)

Open Electives (30 credit hours)

Electives may include any course including career and technical education courses in the catalog, as long as they are 1000 level courses or 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 (25% of total credits) 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 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

As approved by the State Board for Community Colleges and Occupational Education "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" (SP9-30a). The intent of general education is to provide students with the opportunity to develop knowledge and skills related to written communication, quantitative literacy, creative thinking, critical thinking, oral/presentational communication, information literacy, civic engagement, diversity and global learning, inquiry and analysis, and problem solving. Do not take courses on the general education electives list that are part of your discipline.

Arts and Humanities

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: AH4	5
FRE 1012	French Language II: AH4	5
FRE 2011	French Language III: AH4	3
FRE 2012	French Language IV: AH4	3
GER 1011	German Language I: AH4	5
GER 1012	German Language II: AH4	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
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
PHI 2005	Business Ethics: AH3	3
PHI 2014	Philosophy of Religion: AH3	3
PHI 2018	Environmental Ethics: AH3	3
PHO 1043	Perception & Photography	3
PHO 2005	Professional Digital Photo I	3

RUS 1011	Russian Language I	5	BIO 2101	Human Anatomy & Physiology I w/Lab: SC1	4
RUS 1012	Russian Language II	5	BIO 2102	Human Anatomy & Physiology II w/Lab: SC1	4
RUS 2011	Russian Language III: AH4	3	BIO 2104	Microbiology w/Lab: SC1	4
RUS 2012	Russian Language IV: AH4	3	BIO 2124	Genetics: SC1	4
SPA 1001	Conversational Spanish I	3	CHE 1011	Introduction to Chemistry I w/Lab: SC1	5
SPA 1002	Conversational Spanish II	3	CHE 1012	Introduction to Chemistry II w/Lab: SC1	5
SPA 1009	Spanish for Travelers	2	CHE 1111	General College Chemistry I w/Lab: SC1	5
SPA 1011	Spanish Language I: AH4	5	CHE 1112	General College Chemistry II w/Lab: SC1	5
SPA 1012	Spanish Language II: AH4	5	ENV 1111	Introduction to Environmental Science: SC1	4
SPA 1015	Spanish for the Professional I	3	GEO 1011	Physical Geography: Landforms w/Lab: SC1	4
SPA 2011	Spanish Language III: AH4	3	GEY 1108	Geology of U.S. National Parks: SC2	3
SPA 2012	Spanish Language IV: AH4	3	GEY 1111	Physical Geology w/Lab: SC1	4
THE 1005	Theatre Appreciation: AH1	3	GEY 1112	Historical Geology w/Lab: SC1	4
THE 2011	Development of Theatre Greek-Renaissance: AH1	3	GEY 1135	Environmental Geology w/Lab: SC1	4
THE 2012	Development of Theatre Restoration to Modern: AH1	3	HWE 1050	Human Nutrition	3
			PHY 1111	Physics: Algebra-Based I w/Lab: SC1	5
			PHY 1112	Physics: Algebra-Based II w/Lab: SC1	5
Communication					
COM 1150	Public Speaking	3	Social and Behavioral Sciences		
COM 1250	Interpersonal Communication: SS3	3	ANT 1001	Cultural Anthropology: SS3	3
COM 2220	Group Communication: SS3	3	ANT 1003	Introduction to Archaeology: SS3	3
COM 2250	Organizational Communication	3	ANT 1101	Exploring Other Cultures I	3
ENG 1015	Technical English & Communication	3	ANT 2101	Exploring Other Cultures II	3
ENG 1021	English Composition I: CO1	3	ANT 2115	Native Peoples of North America: SS3	3
ENG 1022	English Composition II: CO2	3	ANT 2125	Anthropology of Religion: SS3	3
ENG 1031	Technical Writing I: CO1	3	ANT 2130	Sex, Gender & Culture: SS3	3
ENG 1032	Technical Writing II	3	CRJ 1010	Introduction to Criminal Justice: SS3	3
History					
HIS 1110	The World: Antiquity–1650: HI1	3	ECO 2001	Principles of Macroeconomics: SS1	3
HIS 1120	The World: 1650–Present: HI1	3	ECO 2002	Principles of Microeconomics: SS1	3
HIS 1210	U.S. History to Reconstruction: HI1	3	ECO 2045	Environmental Economics: SS1	3
HIS 1220	U.S. History since the Civil War: HI1	3	GEO 1005	World Regional Geography: SS2	3
HIS 1310	Western Civilization: Antiquity–1650: HI1	3	GEO 1006	Human Geography: SS2	3
HIS 1320	Western Civilization: 1650–Present: HI1	3	JOU 1005	Introduction to Mass Media: SS3	3
HIS 2000	History of Science & Technology: HI1	3	PSC 1011	American Government: SS1	3
HIS 2015	20th Century World History: HI1	3	PSC 1025	American State & Local Government: SS1	3
HIS 2115	American Indian History: HI1	3	PSC 1050	Current Political Issues: SS1	3
HIS 2130	History of the American West: HI1	3	PSC 2005	International Relations: SS1	3
HIS 2135	Colorado History: HI1	3	PSC 2020	Introduction to Political Science: SS1	3
HIS 2140	Civil War Era in American History: HI1	3	PSY 1001	General Psychology I: SS3	3
HIS 2145	U.S. History Since 1945: HI1	3	PSY 1002	General Psychology II: SS3	3
HIS 2300	The Middle Ages: HI1	3	PSY 1005	Psychology of Workplace Relationships	3
HIS 2500	History of Islamic Civilization: HI1	3	PSY 2332	Psychology of Adjustment	3
HIS 2510	Modern Middle East: HI1	3	PSY 2440	Human Growth & Development: SS3	3
HIS 2610	History of Modern China: HI1	3	PSY 2771	Psychology of Personality: SS3	3
Mathematics					
MAT 1120	Math for Clinical Calculations	3	SOC 1001	Introduction to Sociology I: SS3	3
MAT 1140	Career Math	3	SOC 1002	Introduction to Sociology II: SS3	3
MAT 1160	Financial Mathematics	3	SOC 2005	Sociology of Family Dynamics: SS3	3
MAT 1260	Introduction to Statistics: MA1	3	SOC 2016	Sociology of Gender: SS3	3
MAT 1340	College Algebra: MA1	4	SOC 2018	Sociology of Diversity: SS3	3
MAT 2430	Calculus III: MA1	4	SOC 2020	Sociology of Religion: SS3	3
MAT 2431	Calculus III with Engineering Applications: MA1	5	SOC 2031	The Sociology of Deviant Behavior: SS3	3
Natural and Physical Sciences					
ANT 1005	Biological Anthropology w/Lab: SC1	4	WST 2000	Introduction to Women's & Gender Studies: SS3	3
AST 1110	Planetary Astronomy w/Lab: SC1	4	Other General Electives		
AST 1120	Stellar Astronomy w/Lab: SC1	4	BUS 1015	Introduction to Business	3
AST 1150	Astrobiology: Life in the Universe: SC2	3	CIS 1015	Introduction to Computer Information Systems	3
AST 1160	Cosmology: Origin and Evolution of the Universe: SC2	3	CIS 1018	Introduction to PC Applications	3
BIO 1004	Biology: A Human Approach: SC1	4	CSC 1020	Problem Solving with (Software Package)	3
BIO 1005	Science of Biology w/Lab: SC1	4			
BIO 1006	Basic Anatomy & Physiology	4			
BIO 1048	Basic Ecology	4			
BIO 1111	GenBio I: Molecular & Cellular Biology w/Lab: SC1	5			
BIO 1112	GenBio II: Ecology & Organismic Biology 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
		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
		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
		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)
Total Credit Hours		16

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
Total Credit Hours		30

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.

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 1260	Communication in Healthcare	(3)
or		
COM 2250	Organizational Communication	(3)
ENG 1031	Technical Writing I: C01	3
or		
ENG 1021	English Composition I: C01	(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)
		15

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	<u>1</u>
		46.5
Total Credit Hours		61.5

Additional information available on the Allied Health Department website at 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	<u>3</u>
		15

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 Materials & 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	<u>3</u>
		29

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	<u>3</u>
		17

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
		17
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 Materials & Systems	3
AEC 2230	Architectural Design & Development	4
AEC 2700	International Building Codes	3
AEC 2930	Professional Seminar & Portfolio	3
		23
Total Credit Hours		23

Basic AEC Drafting

The Basic AEC Drafting certificate prepare students for employment in architectural, engineering, and construction firms. Students learn about light frame construction techniques, the production of residential construction drawings, residential construction materials, components and systems related to wood frame structures, 2D architectural computer aided drafting skills using the AutoCAD software and how to produce construction document set.

Program Learning Outcomes

Upon completion of the Basic AEC Drafting certificate program, students should be able to:

- Interpret construction documents (e.g., mechanical systems, floor plans, door, and window schedules)
- Produce residential construction drawings based on building specifications (e.g., construction materials, structural systems, building techniques) using 2D AutoCAD and 3D Autodesk Revit software

AEC 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
		18
Total Credit Hours		18

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 Materials & 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
Total Credit Hours		20

Additional information available on the Architectural Engineer / Construction Management Department website at 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
		15

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
		29

Emphasis Areas

Collision

ACT 1024	Replace Weld-On Exterior Panel	3
ACT 1032	Structural Damage Repair	3
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
		17

Total Credit Hours for Collision Degree Emphasis

61

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
		27

Total Credit Hours for Customizing Degree Emphasis

71

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
		17

Total Credit Hours for Estimating Degree Emphasis

61

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	4
ASE 2040	Suspension & Steering III	2
ASE 2065	Heating & Air Conditioning Systems	4
		18

Total Credit Hours for Mechanical Degree Emphasis

62

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
		19

Total Credit Hours for Refinish Degree Emphasis

63

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
Total Credit Hours		30

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 1081	Automotive Collision Repair Level II Internship	2
ACT 2005	Estimating & Shop Management	3
ACT 2007	Customer Relations & Sales	2
Total Credit Hours		22

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
Total Credit Hours		21

Plastics Repair Technician

The Plastics Repair Technician Certificate is designed for students to learn damage analysis as well as a variety of techniques and skills associated with the repair of damaged rigid and flexible plastic components. Students will also learn skills used to tint and blend panels, as well as procedures related to special coatings, and sheet molded compounds and proper adhesives.

Program Learning Outcomes

Upon completion of the Plastics Repair Technician certificate program, students should be able to:

- Analyze damage to determine appropriate methods for overall repair
- Inspect, remove, and replace auto parts
- Repair both sheet molded components and flexible plastic components
- Prepare and apply special coating

ACT 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 2051	Plastics & Adhesives II	1
Total Credit Hours		14

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 2044	Final Detail	2
Total Credit Hours		10

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 1001	Introduction to Automotive Collision Technology	4
ACT 1042	Surface Preparation I	2
ACT 1043	Spray Equipment Operation	2
ACT 1044	Refinishing I	2
ACT 1080	Automotive Collision Repair Internship Level I	2
ACT 1081	Automotive Collision Repair Level II Internship	2
ACT 2043	Refinishing II	2
ACT 2044	Final Detail	2
Total Credit Hours		18

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
Total Credit Hours		12

Additional information available on the Automotive Collision Technology Department website at 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
		15

Elective hours must meet general education requirements. See list of approved general education courses. Students must consult with advisors for selection of elective courses to enhance their employability.

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
		54

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
Total Credit Hours		10

Automotive Brakes

The Automotive Brakes Certificate is designed for students to learn the basics of shop safety and common shop equipment. Students learn about vehicle electricity and wiring diagrams, as well as starting and charging systems. The major emphasis is on the operation of automotive braking systems, including skills related to diagnosis, service, and repair of disc brakes, drum brakes, and basic hydraulic systems. Students learn to perform service checks and procedures associated with automotive braking systems, including anti-lock braking systems, power assist units, and machine operations of today's automobile.

Program Learning Outcomes

Upon completion of the Automotive Brakes certificate program, students should be able to:

- Diagnose, service, and repair anti-lock braking systems, power assist units, and traction control systems
- Test, service, and repair vehicle starting and charging systems

ASE 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
Total Credit Hours		12

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
Total Credit Hours		43

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
Total Credit Hours		12

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
Total Credit Hours		29

Gasoline Engine Repair

The Gasoline Engine Repair Certificate is designed for students to learn the basics of shop safety and common shop equipment. Students learn about vehicle electricity and wiring diagrams, as well as starting and charging systems. The major emphasis is on the service of cylinder head, valve-train components, and components of the cooling system. Students learn about engine removal and reinstallation and re-mounting systems, as well as disassembly, diagnosis, and reassembly of the automotive engine.

Program Learning Outcomes

Upon completion of the Gasoline Engine Repair certificate program, students should be able to:

- Diagnose and repair engines (e.g., block and head assemblies, cylinder head)
- Test, service, and repair vehicle starting and charging systems

ASE 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
Total Credit Hours		11

Manual Drivetrain

The Manual Drivetrain Certificate is designed for students to learn the basics of shop safety and common shop equipment. Students learn about vehicle electricity and wiring diagrams, as well as starting and charging systems. The major emphasis is on the operating principles and repair procedures relating to axle-shaft and universal joints. Students gain skills in the diagnosis and repair of automotive manual transmissions, transaxles and clutches and related components. In addition, students learn to diagnose and repair automotive differentials, four wheel, and all-wheel drive units.

Program Learning Outcomes

Upon completion of the Manual Drivetrain certificate program, students should be able to:

- Test, service, and repair vehicle starting and charging systems
- Diagnose and repair manual transmissions, transaxles, and clutches

ASE 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
Total Credit Hours		12

Suspension and Steering

The Suspension and Steering Certificate is designed for students to learn the basics of shop safety and common shop equipment. Students learn about vehicle electricity and wiring diagrams, as well as starting and charging systems. The major emphasis is on the diagnosis, inspection, and service of suspension and steering systems used in light trucks and automobiles. Students learn about the operation of steering and power steering systems and includes different alignment types and procedures.

Program Learning Outcomes

Upon completion of the Suspension & Steering certificate program, students should be able to:

- Test, service, and repair vehicle starting and charging systems
- Diagnose, service, and repair suspension and steering systems and wheel alignment issues

ASE 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
Total Credit Hours		10

Additional information available on the Automotive Technology Department website at 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

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: C01	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
		42
Total Credits for Addiction Recovery Emphasis		67

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: C01	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

Certificates

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		20

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
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		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
PTE 1010	Introduction to Behavioral Health Care & Wellness	3
Total Credit Hours		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		12

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	3
		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	3

RTV 1082	Streaming 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	f6
Total Credit Hours		49
		64

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

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
Total Credit Hours		32

Advanced Television and Video Production

Students who elect to complete an Advanced Television and Video Production certificate learn specialized broadcast skills in a shorter period of time than they would with an Associate of Applied Science degree. Students learn about television production, from concept through script to actual studio production, preproduction, and postproduction, professional writing techniques for television and radio, corporate scriptwriting, as well as news and sports writing. Additionally, students learn about broadcasting and production equipment and how to use audio equipment and mixer to produce audio tracks for television production, basic videotape production and editing on linear and non-linear editing systems.

Program Learning Outcomes

Upon completion of the Advanced Television and Video Production certificate program, students should be able to:

- Write scripts for television, radio, and institutional video productions
- Create audio tracks for radio and television productions
- Create advanced video productions using industry standards
- Manage day-to-day radio and television station operations

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
Total Credit Hours		32

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
Total Credit Hours		19

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
Total Credit Hours		16

Additional information available on the Broadcasting & Electronic Media Department website at 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
		<u>15-16</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

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	<u>1</u>
		55
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	<u>1</u>
		55-56
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	<u>1</u>
		55
Total Credit Hours for Masonry Degree Emphasis		70

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
Total Credit Hours		21

Carpentry Fundamentals

This Carpentry Fundamentals Certificate introduces NCCER Carpentry level one and level two foundational carpentry skills, basic residential construction systems, the importance of personal and workplace safety, and the role of carpenters within the construction industry. Additional focus on commercial drawings, cold-formed steel framing, exterior finishing, thermal and moisture protection, roofing applications, doors and door hardware, drywall installation, drywall finishing, suspended ceilings, window, door, floor, and ceiling trim, and cabinet installation.

Program Learning Outcomes

Upon completion of the Carpentry Fundamentals certificate program, students should be able to:

- Interpret construction documents using industry standards in the carpentry trades
- Research, interpret, and apply appropriate building and structural codes in carpentry applications
- Discuss requirements associated with the major systems of residential building construction (i.e., mechanical, plumbing, and electrical)

- Explain the fundamentals of the carpentry trades (e.g., construction site safety, hand and power tools, measurements, materials, and applications)
- Estimate the materials and labor for a residential carpentry project
- Explain and perform construction techniques required for certification in NCCER Carpentry Level I (e.g., erecting roofs, installing doors and windows) and Level II (e.g., insulation, drywall application, cabinets installation and trim carpentry)

CON 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
Total Credit Hours		21

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
Total Credit Hours		22

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
Total Credit Hours		21

Masonry Advanced Applications

This Masonry Advanced Applications Certificate introduces the NCCER Carpentry level three advanced skills for the masonry trades to include elevated masonry, specialized materials and techniques, repair and restoration, commercial drawings, estimating, site layout, distance measurement and leveling, and stone masonry. Additional focus to include estimating and scheduling installation types.

Program Learning Outcomes

Upon completion of the Masonry Advanced Applications certificate program, students should be able to:

- Interpret construction documents using industry standards in the advanced masonry trades (e.g., elevated masonry, repair and restoration light commercial)
- Research, interpret, and apply appropriate building and structural codes in advanced masonry
- Discuss the restrictions, standards, and requirements governing the masonry industry

- Estimate the materials and labor for an advanced masonry project
- Create construction schedules for masonry projects
- Explain and perform advanced masonry techniques required for certification in NCCER Masonry Level III (e.g., decorative and structural columns, corners, archways, lintels)

AEC 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
Total Credit Hours		21

Masonry Fundamentals

This Masonry Fundamentals Certificate introduces the NCCER Plumbing level one and level two fundamentals of masonry trades and practices in residential application to include the fundamentals of basic masonry materials, equipment and tools, mathematical concepts used to calculate masonry units, specifications, codes, mortar, installation techniques, safety, and the career of masonry. Additional focus on residential plans and drawing interpretation, residential masonry, reinforced masonry, masonry openings and metal work, advanced laying techniques, effects of climate on masonry, and construction inspection and quality control.

Program Learning Outcomes

Upon completion of the Masonry Fundamentals certificate program, students should be able to:

- Interpret construction documents using industry standards in the masonry trades
- Research, interpret, and apply appropriate building and structural codes in masonry applications
- Explain the fundamentals of the masonry trade (e.g., materials and equipment, site safety, hand and power tools of the trade, measurement and calculations, effects of climate on masonry, various applications, and installation)
- Estimate the materials and labor for a residential masonry project
- Explain and perform masonry installation techniques required for certification in NCCER Masonry Level I (e.g., safety procedures, proper mortar, laying techniques, control joints cutting of material) and Level II (e.g., masonry openings and metal work)

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
Total Credit Hours		21

Additional information available on the Building and Construction Technology Department website at 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: C01	3
MAT 1160	Financial Mathematics	3
		<u>15</u>

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
		<u>15</u>

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
		<u>30</u>
Total Credit Hours for Administrative Assistant Emphasis		60

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
		<u>30</u>
Total Credit Hours for Management Emphasis		60

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
Total Credit Hours		30

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 2046	Critical Issues in Marketing & Management	3

Business Foundations

This certificate will allow students exposure to most of the major areas of business. Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

Program Learning Outcomes

Upon completion of the Business Foundations certificate program, students should be able to:

- Apply the principles of accounting and financial mathematics in a business organization
- Apply fundamental business principles to real-world scenarios
- Communicate effectively with clients and co-workers
- Distinguish between principles of macroeconomics and microeconomics
- Employ skills and techniques that create positive customer experiences
- Use a variety of computer technology and office applications

ACC 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 Microeconomics: SS1	(3)

ENG 1021	English Composition I: CO1	3
FIN 1060	Consumer Economics	3
MAN 1028	Human Relations in Organizations	3
MAR 1060	Customer Service	3
MAT 1160	Financial Mathematics	3
Total Credit Hours		30

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
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
Total Credit Hours		30

Additional information available on the Business Department website at www.pikespeak.edu/programs/business.

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, draftsman, and certified document technician. These career options play a critical role in product planning and the design of assembly parts and products which are to be fabricated and produced. With additional

equipping and/or education, additional career options include mechanical engineer, commercial or industrial designer, civil engineer, product designer, and project designer.

Degree opportunities are:

CAD Mechanical Emphasis- this emphasis students are trained to be CAD technicians in manufacturing, engineering, fabrication, and other areas requiring production-ready drawings and solid 3-dimensional models. Assisting with the design of residential and commercial buildings in an architectural or construction office. Subject matter such as design principles, technical drawing, print reading, product documentation, and fabrication materials and methods are included.

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 qualified to work in electronic automation and in control systems environments. Students in this program are trained on the principles behind robotic and automation technology while focusing on principles of robotics, design, programming, operation of robotic systems, and robotics system maintenance topics such as programmable logic controllers, sensors and transducers, and fundamentals of DC/AC.

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
		15

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
		24

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
		26
Total Credit Hours for HVAC Degree Emphasis		65

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
		25
Total Credit Hours for Mechanical Degree Emphasis		64

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
		26
Total Credit Hours for Robotics & Automation Degree Emphasis		65

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
		18

Additional Required Courses (all emphasis areas)

CAD 2455	SolidWorks/Mechanical	3
CAD 2456	Advanced SolidWorks	3
EGG 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
		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
		15
Total Credit Hours		15

Advanced SolidWorks Skills

The Advanced SolidWorks Skills one-semester certificate is for individuals who are working in the field or individuals in a related field wishing to obtain SolidWorks skills beyond the entry level and with prior knowledge of Mechanical Drafting. Drafting technicians whose skills are dated and wish to update, should select this certificate to gain those skills required in industry. Advanced applications of the 3D parametric software include management of design data, advanced assembly, analysis of model creations, documentation of bill of materials and parts lists, rendering, animation, and dynamic simulation and testing a model assembly.

Program Learning Outcomes

Upon completion of the Advanced SolidWorks Skills certificate program, students should be able to:

- Use the SolidWorks software package to create advanced models, parts, assemblies, and related documents (e.g., bill of materials, parts lists)
- Construct, modify, and manage complex parts in 3D space as well as to produce 2D drawings from the 3D models

CAD 2455	SolidWorks/Mechanical	3
CAD 2456	Advanced SolidWorks	3
Total Credit Hours		6

Basic CAD Skills

The Basic CAD Skills Certificate is designed for students to learn a variety of techniques and skills associated with print reading for computer aided drafting. Students will learn about linetype identification and the use of lineweights, file management, industry standards in dimensioning and how to read working drawings. Additionally, students will learn basic computer aided drafting skills using AutoCAD software, 2D CAD skills.

Program Learning Outcomes

Upon completion of the Basic CAD Skills certificate program, students should be able to:

- Produce 2D printed/plotted drawings with AutoCAD software
- Interpret working drawings for various industries

CAD 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)
Total Credit Hours		9

CAD-Quality Assurance

The CAD - Quality Assurance Certificate is designed for students to learn a variety of techniques and skills associated with print reading for computer aided drafting. Students will learn about linetype identification and the use of lineweights, file management, industry standards in dimensioning and how to read working drawings. Additionally, students learn how to interpret and apply geometric dimensioning and tolerancing in machining or drafting per the 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
Total Credit Hours		12

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
Total Credit Hours		12

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
Total Credit Hours		13

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
Total Credit Hours		17

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
Total Credit Hours		16

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
Total Credit Hours		18

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
EGG 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
Total Credit Hours		19

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
Total Credit Hours		18

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
Total Credit Hours		18

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
Total Credit Hours		30

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
Total Credit Hours		35

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
Total Credit Hours		6

Additional information available on the Computer Aided Drafting and Design – Mechanical Department website at 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
		15

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	4
CNG 1042	Introduction to Cloud Computing Concepts	3
CWB 2005	Client-side Scripting: (Software)	3
		49
Total Credit Hours		64

Certificates

Computer Application Specialist

Industry runs on productivities software and technology. Made for both novices and current industry professionals, learn to gain proficiency in the most commonly used software applications.

Program Learning Outcomes

Upon completion of the Computer Applications Specialist certificate program, students should be able to:

- Create, edit, and format texts, tables, and charts
- Create and modify database objects such as tables, queries, forms, and reports
- 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
Total Credit Hours		16

Computer Support Technician

Good Information technology support can be the difference between success and failure in an organization. This certificate is designed to allow students to gain the skills necessary to troubleshoot technology issues and contribute to the success of an organization supported by technology.

Program Learning Outcomes

Upon completion of the Computer Support Technician certificate program, students should be able to:

- Assemble and upgrade desktop/laptop computers based on customer needs
- Troubleshoot 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
Total Credit Hours		19

Database

Organizations rely on Information management as the backbone of their decision-making process. Students in this certificate will gain the skills necessary to develop, interpret, and make decisions based on data.

Program Learning Outcomes

Upon completion of the Database certificate program, students should be able to:

- Create and use relational databases using Structured Query Language (SQL)
- Create structured and logically correct computer programs
- Implement and test multiple computer programs
- 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
Total Credit Hours		18

Additional information available on the Computer Information Systems Department website at 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
		16

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
		44
Total Credit Hours		60

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
		21
Total Credit Hours		21

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
		19
Total Credit Hours		19

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
		23
Total Credit Hours		23

Additional information available on the Computer Networking Department website at www.pikespeak.edu/programs/computer-networking.

Computer Programming

Certificates

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
Total Credit Hours		18

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
		18-19

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
		42
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
Total Credit Hours		9

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
Total Credit Hours		12

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
Total Credit Hours		12

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
Total Credit Hours		12

Additional information available on the Criminal Justice Department website at 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: CO1	3
MAT 1160	Financial Mathematics	3
PSY 1005	Psychology of Workplace Relationships	3
		15

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
		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
		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
		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: CO1	3
ENV 1111	Environmental Science w/Lab: SC1	4

MAT 1160	Financial Mathematics	3
PSY 1005	Psychology of Workplace Relationships	3
		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
		42
Total Credit Hours for Sustainability Management & Dietary Cuisine Degree Emphasis		61

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
		15
Total Credit Hours		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
Total Credit Hours		29

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
Total Credit Hours		14

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
Total Credit Hours		34

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
Total Credit Hours		16

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
Total Credit Hours		36

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
Total Credit Hours		36

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 1045	Introduction to Baking	4
CUA 1056	Nutrition for the Hospitality Professional	3
Total Credit Hours		19

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
Total Credit Hours		15

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
Total Credit Hours		14

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
Total Credit Hours		14

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
Total Credit Hours		15

Additional information available on the Culinary Arts Department website at 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
		16

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
		44
Total Credit Hours		60

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
Total Credit Hours		25

Additional information available on the Cybersecurity Department website at 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.

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: C01	3
MAT 1140	Career Math	3
PSY 1001	General Psychology I: SS3	3
		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

Total Credit Hours50
65

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: C01	3

Total Credit Hours

47-48

Additional information available on the Dental Assisting Department website at 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 90-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-require 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 1260	Communication in Healthcare	4
ENG 1021	English Composition I: C01	3
HWE 1050	Human Nutrition	3
PSY 1001	General Psychology I: SS3	3
SOC 1001	Introduction to Sociology I: SS3	3
		31

Additional Required Courses

DEH 1001	Preclinical Dental Hygiene	2
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
		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 1150	Public Speaking	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

Diagnostic Medical Sonography

Associate of Applied Science Degree

Diagnostic Medical Sonography (DMS) prepares you to use highly complex medical imaging equipment, analyze acquired images for quality, assess patient condition, and apply appropriate techniques of patient care and education. In addition to fostering your intellectual growth, we advise you to exercise good judgment, demonstrate a professional demeanor, display the highest moral and ethical standards, and promote the safety of yourself and your patients.

The Diagnostic Medical Sonography program has a selective admissions process. All applicants must possess a two-year health-related (patient care-related) degree or a four-year degree from a regionally accredited institution.

Note: You must undergo a background check and drug screen before we can officially admit you into the program. A felony, loss of license, administrative disciplinary proceeding for negligence, malpractice, recklessness, or willful or intentional misconduct may prohibit entrance into the program and/or eligibility to sit for licensure exams.

Program Learning Outcomes

Upon completion of the Diagnostic Medical Sonography degree program, students should be able to:

- Perform diagnostic sonographic procedures using proper techniques and equipment in both classroom and clinical settings
- Demonstrate patient-centered care by effectively communicating with patients and adhering to ethical and professional standards in clinical practice
- Apply knowledge of sonographic principles and protocols during clinical internships at hospitals and clinics
- Analyze sonographic images to identify normal and abnormal anatomical structures
- Complete mock prep exam for American Registry for Diagnostic Medical Sonography
- Execute the essential duties and responsibilities required for entry-level diagnostic medical sonography positions in healthcare settings

General Education Courses

BIO 1111	GenBio I: Molecular & Cellular Biology w/Lab: SC1	5
BIO 2101	Human Anatomy and Physiology I with Lab: SC1	4
BIO 2102	Human Anatomy and Physiology II with Lab: SC1	4
ENG 1021	English Composition I: C01	3
MAT 1140	Career Math	3
PSY 2440	Human Growth & Development: SS3	3
or		
PSY 1001	General Psychology I: SS3	(3)
or		
SOC 1001	Introduction to Sociology: SS3	(3)
		22

Additional Required Courses

DMS 1001	Introduction to Sonography	2
DMS 2001	Ultrasound Physics I	2
DMS 2002	Ultrasound Physics II	2
DMS 2080	Clinical Observation	2.5
DMS 2081	Clinical Internship I	8

DMS 2082	Ultrasound Internship II	8
DMS 2083	Ultrasound Internship III	8
DMS 2089	Ultrasound Capstone	2
DMS 2100	Small Parts Ultrasound	2
DMS 2101	Abdominal Ultrasound I	2
DMS 2102	Abdominal Ultrasound II	2
DMS 2111	General Ultrasound Scan Lab	3
DMS 2201	OB/GYN Ultrasound I	2
DMS 2202	OB/GYN Ultrasound II	2
DMS 2400	Vascular Ultrasound	2
HPR 1038	Introduction to Medical Terminology	1
RTE 2055	Multiplaner Sectional Imaging	2
		52.5

Total Credit Hours

74.5

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
		15

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
DPM 2008	Heavy Duty Automatic Trans Diagnosis	1
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
		58
Total Credit Hours		73

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
Total Credit Hours		12

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	3
Total Credit Hours		12

Diesel Engine Repair

The Diesel Engine Repair Certificate is designed for students to learn to identify and describe different types of diesel-powered vehicles, as well as use information provided in maintenance manuals and parts manuals. Students acquire skills associated with maintaining a safe and clean working heavy duty diesel shop. They also obtain skills in engine removal and reinstallation and remounting systems, with a particular focus on the operation and repair of diesel engines (disassembly, 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	4
Total Credit Hours		12

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	2
Total Credit Hours		9

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	3
Total Credit Hours		11

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	3
Total Credit Hours		12

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
Total Credit Hours		10

Additional information available on the Diesel Technology Department website at 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 developmentally appropriate teaching strategies that integrate language and literacy support for young children's learning
- Establish positive relationships with children, families, and communities
- Create differentiated instruction based on observations and assessment of young children
- Use developmentally appropriate guidance strategies to promote positive behavior in young children
- Demonstrate professionalism in early childhood education
- Examine professional practices through reflection to advance early childhood teaching
- Implement health, safety, and nutrition practices that promote children's wellbeing in early childhood settings

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)
		15

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	5
		45
Total Credit Hours		60

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
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
Total Credit Hours		30

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
Total Credit Hours		6

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
Total Credit Hours		18

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
Total Credit Hours		18

Additional information available on the Early Childhood Education Department website at 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
		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
		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
		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
		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
		18
Total Credit Hours		18

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
Total Credit Hours		12

EMT Enhanced Curriculum

Offers education, training, and supervised clinical experience to further prepare an EMT student to function in the pre-hospital setting such as urban/rural EMS, fire services, or contracted medical work with industrial, tactical, or expeditionary systems. Furthermore, students will be better equipped to apply for work with public and private healthcare institutions and correctional institutions. Emphasizes the enhanced EMT scope of practice available to practitioners in Colorado and elsewhere. Upon successful completion of the program, individuals will obtain an Intravenous Therapy certification, 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
Total Credit Hours		17

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
Total Credit Hours		49

Additional information available on the Emergency Medical Services Department website at 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: C01	3
ENG 1022	English Composition II: C02	3
MAT 1140	Career Math or higher	3
PSC 1011	American Government: SS1	3
or		
PSY 1005	Psychology of Workplace Relationships	(3)
		15

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
		45

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

Total Credit Hours for Fire Service Management 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.

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
Total Credit Hours		24

Additional information available on the Fire Science Technology Department website at 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 (NWC)
- 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
		16-17

Additional Required Courses

HPR 1013	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
		44.5

Total Credit Hours **60.5-61.5**

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
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)
HPR 1013	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	1
Total Credit Hours		16.5

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

HPR 1013	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
Total Credit Hours		18.5

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)
HPR 1013	AHA Heartsaver First Aid CPR & AED	0.5
MAR 1060	Customer Service	3
or		
IHP 1000	Exploring Complementary Health	(1)
or		
IHP 2052	Mindfulness for Health and Wellness	(2)
IHP 2050	Registered Yoga Teacher Training Level 200	10
Total Credit Hours		16.5

Additional information available on the Health and Wellness Department website at 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: C01	3
MAT 1140	Career Math	3
PSY 1005	Psychology of Workplace Relationships	3
		15

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
		53
Total Credit Hours		68

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
Total Credit Hours		15

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
Total Credit Hours		18

Residential HVAC

The Residential HVAC certificate option provides a student with entry-level skills as a helper or apprentice in the installation, repair, and service of residential heating, ventilating, air conditioning, and refrigeration equipment found in today's residences.

Program Learning Outcomes

Upon completion of the Residential HVAC certificate program, students should be able to:

- Install, repair, and service residential heating, ventilating, air conditioning, and refrigeration (HVAC) equipment
- Determine proper equipment sizing based on heating and cooling load calculations
- Apply the Uniform Mechanical Code to HVAC equipment
- Assist clients through the entire repair process (e.g., customer service)

HVA 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
Total Credit Hours		35

Additional information available on the Heating, Air Conditioning and Refrigeration Technology Department website at 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: C01	3
or		
ENG 1021	English Composition I: C01	(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)
		15

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
		45-46
Total Credit Hours		60-61

Certificates**Hospitality Basics**

This program introduces the student to the Hospitality industry. Students learn basic skill sets in customer service, computer applications, event planning, and food safety and sanitation. Students have the opportunity to earn several industry credentials while earning the Hospitality Basics Certificate.

Program Learning Outcomes

Upon completion of the Hospitality Basics certificate program, students should be able to:

- Display the steps for planning and managing various events
- Describe how multiple departments coordinate and interact for optimal results within a property
- Evaluate a marketing plan based upon common marketing models and research methods
- Use office application software as it pertains to the Hospitality Industry
- Manage customer expectations by building rapport with effective communication techniques

CIS 1018	Introduction to PC Applications	3
CUA 1001	Food Safety & Sanitation	2
CUA 2056	Marketing in the Hospitality Industry	3
HOS 1005	Introduction to Management in the Hospitality Industry	3
HOS 1031	Planning for Special Events	3
MAR 1060	Customer Service	3
		17
Total Credit Hours		17

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
or		
PSY 1005	Psychology of Workplace Relationships	(3)
or		
SPA 1001	Conversational Spanish I	(3)
		15

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	1
		55
Total Credit Hours		70

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
CON 1064	National Center for Construction Education & Research Electrical III	6
CON 1065	National Center for Construction Education & Research Electrical IV	6
OSH 1310	10-Hour Construction Industry Standards	1
		30

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	1
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: C01	3
or		
ENG 1021	English Composition I: C01	(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>

Total Credit Hours

75

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.

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
Total Credit Hours		<u>40</u>

Additional information available on the Law Enforcement Academy Department website at 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
		15

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
		49
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
		49
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
Total Credit Hours		21

**Advanced Manufacturing Machining

This Advanced Manufacturing Machining certificate provides students with entry level machining and technology skills. Students learn to use AutoCAD and are introduced to advanced applications of 3D parametric software, with the ability to blend the virtual and real design worlds together through the use of 3D CAD Modeling, and 3D Printing. Students also learn how to use common measuring instruments relating to state-of-the-art manufacturing environments. This certificate is one of four certificates that build on each other across three semesters.

Program Learning Outcomes

Upon completion of the Advanced Manufacturing Machining certificate program, students should be able to:

- Maintain a safe work area by demonstrating safety knowledge and proper use of hand tools and machining equipment

- Read and interpret industry prints, using current drawing standards in dimensioning, symbology, linetypes, lineweights, drawing notes for working drawings, engineering assembly and design related manufacturing drawings
- Demonstrate basic and advanced measurement processes and skills utilizing common measuring instruments to ensure projects are within given specifications
- Apply the principles and theory of manufacturing processes and basic operation manual machining operations using lathes, mills, drill presses and surface grinders
- Determine part function and relationship to each other, to include tolerancing of parts for assemblies while calculating mating part conditions to guarantee parts fits
- Create two-dimensional objects using computer-aided design/computer-aided manufacturing (CAD/CAM) software and processes for mills and machining tool paths
- Generate Numeric Control (NC) code using G-codes to machine parts to specifications
- Set up, program, and operate computerized numerical control (CNC) mills and machining centers in accordance with NIMS standards
- Apply geometric dimensioning and tolerancing (GDT) in machining/drafting
- Produce industrial 2D working drawings and 3D models using SolidWorks Software based on industry standards to create advanced models, parts, assemblies, and related documents (e.g., bill of materials, parts lists)
- Create rapid prototypes using additive manufacturing to include identifying vendor parts to make a functional prototype
- Explain the changes in metallurgical characteristics during heating, cooling, shaping, and forming

CAD 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
Total Credit Hours		43

*Basic Machining Technology

This Basic Machining Technology certificate provides students with entry level machining and technology skills. Students learn about the hazards of a machine shop including safety procedures, use of bench tools, layout tools, power saws, and various hand tools related to the machine shop. Students learn how to read and understand industrial prints, as well as basic drafting and print standards. This certificate is one of two certificates that build on each another.

Program Learning Outcomes

Upon completion of the Basic Machining Technology certificate program, students should be able to:

- Maintain a safe work area by demonstrating safety knowledge and proper use of hand tools and machining equipment
- Read and interpret industry prints, using current drawing

standards in dimensioning, symbology, linetypes, lineweights, drawing notes for working drawings, engineering assembly and design related manufacturing drawings

- Demonstrate basic and advanced measurement processes and skills utilizing common measuring instruments to ensure projects are within given specifications
- Apply the principles and theory of manufacturing processes and basic operation manual machining operations using lathes, mills, drill presses and surface grinders
- Perform basic lathe operations (e.g., shaping, drilling, sanding, knurling, turning, cutting, and deformation)
- Operate a vertical milling machine (e.g., reaming, drilling, boring) within required tolerances

MAC 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
Total Credit Hours		19

****Basic Manufacturing Machining**

This Basic Manufacturing Machining certificate provides students with entry level machining and technology skills. Students learn about the hazards of a machine shop including safety procedures, use of bench tools, layout tools, power saws, and various hand tools related to the machine shop. Students also learn how to use common measuring instruments relating to state-of-the-art manufacturing environments. This certificate is one of four certificates that build on each other across three semesters.

Program Learning Outcomes

Upon completion of the Basic Manufacturing Machining certificate program, students should be able to:

- Maintain a safe work area by demonstrating safety knowledge and proper use of hand tools and machining equipment
- Read and interpret industry prints, using current drawing standards in dimensioning, symbology, linetypes, lineweights, drawing notes for working drawings, engineering assembly and design related manufacturing drawings
- Demonstrate basic and advanced measurement processes and skills utilizing common measuring instruments to ensure projects are within given specifications
- Produce industrial 2D working drawings and 3D models using SolidWorks Software based on industry standards to create advanced models, parts, assemblies, and related documents (e.g., bill of materials, parts lists)
- Explain the changes in metallurgical characteristics during heating, cooling, shaping, and forming

CAD 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
Total Credit Hours		16

****CNC Machining**

This CNC Machining certificate provides students with entry level machining and technology skills. Students learn how to construct, modify, and manage complex parts in 3D space as well as to produce 2D drawings from the 3D models, and create and edit CNC mill programs. Additionally, students learn how to interpret and apply geometric dimensioning and tolerancing (GDT) in machining or drafting. This certificate is one of four certificates that build on each other across three semesters.

Program Learning Outcomes

Upon completion of the CNC Machining certificate program, students should be able to:

- Determine part function and relationship to each other, to include tolerancing of parts for assemblies while calculating mating part conditions to guarantee parts fits
- Create two-dimensional objects using computer-aided design/computer-aided manufacturing (CAD/CAM) software and processes for mills and machining tool paths
- Generate Numeric Control (NC) code using G-codes to machine parts to specifications
- Set up, program, and operate computerized numerical control (CNC) mills and machining centers in accordance with NIMS standards
- Apply geometric dimensioning and tolerancing (GDT) in machining/drafting
- Produce industrial 2D working drawings and 3D models using SolidWorks Software based on industry standards to create advanced models, parts, assemblies, and related documents
- Create rapid prototypes using additive manufacturing to include identifying vendor parts to make a functional prototype

CAD 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
Total Credit Hours		24

****Intermediate Manufacturing Machining**

This Intermediate Manufacturing Machining certificate provides students with entry level machining and technology skills. Students perform basic lathe operations and learn about 2-axis machining, 3-axis machining wire frame and surface modeling, lathe programming, DNC systems, and advanced applications of 3D parametric software. This certificate is one of four certificates that build on each other across three semesters.

Program Learning Outcomes

Upon completion of the Intermediate Manufacturing Machining certificate program, students should be able to:

- Perform basic lathe operations (e.g., shaping, drilling, sanding, knurling, turning, cutting, and deformation)
- Operate a vertical milling machine (e.g., reaming, drilling, boring) within required tolerances
- Create two-dimensional objects using computer-aided design/computer-aided manufacturing (CAD/CAM) software and processes for mills and machining tool paths
- Produce industrial 2D working drawings and 3D models using SolidWorks Software based on industry standards to create advanced models, parts, assemblies, and related documents (e.g., bill of materials, parts lists)

CAD 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
Total Credit Hours		15

Machining for Welders

This Machining for Welders certificate provides students with entry level machining and technology skills. Students learn about the hazards of a machine shop including safety procedures, use of various tools related to the machine shop, and practical metallurgy. Additionally, students learn how to interpret weld symbols on blueprints, identify proper layout methods and tools, and proper joint design necessary for various welding processes.

Program Learning Outcomes

Upon completion of the Machining for Welders certificate program, students should be able to:

- Read and interpret welding blueprints using current drawing standards in dimensioning, symbology, linetypes, lineweights, drawing notes for working drawings, engineering assembly and design related manufacturing drawings (e.g., weld symbols, joint designs)
- Perform basic lathe operations (e.g., shaping, drilling, sanding, knurling, turning, cutting, and deformation)
- Operate a vertical milling machine (e.g., reaming, drilling, boring) within required tolerances
- Explain changes in metallurgical characteristics during heating, cooling, shaping, and forming

MAC 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
Total Credit Hours		17

*Note: These certificates build on one another. There is also the opportunity to receive more certifications should the student pass the exam NIMS Level One Certification.

**Note: The following certificates build on one another. After three semesters a student would achieve the four certificates below. There is also the opportunity to receive two more certifications should the student pass the exams: CSWA: Certification SolidWorks Associate National Certification and a NIMS Level One Certification.

Additional information available on the Machining Technology Department website at www.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 1260	Communication in Healthcare	(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>
Total Credit Hours		61

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>
Total Credit Hours		42

Additional information available on the Medical Assistant Department website at 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
Total Credit Hours		28

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: 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 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
Total Credit Hours		43

Additional information available on the Medical Office Technology Department website at 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
		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
		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	3
	Interface Design (UX/UI)	
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

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	3
MGD 2042	Web Architecture: Open Source Design	3
MGD 2068	Business for Creatives	3
Total Credit Hours		21

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
Total Credit Hours		24

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
Total Credit Hours		24

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
Total Credit Hours		15

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
Total Credit Hours		21

Additional information available on the Multimedia Graphic Design Department website at www.pikespeak.edu/programs/multimedia-graphic-design.

Music Audio Technology

See Recording Arts Technology

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
- Practical Nursing

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 Sessions held each month to obtain information prior to advising. Dates for each session can be found on the PPSC nursing website at www.pikespeak.edu/degrees-certificates/nursing/.

The application process and schedules are posted on the PPSC nursing website. 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/.

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
Total Prerequisite Credits		14

- All Biology (BIO) prerequisites must be completed within seven (7) years of entry into CCCS nursing programs.
- All courses must have a minimum of C grade with an overall GPA of 2.5 in the prerequisites.
- Students will be asked to complete a Nurse Entrance Test (Tests of Essential Academic Skills, TEAS) at time of application. Please see the nursing application for more information.
- Upon provisional acceptance, the program will notify the student of dates needed to obtain additional information such as:
 - Criminal background check/drug testing
 - Immunizations
 - CPR for Health Care Provider (BLS), American Heart Association (AHA) only
 - CNA requirement: either an Active Colorado CNA certificate in good standing OR successful completion of NUA 1001 and NUA 1070 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		
Total Nursing Credits		56.5
Total Credits		70.5

Students are eligible to apply to take the NCLEX-PN at the successful completion of the first year of nursing courses and NUR 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/. 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: C01	3
PSY 2440	Human Growth & Development: SS3	3

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
Total Prerequisite Credits		29

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 Arts and Humanities or Social and Behavioral Sciences	4
	gtPathways elective	3

Total Nursing Curriculum Credits		24.5
With NUR transfer credits from prior LPN coursework		17
Total Credits		70.5

Additional information available on the Nursing Department website at 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 and NUA 1070 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 30 hours of hands-on clinical experience in NUA 1070. 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 register for this certificate program.

To successfully complete this program, students will be required to complete proof of immunization forms for clinical compliance. Additional requirements include:

- 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.

This Program is approved by the Colorado State Board of Nursing (1560 Broadway, Suite 1370, Denver, CO 80202-5146). The following listed Program Learning Outcomes are in alignment with the Terminal Competencies of the Colorado State Board of Nursing.

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	0.67
NUA 1071	Advanced Nurse Aide Clinical	1
Total Credit Hours		5.67

Additional information available on the Nursing Assistant Department website at www.pikespeak.edu/nursing/nursing-assistant.

Practical Nursing (PN)

Recommended basic skills courses are

- College Readiness in English
- College Readiness in Basic Biology

The Practical Nursing (PN) program is designed to prepare safe practitioners to administer basic nursing care and/or assist with care of patients of various health status and ages within the scope of practical nursing as defined by the Colorado State Board of Nursing. Upon successful completion of the PN certificate program, graduates will qualify to take the national Licensed Practical Nursing (LPN) exam, which, if successful, results in a Licensed Practical Nurse who is qualified to practice. Licensed Practical Nurses LPNs work under the direction of physicians and registered nurses to care for sick, injured, and convalescent. The PN program prepares students to provide safe, therapeutic, and competent nursing care in some hospitals and other healthcare settings.

NOTE: A background check and drug screen are required to be officially admitted into the program. A felony, loss of license, administrative disciplinary proceeding for negligence, malpractice, recklessness, or willful or intentional misconduct may prohibit entrance into the program and/or eligibility to take licensure exams.

Program Learning Outcomes

Upon completion of the Practical Nursing certificate program, students should be able to:

- Provide safe, quality, person-centered care in a variety of healthcare settings considering basic research, evidence, and patient preferences as the basis for care
- Engage in critical thinking and clinical judgment, within the practical nurse scope of practice, to make person-centered care decisions
- Participate in performance improvement/quality improvement activities to improve patient care
- Collaborate with healthcare team members, the patient, and the patient's support persons to facilitate effective patient care
- Use information technology to support and communicate the planning and provision of patient care
- Manage care in a variety of healthcare settings for diverse patient populations through the process of planning, organizing, and directing
- Function within the scope of practice of the Practical Nurse incorporating professional, legal, and ethical guidelines
- Promote a culture of caring to provide support, compassion, and culturally competent, holistic care

Program Learning Outcomes:

Upon completion of the Practical Nursing certificate program, students should be able to:

- Demonstrate the roles and responsibilities of the Practical Nurse including scope of practice, supervision, assignments, and leadership skills
- Evaluate performance improvement/quality improvement to patient care
- Manage care for diverse patient populations through the process of planning, organizing, and directing nursing care
- Demonstrate knowledge and application of professional standards, and legal/ethical conduct for the Practical Nurse
- Formulate a plan for personal performance strategies to ensure success in passing the licensure examination

Required Courses

BIO 1006	Basic Anatomy & Physiology	4
ENG 1021	English Composition I: CO1	3
NUR 1001	Pharmacology Calculations	1
NUR 1002	Alterations in Adult Health I	4
NUR 1003	Basic Health Assessment for the Practical Nurse	1
NUR 1004	Alterations in Adult Health II	5
NUR 1005	Practical Nursing Arts and Skills	6
NUR 1010	Pharmacology for Practical Nursing	3
NUR 1011	Advancement into Practical Nursing	1
NUR 1013	Basic Concepts of Maternal-Newborn Nursing	2
NUR 1014	Basic Concepts of Pediatric Nursing	2
NUR 1015	Basic Concepts of Mental Health Nursing	1
NUR 1016	Basic Concepts of Geriatric Nursing	1
NUR 1070	Clinical I	3
NUR 1071	Clinical II	2
NUR 1072	Clinical III	1
NUR 1073	Clinical IV	3
Total Credit Hours		43

Additional information available on the Nursing Assistant Department website at www.pikespeak.edu/nursing/lpn/index.php.

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
		19

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
		45
Total Credit Hours		64

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
Total Credit Hours		36

Additional information available on the Paralegal Department website at www.pikespeak.edu/programs/paralegal.

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
Total Credit Hours		16

Additional information available on the Phlebotomy Department website at 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 1260	Communication in Healthcare	3
ENG 1031	Technical Writing: CO1	3
or		
ENG 1021	English Composition I: CO1	(3)
MAT 1140	Career Mathematics	3
PSY 1001	General Psychology I: SS3	3
		15

Additional Required Courses

HPR 1039	Medical Terminology	2
PTA 1010	Basic Patient Care in Physical Therapy	5
PTA 1011	Essential Physical Therapist Assistant Skills Laboratory I	1
PTA 1015	Principles and Practice of Physical Therapy	2
PTA 1018	Anatomy & Kinesiology	5
PTA 1020	Modalities in Physical Therapy	5
PTA 1021	Essential Physical Therapist Assistant Skills Laboratory II	1
PTA 1024	Rehab Principles of Medical I	2
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 2041	Essential Physical Therapist Assistant Skills Laboratory III	1
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
		61
Total Credit Hours		77

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 Assistant Department website at 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
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
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
		24
Total Credit Hours		24

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
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
Total Credit Hours		30

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
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
Total Credit Hours		27

Additional information available on the Professional Photography Department website at 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
		17-18

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
		57
Total Credit Hours		75

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.

Recording Arts Technology

Associate of Applied Science Degree

This program is designed for students wanting to complete a two-year AAS Degree in Recording Arts Technology and enter the workforce. Students explore music theory, history, sight-singing, music computer applications and audio. Students build digital literacy skills in audio recording, digital editing, audio production, audio post-production, live sound engineering, video sound production, and fundamental musicianship skills to prepare students for the workforce. This program develops the knowledge and skills for entry level career options in the music recording and entertainment industry including audio production, copyright, labels, publishing, licensing, distribution, marketing, finance, and legal settings.

Program Learning Outcomes

Upon completion of the Recording Arts Technology degree program, students should be able to:

- Create high quality audio recordings and live production mixes, which demonstrate proper microphone selection and placement, plus signal flow and processing
- Recognize the best practices of effective production in a range of genres of music in both MIDI and non-MIDI environments
- Apply fundamental knowledge of digital recording electronics and operation of a minimum of two contemporary audio recording and processing Digital Audio Workspace (DAW) software such as Pro Tools, Logic Pro, and Ableton Live
- Demonstrate an understanding of the history and aesthetics of electronic music through practical application of basic digital audio theory, the processes of music synthesis and audio effects
- Evaluate merits of recording outcomes through development of critical listening with an understanding of technical goals and aesthetic considerations appropriate for multiple genres
- Demonstrate an understanding of the process of multi-media content delivery
- Identify different audio career paths and the skills necessary to be successful in the varied career paths in the audio industry
- Develop fundamental entrepreneurial skills, including an online presence and a basic promotional strategy adaptive to market demands
- Demonstrate skills in music theory, ear training, music performance and proficiency in piano

General Education Courses

COM 1150	Public Speaking	3
ENG 1031	Technical Writing I: CO1	3
MAT 1140	Career Math	3
PHY 1105	Conceptual Physics with Lab: SC1	4
PSY 1005	Psychology of Workplace Relationships	3
or		
PSY 1016	Stress Management	(3)
Elective	Choose three (3) credits from list below	3
		19

Elective Courses

MUS 1033	Music Class III	2
MUS 1041	Private Instruction I	1
MUS 1041	Private Instruction I	2
MUS 1042	Private Instruction II	1
MUS 1042	Private Instruction II	2
MUS 1043	Private Instruction III	1
MUS 1043	Private Instruction III	2
MUS 1044	Private Instruction IV	1
MUS 1044	Private Instruction IV	2
MUS 1053	Ensemble III	2
MUS 2010	Music Theory III	3
MUS 2011	Music Theory IV	3
MUS 2012	Ear Training/Sight-Singing III	1
MUS 2013	Ear Training/Sight-Singing IV	1
RTV 1005	Basic Video Production	3
RTV 1006	Principles of Audio	3
RTV 1010	Fundamentals of Podcasting	3
SPA 1001	Conversational Spanish I	3
THE 1016	Technical Theatre	3
THE 1031	Theatre Production 1	3

Additional Required Courses

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 1022	Music History Early Romantic Period to the Present: AH1	3
MUS 1026	History of Rock and Pop	3
or		
MUS 1025	History of Jazz: AH1	(3)
MUS 1031	Music Class I: Keyboard	2
or		
MUS 1041	Private Instruction I: Piano	(2)
MUS 1032	Music Class II: Keyboard	2
or		
MUS 1042	Private Instruction I: Piano	(2)
MUS 1051	Ensemble I	1
MUS 1052	Ensemble II	1
MUS 1061	Computer Music Applications I	3
MUS 1062	Computer Music Applications II	3
MUS 1063	Music Audio Production I	3
MUS 1064	Music Audio Production II	3
MUS 1067	Music Business I	3
MUS 2041	Private Instruction: Audio Production	2
MUS 2065	Live Audio Engineering	3
MUS 2084	Internship	2
or		
MUS 2089	Capstone	(2)
		42
Total Credit Hours		61

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
		15

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
		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
Total Credit Hours		38

Automated Systems

Students will learn the fundamentals of programmable logic controllers (PLCs) as they are applied in robotics and automation. Students also learn to test, repair, certify, and troubleshoot LAN and how to study, construct, test, and evaluate basic industrial control systems and common industrial processes.

Program Learning Outcomes

Upon completion of the Automated Systems certificate program, students should be able to:

- Interpret working drawings for various industries
- Interpret and draw wire diagrams, schematics, and ladder logic diagrams to implement automation systems
- Build, troubleshoot, and repair fiber optic networks and LANs
- Operate, program, maintain, troubleshoot PLCs
- Test and control common industrial processes using a variety of techniques and instruments (e.g., motors, generators, regulators, sensors, transducers)
- Troubleshoot digital circuits
- Construct, test, and troubleshoot electronic circuits
- Program, maintain, and troubleshoot advanced automated systems

CAD 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
Total Credit Hours		25

Basic Automation

Students will acquire skills needed to address operating, monitoring, programming, troubleshooting, and repairing PLC controlled lab trainers as well as actual industrial equipment. Students will learn how to construct, test, and evaluate basic industrial control systems, including AC/DC motors, stepper motors, power sources, generators, tachometers, line diagrams and logic functions.

Program Learning Outcomes

Upon completion of the Basic Automation certificate program, students should be able to:

- Operate, program, maintain, troubleshoot, and repair programmable logic controllers (PLCs)

ELT 2252	Motors & Controls	3
ELT 2358	Programmable Logic Controllers	3
Total Credit Hours		6

Basic Electronics

Students will learn about the testing, repair, certifying and troubleshooting of LAN as well as basic skills needed for many careers in electronics and related fields. Students also learn the basic logic concepts of computer circuits, including the troubleshooting of digital circuits.

Program Learning Outcomes

Upon completion of the Basic Electronics certificate program, students should be able to:

- Test, repair, certify, and troubleshoot a variety of LANs and fiber optic systems
- Construct, test, and troubleshoot electronic circuits
- Troubleshoot digital circuits
- Solder electronic components on circuit boards

EIC 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
Total Credit Hours		12

Electronic Assembly

Students will learn about electronic assembly methods with an emphasis on processes, safety, component recognition, and soldering techniques for both through hole and surface mount components. Students learn how to repair, modify and rework broken or defective printed circuit boards.

Program Learning Outcomes

Upon completion of the Electronic Assembly certificate program, students should be able to:

- Interpret working drawings for various industries
- Troubleshoot digital circuits
- Build, troubleshoot, and repair printed circuit boards

CAD 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
Total Credit Hours		16

Robotic Technology

Students will learn to program a robot in a higher-level language to perform various tasks, including the building and interfacing of sensor circuits. Students will also learn about the technologies and equipment used in manufacturing automation and process control. This includes axis configurations, work envelopes, programming, troubleshooting, and maintenance.

Program Learning Outcomes

Upon completion of the Robotic Technology certificate program, students should be able to:

- Program, maintain, and troubleshoot robotic or similar advanced automated systems
- Operate, program, maintain, troubleshoot, and repair Local Area Networks (LANs), fiber optic networks and Programmable Logic Controllers (PLCs)
- Troubleshoot digital circuits
- Construct, test, and troubleshoot electronic circuits
- Operate a variety of industrial control systems including supervisory control and data acquisition (SCADA) systems

EIC 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
Total Credit Hours		27

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
Total Credit Hours		31

Additional information available on the Robotics & Automation Systems Technology Department website at 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)
		15

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
Total Credit Hours		75

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
ASL 2221	American Sign Language IV: AH4	3
IPP 1021	Aspects of Interpreting I	3
IPP 1045	Deaf People in Society	2
IPP 1047	Survey of Deaf Culture	3
Total Credit Hours		16

Additional information available on the Sign Language Interpreter Preparation Department website at www.pikespeak.edu/program/sign-language-interpreter.

Surgical Services**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, a surgical technologist helps prepare the operating room by setting up surgical instruments and equipment. During the surgery, technologists pass instruments and other sterile supplies to surgeons and assistants.

This four-semester program develops the knowledge and skills for an entry level Surgical Technologists. The Surgical Technology program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) upon the recommendation of the Accreditation Review Council on Education in Surgical Technology and Surgical Assisting (ARC/STSA).

Graduates of this CAAHEP-accredited program are eligible to sit for the Certified Surgical Technologist (CST) examination administered by the National Board of Surgical Technology and Surgical Assisting (NBSTSA).

The Surgical Technologist can work in a variety of settings including hospitals, surgical 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)
MAT 1120	Math for Clinical Calculations	3
or		
MAT 1140	Career Math	(3)
PSY 2440	Human Growth & Development	3
		<u>21</u>

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
		<u>39</u>

Total Credit Hours**60**

All mathematics and science prerequisite coursework must be completed within seven years prior to program admission.

Certificate**Sterile Processing Technology**

Recommended basic skills courses are

- College Readiness in English
- College Readiness for Quantitative Literacy

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. Graduates are eligible to sit for the Certified Registered Central Service Technician (CRCST) examination administered by the Healthcare Sterile Processing Association (HSPA).

Graduates may work in hospital sterile processing departments, ambulatory surgery centers, specialty clinics, and instrument reprocessing facilities.

Program Learning Outcomes

Upon completion of the Sterile Processing Technology certificate 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	<u>18</u>

Additional information available on the Surgical Technology Department website at 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	<u>17</u>

Additional information available on the Veterinary Assistant Department website at 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
Total Credit Hours		26

Gas Metal Arc Welding (GMAW)

This Gas Metal Arc Welding (GMAW) certificate is designed to prepare students for work in a variety of settings using welding and fabrication. Students learn welding in all positions and on various joint configurations using the GMAW (mig) welding process on carbon steel, stainless steel, and aluminum. Student also become familiar with basic metallurgy pertaining to the weldability of metals, structural joints, and safety in the welding industry. Additionally, students learn welding in all positions on carbon steel plate with the GMAW process.

Program Learning Outcomes

Upon completion of the Gas Metal Arc Welding (GMAW) certificate program, students should be able to:

- Identify and adjust welding parameters based on metal thickness
- Produce a single V-groove Gas Metal Arc Weld (GMAW) in various positions on carbon steel in accordance with AWS D1.1 structural steel code

WEL 1025	Introduction to Gas Metal Arc Welding	4
WEL 2025	Advanced Gas Metal Arc Welding	4
Total Credit Hours		8

Gas Tungsten Arc Welding (GTAW)

This Gas Tungsten Arc Welding (GTAW) certificate is designed to prepare students for work in a variety of settings using welding and fabrication. Students learn welding in all positions and on various joint configurations using the GTAW (tig) welding process on carbon steel, stainless steel, and aluminum. Student also become familiar with basic metallurgy pertaining to the weldability of metals, structural joints, and safety in the welding industry. Additionally, students learn welding in all positions on carbon steel, stainless steel, and aluminum plate and carbon steel pipe with the GTAW process.

Program Learning Outcomes

Upon completion of the Gas Tungsten Arc Welding (GTAW) certificate program, students should be able to:

- Identify and adjust welding parameters based on applicable metallurgy on varying joint configurations
- Produce fillet and groove Gas Tungsten Arc Weld (GTAW) I various positions on different metals

WEL 1024	Gas Tungsten Arc Welding I	4
WEL 2024	Gas Tungsten Arc Welding II	4
Total Credit Hours		8

Pipe Welding

This Pipe Welding certificate is designed to prepare students for work in a variety of settings using welding and fabrication. Students learn to perform safety inspections, minor repairs, adjust operating parameters, and operate SMAW, GMAW, and FCAW equipment in a variety of positions on plain carbon steel pipe joints. Students learn to evaluate and solve complex welding and fabrication problems and administer hands on training and supervision to other students during assigned fabrication and welding operations.

*Students must complete Entry Level Certificate prior to taking Pipe courses

Program Learning Outcomes

Upon completion of the Pipe Welding certificate program, students should be able to:

- Follow shop safety procedures and perform safety inspections
- Read and interpret an industry standard blueprint
- Utilize the oxyacetylene and plasma arc cutting processes
- Produce multi pass welds with Gas Tungsten Arc Welding (GTAW) and Shielded Metal Arc Welding (SMAW) equipment in various positions
- Adjust operating parameters of various electrodes on Shielded Metal Arc Welding (SMAW) equipment on carbon steel pipe joints

*Entry Level Certificate	26
WEL 2030 Pipe Welding I	4
WEL 2031 Pipe Welding II	4
Total Credit Hours	34

Shielded Metal Arc Welding (SMAW)

This Shielded Metal Arc Welding (SMAW) certificate is designed to prepare students for work in a variety of settings using welding and fabrication. Students learn about theory and practice in oxyacetylene processes with an emphasis toward AWS welder qualification with mild steel electrode E-7018 welding in the horizontal and vertical position. The goal is to take the AWS welder with mild steel electrode E-7018 qualification test in the 2G, 3GU, and 4G position.

Program Learning Outcomes

Upon completion of the Shielded Metal Arc Welding certificate program, students should be able to:

- Identify and adjust welding parameters based on varying positions
- Produce a single V-groove Shielded Metal Arc (SMAW) weld in various positions on carbon steel in accordance with AWS D1.1 structural steel code

WEL 1021	Structural Welding I	3
WEL 1022	Structural Welding II	3
Total Credit Hours		6

Additional information available on the Welding Department website at 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:

- Analyze the scientific principles underlying animal care
- Develop a public interpretation program that integrates comprehensive research on a specific animal, highlighting its natural history, biology, and conservation status
- Evaluate animal welfare through daily observations and husbandry practices, focusing on the effectiveness of unique care strategies across all major taxa
- Evaluate appropriate usage of tools, instruments, and techniques for suitability to the specific needs of various taxa

General Education Courses

BIO 1003	Principles of Animal Biology: SC2	3
Any COM course		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)
		<u>16</u>

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 PED or ZOO prefix	<u>5</u>
		49
Total Credit Hours		65

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.

Associate of Engineering Science Degrees (AES)

The Associate of Engineering Science (AES) degrees are designed for students who want an emphasis in various fields of engineering and who intend to transfer to a four-year engineering program.

Each four-year engineering program has specific course requirements. Students must consult with their advisors and follow current transfer guides for their destination institutions. Not all credits are guaranteed to transfer for bachelor's degree requirements at all universities or for all engineering fields.

Aerospace Engineering

Associate of Engineering Science Degree

Recommended basic skills courses are

- College Readiness in English
- MAT 1340 and MAT 1440
- CHE 1011

The Associate of Engineering Science in Aerospace Engineering is the pathway for students interested in earning a bachelor's degree in aerospace engineering. This program introduces students to calculus, physics, and engineering applications and it includes courses that are designed to transfer to University of Colorado-Colorado Springs in order to continue studies in aerospace engineering. This is a designed career pathway in aerospace engineering. The Associate of Engineering Science (AES) degree prepares students to complete the second half of a Bachelor of Science (BS) in aerospace engineering at a four-year university, specifically University of Colorado-Colorado Springs.

Written Communication

Three (3) credit hours. Any GT-CO1 or GT-CO2 course.

ENG 1021	English Composition I: CO1	3
or		
ENG 1022	English Composition II: CO2	(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.

COM 2220	Group Communication: SS3	3
or		
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

Thirty to thirty-four (30-34) 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. Please check with the receiving institution to determine in which way these courses will be applied.

EGG 1025	Principles of Aerospace	3
EGG 1040	Engineering Projects	3
or		
EGT 1110	IDEA: Introduction to Design and Engineering Applications	(3)
EGG 1060	Introduction to Engineering Computing	4
EGG 2011	Engineering Mechanics I - Statics	3
EGG 2012	Engineering Mechanics II (Dynamics)	3
EGG 2020	Thermodynamics	3
EGG 2030	Mechanics of Solids	3
or		
EGG 2041	Circuit Analysis I	(4)
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)
Total Credit Hours		64-68

Civil Engineering

Associate of Engineering Science Degree

Recommended basic skills courses are

- College Readiness in English
- MAT 1340 and MAT 1440
- CHE 1011

This program is designed for students transferring to a four-year university to complete their BS degree in Civil Engineering. It allows students to complete the first two years of the BS degree at the community college. Students explore calculus, physics, and engineering applications. Civil engineers design, build, and maintain the foundation for our modern society – our buildings, roads and bridges, drinking water and energy systems, seaports and airports, and the infrastructure for a cleaner environment, to name just a few. Civil engineering is an exciting profession because at the end of the day you can see the results of your work, whether this is a completed bridge, a high-rise building, a subway station, or a hydroelectric dam. This program introduces students to calculus, physics, and engineering applications and it includes courses that are designed to transfer to Colorado State University-Pueblo and University of Colorado-Boulder in order to continue studies in civil engineering. This is a designed career pathway in civil engineering. The Associate of Engineering Science (AES) degree prepares students to complete the second half of a Bachelor of Science (BS) in civil engineering at a four-year university, specifically Colorado State University and University of Colorado. Not all credits are guaranteed to transfer for Bachelor's degree requirements at all universities or for all engineering fields. You must complete a minimum of 64 credits to complete this degree. If receiving financial aid, you should only take courses and credits as required for this degree. Additional prerequisite courses may be required depending on your transfer institution. Please consult with your academic advisor.

Written Communication

Three (3) credit hours. Any GT-CO1 or GT-CO2 course.

ENG 1021	English Composition I: CO1	3
or		
ENG 1022	English Composition II: CO2	(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.

COM 2220	Group Communication: SS3	3
or		
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

Ten (10) credit hours

CHE 1111	General College Chemistry I w/Lab: SC1	5
PHY 2111	Physics: Calculus-Based I 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. Please check with the receiving institution to determine in which way these courses will be applied.

EGG 1040	Engineering Projects	3
or		
EGT 1110	IDEA: Introduction to Design and Engineering Applications	(3)
EGG 1060	Introduction to Engineering Computing	4
EGG 2011	Engineering Mechanics I - Statics	3
EGG 2012	Engineering Mechanics II (Dynamics)	3
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)

Required courses for transfer to Colorado State University-Pueblo Bachelor's degree in Civil Engineering

Ten to eleven (10-11) credit hours.

AEC 1520	Construction Materials & Systems	3
BIO	Any Biology GT-SC1 Course	4-5
CAD 1101	Computer Aided Drafting/ 2D I	3
or		
EGT 1101	Mechanical Design I	(3)
GEY	Any Geology GT-SC1 Course	4

Elective courses for transfer to Colorado State University-Pueblo Bachelor's degree in Civil Engineering

Three to four (3-4) credit hours

CAD 1102	Computer Aided Drafting /2D II	3
CAD 1104	CAD for Architecture	4
CAD 2220	Revit Architecture	3
CON 1047	Field Engineering I	3
EGG 2020	Thermodynamics	3
EGG 2030	Mechanics of Solids	3
Total Credit Hours		64

Required courses for transfer to University of Colorado-Boulder Bachelor's degree in Civil Engineering

Eleven to fourteen (11-14) credit hours.

CAD 1101	Computer Aided Drafting/ 2D I	3
or		
CAD 1102	Computer Aided Drafting/ 2D II	(3)
or		
CAD 2220	Revit Architecture	(3)
EGG 2020	Thermodynamics	3
PHY 2112	Physics: Calculus-Based II w/Lab: SC1	5

Elective courses for transfer to University of Colorado-Boulder

Bachelor's degree in Civil Engineering

Three to four (3-4) credit hours.

EGG 2030	Mechanics of Solids	3
GEY 1111	Physical Geology w/Lab: SC1	4
Total Credit Hours		64

Engineering: Mechatronics

Associate of Engineering Science Degree

Recommended basic skills courses are

- College Readiness in English
- MAT 1340 and MAT 1440
- CHE 1011

The AES Engineering: Mechatronics curriculum introduces students to calculus, physics, and engineering applications and it includes courses that are design to transfer to Colorado State University-Pueblo to complete their BS degree in Engineering: Mechatronics. It allows students to complete the first two years of the BS degree at Pikes Peak State College. Students explore calculus, physics, and engineering applications. Engineering mechatronics combines the study of mechanical with electrical engineering courses, so that students may understand core knowledge to drive techniques approach in both engineering- related fields. Engineering mechatronics AES degree prepares students for courses at Colorado State University-Pueblo in electronics, electromechanical devices, microprocessors, control systems, robotics, manufacturing processes, computer integrated manufacturing, quality control reliability, engineering economy, and senior design project. Not all credits are guaranteed to transfer for bachelor's degree requirements at all universities or for all engineering fields. You must complete a minimum of 65 credits to complete this degree. If receiving financial aid, you should only take courses and credits as required for this degree. Additional prerequisite courses may be required depending on your transfer institution. Please consult with your academic advisor.

Written Communication

Three (3) credit hours. Any GT-CO1 or GT-CO2 course.

ENG 1021	English Composition 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.

COM 2220	Group Communication: SS3	3
or		
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-eight to thirty-one (28-31) credit hours.

CAD 2455	Solidworks/Mechanical	3
EGG 1040	Engineering Projects	3
or		
EGT 1110	IDEA: Introduction to Design and Engineering Applications	(3)
EGG 1060	Introduction to Engineering Computing	4
EGG 2011	Engineering Mechanics I - Statics	3
EGG 2012	Engineering Mechanics II (Dynamics)	3
EGG 2041	Circuit Analysis I	4
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)

Electives

Choose one (1) course from the list below.

CHE 1112	General College Chemistry II w/Lab: SC1	5
CSC 1019	Introduction to Programming: (Programming Language)	3
CSC 1060	Computer Science I: (Language)	4
ELT 2252	Motors & Controls	3
ELT 2361	Microprocessors	3
ELT 2367	Introduction to Robotics	1
ELT 2368	Robotics Technologies	3

Total Credit Hours 65-68

General Engineering**Associate of Engineering Science Degree**

Recommended basic skills courses are

- College Readiness in English
- MAT 1340 and MAT 1440
- CHE 1011

For students who want to complete a degree in engineering and are undecided about the engineering field or transfer university, but are college chemistry and calculus ready, the AES in General Engineering is the most direct path to a bachelor's degree. The majority of coursework will transfer to most universities, but it is important to consult with your academic advisor when selecting electives in the third and fourth semesters. Not all credits are guaranteed to transfer for bachelor's degree requirements at all universities or for all engineering fields. It is recommended that you meet with your advisor before selecting a pathway in engineering.

Written Communication

Three (3) credit hours. Any GT-CO1 or GT-CO2 course.

ENG 1021	English Composition I: CO1	3
or		
ENG 1022	English Composition II: CO2	(3)
or		
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.

COM 2220	Group Communication: SS3	3
or		
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

Fifteen to eighteen (15-18) 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. Please check with the receiving institution to determine in which way these courses will be applied.

EGG 1040	Engineering Projects	3
or		
EGT 1110	IDEA: Introduction to Design and Engineering Applications	(3)
EGG 1060	Introduction to Engineering Computing	4
or		
CSC 1060	Computer Science I: (Language)	(4)
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)

Electives

Eight to eleven (8-11) credit hours

Note: It is important to consult with an academic advisor to select the correct electives based on your preferred Engineering field and transfer institution. You must complete a minimum of 60 credits to complete this degree. If receiving financial aid, you should only take courses and credits as required for this degree. Additional prerequisite courses may be required depending on your transfer institution. Please consult with your academic advisor.

AEC 1520	Construction Materials and Systems	3
BIO 1111	GenBio I: Molecular & Cellular Biology w/Lab: SC1	5
BIO 1112	GenBio II: Ecology & Organismic Biology w/Lab: SC1	5
BUS 2016	Legal Environment of Business	3
CAD 1101	Computer Aided Drafting/2D I	3
CAD 1102	Computer Aided Drafting/2D II	3
CAD 1104	CAD for Architecture	4
CAD 2220	Revit Architecture	3
CAD 2455	SolidWorks/Mechanical	3
CAD 2456	Advanced Solidworks	3
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
CON 1047	Field Engineering I	5
CSC 1019	Introduction to Programming: (Programming Language)	3
CSC 1061	Computer Science II: (Language)	4
CSC 2025	Computer Architecture/Assembly Language Programming	4
EGG 1020	Engineering Methodologies	3
EGG 1025	Principles of Aerospace	3
EGG 1065	Logic Design I	4
EGG 2011	Engineering Mechanics I - Statics	4
EGG 2012	Engineering Mechanics II (Dynamics)	4
EGG 2020	Thermodynamics	3
EGG 2030	Mechanics of Solids	3
EGG 2041	Circuit Analysis I	4
EGG 2050	Engineering Economics	3
EGT 1101	Mechanical Design I	3
ELT 2252	Motors & Controls	3
ELT 2361	Microprocessors	3
ELT 2367	Introduction to Robotics	1
ELT 2368	Robotics Technologies	3
ENG 1022	English Composition II: CO2	3
GEY 1111	Physical Geology w/Lab: SC1	4
MAT 2520	Discrete Mathematics: MA1	4
PHY 2113	Physics III: Calculus-Based Modern Physics	3
Total Credit Hours		60

Industrial Engineering

Associate of Engineering Science Degree

Recommended basic skills courses are

- College Readiness in English
- MAT 1340 and MAT 1440
- CHE 1011

The AES Industrial Engineering curriculum introduces students to calculus, physics, and engineering applications and it includes courses that are design to transfer to Colorado State University-Pueblo to complete their BS degree in Industrial Engineering. It allows students to complete the first two years of the BS degree at Pikes Peak State College. Industrial engineers design and conduct experiments to identify and fix applications to create a more sustainable and ethical solution in manufacturing. Not all credits are guaranteed to transfer for Bachelor's degree requirements at all universities or for all engineering fields. You must complete a minimum of 65 credits to complete this degree. If receiving financial aid, you should only take courses and credits as required for this degree. Additional prerequisite courses may be required depending on your transfer institution. Please consult with your academic advisor.

Written Communication

Three (3) credit hours. Any GT-CO1 or GT-CO2 course.

ENG 1021	English Composition 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

Six (6) credit hours. Any two gtPathways Social & Behavioral Science courses from two different areas (GT-SS1, GT-SS2, or GT-SS3).

COM 2220	Group Communication: SS3	3
ECO 2001	Principles of Macroeconomics: SS1	3
or		
ECO 2002	Principles of Microeconomics: SS1	(3)

Natural and Physical Sciences

Ten (10) credit hours

CHE 1111	General College Chemistry I w/Lab: SC1	5
PHY 2111	Physics: Calculus-Based I w/Lab: SC1	5

Additional Required Courses

Thirty-three to thirty-six (33-36) credit hours.

EGG 1040	Engineering Projects	3
or		
EGT 1110	IDEA: Introduction to Design and Engineering Applications	(3)
EGG 1060	Introduction to Engineering Computing	4
EGG 2011	Engineering Mechanics I - Statics	3
EGG 2012	Engineering Mechanics II (Dynamics)	3
EGG 2041	Circuit Analysis I	(4)
EGT 1101	Mechanical Design I	3
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)
PHY 2112	Physics: Calculus-Based II w/Lab: SC1	5
or		
CHE 1112	General College Chemistry II w/Lab: SC1	(5)
Total Credit Hours		65-68

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.

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.

EKG 1040	Engineering Projects	(3)
or		
EGT 1110	Introduction to Design & Engineering Applications	(3)
EKG 1060	Introduction to Engineering Computing	4
or		
CSC 1060	Computer Science I: (Language)	(4)
EKG 2011	Engineering Mechanics I - Statics	3
EKG 2012	Engineering Mechanics II (Dynamics)	3
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)

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
EKG 1020	Engineering Methodologies	3
EKG 2020	Thermodynamics	3
EKG 2030	Mechanics of Solids	3
EKG 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 an Associate of Applied Science degree with a minimum of 60 credits in Emergency Medical Services, Paramedic emphasis area 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
ESA 3005	Crisis Communication & Public Relations	3
MAT 1260	Introduction to Statistics: MA1	3
SOC 2031	The Sociology of Deviant Behavior: SS3	3
Total Credit Hours		13

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

Total Upper Division Credit Hours	48

Total Credit Hours	61

Total Emergency Medical Services Paramedic AAS Degree Credit Hours	62

(Including 17 General Education credit hours from the Emergency Medical Services AAS Paramedic Degree Emphasis)	

Total BAS Degree Credit Hours	123

Behavioral Health

The Bachelor of Applied Science (BAS) in Behavioral Health 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.

Students must complete an associate degree before applying for this BAS degree.

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

Elective General Education Options

Select seven (7) credit hours

COM 2060	Listening in a Workplace Communication Setting	1
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		26

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		27
Total Credits for Mental Health and Social Work Emphasis		53
Total Credits for Behavioral Health AAS (Including at least 4 General Education credit hours from the associate degree)		67
Total Behavioral Health 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
		17

General Education Electives

Select seven (7) credit hours

COM 2060	Listening in a Workplace Communication Setting	1
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		24

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 29

Total Credits for Addiction Recovery Emphasis 53

Total Credits for Behavioral Health AAS (including at least 6 General Education credit hours from the associate degree) 67

Total Behavioral Health 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.

Business Administration

The BAS in Business Administration provides students with the knowledge and skills to effectively manage operations in various business environments. The degree emphasizes the application of Business principles and concepts and incorporates the development of skills necessary for management, such as critical thinking, problem solving, effective communication, quantitative analysis, organizational efficiency, global awareness, leadership, teamwork, and understanding contemporary technology.

Before applying for admission to the BAS in Business Administration Program, students must complete or be nearing completion of an Associate degree in Business Administration or a similar degree. Sixty or more credits from the Associate degree will be applied toward the BAS in Business Administration.

Program Learning Outcomes

Upon completion of the Business Administration degree, students should be able to:

- Evaluate complex business problems and systems, including Human Resources concerns
- Use quantitative methodology with data analysis, interpretation of financial statements, and strategic business decisions
- Distinguish cultural differences and their implications for business operations and management
- Analyze foundational knowledge in accounting, economics, finance, management, and marketing in application of concepts and theories
- Execute practices rooted in core business disciplines such as accounting, management, marketing, finance, business law & ethics, business operations, organizational behavior, communication, and innovation & change
- Distinguish leadership qualities such as motivating others, resolving conflicts, and achieving common goals

- Evaluate opportunities, risks, and innovative solutions to business challenges
- Use methodologies to evaluate and manage human resources

General Education Requirements (15 credits in addition to the AAS degree)

COM 1250	Interpersonal Communications: SS3	3
or		
COM 2220	Group Communication: SS3	(3)
or		
COM 2250	Organizational Communications	(3)
or		
COM 2300	Intercultural Communication: SS3	(3)
ECO 2001	Principles of Macroeconomics: SS1	3
or		
ECO 2002	Principles of Macroeconomics: SS1	(3)
or		
ECO 2011	Gender in the Economy: SS1	(3)
or		
ECO 2045	Environmental Economics: SS1	(3)
or		
SOC 2018	Sociology of Diversity	(3)
ENG 1022	English Composition II: CO2	3
MAT 1260	Introduction to Statistics: MA1 or higher	3
PHI 1012	Ethics: AH3	3
or		
PHI 2005	Business Ethics: AH3	(3)
Total Credit Hours		15

Note: If the Math requirement was met in the AAS degree, no additional Math courses are needed. Any GT course can be taken to meet the extra 15 credits of General Education courses.

BAS Core Requirements

ACC 1011	Introduction to Financial Accounting	3
(If already completed in AAS, choose from Elective options below)		
BUS 3020	Business Law and Ethics	3
FIN 3020	Applied Finance	3
MAN 3030	Contemporary Management	3
MAN 3060	Operations Management	3
MAN 4030	Organizational Leadership	3
MAR 3040	Practical Marketing	3
Total Credit Hours		21

Business Administration Emphasis

BUS 3040	Sustainability and Applied Ethics	3
BUS 3060	Management Technology and Info Systems Processes	3
BUS 4010	Applied Business Research and Data Analytics	3
BUS 4081	Internship	3
or		
BUS 4089	Capstone	(3)
MAN 3050	Innovation and Change Management	3
MAN 4040	Strategic Management	3
MAN 4060	Human Resource and Supervisory Management	3
MAR 4010	Digital Marketing and Analytics	3
Total Credit Hours		24

Electives

3 credit hours of Economics not yet applied
 BUS courses not yet applied (BUS 2026 Business Statistics recommended)
 Any GT Course

Total Credit Hours	60
Total AAS Degree Credit Hours (including 15 general education credit hours from the AAS)	60
Total BAS Degree Credits	120

Cybersecurity

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.

If a student enters the BAS Cybersecurity program and has not completed a related associate degree, they will be advised into a Cybersecurity Certificate or AAS program to prepare for the BAS coursework.

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	14
Total Credit Hours	14

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		28

Network Security Operations Emphasis Electives

(Choose 16 credits)		
CNG 3010	Fundamentals of Cybersecurity	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		16

Electives	Select any BUS, CIS, CNG, CRJ, CSC, CWB, DAT, EMP, PSM, PAR course (unless prescribed by department)	2

Total Credit Hours	60
Total AAS Degree Credit Hours (including 16 General Education credit hours from the Cybersecurity AAS degree)	60
Total BAS Degree Credit Hours	120

Elementary Education

The Elementary Education BAS aligns with the Colorado Teacher Quality Standards and the Colorado Department of Education's Educator Preparation Standards Matrices. This comprehensive preparation program equips future educators with the essential knowledge, skills, and tools to succeed in diverse classrooms. Field experience opportunities are embedded throughout the curriculum to ensure teacher candidates meet the 800 or more field hours required by the Colorado Department of Education.

Before applying for admission to the BAS program, students must complete or be nearing completion of the Associate of Arts degree in Elementary Teacher Education. Look for this degree under Transfer Agreements at <https://cdhe.colorado.gov/students/attending-college/credit-transfer/transfer-degrees>. If a candidate is completing a different associate degree, they must meet with a faculty advisor from the Elementary Education Department, to develop a modified academic plan. In this case, a student may be required to complete additional lower division courses. Sixty credits from the associate degree are applied to the 120-credit requirement of the BAS degree.

Additional admissions requirements to the Elementary Education BAS include fingerprint-based criminal history check, a cumulative GPA of 2.5 or higher, and a grade of "C" in all general education courses.

Program Learning Outcomes

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

- Design interdisciplinary lessons that foster mastery of literacy, reading, math, science, and social studies knowledge, aligned with the Colorado Academic Standards
- Design curriculum that integrates digital literacy and digital citizenship, preparing students to responsibly, ethically, and effectively navigate digital platforms
- Create safe learning environments that respect and integrate students' diverse backgrounds
- Develop teaching strategies that foster critical thinking, problem-solving, creativity, and self-confidence in diverse educational settings
- Build collaborative relationship skills to enhance the educational experience and to achieve common goals
- Assess student outcomes with data analysis and self-reflection techniques
- Adapt innovative methodologies and technologies to enhance student learning experiences

The BAS in Elementary Education is a comprehensive program that emphasizes Colorado Essential Skills for teaching, with a focus on twenty-first century skills, such as digital literacy, digital citizenship, and social-emotional learning (SEL) techniques.

Graduates of this program are prepared to sit for the Praxis examinations to achieve the Colorado Teacher licensure with an endorsement in Elementary Education (K-6).

To obtain the Elementary Education endorsement, the teacher candidates must achieve passing scores on the following examinations:

Content PRAXIS Exams

- PRAXIS 5205, Reading (159), or an Approved Multiple Measures Submission for Teaching Reading and
- PRAXIS Mathematics 5903 (157) or an Approved Multiple Measures Submission for Elementary Math.

BAS in Elementary Education Core Requirements

EDU 3311	Classroom and Behavioral Supports	4
EDU 3321	Reading Foundations I: Emergent Literacy	4
EDU 3331	Inclusive Classroom Practices through Universal Design	4
EDU 3341	Digital Literacy Citizenship for Teaching and Learning	3
EDU 3351	Reading Foundations II: Word Study and Comprehension	4
EDU 3361	Digital Storytelling	3
EDU 4052	Teacher Preparation Clinical Residency I	9
EDU 4062	Teacher Preparation Clinical Residency II	12
EDU 4411	Methods of Teaching Language Arts	3
EDU 4421	Methods of Teaching Mathematics in Diverse Classrooms	3
EDU 4423	Community of Practice Seminar	3
EDU 4431	Methods of Teaching Social Studies and Science	4
EDU 4441	Assessment in Diverse Classrooms	4
Total Credit Hours		60
Total Associate Degree Credit Hours		60
(Including 35 General Education credit hours from the Elementary Teacher Education AA)		
Total BAS Degree Credit Hours		120

Emergency Service Administration

The BAS Emergency Service Administration degree offers a comprehensive educational program to prepare a new generation of leaders in the field of emergency services in both governmental agencies and private sectors. Students will obtain a well-rounded learning experience and training related to proactive strategic planning for disaster prevention and reduction. The curriculum blends theoretical perspectives with professional practice necessary to enhance resiliency for communities and leverage capabilities and resources to deal with emergency situations. Students will learn how to tackle crisis requiring multi-agency collaboration and coordination activities. Additionally, the curriculum provides the foundation and skills for professionals in emergency services to advance into a leadership position and practice a proactive leadership in unpredictable and catastrophic situations to minimize risk to responders and the public.

Prior to applying for the BAS ESA degree, students must complete an associate degree with a minimum of 60 credits in one of the following degrees or a different associate degree combined with showing evidence of a minimum of 4000 hours of related field experience.

Criminal Justice
Emergency Management & Planning
Emergency Medical Services
Fire Science Technology
Fire Science Wildland
Public Security Management

Each general education course and all 3000 and 4000 level ESA courses must be completed with a grade of C or better or the course must be repeated to progress in the program and graduate.

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	(3)
Total Credit Hours		15

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	6
		45
Total Credit Hours		60
Total Associate Degree Credit Hours (Including at least 15 General Education credit hours from the associate degree)		60
Total BAS Degree Credit Hours		120

Additional information available on the Emergency Service Administration Department website at 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
Total Credit Hours		18

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
Total Credit Hours		24.5

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
Total Credit Hours	120

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 certificate/courses are not transferrable or applicable to other degree or certificate programs. 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: C01	3
PSY 1005	Psychology of Workplace Relationships	3
PSY 1016	Stress Management	3
General Education Options		<u>18</u>

Area of Study Courses

Elective Options	<u>18</u>
Total Credit Hours	36

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.

COURSE DESCRIPTIONS

Course Numbering System

Each course has a letter and a numeric code. The letters are an abbreviation for the subject. For instance, MAT indicates a mathematics course and ENG an English course.

Courses numbered 1000-1999 are usually considered freshman level. Sophomore courses are generally numbered between 2000 and 2999. Courses numbered 3000 and above are Bachelor level.

Course numbers and descriptions are subject to change.

Developmental Courses

Developmental courses are numbered from 0001 to 0999. 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

Courses that are part of the Guaranteed Transfer (GT) Pathways Matrix are guaranteed to transfer to Colorado public institutions when completed with a grade of C or better. GT Pathways courses are indicated in the PPSC Catalog following the course title by bolded abbreviations (e.g., **AH4**, **C01**, **SC1**).

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.

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

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 (minimum grade of C) or ACC 1011 (minimum grade of C) or ACC 1021 (minimum grade of C)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Co-requisite: ACC 1001 (minimum grade of C) or ACC 1011 (minimum grade of C) or ACC 1021 (minimum grade of C)

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

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

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: ACC 1021 (minimum grade of C)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Co-requisite: ACC 1001 (minimum grade of C) or ACC 1011 (minimum grade of C) or ACC 1021 (minimum grade of C)

Introduces computerized accounting applications for business use, with emphasis on company setup and all aspects of the accounting cycle.

ACC 1031 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

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

1 Credit Hour • 30 Contact Hours (Practicum)

Prerequisite: ACC 1032 (minimum grade of C)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: (ACC 1001 (minimum grade of C) or ACC 1011 (minimum grade of C) or ACC 1021 (minimum grade of C)) and (CIS 1018 (minimum grade of C) or CIS 1055 (minimum grade of C))

Introduces spreadsheets as an accounting tool in the application of fundamental accounting concepts, problem-solving, and decision-making skills.

ACC 2011 Intermediate Accounting I

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: ACC 1012 (minimum grade of C) or ACC 1022 (minimum grade of C)

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

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: ACC 2011 (minimum grade of C)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ACC 1012 (minimum grade of C) or ACC 1022 (minimum grade of C)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ACC 1012 (minimum grade of C) or ACC 1022 (minimum grade of C)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ACC 1031 (minimum grade of C) or ACC 1032 (minimum grade of C)

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

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

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

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

5 Credit Hours • 75 Contact Hours (Lecture)

Prerequisite: ASL 1121 (minimum grade of B) 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

5 Credit Hours • 75 Contact Hours (Lecture)

Prerequisite: ASL 1122 (minimum grade of B) 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

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ASL 1122 (minimum grade of D)

Provides the student an opportunity to develop expressive and receptive fingerspelling through various class activities.

ASL 1135 Conversational ASL

2 Credit Hours • 30 Contact Hours (Lecture)

Prerequisite: ASL 1123 (minimum grade of C)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ASL 2221 (minimum grade of B)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ASL 1123 (minimum grade of B)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ASL 2221 (minimum grade of B)

Focuses on increasing advanced intermediate-level proficiency in understanding and using American Sign Language (ASL).

Anthropology Courses

ANT 1001 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

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

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

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

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

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

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

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

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

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

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

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

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.

Architectural Engineer/Construction Management Courses

AEC 1110 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

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

4 Credit Hours • 60 Contact Hours (Lecture)

Print reading, construction assemblies, terminology, isometric drawings, orthographic projections, and oblique sketching.

AEC 1231 Residential Construction Drawing

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: AEC 1220 (minimum grade of D)

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

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: AEC 1220 (minimum grade of D)

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 Materials & Systems

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: AEC 1200 (minimum grade of D)

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

2 Credit Hours • 30 Contact Hours (Lecture)

Prerequisite: AEC 1200 (minimum grade of D), AEC 1220 (minimum grade of D)

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

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

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: AEC 1231 (minimum grade of D), AEC 1232 (minimum grade of D), AEC 1520 (minimum grade of D), AEC 2300 (minimum grade of D), CAD 2220 (minimum grade of D)

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

3 Credit Hours • 45 Contact Hours (Lecture)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: AEC 1200 (minimum grade of D), AEC 1520 (minimum grade of D)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: AEC 1200 (minimum grade of D), AEC 1520 (minimum grade of D), AEC 2610 (minimum grade of D)

Perform research using various methods of project scheduling. Emphasis will be placed on critical path method techniques and strategies.

AEC 2650 Construction Project Management

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: AEC 1520 (minimum grade of D), AEC 2610 (minimum grade of D), AEC 2630 (minimum grade of D)

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

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: AEC 1200 (minimum grade of D), AEC 1520 (minimum grade of D)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: AEC 1232 (minimum grade of D), CAD 2220 (minimum grade of D)

Co-requisite: AEC 2230 (minimum grade of D), AEC 2650 (minimum grade of D)

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

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

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

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

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

Prerequisite: ART 1005 (minimum grade of C)

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

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

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

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

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

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

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

3 Credit Hours • 90 Contact Hours (Studio)

Prerequisite: ART 1201 (minimum grade of C)

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

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

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

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

3 Credit Hours • 90 Contact Hours (Studio)

Prerequisite: ART 1301 (minimum grade of C)

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

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

3 Credit Hours • 90 Contact Hours (Studio)

Prerequisite: ART 1307 (minimum grade of C)

Continues the study of watercolor techniques, emphasizing original compositions and experimentation with materials. Color theory is included.

ART 1401 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

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

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

3 Credit Hours • 90 Contact Hours (Studio)

Prerequisite: ART 1604 (minimum grade of C)

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

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

3 Credit Hours • 90 Contact Hours (Studio)

Prerequisite: ART 1703 (minimum grade of C)

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

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

3 Credit Hours • 90 Contact Hours (Studio)

Prerequisite: ART 1805 (minimum grade of C)

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

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

Prerequisite: ART 1405 (minimum grade of C)

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

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

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

3 Credit Hours • 90 Contact Hours (Studio)

Prerequisite: ART 1202 (minimum grade of C)

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

3 Credit Hours • 90 Contact Hours (Studio)

Prerequisite: ART 2201 (minimum grade of C)

Explores advanced drawing problems with an emphasis on conceptual development and portfolio and/or exhibition quality presentation.

ART 2203 Advanced Figure Drawing

3 Credit Hours • 90 Contact Hours (Studio)

Prerequisite: ART 1203 (minimum grade of C)

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

3 Credit Hours • 90 Contact Hours (Studio)

Prerequisite: ART 1302 (minimum grade of C)

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

3 Credit Hours • 90 Contact Hours (Studio)

Prerequisite: ART 2301 (minimum grade of C)

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

3 Credit Hours • 90 Contact Hours (Studio)

Prerequisite: ART 1308 (minimum grade of C)

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

3 Credit Hours • 90 Contact Hours (Studio)

Prerequisite: ART 2307 (minimum grade of C)

Concentrates on the advanced study of techniques, individual style or expression, and consistency of compositional problem solving in watercolor.

ART 2405 Portrait Photography

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

Prerequisite: ART 1401 (minimum grade of C)

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

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

Prerequisite: ART 1401 (minimum grade of C)

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

3 Credit Hours • 90 Contact Hours (Studio)

Prerequisite: ART 1605 (minimum grade of C)

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

3 Credit Hours • 90 Contact Hours (Studio)

Prerequisite: ART 2603 (minimum grade of C)

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

3 Credit Hours • 90 Contact Hours (Studio)

Prerequisite: ART 1703 (minimum grade of C) and (ART 1703 or ART 1704) (minimum grade of C)

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

3 Credit Hours • 90 Contact Hours (Studio)

Prerequisite: ART 1704 (minimum grade of C) or ART 2703 (minimum grade of C)

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

3 Credit Hours • 90 Contact Hours (Studio)

Prerequisite: ART 1806 (minimum grade of C)

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

3 Credit Hours • 90 Contact Hours (Studio)

Prerequisite: ART 2805 (minimum grade of C)

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

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

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

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

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

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.

AST 1150 Astrobiology: Life in the Universe: SC2

3 Credit Hour • 45 Contact Hours (Lecture)

Prerequisite: College Readiness in English and College Readiness in Quantitative Literacy Math

Introduces the interdisciplinary and scientific study of the search for life in the universe. Questions of how life begins and evolves on Earth, the possibilities of other life in the solar system, the galaxy, and throughout the universe will be examined. Investigation of current explorations and the search for extraterrestrial life will also be covered.

AST 1160 Cosmology: Origin and Evolution of the Universe: SC2

3 Credit Hour • 45 Contact Hours (Lecture)

Prerequisite: College Readiness in English and College Readiness in Quantitative Literacy Math

Introduces the interdisciplinary and scientific study of the search for life in the universe. Questions of how life begins and evolves on Earth, the possibilities of other life in the solar system, the galaxy, and throughout the universe will be examined. Investigation of current explorations and the search for extraterrestrial life will also be covered.

Automotive Collision Technology Courses

ACT 1001 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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Co-requisite: ACT 1001 (minimum grade of C)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Co-requisite: ACT 1001 (minimum grade of C)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Co-requisite: ACT 1001 (minimum grade of C)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Co-requisite: ACT 1001 (minimum grade of C)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Co-requisite: ACT 1001 (minimum grade of C)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Co-requisite: ACT 1001 (minimum grade of C)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Co-requisite: ACT 1001 (minimum grade of C)

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

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Co-requisite: ACT 1001 (minimum grade of C)

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

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Co-requisite: ACT 1001 (minimum grade of C)

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

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Co-requisite: ACT 1001 (minimum grade of C)

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

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

Co-requisite: ACT 1001 (minimum grade of C)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Co-requisite: ACT 1001 (minimum grade of C)

This course provides instruction in basic custom paint application such as pearl paints, candy colors, metal flakes, etc.

ACT 1064 Hobbyist Paint & Body

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Co-requisite: ACT 1001 (minimum grade of C)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Co-requisite: ACT 1001 (minimum grade of C)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Co-requisite: ACT 1001 (minimum grade of C)

Covers modification of vehicle and vehicle parts such as chopping, measuring, realigning, fabricating, recessing, shaping etc.

ACT 1067 Automotive Body Customizing III

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Co-requisite: ACT 1001 (minimum grade of C)

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

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Co-requisite: ACT 1001 (minimum grade of C)

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

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Co-requisite: ACT 1001 (minimum grade of C)

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

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Co-requisite: ACT 1001 (minimum grade of C)

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

2 Credit Hours • 90 Contact Hours (Internship)

*Co-requisite: ACT 1001 (minimum grade of C)**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

2 Credit Hours • 90 Contact Hours (Internship)

*Co-requisite: ACT 1001 (minimum grade of C)**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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Co-requisite: ACT 1001 (minimum grade of C)

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

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Co-requisite: ACT 1001 (minimum grade of C)

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

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Co-requisite: ACT 1001 (minimum grade of C)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Co-requisite: ACT 1001 (minimum grade of C)

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

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Co-requisite: ACT 1001 (minimum grade of C)

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

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Co-requisite: ACT 1001 (minimum grade of C)

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

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Co-requisite: ACT 1001 (minimum grade of C)

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

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Co-requisite: ACT 1001 (minimum grade of C)

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

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

Co-requisite: ACT 1001 (minimum grade of C)

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

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

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Co-requisite: ASE 1002 (minimum grade of D)

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

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Co-requisite: ASE 1010 (minimum grade of D)

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

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Co-requisite: ASE 1002 (minimum grade of D)

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

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Co-requisite: ASE 1020 (minimum grade of D)

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

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: ASE 1023 (minimum grade of D)

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

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Co-requisite: ASE 1030 (minimum grade of D)

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

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Co-requisite: ASE 1030 (minimum grade of D), ASE 1032 (minimum grade of D)

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

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Co-requisite: ASE 1002 (minimum grade of D)

Focuses on diagnosis and service of suspension and steering systems and components. This course meets MLR/AST/MAST requirements.

ASE 1041 Suspension & Steering II

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Co-requisite: ASE 1040 (minimum grade of D)

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

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Co-requisite: ASE 1002 (minimum grade of D)

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

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Co-requisite: ASE 1050 (minimum grade of D)

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

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Co-requisite: ASE 1051 (minimum grade of D)

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

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Co-requisite: ASE 1002 (minimum grade of D)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Co-requisite: ASE 1060 (minimum grade of D)

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

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: ASE 1002 (minimum grade of D), ASE 1020 (minimum grade of D), ASE 1023 (minimum grade of D), 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

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Co-requisite: ASE 1011 (minimum grade of D)

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

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: ASE 1020 (minimum grade of D)

Provides a comprehensive study of the theory, operation, diagnosis, and repair of vehicle accessories.

ASE 2031 Automotive Computers & Ignition Systems

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: ASE 1020 (minimum grade of D), ASE 1034 (minimum grade of D)

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

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: ASE 1020 (minimum grade of D), ASE 1034 (minimum grade of D), ASE 2031 (minimum grade of D)

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

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: ASE 2033 (minimum grade of D)

Focuses on diagnostic techniques and the use of diagnostic scan tools, oscilloscopes, lab scopes, multi-meters, and gas analyzers.

ASE 2040 Suspension & Steering III

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Co-requisite: ASE 1041 (minimum grade of D)

Covers operation of steering and power steering systems. It will also include different alignment types and procedures.

ASE 2050 Automatic Transmission/Transaxle Service

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

Co-requisite: ASE 1002 (minimum grade of D)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: ASE 2050 (minimum grade of D)

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

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: ASE 1023 (minimum grade of D)

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)

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.

ASE 2210 Hybrid Vehicle/Electric Vehicle Safety and Operation

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Provides an overview of HEV (Hybrid Electric Vehicles) and BEV (Battery Electric Vehicles) design, layout, systems, and operations emphasizing safety procedures.

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 & Reciprocity Consortium (IC&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&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)

Prerequisite: BEH 1001 (minimum grade of C)

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 (minimum grade of C)

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 (minimum grade of C)

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 (minimum grade of C), CSL 2050 (minimum grade of C), CSL 2068 (minimum grade of C), PSY 2221 (minimum grade of C)

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 (minimum grade of C)

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 (minimum grade of C), BEH 3088 (minimum grade of C), BEH 4020 (minimum grade of C)

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 (minimum grade of C), BEH 4020 (minimum grade of C)

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

BIO 1003 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

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

Recommend College Readiness in English and College Readiness in Quantitative Literacy Math

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

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

Recommend College Readiness in English and College Readiness in Quantitative Literacy Math

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

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

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

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

5 Credit Hours • 90 Contact Hours (60 Lecture, 30 Lab)

Prerequisite: College Readiness in English and College Readiness in Quantitative Literacy Math, BIO 1111 (minimum grade of C)

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

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

Prerequisite: BIO 1010 (minimum grade of C) or BIO 1111 (minimum grade of C)

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

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

Prerequisite: BIO 2101 (minimum grade of C)

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

2 Credit Hours • 60 Contact Hours (Lab)

Prerequisite: BIO 2101 (minimum grade of C)

Co-requisite: BIO 2102 (minimum grade of C)

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

4 Credit Hours • 90 Contact Hours (45 Lecture, 45 Lab)

Prerequisite: BIO 1010 (minimum grade of C) or BIO 1111 (minimum grade of C)

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

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: BIO 2101 (minimum grade of C)

Co-requisite: BIO 2102 (minimum grade of C)

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

5 Credit Hours • 90 Contact Hours (60 Lecture, 30 Lab)

Prerequisite: BIO 1111 (minimum grade of C) or BIO 1112 (minimum grade of C) or NRE 1100 (minimum grade of C)

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

4 Credit Hour • 75 Contact Hours (45 Lecture, 30 Lab)

Prerequisite: BIO 1111 (minimum grade of C)

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

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

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 2001 Business Logistics Optimization

3 Credit Hours • 45 Contact Hours (Lecture)

Addresses and explores the principles of business logistics and optimization, utilizing database management systems and software. Students will construct and evaluate models of business systems for transportation, fleet and asset tracking, distribution and supply, and warehousing. Emphasizes decision analysis for logistics efficiency.

BUS 2002 Business Purchasing, Supply, and Sourcing Logistics

3 Credit Hours • 45 Contact Hours (Lecture)

Assesses the skills and abilities needed for the processes and activities for sourcing materials necessary for a business to deliver goods and services. An emphasis on the ability to formulate and manage the sourcing activities of purchasing supply, and sourcing logistics. The skills and fundamental comprehension for evaluating the sourcing of materials will be applied to business processes. Emphasizes decision analysis for logistics efficiency of purchasing, supply and sourcing.

BUS 2003 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

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 given to economic regulation, social regulation, labor-management issues, environmental issues, and contract fundamentals. This course analyzes the role of law in social, political, and economic change business environments.

BUS 2017 Business Communications & 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

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 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 (minimum grade of C)

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

BTE 1000 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

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

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

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

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

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

Co-requisite: CAR 1002 (minimum grade of D), CAR 1005 (minimum grade of D)

An overview of safety concerns and procedures in the construction field.

CAR 1002 Hand & Power Tools

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

Co-requisite: CAR 1001 (minimum grade of D), CAR 1005 (minimum grade of D)

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

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Co-requisite: CAR 1001 (minimum grade of D), CAR 1002 (minimum grade of D), CAR 1005 (minimum grade of D)

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

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: CAR 1003 (minimum grade of D)

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

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)
Co-requisite: CAR 1001 (minimum grade of D), CAR 1002 (minimum grade of D)

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

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: CAR 1003 (minimum grade of D)
Co-requisite: CAR 1004 (minimum grade of D), CAR 1023 (minimum grade of D), CAR 1035 (minimum grade of D)
 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

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: CAR 1003 (minimum grade of D)
Co-requisite: CAR 1004 (minimum grade of D), CAR 1015 (minimum grade of D), CAR 1035 (minimum grade of D)
 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

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: CAR 1004 (minimum grade of D)
Co-requisite: CAR 1023 (minimum grade of D)
 Covers application techniques and estimation of asphalt and wood roofing products and accessories including gutters and flashing.

CAR 1030 Windows & Exterior Doors

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)
Co-requisite: CAR 1004 (minimum grade of D)
 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

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)
Prerequisite: CAR 1003 (minimum grade of D), CAR 1004 (minimum grade of D)
 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

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: CAR 1003 (minimum grade of D)
Co-requisite: CAR 1004 (minimum grade of D), CAR 1015 (minimum grade of D), CAR 1023 (minimum grade of D)
 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

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)
Co-requisite: CAR 1004 (minimum grade of D)
 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

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: CAR 1003 (minimum grade of D), CAR 1004 (minimum grade of D)

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

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: CAR 1003 (minimum grade of D), CAR 1004 (minimum grade of D)
 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

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: CAR 1003 (minimum grade of D), CAR 1004 (minimum grade of D)
 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

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 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

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

5 Credit Hours • 90 Contact Hours (60 Lecture, 30 Lab)
Prerequisite: College Readiness in English, CHE 1011 (minimum grade of C)
 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

5 Credit Hours • 105 Contact Hours (60 Lecture, 45 Lab)

Prerequisite: College Readiness in English, MAT 1340 (minimum grade of C) or higher and (CHE 1011 (minimum grade of C) 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

5 Credit Hours • 105 Contact Hours (60 Lecture, 45 Lab)

Prerequisite: CHE 1111 (minimum grade of C), MAT 1340 (minimum grade of C)

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

5 Credit Hours • 105 Contact Hours (60 Lecture, 45 Lab)

Prerequisite: CHE 1112 (minimum grade of C)

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

5 Credit Hours • 105 Contact Hours (60 Lecture, 45 Lab)

Prerequisite: CHE 2111 (minimum grade of C)

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

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

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

5 Credit Hours • 75 Contact Hours (Lecture)

Prerequisite: CHI 1011 (minimum grade of C)

Continues Chinese Language I in the development of functional proficiency in listening, speaking, reading, and writing the Chinese language.

CHI 2011 Chinese Language III

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: CHI 1012 (minimum grade of C)

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.

Communication Courses

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

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

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

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

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

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

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

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

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

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

CAD 1100 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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Co-requisite: CAD 1100 (minimum grade of D)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Co-requisite: CAD 1101 (minimum grade of C)

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

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

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: IND 1100 (minimum grade of D)

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

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

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: AEC 1200 (minimum grade of D), AEC 1220 (minimum grade of D), AEC 1231 (minimum grade of D), AEC 1520 (minimum grade of D)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: CAD 2220 (minimum grade of C)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: CAD 1105 (minimum grade of C)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: CAD 2227 (minimum grade of C)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: CAD 1100 (minimum grade of D) or MAC 1002 (minimum grade of D)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: CAD 2455 (minimum grade of C)
 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

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: CAD 2458 (minimum grade of C)
 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

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

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: CAD 2455 (minimum grade of D), CAD 2456 (minimum grade of D)
 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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: CAD 2660 (minimum grade of C)
 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

CNG 1001 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

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

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 1020 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+

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+

4 Credit Hours • 60 Contact Hours (Lecture)
Co-requisite: CNG 1021 (minimum grade of C)
 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 (minimum grade of C)

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 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

3 Credit Hours • 45 Contact Hours (Lecture)

Co-requisite: CNG 1001 (minimum grade of C) or CNG 1024 (minimum grade of C) or CNG 1124 (minimum grade of C)

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 (minimum grade of C)

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

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 1124 Modern Secure Networking

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Covers the knowledge, skills, and abilities necessary to perform computer networking job roles. This course provides preparation for the Network+ industry certification exam.

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

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: CIS 2020 (minimum grade of C) or CIS 2023 (minimum grade of C) or CNG 2001 (minimum grade of C)

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 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

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: CNG 1001 (minimum grade of C) or CNG 1024 (minimum grade of C) or CNG 1124 (minimum grade of C)

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 (minimum grade of C) or CNG 1024 (minimum grade of C) or CNG 1124 (minimum grade of C)

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

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 (minimum grade of C) or CNG 1042 (minimum grade of C)

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 (minimum grade of C) or CNG 2001 (minimum grade of C)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: CNG 1032

Covers the evaluation of a system's security and giving of recommendations that make the system more secure. The purpose is to allow future IT professionals to move into the cybersecurity field. This course is designed to prepare students to pass the CompTIA CySA+ certification system.

CNG 2058 Digital Forensics

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: CNG 1032 (minimum grade of C)

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 (minimum grade of C)

Co-requisite: CNG 2056 (minimum grade of C)

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

5 Credit Hours • 75 Contact Hours (Lecture)

Co-requisite: CNG 1001 (minimum grade of C) or CNG 1024 (minimum grade of C)

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

5 Credit Hours • 75 Contact Hours (Lecture)

Co-requisite: CNG 2060 (minimum grade of C)

Introduces the architecture, components, and operations of routers and switches.

CNG 2062 Cisco Network Associate III

5 Credit Hours • 75 Contact Hours (Lecture)

Co-requisite: CNG 2061 (minimum grade of C)

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

5 Credit Hours • 75 Contact Hours (Lecture)

Prerequisite: CNG 1032 (minimum grade of C) and (CNG 2060 (minimum grade of C) or CNG 2061 (minimum grade of C))

Provides core and advanced security concepts and skills for Cisco networks.

CNG 2080 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 2160 CISCO CCNA Network Associate I

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: CNG 1001 (minimum grade of C) or CNG 1024 (minimum grade of C) or CNG 1124 (minimum grade of C)

Meets the requirements of the first course in the Cisco Certified Network Associate, CCNA curriculum; introducing the architecture, structure, functions, components, and models of the Internet and other computer networks. The principles and structure of Internet Protocol - (IP) addressing and the fundamentals of ethernet concepts, media, and operations are introduced to provide a foundation for the curriculum.

CNG 2161 CISCO CCNA Network Associate II

4 Credit Hours • 60 Contact Hours (Lecture)

Co-requisite: CNG 2160 (minimum grade of C)

Meets the requirements of the second course in the Cisco Certified Network Associate - CCNA curriculum focusing on switching technologies and router configurations and operations that support small-to-medium business networks, including wireless local area networks (WLANs) and security concepts.

CNG 2162 CISCO CCNA Network Associate III

4 Credit Hours • 60 Contact Hours (Lecture)

Co-requisite: CNG 2161 (minimum grade of C)

Explores the architecture, components, operations, and security to scale for large, complex networks, including wide area network (WAN) technologies. This course is the final course in the Cisco Certified Network Associate (CCNA) curriculum. The course emphasizes network security concepts and introduces network virtualization and automation.

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)

Prerequisite: CNG 2056 (minimum grade of C)

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.

CNG 4150 Cloud Native Application Protection Platforms

4 Credit Hours • 60 Contact Hours (Lecture)

Examines threats to the cloud native stack, including pipelines, supply chains, infrastructure, workloads, and applications to understand how CNAPP (Cloud Native Application Protection Platforms) mitigates multidimensional threats in real-life attack scenarios.

CNG 4155 AWS Cloud Security and Operations

4 Credit Hours • 60 Contact Hours (Lecture)

Covers the skills and knowledge needed to apply AWS (Amazon Web Services) data protection mechanisms, security logging and monitoring, data-encryption methods, and multi-account governance, and organizational compliance strategies in a secure cloud network. The course also covers troubleshooting security issues identified through threat detection as part of the AWS Security Finding Format (ASFF) organizational incident response plan.

CNG 4160 Microsoft Azure Cloud Security

4 Credit Hours • 60 Contact Hours (Lecture)

Covers the skills and knowledge needed to implement security controls, maintain an organization's security posture, and identify and remediate security vulnerabilities in the cloud.

CNG 4165 Google Cloud Security and Data Protection

4 Credit Hours • 60 Contact Hours (Lecture)

Covers the processes of developing, implementing, and monitoring an organization's cloud security infrastructure to protect sensitive information and cloud resources against cybercrime using cloud security best practices. This course also examines recognized industry solutions to common vulnerabilities and insecure configurations.

Computer Information Systems Courses

CIS 1002 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

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)

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

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

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 1020 Technology for Career Develop

1 Credit Hour • 15 Contact Hours (Lecture)
Prepare students to actively pursue a career path. This course will emphasize awareness of career opportunities through the use of career assessment tools, academic advising and career professionals. It will provide students with skills assessment tools, professional development activities, and information for creating and maintaining an electronic career portfolio.

CIS 1024 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 (Operating System)

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

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)

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

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

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)

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

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

3 Credit Hours • 45 Contact Hours (Lecture)
Prerequisite: CIS 1018 (minimum grade of C) or CIS 1028 (minimum grade of C) or CSC 1005 (minimum grade of C), or (CIS 1035 (minimum grade of C) and CIS 1055 (minimum grade of C))
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 2020 Fundamentals of Unix

3 Credit Hours • 45 Contact Hours (Lecture)
Explores the structure and fundamentals of the Unix operating system including the file system and file processing, various utility programs, shell, multi-user operation, text processing, and communications.

CIS 2023 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

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)

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

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

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

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

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

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

3 Credit Hours • 45 Contact Hours (Lecture)

Serves as the capstone course for CIS majors. Incorporates projects that allow students to develop advanced techniques and assemble information from different courses. Most projects will include the creation of interactive application programs for the non-computer user and require research beyond the classroom to prepare the student for entry level employment in a variety of situations.

Computer Science Courses

CSC 1005 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)

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)

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

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

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

Co-requisite: CSC 1060 (minimum grade of C)

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)

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

*Prerequisite: CSC 1019 (minimum grade of C) or CSC 1020 (minimum grade of C)**Co-requisite: MAT 1340 (minimum grade of C) 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)

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

Prerequisite: CSC 1060 (minimum grade of C)

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

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

Prerequisite: ((CSC 1019 (minimum grade of C) or CSC 1020 (minimum grade of C)) and MAT 1340 (minimum grade of C) or higher) or CSC 1060 (minimum grade of C)

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 2025 Computer Architecture/Assembly Language Programming

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

Co-requisite: CSC 1061 (minimum grade of C)

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

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

*Prerequisite: CSC 1019 (minimum grade of C) or CSC 1020 (minimum grade of C)**Co-requisite: CSC 1060 (minimum grade of C)*

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)

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

Prerequisite: CSC 1061 (minimum grade of C)

Provides students with 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

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

Prerequisite: CSC 1060 (minimum grade of C)

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

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

Prerequisite: CSC 1060 (minimum grade of C) or CSC 2017 (minimum grade of C)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: CSC 1060 (minimum grade of C) or CSC 2040 (minimum grade of C)

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)

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

Prerequisite: CSC 1029 (minimum grade of C)

Co-requisite: CSC 1061 (minimum grade of C)

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)

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

Prerequisite: CSC 1060 (minimum grade of C)

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 2065 Discrete Structures

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: CSC 1061 (minimum grade of C)

Prepares students for a fundamental understanding of computing and computer science. Includes set theory, Boolean algebra,

relations, functions, graph theory and techniques for formal reasoning.

CSC 2067 Object-Oriented Analysis & 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

2 Credit Hours • 90 Contact Hours (Internship)

Provides students with the opportunity to supplement coursework with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor.

Computer Web-Based Courses

CWB 1010 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

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)

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: CSC 1010 (minimum grade of C), CWB 1019 (minimum grade of C)

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 2006 Server-side Scripting: (Software)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: CSC 1019 (minimum grade of C), CWB 1010 (minimum grade of C)

Explores the creation of dynamic web pages and applications using server-side scripting with database interactivity, server-based scripting languages, and database manipulation languages.

CWB 2015 Microservices Secure Design

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: CWB 2005 (minimum grade of C)

Co-Requisite: CWB 2006 (minimum grade of C)

Explores industry shifts from building monolithic web applications to independently deployed smaller self-contained microservices that communicate with each other. This course also examines the complexities of testing and monitoring distributed application systems from the lens of web application security.

CWB 2016 Web Vulnerability Testing

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: CWB 2005 (minimum grade of C)

Co-Requisite: CWB 2006 (minimum grade of C)

Covers the creation and implementation of a comprehensive security plan for continuous integration and deployment testing for web applications and web services throughout the lifecycle of development.

CWB 2021 Technology Foundations for E-Commerce

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: CWB 1010 (minimum grade of C)

Provides the student with thorough knowledge of e-commerce architecture, relational database management systems, and HTML and Network fundamentals.

Construction Technology Courses**CON 1020 Building Materials & Environmental Impact**

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: CON 1057 (minimum grade of D)

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

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: CON 1057 (minimum grade of D), CON 1058 (minimum grade of D)

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

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: CON 1057 (minimum grade of D)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Co-requisite: CAR 1004 (minimum grade of D)

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)

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

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: CON 1057 (minimum grade of D)

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

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: CON 1057 (minimum grade of D)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: CON 1057 (minimum grade of D)

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

6 Credit Hours • 135 Contact Hours (Lecture/Lab Combination)

Prerequisite: CON 1057 (minimum grade of D)

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

6 Credit Hours • 135 Contact Hours (Lecture/Lab Combination)

Prerequisite: CON 1052 (minimum grade of D), CON 1057 (minimum grade of D)

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

6 Credit Hours • 135 Contact Hours (Lecture/Lab Combination)

Prerequisite: CON 1052 (minimum grade of D), CON 1053 (minimum grade of D), CON 1057 (minimum grade of D)

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

6 Credit Hours • 135 Contact Hours (Lecture/Lab Combination)

Prerequisite: CON 1054 (minimum grade of D)

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

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

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

6 Credit Hours • 135 Contact Hours (Lecture/Lab Combination)
Prerequisite: CON 1057 (minimum grade of D), CON 1058 (minimum grade of D)

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

6 Credit Hours • 135 Contact Hours (Lecture/Lab Combination)
Prerequisite: CON 1057 (minimum grade of D), CON 1058 (minimum grade of D), CON 1059 (minimum grade of D)

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

6 Credit Hours • 135 Contact Hours (Lecture/Lab Combination)
Prerequisite: CON 1060 (minimum grade of D)

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

6 Credit Hours • 135 Contact Hours (Lecture/Lab Combination)
Prerequisite: CON 1057 (minimum grade of D)

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

6 Credit Hours • 135 Contact Hours (Lecture/Lab Combination)
Prerequisite: CON 1057 (minimum grade of D), CON 1062 (minimum grade of D)

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

6 Credit Hours • 135 Contact Hours (Lecture/Lab Combination)
Prerequisite: CON 1057 (minimum grade of D), CON 1062 (minimum grade of D)

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

6 Credit Hours • 135 Contact Hours (Lecture/Lab Combination)
Prerequisite: CON 1057 (minimum grade of D), CON 1062 (minimum grade of D), CON 1063 (minimum grade of D), CON 1064 (minimum grade of D)

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

6 Credit Hours • 135 Contact Hours (Lecture/Lab Combination)
Prerequisite: CON 1057 (minimum grade of D)

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

6 Credit Hours • 135 Contact Hours (Lecture/Lab Combination)
Prerequisite: CON 1057 (minimum grade of D), CON 1066 (minimum grade of D)

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

6 Credit Hours • 135 Contact Hours (Lecture/Lab Combination)
Prerequisite: CON 1067 (minimum grade of D)

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

6 Credit Hours • 135 Contact Hours (Lecture/Lab Combination)
Prerequisite: CON 1068 (minimum grade of D)

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

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

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: CON 1057 (minimum grade of D)

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

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: CON 1057 (minimum grade of D), CON 1058 (minimum grade of D)

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

1 Credit Hour • 15 Contact Hours (Lecture)

Prerequisite: CON 1057 (minimum grade of D), CON 1058 (minimum grade of D)

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

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

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 (minimum grade of C)

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

1.5 Credit Hours • 22.5 Contact Hours (Lecture)

Prerequisite: CSL 2068 (minimum grade of C)

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 (minimum grade of C)

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

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 (minimum grade of C)

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 (minimum grade of C)

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

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 (minimum grade of C)

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 (minimum grade of C), CSL 2058 (minimum grade of C), CSL 2068 (minimum grade of C), CSL 3050 (minimum grade of C)

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 (minimum grade of C)

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

CRJ 1010 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

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

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

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

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

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

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

3 Credit Hours • 45 Contact Hours (Lecture)

Covers the function of the preliminary investigation at a crime scene to include securing the scene, crime scene searches, police drawings, and recognition and collection of evidence.

CRJ 2010 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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: CUA 1000 (minimum grade of D), CUA 1001 (minimum grade of D)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: CUA 1000 (minimum grade of D), CUA 1001 (minimum grade of D), CUA 1025 (minimum grade of D)

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

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: CUA 1000 (minimum grade of D), CUA 1001 (minimum grade of D), CUA 1025 (minimum grade of D)

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

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: CUA 1000 (minimum grade of D), CUA 1001 (minimum grade of D)

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

2 Credit Hours • 30 Contact Hours (Lecture)

*Note: Student must have completed and passed the ServSafe National Exam**Prerequisite: CUA 1000 (minimum grade of D), CUA 1001 (minimum grade of D), CUA 1025 (minimum grade of D), CUA 1045 (minimum grade of D)*

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

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: CUA 1000 (minimum grade of D), CUA 1001 (minimum grade of D)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: CUA 1045 (minimum grade of D)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: CUA 1045 (minimum grade of D)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: CUA 1045 (minimum grade of D)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: CUA 1045 (minimum grade of D)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: CUA 1000 (minimum grade of D), CUA 1001 (minimum grade of D)

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

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

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

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: CUA 1050 (minimum grade of D)

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

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

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: CUA 1029 (minimum grade of D)

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

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: CUA 1029 (minimum grade of D)

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

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: CUA 1051 (minimum grade of D), CUA 1061 (minimum grade of D)

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

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: CUA 1027 (minimum grade of D), CUA 1029 (minimum grade of D)

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

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

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

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

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

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

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: CUA 1005 (minimum grade of D)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: CUA 1025 (minimum grade of D), CUA 1056 (minimum grade of D)

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

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: CUA 1045 (minimum grade of D)

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

4 Credit Hours • 180 Contact Hours (Internship)

Prerequisite: CUA 1027 (minimum grade of D)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

2 Credit Hours • 60 Contact Hours (Lab)

Further the study of choreographic methods including group work and developing ideas in creating site specific pieces, while continuing to cultivate individual movement style and invention.

DAN 2021 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

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

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

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

Continues DAN 2024 with more emphasis on performance.

DAN 2051 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

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

2 Credit Hours • 60 Contact Hours (Lab)

Analyzes, discusses, and traces the history of Dance for Camera/Screen dance including musicals, art-films, and commercial media. Students will get hands-on-training in using the video camera as a two-dimensional stage, progressing to creating their own Dances for Camera. This class will require students to watch and analyze dance media, read and apply historical information discussed in creating their own screen dances, and be actively engaged in class discussions and feedback sessions.

Data Science Courses

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.

DAT 1002 Data Ethics Survey

3 Credit Hours • 45 Contact Hours (Lecture)

Explores the ethical ramifications and implications surrounding the collection, analysis, and use of data. The course introduces the basics of ethical thinking in science, the history of ethical

dilemmas in scientific work, and the modern challenges and relevant policies related to ethics in data science. Perspectives from both the consumer and the data scientist are considered when exploring themes such as privacy, equity, and Artificial Intelligence (AI).

DAT 2002 Visualizing Data

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on the analysis and design of visual representations of statistical information. The analysis and evaluation of existing graphics are combined with principles from disciplines such as statistics, computer science, and graphic design to define the criteria for a quality visualization. Various software tools are used to develop static and interactive visualizations to identify patterns, convey messages, make decisions, and tell stories with data.

DAT 2025 Introduction to Machine Learning

3 Credit Hours • 45 Contact Hours (Lecture)

Provides the foundation for students to explore, practice, and apply mathematical concepts for pattern recognition, neural networks, and machine learning. The course covers algorithmic and mathematical methods which are required for machine learning techniques, as well as the theoretical relationships between these algorithms. Coding may be required as the course provides practice with translating the above mathematical concepts into computer programs.

Dental Assisting Courses

DEA 1011 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

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

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

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

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

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Lab)

Prerequisite: DEA 1011 (minimum grade of C), DEA 1012 (minimum grade of C)

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

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: DEA 1011 (minimum grade of C), DEA 1012 (minimum grade of C)

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

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Lab)

Prerequisite: DEA 1011 (minimum grade of C), DEA 1012 (minimum grade of C)

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

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Lab)

Prerequisite: DEA 1011 (minimum grade of C), DEA 1012 (minimum grade of C)

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

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Lab)

Prerequisite: DEA 1015 (minimum grade of C), DEA 1016 (minimum grade of C), DEA 1021 (minimum grade of C), DEA 1023 (minimum grade of C)

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

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

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Lab)

Prerequisite: DEA 1015 (minimum grade of C), DEA 1016 (minimum grade of C), DEA 1021 (minimum grade of C), DEA 1023 (minimum grade of C), DEA 1024 (minimum grade of C)

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

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: DEA 1015 (minimum grade of C), DEA 1016 (minimum grade of C), DEA 1021 (minimum grade of C), DEA 1023 (minimum grade of C), DEA 1024 (minimum grade of C)

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)

1 Credit Hour • 15 Contact Hours (Lecture)

Prerequisite: DEA 1011 (minimum grade of C), DEA 1012 (minimum grade of C), DEA 1013 (minimum grade of C), DEA 1015 (minimum grade of C), DEA 1016 (minimum grade of C), DEA 1021 (minimum grade of C), DEA 1022 (minimum grade of C), DEA 1023 (minimum grade of C), DEA 1024 (minimum grade of C), DEA 1031 (minimum grade of C), DEA 1033 (minimum grade of C), DEA 1034 (minimum grade of C), DEA 1035 (minimum grade of C), DEA 1081 (minimum grade of C), DEA 1082 (minimum grade of C)

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

1 Credit Hour • 45 Contact Hours (Internship)

Prerequisite: DEA 1011 (minimum grade of C), DEA 1012 (minimum grade of C), DEA 1015 (minimum grade of C), DEA 1016 (minimum grade of C), DEA 1021 (minimum grade of C), DEA 1023 (minimum grade of C), DEA 1024 (minimum grade of C)

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

6 Credit Hours • 270 Contact Hours (Internship)

Prerequisite: DEA 1081 (minimum grade of C)

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

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: DEA 1011 (minimum grade of C), DEA 1012 (minimum grade of C), DEA 1013 (minimum grade of C), DEA 1015 (minimum grade of C), DEA 1016 (minimum grade of C), DEA 1021 (minimum grade of C), DEA 1022 (minimum grade of C), DEA 1023 (minimum grade of C), DEA 1024 (minimum grade of C), DEA 1031 (minimum grade of C), DEA 1033 (minimum grade of C), DEA 1034 (minimum grade of C), DEA 1035 (minimum grade of C), DEA 1040 (minimum grade of C), DEA 1081 (minimum grade of C), DEA 1082 (minimum grade of C)

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

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: DEA 2011 (minimum grade of C)

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.

Diagnostic Medical Sonography Courses

DMS 1001 Introduction to Sonography

2 Credit Hours • 30 Contact Hours (Lecture)

Prerequisite: College Readiness in English, BIO 2101 (minimum grade of C)

Provides an overview of sonography for students interested in the Diagnostic Medical Sonography program with an introduction to pulse-echo imaging, general sonography, cardiac sonography, vascular technology and typical career opportunities.

DMS 2001 Ultrasound Physics I

2 Credit Hours • 30 Contact Hours (Lecture)

Prerequisite: Admission to Diagnostic Medical Sonography Program

Covers a detailed study of ultrasound physics and the application within the clinical setting. Manipulation of technique controls, basic mathematical concepts, various Doppler modalities, equipment artifacts, QC/QA procedures, 3D fundamentals, and bio effects are covered. ~Note: The comprehensive final is in a registry review format.

DMS 2002 Ultrasound Physics II

2 Credit Hours • 30 Contact Hours (Lecture)

Prerequisite: Admission to Diagnostic Medical Sonography Program

Presents the theoretical and practical approach to understanding the fundamentals of ultrasound physics, instrumentation, image characteristics, artifacts, and bio-effects. The ergonomics of proper scanning techniques (setting up the cart, chair, and room properly to avoid musculoskeletal injury) will also be presented.

DMS 2080 Clinical Observation

2.5 Credit Hours • 112.5 Contact Hours (Internship)

Prerequisite: Admission to Diagnostic Medical Sonography Program

Prepares the beginning ultrasound student for clinical internship under the direct supervision of a registered sonographer with a focus on introductory skills necessary for clinical internship to include instrumentation, scanning techniques and image evaluation. The student will spend seven hours per week at the clinical site for training in patient care and work efficiency in the clinical setting.

DMS 2081 Clinical Internship I

8 Credit Hours • 360 Contact Hours (Internship)

Prerequisite: Admission to Diagnostic Medical Sonography 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.

DMS 2082 Ultrasound Internship II

8 Credit Hours • 360 Contact Hours (Internship)

Prerequisite: Admission to Diagnostic Medical Sonography 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.

DMS 2083 Ultrasound Internship III

8 Credit Hours • 360 Contact Hours (Internship)

Prerequisite: Admission to Diagnostic Medical Sonography 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.

DMS 2089 Ultrasound Capstone

2 Credit Hours • 30 Contact Hours (Lecture)

Prerequisite: Admission to Diagnostic Medical Sonography 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.

DMS 2100 Small Parts Ultrasound

2 Credit Hours • 30 Contact Hours (Lecture)

Prerequisite: Admission to Diagnostic Medical Sonography Program

Designed to teach specific knowledge of anatomy of the breast, thyroid, scrotum, prostate and the surrounding structures. The ability to identify pathology or to locate abnormalities is also an intricate part of the class.

DMS 2101 Abdominal Ultrasound I

2 Credit Hours • 30 Contact Hours (Lecture)

Prerequisite: Admission to Diagnostic Medical Sonography Program

Offers a systematic study of the abdomen to include the function and development of the major organ systems with correlation to sonographic imaging and the surrounding environment. The student will master the foundations of sectional anatomy and abdominal sonography.

DMS 2102 Abdominal Ultrasound II

2 Credit Hours • 30 Contact Hours (Lecture)

Prerequisite: Admission to Diagnostic Medical Sonography Program

Offers a systematic study of the gastrointestinal tract, pediatric abdomen, neonatal brain, and transplanted organs. The student will review the necessary sterile technique preceding invasive and intraoperative procedures and will learn the applications of contrast agents in ultrasound. Other imaging techniques will be discussed as well as the principles guiding the field of sonography. A mock registry examination will be administered to prepare the student for writing the national registry examination.

DMS 2111 General Ultrasound Scan Lab

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: Admission to Diagnostic Medical Sonography Program

Prepares the general sonography student for an ultrasound internship with an emphasis on abdominal, superficial structure, gynecological and obstetrical scanning. Ergonomics, applied instrumentation, image optimization, and history integration will be covered as well.

DMS 2201 OB/GYN Ultrasound I

2 Credit Hours • 30 Contact Hours (Lecture)

Prerequisite: Admission to Diagnostic Medical Sonography Program

Provides a systematic study of embryology to include development of the major organ systems, with correlation to sonographic imaging, at all stages of embryonic/fetal development and the surrounding environment and the ultimate mastery of the foundations of obstetric and gynecological sonography.

DMS 2202 OB/GYN Ultrasound II

2 Credit Hours • 30 Contact Hours (Lecture)

Prerequisite: Admission to Diagnostic Medical Sonography Program

Provides a systematic study of embryology to include development of the major organ systems, with correlation to sonographic imaging, at all stages of embryonic/fetal development and the surrounding environment and the ultimate mastery of the foundations of obstetric and gynecological sonography.

DMS 2400 Vascular Ultrasound

2 Credit Hours • 30 Contact Hours (Lecture)

Covers basic positioning and scanning protocol of the vascular system. Review of the anatomy, hemodynamics and terminology unique to the vascular system with emphasis on the external carotid system, the upper and lower venous and arterial systems and the abdominal vasculature will be included.

Diesel Power Mechanics Courses**DPM 1000 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

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Co-requisite: DPM 1000 (minimum grade of D)

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

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Prerequisite: DPM 1000 (minimum grade of D)**Co-requisite: DPM 1001 (minimum grade of D)*

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: DPM 1000 (minimum grade of D), DPM 1001 (minimum grade of D)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Note: DPM 1006 must be taken concurrently with DPM 2010**Prerequisite: DPM 1000 (minimum grade of D), DPM 1001 (minimum grade of D)*

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

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: DPM 1000 (minimum grade of D), DPM 1001 (minimum grade of D)

Focuses on the operation and repair of four-wheel drive and front wheel drive systems.

DPM 1011 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, (minimum grade of D) DPM 1001 (minimum grade of D)*

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

1.5 Credit Hours • 33.75 Contact Hours (Lecture/Lab Combination)

*Note: DPM 1012 must be taken concurrently with DPM 1011**Prerequisite: DPM 1000 (minimum grade of D), DPM 1001 (minimum grade of D)*

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

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)
Prerequisite: DPM 1000 (minimum grade of D), DPM 1001 (minimum grade of D)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: DPM 1000 (minimum grade of D), DPM 1001 (minimum grade of D)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Co-requisite: DPM 1021 (minimum grade of D)

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

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)
Prerequisite: DPM 1000 (minimum grade of D), DPM 1001 (minimum grade of D), DPM 1003 (minimum grade of D), DPM 1006 (minimum grade of D), DPM 2003 (minimum grade of D), DPM 2010 (minimum grade of D)

Covers the history, developments, theory, operation, and service procedures of a Cummins B Series diesel engines.

DPM 1024 Powerstroke Engines

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)
Prerequisite: DPM 1000 (minimum grade of D), DPM 1001 (minimum grade of D), DPM 1003 (minimum grade of D), DPM 1006 (minimum grade of D), DPM 2003 (minimum grade of D), DPM 2010 (minimum grade of D)

Covers the history, development, theory, operation, and service procedures of Powerstroke Diesel Engines used in Ford Trucks.

DPM 1025 Duramax Engines

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)
Prerequisite: DPM 1000 (minimum grade of D), DPM 1001 (minimum grade of D), DPM 1003 (minimum grade of D), DPM 1006 (minimum grade of D), DPM 2003 (minimum grade of D), DPM 2010 (minimum grade of D)

Covers the history, development, theory, operation, and service procedures for Duramax Diesel Engines used in General Motors Trucks.

DPM 1026 Heavy Duty Starting & Charging

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: DPM 1000 (minimum grade of D), DPM 1001 (minimum grade of D)
Co-requisite: DPM 1020 (minimum grade of D)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: DPM 1000 (minimum grade of D), DPM 1001 (minimum grade of D)

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

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)
Co-requisite: DPM 1003 (minimum grade of D)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: DPM 1000 (minimum grade of D), DPM 1001 (minimum grade of D)

Co-requisite: DPM 1005 (minimum grade of D)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: DPM 1000 (minimum grade of D), DPM 1001 (minimum grade of D)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: DPM 1000 (minimum grade of D), DPM 1001 (minimum grade of D)

Co-requisite: DPM 2006 (minimum grade of D)

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

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: DPM 1000 (minimum grade of D), DPM 1001 (minimum grade of D)

Co-requisite: DPM 2005 (minimum grade of D)

Provides laboratory hands on experiences in the diagnosis of electrically controlled heavy duty transmissions.

DPM 2010 Diesel Air Induction & Exhaust

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)
Note: DPM 2010 must be taken concurrently with DPM 1006
Prerequisite: DPM 1000 (minimum grade of D), DPM 1001 (minimum grade of D)

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

1.5 Credit Hours • 33.75 Contact Hours (Lecture/Lab Combination)

Prerequisite: DPM 1000 (minimum grade of D), DPM 1001 (minimum grade of D), DPM 1011 (minimum grade of D)

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

1.5 Credit Hours • 33.75 Contact Hours (Lecture/Lab Combination)

Prerequisite: DPM 1000 (minimum grade of D), DPM 1001 (minimum grade of D)

Co-requisite: DPM 2011 (minimum grade of D)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: DPM 1000 (minimum grade of D), DPM 1001 (minimum grade of D), DPM 1020 (minimum grade of D)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: DPM 1000 (minimum grade of D), DPM 1001 (minimum grade of D), DPM 1020 (minimum grade of D)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: DPM 1000 (minimum grade of D), DPM 1001 (minimum grade of D)

Co-requisite: DPM 1040 (minimum grade of D)

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

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: DPM 1000 (minimum grade of D), DPM 1001 (minimum grade of D)

Co-requisite: DPM 2065 (minimum grade of D)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: DPM 1000, (minimum grade of D) DPM 1001 (minimum grade of D)

Co-requisite: DPM 2064 (minimum grade of D)

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

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**DRV 1000 Driver's Education**

2.5 Credit Hours • 56.25 Contact Hours (Lecture/Lab Combination)

Prerequisite: DRV 1030 (minimum grade of B), DRV 1034 (minimum grade of B)

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

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: DRV 1032 (minimum grade of B), DRV 1036 (minimum grade of B)

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

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

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: DRV 1032 (minimum grade of B), DRV 1036 (minimum grade of B)

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

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

6 Credit Hours • 135 Contact Hours (Lecture/Lab Combination)
Prerequisite: DRV 1030 (minimum grade of B), DRV 1034 (minimum grade of B)

Provides over-the-road driving experience with the driving instructor to prepare participants for the CDL driving test. This class drills students in safe driving procedures both on and off the road, including driving empty and loaded vehicles, proper turning and backing, appropriate use of brakes, shifting, and observing speed limits, signals, road signs, and port-of-entry procedures.

Early Childhood Education Courses

ECE 1011 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

3 Credit Hours • 45 Contact Hours (Lecture)

Co-requisite: ECE 1011 (minimum grade of C)

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

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Practicum)

Co-requisite: ECE 1011 (minimum grade of C), ECE 1031 (minimum grade of C)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Co-requisite: ECE 1011 (minimum grade of C)

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

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Practicum)

Co-requisite: ECE 1011 (minimum grade of C), ECE 1111 (minimum grade of C)

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

3 Credit Hours • 90 Contact Hours (Practicum)

Co-requisite: ECE 2381 (minimum grade of C)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Co-requisite: ECE 1011 (minimum grade of C)

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

1 Credit Hour • 15 Contact Hours (Lecture)

Co-requisite: ECE 1011 (minimum grade of C)

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

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

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

3 Credit Hours • 45 Contact Hours (Lecture)

Co-requisite: ECE 1011 (minimum grade of C)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Co-requisite: ECE 1011 (minimum grade of C)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Co-requisite: ECE 1011 (minimum grade of C)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Co-requisite: ECE 1011 (minimum grade of C)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Co-requisite: ECE 1011 (minimum grade of C)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Co-requisite: ECE 1011 (minimum grade of C), ECE 2381 (minimum grade of C)

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

3 Credit Hours • 90 Contact Hours (Practicum)

Co-requisite: ECE 2601 (minimum grade of C)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Co-requisite: ECE 1011 (minimum grade of C), ECE 2381 (minimum grade of C)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Co-requisite: ECE 1011 (minimum grade of C), ECE 2381 (minimum grade of C)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Co-requisite: ECE 1011 (minimum grade of C), ECE 2381 (minimum grade of C)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Co-requisite: ECE 1011 (minimum grade of C), ECE 2381 (minimum grade of C)

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

ECO 1001 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

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

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

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

EDU 1080 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.

EDU 2080 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.

EDU 2088 Practicum II

1 Credit Hour • 45 Contact Hours (Practicum)

Co-requisite: EDU 2211 (minimum grade of C)

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 2089 Capstone

3 Credit Hours • 45 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.

EDU 2211 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

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 2251 Introduction to Relationship-Based Mentoring and Coaching in Education

3 Credit Hours • 45 Contact Hours (Lecture)

Covers the concepts and philosophy of mentoring and coaching new teachers in early childhood or K-12 educational settings. The course introduces the skills of a mentoring or coaching educator to cultivate and engage other adults in sustained and focused learning related to professional development and training.

EDU 2255 Introduction to Relationship-Based Mentoring and Coaching Techniques

1 Credit Hour • 30 Contact Hours (Practicum)

Provides opportunities for the mentor teacher to practice beginning-level competencies in mentoring or coaching in early childhood or K - 12. This course emphasizes practice of behaviors and actions that demonstrate knowledge, comprehension, or

application of mentoring or coaching strategies. This is a practicum-based course.

EDU 2331 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

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

Prerequisite: PSY 2440 (minimum grade of C) or PSY 2441 (minimum grade of C)

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

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

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

3 Credit Hours • 45 Contact Hours (Lecture)

Provides faculty with the knowledge and skills necessary to design, develop, and deliver courses in a distance format. Focuses on assessment and evaluation methods and methods to incorporate interactive, collaborative, and expanded learning activities.

EDU 3311 Classroom and Behavioral Supports

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Practicum)

Prerequisite: Admitted to BAS teacher preparation program

Covers behavior management and instructional procedures used in diverse educational settings. The course explores evidence-based practices for inclusive classrooms and addresses federal and state legal procedures relevant to teachers, especially those working with students with disabilities or English language learners (ELL). This course has a field experience component.

EDU 3321 Reading Foundations I: Emergent Literacy

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Practicum)

Prerequisite: Admitted to BAS teacher preparation program

Covers the foundational skills of reading development based on the science of reading and examines the relationship between cognitive, socio-cultural, linguistic, and motivational influences and educational outcomes. This course also explores how to teach phonological and phonemic awareness, phonics, decoding, and fluency reading components. This course has a field experience component.

EDU 3331 Inclusive Classroom Practices through Universal Design

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Practicum)

Prerequisite: Admitted to BAS teacher preparation program

Covers techniques for fostering inclusive classrooms using diverse materials and engaging activities based on the Universal Design Learning (UDL) framework. This course has a field experience component.

EDU 3341 Digital Literacy Citizenship for Teaching and Learning

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: Admitted to BAS teacher preparation program

Covers effective teaching methods within the classroom setting. This course includes sharing strategies to enhance digital citizenship skills essential for the 21st century and how to make informed citizenship choices. The course covers the development of robust curriculum design techniques, implementation of advanced assessment methods, and evaluation of skills that promote digital learning.

EDU 3351 Reading Foundations II: Word Study and Comprehension

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Practicum)

Prerequisite: EDU 3321 (minimum grade of B)

Covers vocabulary, comprehension, disciplinary literacy, including a comprehensive exploration of the developmental and instructional implications related to the science of reading instruction for diverse learners. The course also covers the principles of explicit and systematic reading instruction. This course has a field experience component.

EDU 3361 Digital Storytelling

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: Admitted to BAS teacher preparation program

Covers digital storytelling and how to convey compelling narratives through various digital platforms across the curriculum. This course includes ways to create impactful stories, blending visuals, audio, and text.

EDU 4052 Teacher Preparation Clinical Residency I

9 Credit Hours • 405 Contact Hours (Internship)

Prerequisite: Admitted to BAS teacher preparation program

A residency that includes the Colorado Teacher Quality Standards, and emphasizes reflection, developmental growth, skilled-based activities, culturally responsive instructional strategies, and competency-based learning. This course requires part-time in a classroom setting, implementing the Co-Teach model with a state-licensed certified, teacher under the guidance of a faculty supervisor.

EDU 4062 Teacher Preparation Clinical Residency II

12 Credit Hours • 540 Contact Hours (Internship)

Prerequisite: Admitted to BAS teacher preparation program

Advances the implementation of the Colorado Teacher Quality Standards and teaching skills. This course requires assuming the lead role as the full-time teacher during the residency and enrollment in the community of practice seminar course. This is the second part of a year-long teacher prep clinical residency experience. Additional details are included in the teacher prep clinical residency handbook.

EDU 4411 Methods of Teaching Language Arts

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: Admitted to BAS teacher preparation program

Covers approaches and methods used in teaching language arts in the elementary school (K-6). The course includes how to present techniques for teaching listening, oral language, writing, spelling, grammar, and handwriting that are developmentally appropriate and challenging. The course must be taken with Teacher Prep Clinical Residency I.

EDU 4421 Methods of Teaching Mathematics in Diverse Classrooms

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: Admitted to BAS teacher preparation program

Covers how to evaluate, plan, and deliver math lessons for learners. The course will examine how to assess diverse learners' math knowledge and skills through a student-centered inquiry approach. The course will introduce methods for teaching topics in numbers, operations, algebra, geometry, measurement, data analysis, and probability based on the National Council of Teachers of Mathematics (NCTM) principles and standards. This course must be taken with Teacher Prep Clinical Residency I.

EDU 4423 Community of Practice Seminar

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: Admitted to BAS teacher preparation program

Supports and enhances the clinical teaching residency experience. This course creates a structured space to reflect on practical experiences, engage in professional discourse, and develop advanced teaching competencies. This course requires a professional e-portfolio that provides evidence of competency in the career field.

EDU 4431 Methods of Teaching Social Studies and Science

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Practicum)

Prerequisite: Admitted to BAS teacher preparation program

Covers developing inquiry-based lessons to investigate science and social studies using technology and a multidisciplinary approach. The course has a field experience component.

EDU 4441 Assessment in Diverse Classrooms

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Practicum)

Prerequisite: Admitted to BAS teacher preparation program

Assessment and feedback to meet the needs of learners across diverse cultural and linguistic backgrounds. The course also applies informal classroom assessments, standardized tests, and developmental screenings. The course includes a field experience component.

Electricity Industrial Commercial Courses

EIC 1860 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

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

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: ELT 1206 (minimum grade of C)

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

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: ELT 1206 (minimum grade of C)

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

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: ELT 1206 (minimum grade of C)

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

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: ELT 1206 (minimum grade of C)

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 (minimum grade of C)

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

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: ELT 1206 (minimum grade of C)

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

ELT 1001 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

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

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

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Co-requisite: MAT 1140 (minimum grade of C) 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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: ELT 1206 (minimum grade of C)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: ELT 1206 (minimum grade of C)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: ELT 1206 (minimum grade of C)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: ELT 1206 (minimum grade of C)

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 (minimum grade of C)

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 (minimum grade of C)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: ELT 1206 (minimum grade of C)

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

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: ELT 1206 (minimum grade of C)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: ELT 1206 (minimum grade of C)

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 (minimum grade of C)

Focuses on troubleshooting electromechanical systems consisting of switches, relays, and motors. Emphasizes teamwork.

ELT 2080 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 (minimum grade of C)

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 (minimum grade of C)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: ELT 1206 (minimum grade of C)

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 (minimum grade of C)

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 (minimum grade of C)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: ELT 1206 (minimum grade of C)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: ELT 1206 (minimum grade of C)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: ELT 1206 (minimum grade of C)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: ELT 1206 (minimum grade of C)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: ELT 1206 (minimum grade of C), ELT 2252 (minimum grade of C)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: ELT 2358 (minimum grade of C)

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

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: ELT 1246 (minimum grade of C) or ELT 1247 (minimum grade of C)

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

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: ELT 1206 (minimum grade of C)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: ELT 2358 (minimum grade of C)

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 (minimum grade of C), ELT 1212 (minimum grade of C)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: ELT 1206 (minimum grade of C)

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

EMP 1001 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

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 1007 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.

Emergency Medical Services Courses

EMS 1015 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

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

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Co-requisite: EMS 1021 (minimum grade of C)

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

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Co-requisite: EMS 1021 (minimum grade of C)

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

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Co-requisite: EMS 1021 (minimum grade of C)

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

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

1 Credit Hour • 30 Contact Hours (Clinical)

Co-requisite: EMS 1021 (minimum grade of C)

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

2 Credit Hours • 90 Contact Hours (Clinical)

Co-requisite: EMS 1125 (minimum grade of C)

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

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

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

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Co-requisite: EMS 1125 (minimum grade of C)

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

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

Co-requisite: EMS 1125 (minimum grade of C)

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

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

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

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Co-requisite: EMS 1125 (minimum grade of C)

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

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

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

3 Credit Hours • 90 Contact Hours (45 Lecture/Lab Combination, 45 Practicum)

Prerequisite: BIO 1006 (minimum grade of C)

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

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Co-requisite: EMS 2025 (minimum grade of C)

Note: Must have faculty consent to enroll

Serves as the lab experience to coincide with EMS 2025 topics.

EMS 2027 Paramedic Special Considerations

3 Credit Hours • 90 Contact Hours (45 Lecture/Lab Combination, 45 Practicum)

Co-requisite: EMS 2025 (minimum grade of C)

Note: Must have faculty consent to enroll

Focuses on a comprehensive study of Advanced Life Support Practice.

EMS 2028 Paramedic Special Considerations Lab

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Co-requisite: EMS 2025 (minimum grade of C)

Note: Must have faculty consent to enroll

Serves as the lab experience for those students enrolled in EMS 2027.

EMS 2029 Paramedic Pharmacology

3 Credit Hours • 90 Contact Hours (45 Lecture/Lab Combination, 45 Practicum)

Co-requisite: EMS 2025 (minimum grade of C)

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

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Co-requisite: EMS 2025 (minimum grade of C)

Note: Must have faculty consent to enroll

Serves as the required lab course in the paramedic education program.

EMS 2031 Paramedic Cardiology

5 Credit Hours • 135 Contact Hours (90 Lecture/Lab Combination, 45 Practicum)

Co-requisite: EMS 2025 (minimum grade of C)

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

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

Co-requisite: EMS 2025 (minimum grade of C)

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

4 Credit Hours • 112.5 Contact Hours (67.5 Lecture/Lab Combination, 45 Practicum)

Co-requisite: EMS 2025 (minimum grade of C)

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

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

Co-requisite: EMS 2025 (minimum grade of C)

Note: Must have faculty consent to enroll

Focuses on a clinical study of adult and pediatric medical emergencies.

EMS 2035 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

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

Co-requisite: EMS 2025 (minimum grade of C)

Note: Must have faculty consent to enroll

Serves as a lab presenting various acute trauma scenarios.

EMS 2037 Paramedic Internship Preparatory

2 Credit Hours • 30 Contact Hours (Lecture)

Co-requisite: EMS 2025 (minimum grade of C)

Note: Must have faculty consent to enroll

Reviews concepts and techniques used in the pre-hospital setting.

EMS 2080 Paramedic Internship I

6 Credit Hours • 270 Contact Hours (Internship)

Co-requisite: EMS 2025 (minimum grade of C)

Note: Must have faculty consent to enroll

Serves as the preceptor/internship program for paramedic students.

EMS 2081 Paramedic Internship II

6 Credit Hours • 270 Contact Hours (Internship)

Co-requisite: EMS 2025 (minimum grade of C)

Note: Must have faculty consent to enroll

Serves as the continuation of EMS 2080, preceptor program for paramedic students.

EMS 3010 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

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

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

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

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

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

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

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

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

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

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

3 Credit Hours • 45 Contact Hours (Lecture)

Co-requisite: ESA 3000 (minimum grade of D)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Co-requisite: ESA 3000 (minimum grade of D)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Co-requisite: ESA 3000 (minimum grade of D)

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

4 Credit Hours • 60 Contact Hours (Lecture)

Co-requisite: ESA 3000 (minimum grade of D)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Co-requisite: ESA 3000 (minimum grade of D)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Co-requisite: ESA 3000 (minimum grade of D)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Co-requisite: ESA 3000 (minimum grade of D)

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

4 Credit Hours • 60 Contact Hours (Lecture)

Co-requisite: ESA 3000 (minimum grade of D)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Co-requisite: ESA 3000 (minimum grade of D)

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

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: ESA 3000 (minimum grade of D), ESA 3015 (minimum grade of D)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Co-requisite: ESA 3000 (minimum grade of D)

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

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

EGG 1020 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 (minimum grade of C) 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 (minimum grade of C) 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

3 Credit Hours • 67.5 Contact Hours (22.5 Lecture (1.5 Credit Hours), 45 Lab (1.5 Credit Hours))

Prerequisite: MAT 1340 (minimum grade of C) 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

4 Credit Hours • 67.5 Contact Hours ((52.5 Lecture (3.5 credit hours), 15 Lab (0.5 credit hours))

Co-requisite: MAT 2410 (minimum grade of C) 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

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: MAT 2410 (minimum grade of C) or higher

Co-requisite: PHY 2111 (minimum grade of C)

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)

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: EGG 2011 (minimum grade of C)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: MAT 2410 (minimum grade of C) or higher, PHY 2111 (minimum grade of C)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: EGG 2011 (minimum grade of C)

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 (minimum grade of C) or higher

Co-requisite: PHY 2112 (minimum grade of C)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: MAT 1340 (minimum grade of C) 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.

Engineering Graphics Technology Courses

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 (minimum grade of C) or EGT 1100 (minimum grade of C)

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 (minimum grade of C)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: MAT 1340 (minimum grade of C) 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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: CAD 1100 (minimum grade of D), CAD 1101 (minimum grade of D)
Co-requisite: CAD 1102 (minimum grade of D)
 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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: CAD 1100 (minimum grade of C) or EGT 1101 (minimum grade of C) or MAC 1002 (minimum grade of C)
 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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisites: CAD 2456 (minimum grade of C) or CAD 2458 (minimum grade of C); EGT 2303 (minimum grade of C)
 Provides the training and skillsets to produce industrial working drawings and working models based on ASME standards. Examines industry-based design management models and the process of controlling drawing revisions. Design concepts for linkages, gears, bearings, belt drives, and chain drives will be covered. Examines part function and their relationships to develop detail, assembly, and subassembly drawings including a list of materials.

English Courses

ENG 0077 Studio 1031

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 1021

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

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

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

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

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

3 Credit Hours • 45 Contact Hours (Lecture)
Prerequisite: ENG 1021 (minimum grade of C) or ENG 1031 (minimum grade of C)
 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

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

3 Credit Hours • 45 Contact Hours (Lecture)
Prerequisite: ENG 1031 (minimum grade of C)
 Expands and refines the objectives of ENG 1031, emphasizing formal presentations, both written and oral.

ENG 2001 English Composition III: C03

3 Credit Hours • 45 Contact Hours (Lecture)
Co-requisite: ENG 1022 (minimum grade of C)
 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

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

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

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

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

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

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

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

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

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

ESL 0011 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

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

5 Credit Hours • 75 Contact Hours (Lecture)

Prerequisite: LOEP Language Usage score of 30-57

Develops competency in basic grammatical structures through oral and written practice.

ESL 0022 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

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

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: LOEP Listening score of 40-63

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

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: ESL 0021 (minimum grade of C), ESL 0031 (minimum grade of C), ESL 0041 (minimum grade of C); 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

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: LOEP Reading score of 30-62

Improves comprehension of simple written texts through vocabulary building and reading strategies.

ESL 0042 Intermediate Reading

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: ESL 0021 (minimum grade of C), ESL 0041 (minimum grade of C); 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

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: ESL 0022 (minimum grade of C), ESL 0042 (minimum grade of C), ESL 0052 (minimum grade of C); 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

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: ESL 0021 (minimum grade of C), ESL 0041 (minimum grade of C)

Introduces the fundamentals of paragraph organization and development. Emphasizes development of sentence variety and grammatical competency within well-organized paragraphs.

ESL 0053 Advanced Composition

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: ESL 0022 (minimum grade of C), ESL 0042 (minimum grade of C), ESL 0052 (minimum grade of C)

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

ENP 1005 Introduction to Entrepreneurship

3 Credit Hours • 45 Contact Hours (Lecture)

Explores the business skills, personality traits, and commitment necessary to successfully plan, launch, and grow an entrepreneurial venture. This course will cover the challenges and rewards of entrepreneurship. This course will cover the role of entrepreneurial businesses in the United States and the world and their impact on our national and global economy.

Environmental Science Courses

ENV 1010 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

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.

Finance Courses

FIN 1015 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

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

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

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

2 Credit Hours • 30 Contact Hours (Lecture)

Co-requisite: FIN 1015 (minimum grade of D)

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

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

FST 1000 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

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

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

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

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

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)

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

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

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 1060 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

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

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

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

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)

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

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

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

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

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

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

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

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

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**FSW 1000 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

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

2 Credit Hours • 30 Contact Hours (Lecture)

Designed to prepare the prospective supervisor to undertake safe and effective fire management operations.

French Courses**FRE 1001 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: AH4

5 Credit Hours • 75 Contact Hours (Lecture)

Develops 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.

FRE 1012 French Language II: AH4

5 Credit Hours • 75 Contact Hours (Lecture)

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.

FRE 2011 French Language III: AH4

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: FRE 1012 (minimum grade of C)

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

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**GEO 1005 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

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

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

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

GEY 1108 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

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

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

Prerequisite: GEY 1111 (minimum grade of C)

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

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

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

GER 1011 German Language I: AH4

5 Credit Hours • 75 Contact Hours (Lecture)

Develops 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 1012 German Language II: AH4

5 Credit Hours • 75 Contact Hours (Lecture)

Prerequisite: GER 1011 (minimum grade of C)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: GER 1012 (minimum grade of C)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: GER 2011 (minimum grade of C)

Continues the development of increased functional proficiency at intermediate mid-level in speaking, aural comprehension, reading, writing and cultural competency in the German language. This course is conducted predominantly in German.

Health and Wellness Courses

HWE 1005 American Heart Association Heartsaver First Aid CPR and AED

0.5 Credit Hours • 7.5 Contact Hours (Lecture)

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

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

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

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

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

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

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

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

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

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

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 Information Technology Courses

HIM 3020 Health Information Systems – Domain III

3 Credit Hours • 45 Contact Hours (Lecture)

Analyzes technologies for health information management and introduces health informatics concepts for the management of health information.

HIM 3030 Data Use and Management in Healthcare – Domain III

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: HIM 3020 (minimum grade of D)

Examines data management techniques and identifies standards for the exchange of health information. This course includes assessment of systems and recommendation of appropriate systems to meet organizational needs.

HIM 4005 Health Law and Compliance – Domain V

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: HIM 3020 (minimum grade of D), HIM 3030 (minimum grade of D)

Examines regulatory compliance with legal processes impacting health information; evaluates corporate compliance with external regulatory forces; analyzes components of risk management for compliance with local, state, and federal policies.

Health Professional Courses

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

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

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

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

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

0.5 Credit Hours • 7.5 Contact Hours (Lecture)

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)

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 1020 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

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

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

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

2 Credit Hours • 30 Contact Hours (Lecture)

Provides students with an experiential learning opportunity.

HPR 2011 Advanced Cardiac Life Support

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

Note: Must have faculty consent to enroll

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

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

Note: Must have faculty consent to enroll

Provides students the needed information and skills as required by health care agencies for pediatric emergencies.

HPR 2020 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.

HPR 3001 Communication in Health Care

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Readiness in English

Develops professional written and oral communication plans to ensure effective patient-centered outcomes between health care professionals, patients and caregivers.

HPR 3010 Quality Improvement in Health Care

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces approaches to assessing risk and improving health care quality through the practice of Continuous Quality Improvement (CQI). Course explores the conceptual framework for quality improvement, a focus on quality improvement as a strategy to manage cost, boost productivity, and enhance quality outcomes in various health care settings. The course will focus on both conceptual understanding and experiential learning.

HPR 4003 Critical Review of Health Care Research

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: successful completion of all required 3000 level within the BAS healthcare administration and management program

Covers the identification, evaluation, and analysis of scientific published literature necessary to identify healthcare best practices, the formulation of research for clinical questions for effective participation in healthcare discussions and evidence-based decision-making.

HPR 4011 Leadership and Management in Health Professions

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: College Readiness in English. Successful completion of required 3000 level courses for BAS Healthcare Administration and Management program

Provides a general overview of the concepts and theories relative to leadership and management in health care settings. This course covers concepts in decision-making models, ethical reasoning skills, effective communication, interpersonal and inter-professional relationships, management of human and fiscal resources, risk management, and quality improvement.

Heating, Air Conditioning and Refrigeration Technology Courses

HVA 1002 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

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

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

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

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

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)

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

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

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)
Co-requisite: HVA 1002 (minimum grade of D), HVA 1005 (minimum grade of D)
 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

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

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)
Co-requisite: HVA 1002 (minimum grade of D), HVA 1005 (minimum grade of D)
 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

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)
Co-requisite: HVA 1010 (minimum grade of D)
 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

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

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

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

4 Credit Hours • 60 Contact Hours (Lecture)
Co-requisite: HVA 1010 (minimum grade of D)
 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

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

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

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

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

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Co-requisite: HVA 1010 (minimum grade of D)

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

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Co-requisite: ELT 1001 (minimum grade of D)

Helps the student with the installation of building automation devices with regard to HVAC equipment.

HVA 2052 Building Automation II, Service

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: HVA 2051 (minimum grade of D)

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

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: HVA 2052 (minimum grade of D)

Covers complete set up and programming of a building automation system. The class includes extensive hands-on workshops.

HVA 2059 Commercial HVAC System Design

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: HVA 1005 (minimum grade of D)

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

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

2 Credit Hours • 90 Contact Hours (Internship)

Gives the student an opportunity to apply their course studies in a specific area.

HVA 2089 Capstone

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

Demonstrate culmination of learning within a given program of study.

History Courses

History courses may be taken in any order

HIS 1110 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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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: C03

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

3 Credit Hours • 45 Contact Hours (Lecture)

Offers fundamental knowledge in planning and executing events or meetings. The material covers budgeting, entertainment, catering, and accommodating participants' lodging needs.

HOS 1048 Introduction to Food & Beverage

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on food and beverage management. This course includes menu planning, purchasing, storage, and facility layout.

HOS 2021 Basic Hotel & Restaurant Accounting

3 Credit Hours • 45 Contact Hours (Lecture)

Covers hotel and restaurant accounting procedures including computerized accounting and hospitality situations. This course also covers managing financial operations of hotels and restaurants.

HOS 2026 Supervision in the Hospitality Industry

3 Credit Hours • 45 Contact Hours (Lecture)

Covers effective supervision and management in the hospitality industry, talent recruitment, productivity enhancement, cost control, communication, conflict resolution, and change management. The course also includes career development.

HOS 2031 Resort Facilities Management & Design

3 Credit Hours • 45 Contact Hours (Lecture)

Covers resort facility systems to improve efficiency and integrate eco-friendly practices into hospitality operations. The course also covers interior and exterior facilities including guestrooms, public spaces, and building structure.

HOS 2051 Hotel Operations

3 Credit Hours • 45 Contact Hours (Lecture)

Covers hotel operations, organizational structure, human resources management, and production controls.

HOS 2080 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

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

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

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

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

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

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 Mechatronic Maintenance Courses

IMM 1004 Service & 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

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

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

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Covers the fundamental principles of mechanical transmission and the functioning of simple machines. Topics include various types of bearings, seals, lubricants, industrial shafting, belt and chain drives, gear power transmission, and conveyor systems. Additionally, this course addresses troubleshooting techniques essential for evaluating mechanical systems.

IMM 1013 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

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 Introduction to Electrical Systems

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Introduces industrial maintenance technology used in electrical systems. This course focuses on how electrical power is converted into energy and explains electrical applications and the theory on which they operate. Course content includes industrial circuits and electrical systems.

IMM 1016 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

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

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

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.

Integrative Health Professions Courses

IHP 1000 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

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

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.

Interior Design Courses

IND 1017 Interior Textiles

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Study and research of fabric types, fibers, weaves, finishes, construction and dying & 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

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

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

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: IND 2207 (minimum grade of C)

Note: Must have Department Chair permission to enroll

Provides students with an experiential learning opportunity.

IND 2080 Internship

2-4 Credit Hours • Per Credit Hour, 45 Contact Hours (Internship)

Prerequisite: IND 2300 (minimum grade of C)

Note: Must have Department Chair permission to enroll

Provides work experience in a business or industry.

IND 2088 Practicum

1 Credit Hour • 30 Contact Hours (7.5 Lecture, 22.5 Practicum)

Prerequisite: IND 2207 (minimum grade of C) or IND 2211 (minimum grade of C)

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

3-4 Credit Hours • Per Credit Hour, 22.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: IND 2088 (minimum grade of C)

Note: Must have Department Chair permission to enroll

Provides a demonstrated culmination of learning within a given program of study.

IND 2201 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

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

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: CAD 1105 (minimum grade of C)

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

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: CAD 1105 (minimum grade of C), IND 2207 (minimum grade of C); CAD 1110 (minimum grade of C) or IND 2300 (minimum grade of C)

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

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: CAD 1105 (minimum grade of C), IND 2207 (minimum grade of C)

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

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

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: CAD 2227 (minimum grade of C) or IND 2209 (minimum grade of C)

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

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)
Prerequisite: CAD 1105 (minimum grade of C) or CAD 2220 (minimum grade of C)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: CAD 1105 (minimum grade of C)

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

3 Credit Hours • 45 Contact Hours (Lecture)
Prerequisite: CAD 1105 (minimum grade of C) or CAD 2220 (minimum grade of C)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: CAD 1105 (minimum grade of C)

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

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

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: IND 2078 (minimum grade of C) or IND 2208 (minimum grade of C) or IND 2211 (minimum grade of C)
 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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Co-requisite: IND 2211 (minimum grade of C) or IND 2704 (minimum grade of C)

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

3 Credit Hours • 45 Contact Hours (Lecture)
Prerequisite: IND 2078 (minimum grade of C) or IND 2300 (minimum grade of C)

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

IPP 1021 Aspects of Interpreting I

3 Credit Hours • 45 Contact Hours (Lecture)
Prerequisite: ASL 1122 (minimum grade of B), ENG 1021 (minimum grade of C)

Co-requisite: ASL 1123 (minimum grade of D)
 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

3 Credit Hours • 45 Contact Hours (Lecture)
Prerequisite: ASL 1123 (minimum grade of B), ENG 1021 (minimum grade of C), IPP 1021 (minimum grade of B)

Co-requisite: ASL 2221 (minimum grade of B)
 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

2 Credit Hours • 30 Contact Hours (Lecture)
Prerequisite: IPP 1021 (minimum grade of B)
Co-requisite: IPP 1032 (minimum grade of B)

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

3 Credit Hours • 45 Contact Hours (Lecture)
Prerequisite: ASL 1122 (minimum grade of B), ENG 1021 (minimum grade of C)

Co-requisite: ASL 1123 (minimum grade of B)
 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

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ASL 1123 (minimum grade of B), ENG 1021 (minimum grade of C), IPP 1031 (minimum grade of B)*Co-requisite:* ASL 2221 (minimum grade of B)

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

2 Credit Hours • 30 Contact Hours (Lecture)

Prerequisite: ASL 1122 (minimum grade of B), ENG 1021 (minimum grade of C)*Co-requisite:* ANT 1001 (minimum grade of D)*Co-requisite:* ASL 1123 (minimum grade of B)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ANT 1001 (minimum grade of D), ASL 1123 (minimum grade of B), ENG 1021 (minimum grade of C), IPP 1045 (minimum grade of B)*Co-requisite:* ASL 2221 (minimum grade of B)

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

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: ASL 1123 (minimum grade of B), ENG 1021 (minimum grade of C), IPP 1021 (minimum grade of B), IPP 1031 (minimum grade of B)

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

2 Credit Hours • 30 Contact Hours (Lecture)

Prerequisite: ASL 2221 (minimum grade of B), IPP 1022 (minimum grade of B), IPP 1032 (minimum grade of B)*Co-requisite:* ASL 2222 (minimum grade of B)

Expands their repertoire of specialized and technical sign terminology and apply them in appropriate contexts.

IPP 2025 English to ASL Interpreting

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ASL 2221 (minimum grade of B), COM 1150 (minimum grade of D), IPP 1032 (minimum grade of B)*Co-requisite:* ASL 2222 (minimum grade of B)*Note:* 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

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ASL 2221 (minimum grade of B), COM 1150 (minimum grade of D), IPP 1032 (minimum grade of B)*Co-requisite:* ASL 2222 (minimum grade of B)*Note:* 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

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ASL 2221 (minimum grade of B), IPP 1022 (minimum grade of B), IPP 1032 (minimum grade of B)*Co-requisite:* ASL 2222 (minimum grade of B)*Note:* 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

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: ANT 1001, ASL 2222 (minimum grade of B), CIS 1018 (minimum grade of B) or CSC 1005 (minimum grade of B), COM 1150 (minimum grade of B), ENG 1021 (minimum grade of C), IPP 2025, IPP 2027 (minimum grade of B), IPP 2029 (minimum grade of B), MAT 1140 (minimum grade of B) 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

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ANT 1001 (minimum grade of B), CIS 1018 (minimum grade of B) or CSC 1005 (minimum grade of B), COM 1150 (minimum grade of B), ENG 1021 (minimum grade of C), MAT 1140 (minimum grade of B) or higher*Note:* IPP 2035, IPP 2081 must be taken concurrently with IPP 2079. Must have GPA of B or higher.

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

5 Credit Hours • 225 Contact Hours (Internship)

Prerequisite: ANT 1001 (minimum grade of B), CIS 1018 (minimum grade of B) or CSC 1005 (minimum grade of B), COM 1150 (minimum grade of B), ENG 1021 (minimum grade of C), MAT 1140 (minimum grade of B) or higher*Note:* IPP 2035, IPP 2079 must be taken concurrently with IPP 2081. Must have GPA of B or higher

Provides field experience interpreting in a supervised educational, community, service agency, or other setting.

Italian Courses**ITA 1001 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

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

5 Credit Hours • 75 Contact Hours (Lecture)

Prerequisite: ITA 1011 (minimum grade of C)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ITA 1012 (minimum grade of C)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ITA 2011 (minimum grade of C)

Continues Italian Language III in the development of increased functional proficiency at the intermediate mid-level in speaking, aural comprehension, reading, writing, and cultural competency in the Italian language. This course is conducted predominantly in Italian.

Japanese Courses

JPN 1001 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

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

5 Credit Hours • 75 Contact Hours (Lecture)

Prerequisite: JPN 1011 (minimum grade of C)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: JPN 1012 (minimum grade of C)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: JPN 2011 (minimum grade of C)

Continues the development of increased functional proficiency at intermediate mid-level in speaking, aural comprehension, reading, writing, and cultural competency in the Japanese language. This course is conducted predominantly in Japanese.

Journalism Courses

JOU 1005 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

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

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

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

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

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

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

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

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

LEA courses must have permission of Academy Director to register.

LEA 1001 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

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

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

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

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

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

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

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

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

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

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

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 1021 (minimum grade of C) or ENG 1031 (minimum grade of C)

Identifies the areas of concern in regard to proper documentation of police related activities. Focuses on report writing skills, proper structuring of interviews, and chronological documentation of

events. Incorporates proper sentence structuring, the use of correct terminology, and accuracy in written reports.

Literature Courses**LIT 1015 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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

3 Credit Hours • 45 Contact Hours (Lecture)

Explores special interests in literature, such as Detective Fiction and Science Fiction.

Machining Courses

MAC 1000 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

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

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

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 $\pm .004$ in. and perform competencies set by manufacturing standards.

MAC 1011 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

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

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

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

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

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

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

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

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

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

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

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

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 1005 Logistics Management

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces the fundamental facets of logistics in supply chain management utilizing a systems approach to: manage activities associated with traffic, logistical support, regulations, transportation, inventory management and control, warehousing, packaging, order processing, and materials handling.

MAN 1016 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

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

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

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

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

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

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

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

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 (minimum grade of C), MAN 3030 (minimum grade of C), MAR 3040 (minimum grade of C)

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 1101 Introduction to Manufacturing

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Focuses on the fundamentals of manufacturing and the responsibilities of the manufacturing technician, including design, procurement, assembly, maintenance, operations, accounting and the importance of Quality Assurance (QA) throughout the manufacturing process.

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

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 2080 Manufacturing 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 Outcome, and Topical Outline guidelines.

MTE 2089 Manufacturing Capstone

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

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.

MTE 2310 Design for Manufacturability

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: MAC 1002 (minimum grade of C)

Introduces Design for Manufacturability (DFM) engineering techniques for manufacturing parts to meet specifications for assembly, testing, integration, operation, maintenance, and end-of-life management, while considering the importance of designed-in quality, the role of design tolerances, and the need for

standardized parts using Computer-Aided Drafting (CAD), Computer-Aided Machining (CAM), and Computer-Integrated Manufacturing (CIM) software in product development.

MTE 2330 Strength of Materials

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: CAD 2456 (minimum grade of C), EGT 2303 (minimum grade of C), MAT 1140 (minimum grade of C) 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

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

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

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

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

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

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 (minimum grade of C)
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 0150 Technical Mathematics Support

1 Credit Hours • 15 Contact Hours (Supplemental Academic Instruction)
Co-requisite: MAT 1150
Note: MAT 0150 must be taken concurrently with MAT 1150
 Supports skill development necessary for success within Technical Mathematics.

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

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

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

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

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

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 1150 Technical Mathematics

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: College Readiness in Career Math

Covers mathematical material designed for career and technical students. Topics include measurement, algebra, geometry, trigonometry, and vectors. These are presented at an introductory level, and the emphasis is on applications.

MAT 1160 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

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

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

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

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

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

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

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: MAT 1340 (minimum grade of C) 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

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: MAT 1340 (minimum grade of C) 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

5 Credit Hours • 75 Contact Hours (Lecture)

Prerequisite: MAT 1340 (minimum grade of C) 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

1 Credit Hour • 45 Contact Hours (Internship)

Note: Must have faculty consent to enroll

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.

MAT 2410 Calculus I: MA1

5 Credit Hours • 75 Contact Hours (Lecture)

Prerequisite: MAT 1420 (minimum grade of C) or MAT 1440 (minimum grade of C) 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

5 Credit Hours • 75 Contact Hours (Lecture)

Prerequisite: MAT 2410 (minimum grade of C)

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

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: MAT 2420 (minimum grade of C)

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

5 Credit Hours • 75 Contact Hours (Lecture)

Prerequisite: MAT 2420 (minimum grade of C)

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

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: MAT 2410 (minimum grade of C)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: MAT 2420 (minimum grade of C)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: MAT 2420 (minimum grade of C)

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

4 Credit Hours • 60 Contact Hours (Lecture)

Prerequisite: MAT 2420 (minimum grade of C)

Explores ordinary differential equations with an introduction to select topics in linear algebra. Course covers first and second order differential equations, series solutions, Laplace transforms, linear algebra, eigenvalues, first order systems of equations, and numerical techniques for solving differential equations.

Medical Assistant Professional Courses

MAP 1010 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

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

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

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

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: MOT 1036 (minimum grade of C)

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

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: MOT 1036 (minimum grade of C)

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

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

4 Credit Hours • 180 Contact Hours (Internship)

Note: Program Coordinator approval

Provides the opportunity to supplement coursework with practical work experience related to their educational program, working under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor.

Medical Office Technology Courses

MOT 1015 Electronic Medical Office Records

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: HPR 1039 (minimum grade of D), HPR 1045 (minimum grade of D)

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

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

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

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

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

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: MOT 1025 (minimum grade of D), MOT 1026 (minimum grade of D), MOT 1027 (minimum grade of D) 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

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: MOT 1025 (minimum grade of D), MOT 1026 (minimum grade of D), MOT 1027 (minimum grade of D) 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

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

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

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

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: MOT 1050 (minimum grade of D), MOT 1060 (minimum grade of D)

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

MET 1050 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

MGD 1002 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

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

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

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Covers the design process and creative problem solving; design and color theories, fundamentals, styles; stages area applied to workups; finished art; and presentations. Emphasis will be online, form, composition, and continuity.

MGD 1010 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

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

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

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

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Co-requisite: MGD 1002 (minimum grade of C) or MGD 1012 (minimum grade of C) or MGD 1013 (minimum grade of C)
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

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Co-requisite: MGD 1011 (minimum grade of C) or MGD 1012 (minimum grade of C) or MGD 1013 (minimum grade of C)
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

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: MGD 1009 (minimum grade of C)
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

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: MGD 1034 (minimum grade of C) or ART 1201 (minimum grade of C)
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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: MGD 1037 (minimum grade of C)
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

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)

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

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

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

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

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Provides students with an exceptional learning experience.

MGD 1080 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

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: MGD 1009 (minimum grade of C)
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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: MGD 1012 (minimum grade of C)
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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: MGD 1011 (minimum grade of C)
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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: MGD 1012 (minimum grade of C)
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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: MGD 1011 (minimum grade of C), MGD 1012 (minimum grade of C), MGD 1013 (minimum grade of C)
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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: MGD 1014 (minimum grade of C) or MGD 1015 (minimum grade of C)
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

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: MGD 1011 (minimum grade of C), MGD 1012 (minimum grade of C), MGD 1013 (minimum grade of C), MGD 1014 (minimum grade of C)
Introduces the process of generating computer design.

MGD 2022 Computer Graphics II

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: MGD 2021 (minimum grade of C)
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

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

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: MGD 1038 (minimum grade of C)
 Continues Illustration II with added emphasis on conceptual development and proficiency in technique.

MGD 2038 Illustration IV

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: MGD 2037 (minimum grade of C)
 Covers advanced illustration techniques including manual, computer, and mixed media techniques.

MGD 2041 Web Design II

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: MGD 1041 (minimum grade of C)
 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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: MGD 1041 (minimum grade of C)
 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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: MGD 1043 (minimum grade of C)
 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)

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: MGD 1058 (minimum grade of C)
 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

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: MGD 1064 (minimum grade of C)
 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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: MGD 1065 (minimum grade of C)
 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

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

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
 A demonstrated culmination of learning within a given program of study.

Music Courses

MUS 1000 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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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)

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)

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)

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)

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)

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)

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)

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)

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 • 67.5 Contact Hours (Lecture/Lab Combination)

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 • 67.5 Contact Hours (Lecture/Lab Combination)

Refines techniques and emphasizes critical listening in the acoustic and Digital Audio Workstation environments.

MUS 1067 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

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

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

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

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:

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:

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:

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:

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

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

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

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

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

1 Credit Hour • 37.5 Contact Hours (Studio)

Rehearses and performs various types of musical literature. Second year, first term.

MUS 2052 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

1 Credit Hour • 37.5 Contact Hours (Studio)
Rehearses and performs various types of musical literature.
Second year, third term.

MUS 2054 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 • 67.5 Contact Hours (Lecture/Lab Combination)
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

NRE 1002 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

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: ENV 1111 (minimum grade of C)
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

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

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

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

1-6 Credit Hours • Per Credit Hour, 15 Contact Hours (Seminar)
Provides students with an experiential learning opportunity.

NRE 2080 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

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: NRE 2205 (minimum grade of C)

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

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 (minimum grade of C), ENG 1021 (minimum grade of C); 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 (minimum grade of C), ENG 1021 (minimum grade of C); Acceptance into the Practical Nursing program

Co-requisite: NUR 1001 (minimum grade of C), NUR 1003 (minimum grade of C), NUR 1005 (minimum grade of C)

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 (minimum grade of C), NUR 1002 (minimum grade of C), NUR 1005 (minimum grade of C)

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 (minimum grade of C), NUR 1002 (minimum grade of C), NUR 1003 (minimum grade of C), NUR 1005 (minimum grade of C); *Acceptance into the Practical Nursing program*

Co-requisite: NUR 1010 (minimum grade of C), NUR 1070 (minimum grade of C), NUR 1071 (minimum grade of C)

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 (minimum grade of C), NUR 1002 (minimum grade of C), NUR 1003 (minimum grade of C)

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

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 (minimum grade of C), MAT 1120 (minimum grade of C), NUR 1009 (minimum grade of C), NUR 1012 (minimum grade of C)*

Corequisite: BIO 2116 (minimum grade of C), NUR 1050 (minimum grade of C). 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

6 Credit Hours • 210 Contact Hours (30 Lecture, 90 Lab, 90 Clinical)

Prerequisite: BIO 2101 (minimum grade of C), BIO 2104 (minimum grade of C), ENG 1021 (minimum grade of C), PSY 2440 (minimum grade of D)

Co-requisite: BIO 2102 (minimum grade of C), MAT 1120 (minimum grade of C)

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 (minimum grade of C), ENG 1021 (minimum grade of C), NUR 1001 (minimum grade of C), NUR 1002 (minimum grade of C), NUR 1003 (minimum grade of C), NUR 1005 (minimum grade of C); *Acceptance into the Practical Nursing program*

Co-requisite: NUR 1004 (minimum grade of C), NUR 1070 (minimum grade of C), NUR 1071 (minimum grade of C)

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 (minimum grade of C), NUR 1005 (minimum grade of C), NUR 1010 (minimum grade of C), NUR 1070 (minimum grade of C), NUR 1071 (minimum grade of C); *Acceptance into the Practical Nursing program*

Co-requisite: NUR 1013 (minimum grade of C), NUR 1014 (minimum grade of C), NUR 1015 (minimum grade of C), NUR 1016 (minimum grade of C), NUR 1072 (minimum grade of C), NUR 1073 (minimum grade of C)

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

2 Credit Hours • 30 Contact Hours (Lecture)

Prerequisite: *Permission of program director. Admission to the program*

Corequisite: NUR 1009 (minimum grade of C)

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 (minimum grade of C), NUR 1005 (minimum grade of C), NUR 1010 (minimum grade of C), NUR 1070 (minimum grade of C), NUR 1071 (minimum grade of C); *Acceptance into the Practical Nursing program*

Co-requisite: NUR 1011 (minimum grade of C), NUR 1014 (minimum grade of C), NUR 1015 (minimum grade of C), NUR 1016 (minimum grade of C), NUR 1072 (minimum grade of C), NUR 1073 (minimum grade of C)

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 (minimum grade of C), NUR 1005 (minimum grade of C), NUR 101 (minimum grade of C), NUR 1070 (minimum grade of C), NUR 1071 (minimum grade of C); *Acceptance into the Practical Nursing program*

Co-requisite: NUR 1011 (minimum grade of C), NUR 1013 (minimum grade of C), NUR 1015 (minimum grade of C), NUR 1016 (minimum grade of C), NUR 1072 (minimum grade of C), NUR 1073 (minimum grade of C)

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 (minimum grade of C), NUR 1005 (minimum grade of C), NUR 1010 (minimum grade of C), NUR 1070 (minimum grade of C), NUR 1071 (minimum grade of C); *Acceptance into the Practical Nursing program*

Co-requisite: NUR 1011 (minimum grade of C), NUR 1013 (minimum grade of C), NUR 1014 (minimum grade of C), NUR 1016 (minimum grade of C), NUR 1072 (minimum grade of C), NUR 1073 (minimum grade of C)

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 (minimum grade of C), NUR 1005 (minimum grade of C), NUR 1010 (minimum grade of C), NUR 1070 (minimum grade of C), NUR 1071 (minimum grade of C); *Acceptance into the Practical Nursing program*

Co-requisite: NUR 1011 (minimum grade of C), NUR 1013 (minimum grade of C), NUR 1014 (minimum grade of C), NUR 1015 (minimum grade of C), NUR 1072 (minimum grade of C), NUR 1073 (minimum grade of C)

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

6 Credit Hours • 171 Contact Hours (49.5 Lecture, 31.5 Lab, 90 Clinical)

Prerequisite: Successful completion of preceding nursing coursework; BIO 2102 (minimum grade of C), MAT 1120 (minimum grade of C), NUR 1009 (minimum grade of C), NUR 1012 (minimum grade of C)

Corequisite: BIO 2116 (minimum grade of C), NUR 1006 (minimum grade of C)

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

4 Credit Hours • 120 Contact Hours (30 Lecture, 90 Clinical)

Prerequisite: Permission of program director. NUR 1006 (minimum grade of D), NUR 1050 (minimum grade of D)

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 (minimum grade of C); *Acceptance into the Practical Nursing program*

Co-requisite: NUR 1004 (minimum grade of C), NUR 1010 (minimum grade of C), NUR 1071 (minimum grade of C)

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 (minimum grade of C); *Acceptance into the Practical Nursing program*

Co-requisite: NUR 1004 (minimum grade of C), NUR 1010 (minimum grade of C), NUR 1070 (minimum grade of C)

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 (minimum grade of C), NUR 1005 (minimum grade of C), NUR 1010 (minimum grade of C), NUR 1070 (minimum grade of C), NUR 1071 (minimum grade of C); *Acceptance into the Practical Nursing program*

Co-requisite: NUR 1011 (minimum grade of C), NUR 1013 (minimum grade of C), NUR 1014 (minimum grade of C), NUR 1015 (minimum grade of C), NUR 1016 (minimum grade of C), NUR 1073 (minimum grade of C)

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 (minimum grade of C), NUR 1005 (minimum grade of C), NUR 1010 (minimum grade of C), NUR 1070 (minimum grade of C), NUR 1071 (minimum grade of C); *Acceptance into the Practical Nursing program*

Co-requisite: NUR 1011 (minimum grade of C), NUR 1013 (minimum grade of C), NUR 1014 (minimum grade of C), NUR

1015 (minimum grade of C), NUR 1016 (minimum grade of C), NUR 1072 (minimum grade of C)

Caring for stable patients with predictable outcomes.

NUR 1089 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

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 (minimum grade of C), NUR 2012 (minimum grade of C)

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

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 (minimum grade of C), NUR 2012 (minimum grade of C)

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

2 Credit Hours • 30 Contact Hours (Lecture)

Prerequisite: Permission of program director. NUR 1006 (minimum grade of C), NUR 1050 (minimum grade of C)

Co-requisite: NUR 2006 (minimum grade of C), NUR 2011 (minimum grade of C)

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

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

4 Credit Hours • 132 Contact Hours (24 Lecture, 108 Clinical)

Prerequisite: Permission of program director. NUR 2011 (minimum grade of C), NUR 2012 (minimum grade of C)

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

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

3 Credit Hours • 45 Contact Hours (Lecture)

Co-requisite: NUR 3001 (minimum grade of C)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: MAT 1260 (minimum grade of C), NUR 3001 (minimum grade of C), NUR 3002 (minimum grade of C)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Co-requisite: NUR 3002 (minimum grade of C)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Co-requisite: NUR 3002 (minimum grade of C)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Co-requisite: NUR 3002 (minimum grade of C)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Co-requisite: NUR 3002 (minimum grade of C)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: NUR 3001 (minimum grade of C), NUR 3002 (minimum grade of C)

Co-requisite: NUR 3003 (minimum grade of C)

Emphasizes the ethical and legal obligations of professional nursing practice. The focus is on values clarification, ethical theory, and ethical decision-making models. This course also covers legal issues related to healthcare.

NUR 4009 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 (minimum grade of C), NUR 3002 (minimum grade of C), NUR 3003 (minimum grade of C), NUR 4008 (minimum grade of C)

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

6 Credit Hours • 112.5 Contact Hours (67.5 Lecture, (4.5 Credits), 45 Clinical (1.5 Credits)

Prerequisite: NUR 3001 (minimum grade of C), NUR 3002 (minimum grade of C), NUR 3003 (minimum grade of C), NUR 4008 (minimum grade of C)

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

3 Credit Hours • 45 Contact Hours (Seminar)

Prerequisite: NUR 3001 (minimum grade of C), NUR 3002 (minimum grade of C), NUR 3003 (minimum grade of C), NUR 4008 (minimum grade of C)

Co-requisite: NUR 4009 (minimum grade of C), 4010 (minimum grade of C)

Integrates theory into practice by building on previous concepts and knowledge.

Nursing Assistant Courses

NUA 1001 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 1070 Nurse Aide Clinical Experience

0.67 Credit Hour • 30 Contact Hours (Clinical)

Co-requisite: NUA 1001 (minimum grade of C)

Note: Must have current CPR for Health Care Provider (BLS) card, negative TB test or chest X-ray, and current immunizations

Applies knowledge and skill gained in NUA 1001 to patient care.

NUA 1071 Clinical: Advanced Nurse Aide

1 Credit Hour • 30 Contact Hours (Clinical)

Co-requisite: NUA 1001 (minimum grade of D), NUA 1070 (minimum grade of D)

Note: Must have current CPR for Health Care Provider (BLS) card, negative TB test or chest X-ray, and current immunizations

Expands and applies knowledge and skill gained in NUA 1070 to client care.

Occupational Safety Technician Courses

OSH 1310 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

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

PAR 1114 Computers & the Law

3 Credit Hours • 45 Contact Hours (Lecture)

Provides students with an opportunity to develop computer skills needed in the legal environment, including software applications, spreadsheets, databases, and Internet research.

PAR 1115 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

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 1021 (minimum grade of C), PAR 1115 (minimum grade of D)

Focuses on tort law, including negligence, intentional torts, and strict liability.

PAR 1117 Family Law

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 1021 (minimum grade of C), PAR 1115 (minimum grade of D)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 1021 (minimum grade of C), PAR 1115 (minimum grade of D)

This course covers the basic principles of contract law.

PAR 1125 Property Law

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 1021 (minimum grade of C), PAR 1115 (minimum grade of D)

Focuses on real estate law, ownership, sale, leasing, financing, and government regulation of land.

PAR 1127 Legal Ethics

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 1021 (minimum grade of C), PAR 1115 (minimum grade of D)

Explores the parameters of professional responsibilities and value systems for paralegals and related occupations.

PAR 2080 Internship

3 Credit Hours • 135 Contact Hours (Internship)

*Prerequisite: PAR 1115 (minimum grade of D)**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

3 Credit Hours • 135 Contact Hours (On-the-Job-Training)

Prerequisite: PAR 1115 (minimum grade of D)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 1021 (minimum grade of C), PAR 1115 (minimum grade of D)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 1021 (minimum grade of C), PAR 1115 (minimum grade of D)

Introduces the state and federal Rules of Evidence and application within the trial process.

PAR 2205 Criminal Law

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 1021 (minimum grade of C), PAR 1115 (minimum grade of D)

Introduces basic concepts of criminal law and criminal procedure, including federal laws, Colorado statutes and Rules of Procedure.

PAR 2206 Business Organization Law

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 1021 (minimum grade of C), PAR 1115 (minimum grade of D)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 1021 (minimum grade of C), PAR 1115 (minimum grade of D)

Provides an understanding of the creation and administration of an estate, including wills and trusts, and the probate process.

PAR 2209 Constitutional Law

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 1021 (minimum grade of C), PAR 1115 (minimum grade of D)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: ENG 1021 (minimum grade of C), PAR 1115 (minimum grade of D)

Provides an introduction to legal research and writing.

Park Ranger Course

PRA 2005 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

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

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

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

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

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

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

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

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:

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:

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

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

*Prerequisite: PHT 1040 (minimum grade of C)**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

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

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

Philosophy courses can be taken in any order.

PHI 1011 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

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

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

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

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

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: AH3

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

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

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

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

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

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 1002 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

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

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

1 Credit Hour • 30 Contact Hours (Physical Education)

Prerequisite: PED 1010 (minimum grade of D)

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

1 Credit Hour • 30 Contact Hours (Physical Education)

Prerequisite: PED 1011 (minimum grade of D)

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

1 Credit Hour • 30 Contact Hours (Physical Education)

Prerequisite: PED 1012 (minimum grade of D)

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

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

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

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

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

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

1 Credit Hour • 30 Contact Hours (Physical Education)

Prerequisite: PED 1041 (minimum grade of D)

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

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

1 Credit Hour • 30 Contact Hours (Physical Education)

Prerequisite: PED 1043 (minimum grade of D)

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

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

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

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

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

1 Credit Hour • 30 Contact Hours (Physical Education)

Prerequisite: PED 2030 (minimum grade of D)

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

PTA 1010 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 1011 Essential Physical Therapist Assistant Skills Laboratory I

1 Credit Hour • 30 Contact Hours (Lab)

Corequisite: PTA 1010 (minimum grade of D)

Provides a laboratory experience developing and assessing the essential skills required by Commission on Accreditation of Physical Therapy Education (CAPTE). This course ensuring competency in essential psychomotor skills required by CAPTE accreditation.

PTA 1015 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 (minimum grade of C)

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

5 Credit Hours • 112.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: PTA 1010 (minimum grade of C)

Examines the theory and principles of physical therapy modalities. This course includes therapeutic heat and cold, traction, hydrotherapy, and light therapies.

PTA 1021 Essential Physical Therapist Assistant Skills Laboratory II

1 Credit Hour • 30 Contact Hours (Lab)

Prerequisite: PTA 1010 (minimum grade of D)

Provides the opportunity to develop and be evaluated on essential skills in therapeutic interventions, modalities, muscle testing, range of motion assessment, gait, and posture \ required by Commission on Accreditation of Physical Therapy Education (CAPTE), ensuring student competency in the psychomotor skills acquired throughout the semester. These skills include therapeutic modalities and therapeutic interventions and assessment of those interventions in contemporary physical therapy for the physical therapist assistant.

PTA 1024 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

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

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

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: PTA 1010 (minimum grade of C)

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

5 Credit Hours • 112.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: PTA 1018 (minimum grade of C) 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

1 Credit Hour • 15 Contact Hours (Lecture)

Prerequisite: PTA 1031 (minimum grade of C)

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

2 Credit Hours • 30 Contact Hours (Lecture)

Prerequisite: PTA 2080 (minimum grade of C)

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

5 Credit Hours • 112.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: PTA 1020 (minimum grade of C), PTA 1040 (minimum grade of C)

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

5 Credit Hours • 112.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: PTA 1020 (minimum grade of C), PTA 1040 (minimum grade of C)

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 2041 Essential Physical Therapist Assistant Skills Laboratory III

1 Credit Hour • 30 Contact Hours (Lab)

Prerequisite: PTA 1010 (minimum grade of D)*Corequisite:* PTA 1040 (minimum grade of D)

Provides the opportunity to develop and be evaluated on essential skills in orthopedic, neurological, pediatric, geriatric and special population assessment and management required by Commission on Accreditation of Physical Therapy Education (CAPTE), ensuring student competency in the psychomotor skills acquired throughout the semester. These skills include Orthopedic Assessment and Management and Neurological Assessment and Management in contemporary physical therapy for the physical therapist assistant. This is a laboratory experience, providing

students with the opportunity to develop and be assessed on essential skills required by CAPTE accreditation, ensuring student competency in the psychomotor skills acquired throughout the semester.

PTA 2051 Professional Communications III

1 Credit Hour • 15 Contact Hours (Lecture)

Prerequisite: PTA 1041 (minimum grade of C)

Advances development and application of the written and oral communication skills utilized in healthcare and physical therapy workplace settings.

PTA 2078 PTA Seminar

2 Credit Hours • 30 Contact Hours (Lecture)

Prerequisite: PTA 2030 (minimum grade of C), PTA 2080 (minimum grade of C)

Note: Students should be in the final semester of their degree

Provides students with an experiential learning opportunity.

PTA 2080 Internship I

4 Credit Hours • 180 Contact Hours (Internship)

Prerequisite: PTA 1020 (minimum grade of C), PTA 1040 (minimum grade of C)

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

5 Credit Hours • 225 Contact Hours (Internship)

Prerequisite: PTA 2080 (minimum grade of C)

Co-requisite: PTA 2030 (minimum grade of C)

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

5 Credit Hours • 225 Contact Hours (Internship)

Prerequisite: PTA 2040 (minimum grade of C), PTA 2081 (minimum grade of C)

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

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

5 Credit Hours • 105 Contact Hours (60 Lecture, 45 Lab)

Prerequisite: MAT 1340 (minimum grade of C)

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

5 Credit Hours • 105 Contact Hours (60 Lecture, 45 Lab)

Prerequisite: PHY 1111 (minimum grade of C)

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

5 Credit Hours • 105 Contact Hours (60 Lecture, 45 Lab)

Prerequisite: MAT 2410 (minimum grade of C)

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

5 Credit Hours • 105 Contact Hours (60 Lecture, 45 Lab)

Prerequisite: PHY 2111 (minimum grade of C)

Co-requisite: MAT 2420 (minimum grade of C)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: MAT 2420 (minimum grade of C), PHY 2112 (minimum grade of C)

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

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

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: PLU 2007 (minimum grade of D)

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

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

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

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

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

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

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

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

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

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

PHO 1001 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

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

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: ART 1401 (minimum grade of C) or PHO 1020 (minimum grade of C)

Presents the fundamentals of the psychology of perception, and its role in understanding the visual arts using photography. The course covers a variety of concepts that aid in the design, creation, interpretation, and evaluation of images. This course also covers the role of images in influencing thoughts and desires.

PHO 2005 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

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: PHO 2037 (minimum grade of C)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: ART 1401 (minimum grade of C) or PHO 1020 (minimum grade of C)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: ART 1401 (minimum grade of C) or PHO 2005 (minimum grade of C)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: PHO 2034 (minimum grade of C)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: PHO 1020 (minimum grade of C) or ART 1401 (minimum grade of C)

Co-requisite: ART 2405 (minimum grade of C)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: ART 2405 (minimum grade of C)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: PHO 2005 (minimum grade of C), PHO 2026 (minimum grade of C)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: ART 1401 (minimum grade of C) or PHO 1020 (minimum grade of C)

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

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

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

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: PHO 1020 (minimum grade of C)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Co-requisite: PHO 2187 (minimum grade of C)

Focuses on the creation of professional visual portfolio(s) and promotional pieces with techniques, styles, and formats appropriate for a photographic career.

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)

Corequisite: PTE 1010 (minimum grade of C)

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)

Prerequisite: PTE 1010 (minimum grade of C)

Provides training in the application of concepts and skills in basic etiology, symptoms of, and interventions for common behavioral and mental health disorders. This course provides opportunities to recognize clients experiencing common behavioral and mental health issues.

Psychology Courses

PSY 1001 General Psychology I: SS3

3 Credit Hours • 45 Contact Hours (Lecture)

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

3 Credit Hours • 45 Contact Hours (Lecture)

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

3 Credit Hours • 45 Contact Hours (Lecture)

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)

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

4 Credit Hours • 60 Contact Hours (Lecture)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Examines gender comparisons in work, courtship, family life, and sexual behavior throughout the life span.

PSY 2107 Human Sexuality: SS3

3 Credit Hours • 45 Contact Hours (Lecture)

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)

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)

Focuses on addictive behavior and its effect on individuals, families, and society.

PSY 2220 Dynamics of Racism and Prejudice

3 Credit Hours • 45 Contact Hours (Lecture)

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

3 Credit Hours • 45 Contact Hours (Lecture)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Examines philosophies of life and death emphasizing dying, death, mourning, and the consideration of one's own death.

PSY 2223 Environmental Psychology

3 Credit Hours • 45 Contact Hours (Lecture)

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

3 Credit Hours • 45 Contact Hours (Lecture)

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

3 Credit Hours • 45 Contact Hours (Lecture)

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

3 Credit Hours • 45 Contact Hours (Lecture)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Examines human development from conception through death, emphasizing physical, cognitive, emotional, and psychosocial factors.

PSY 2441 Child Development: SS3

3 Credit Hours • 45 Contact Hours (Lecture)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Examines the causes and effects of physical, sexual, and psychological abuse and neglect. This course emphasizes intervention and prevention strategies.

PSY 2552 Psychopathology: SS3

3 Credit Hours • 45 Contact Hours (Lecture)

Examines psychopathology and its classification, causes, treatment, and prevention.

PSY 2660 Introduction to Evolutionary Psychology

3 Credit Hours • 45 Contact Hours (Lecture)

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

3 Credit Hours • 45 Contact Hours (Lecture)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: PSY 1001 (minimum grade of C) or PSY 1002 (minimum grade of C)

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)

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

3 Credit Hours • 45 Contact Hours (Lecture)

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 1037 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

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

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

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

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

3 Credit Hours • 45 Contact Hours (Lecture)

Explores writing techniques for television and radio emphasizing professional techniques, format, and style.

RTV 1004 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

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

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

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

4 Credit Hours • 180 Contact Hours (Internship)

Prerequisite: RTV 1001 (minimum grade of D)

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

4 Credit Hours • 180 Contact Hours (Internship)

Prerequisite: RTV 1002 (minimum grade of D)

Note: Must have faculty consent to enroll

Provides experience in a commercial television station or an allied industry.

RTV 1180 Internship – KEPC Radio

4 Credit Hours • 180 Contact Hours (Internship)

Prerequisite: RTV 1001 (minimum grade of D) or RTV 1002 (minimum grade of D)

Incorporates on-the-air experience on the college FM radio station, KEPC.

RTV 1181 Internship – College ITV Studio

4 Credit Hours • 180 Contact Hours (Internship)

Prerequisite: RTV 1002 (minimum grade of D), RTV 1005 (minimum grade of D)

Provides experience in a commercial television station or an allied industry.

RTV 1202 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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: RTV 1001 (minimum grade of D)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: RTV 1002 (minimum grade of D)

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

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: RTV 1005 (minimum grade of D)

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

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

3 Credit Hours • 135 Contact Hours (Internship)

Prerequisite: RTV 1002 (minimum grade of D), RTV 1083 (minimum grade of D) or RTV 1181 (minimum grade of D)

Provides experience in a commercial television station or an allied industry.

RTV 2083 Internship – Radio Station/Audio Production II

3 Credit Hours • 135 Contact Hours (Internship)

Prerequisite: RTV 1002 (minimum grade of D), RTV 1180 (minimum grade of D) or RTV 2182 (minimum grade of D)

Incorporates advanced experience in a commercial radio station or an allied industry.

RTV 2181 Internship in the News – KEPC Radio

3 Credit Hours • 135 Contact Hours (Internship)

Prerequisite: RTV 1001 (minimum grade of D)

Enables the student to cover news events, actualities, and report several regular newscasts on KEPC.

RTV 2182 Internship – KEPC Radio II

3 Credit Hours • 135 Contact Hours (Internship)

Prerequisite: RTV 1001 (minimum grade of D), RTV 1082 (minimum grade of D) or RTV 1180 (minimum grade of D)

Incorporates advanced experience on radio station KEPC.

RTV 2184 Internship in Telecommunications

3 Credit Hours • 135 Contact Hours (Internship)

Prerequisite: RTV 1001 (minimum grade of D) or RTV 1002 (minimum grade of D), RTV 1082 (minimum grade of D) or RTV 1083 (minimum grade of D) or RTV 1180 (minimum grade of D)

Provides experience in a commercial TV station or an allied industry.

Radiologic Technology Courses

RTE 1001 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

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

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: RTE 1021 (minimum grade of C)

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

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

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: RTE 1041 (minimum grade of C)

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

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

5 Credit Hours • 225 Contact Hours (Internship)

Prerequisite: RTE 1081 (minimum grade of C)

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

7 Credit Hours • 315 Contact Hours (Internship)

Prerequisite: RTE 1082 (minimum grade of C)

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: RTE 1021 (minimum grade of C)

Offers advanced imaging techniques including radiographic procedures involving the skull, trauma, mobile, surgical, pediatric, special procedures, and advanced modalities.

RTE 2031 Radiation Biology/Protection

2 Credit Hours • 30 Contact Hours (Lecture)

Prerequisite: RTE 1041 (minimum grade of C)

Provides the basic knowledge and understanding of the biologic effects of ionizing radiation and radiation protection and safety.

RTE 2055 Multiplanar Sectional Imaging

2 Credit Hours • 30 Contact Hours (Lecture)

Prerequisite: BIO 2101 (minimum grade of C)

Offers advanced knowledge in multi-planar/multi-modality sectional anatomy for medical imaging professionals.

RTE 2081 Radiographic Internship IV

8 Credit Hours • 360 Contact Hours (Internship)

Prerequisite: RTE 1083 (minimum grade of C)

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

8 Credit Hours • 360 Contact Hours (Internship)

Prerequisite: RTE 2081 (minimum grade of C)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: RTE 2021 (minimum grade of C), RTE 2031 (minimum grade of C)

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**RUS 1011 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

5 Credit Hours • 75 Contact Hours (Lecture)

Prerequisite: RUS 1011 (minimum grade of C)

Continues Russian I in the development of functional proficiency in listening, speaking, reading, and writing the Russian language.

RUS 2011 Russian Language III: AH4

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: RUS 1012 (minimum grade of C)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: RUS 2011 (minimum grade of C)

Continues Russian Language III in the development of increased functional proficiency at intermediate mid-level in speaking, aural comprehension, reading, writing, and cultural competency in the Russian language. This course is conducted predominantly in Russian.

Science Courses**SCI 1055 Integrated Science I-Physics & Chemistry with Lab: SC1**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

Prerequisite: College Readiness in English, MAT 1150 (minimum grade of C) or MAT 1220 (minimum grade of C) 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

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

Prerequisite: College Readiness in English, MAT 1150 (minimum grade of C) or MAT 1220 (minimum grade of C) 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**SWK 1000 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

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

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

6 Credit Hours • 270 Contact Hours (Internship)

Prerequisite: SWK 2222 (minimum grade of D)

Provides work experience in a business or industry.

SWK 1081 Internship II

6 Credit Hours • 270 Contact Hours (Internship)

Prerequisite: SWK 2222 (minimum grade of D)

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

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

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

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.

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

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

6 Credit Hours • 270 Contact Hours (Internship)

Prerequisite: SWK 1081 (minimum grade of D), SWK 2222 (minimum grade of D)

Provides work experience in a business or industry.

SWK 2222 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

SOC 1001 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

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

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

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

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

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

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

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

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.

SOC 2080 Internship

1 Credit Hour • 45 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.

Spanish Courses

SPA 1001 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

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

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: AH4

5 Credit Hours • 75 Contact Hours (Lecture)

Develops 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.

SPA 1012 Spanish Language II: AH4

5 Credit Hours • 75 Contact Hours (Lecture)

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.

SPA 1014 Fast-Track Spanish I & II

5 Credit Hours • 75 Contact Hours (Lecture)

Designed to bridge beginning SPA courses with intermediate SPA courses. It is designed for students who have studied two years of the target language in high school and possess linguistic and cultural knowledge that true beginners do not, but are not ready yet to move to the intermediate level because they need an in-depth review of essential structures.

SPA 1015 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

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

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

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: SPA 1014 (minimum grade of C) or SPA 1012 (minimum grade of C)

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

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: SPA 2011 (minimum grade of C)

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

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: AH4

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

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

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 (minimum grade of D)

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 (minimum grade of D)

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 (minimum grade of D)

Provides students with an exceptional learning experience.

Surgical Technology Courses

STE 1000 Fundamentals of Surgical Technology

6 Credit Hours • 135 Contact Hours (Lecture/Lab Combination)

Prerequisite: BIO 2101 (minimum grade of D), BIO 2104 (minimum grade of D), ENG 1031 (minimum grade of C) or ENG 1021 (minimum grade of C), HPR 1045 (minimum grade of D), MAT 1120 (minimum grade of D) 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

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Co-requisite: STE 1000 (minimum grade of D)

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

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Co-requisite: STE 1000 (minimum grade of D), STE 1001 (minimum grade of D), STE 1005 (minimum grade of D)

Reviews General, Obstetric/Gynecological and Urologic surgical procedures.

STE 1015 Surgical Procedures II

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: STE 1000 (minimum grade of D), STE 1001 (minimum grade of D), STE 1005 (minimum grade of D)

Reviews plastic, otorhinolaryngological, ophthalmologic and orthopedic surgical procedures.

STE 1020 Surgical Procedures III

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: STE 1000 (minimum grade of D), STE 1001 (minimum grade of D), STE 1005 (minimum grade of D)

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

4 Credit Hours • 180 Contact Hours (Internship)

Prerequisite: STE 1000 (minimum grade of D), STE 1001 (minimum grade of D), STE 1005 (minimum grade of D), STE 1010 (minimum grade of D), STE 1015 (minimum grade of D)

Co-requisite: STE 1082 (minimum grade of D), STE 1083 (minimum grade of D)

Allows students to integrate theoretical concepts in a clinical setting.

STE 1082 Internship II

4 Credit Hours • 180 Contact Hours (Internship)

Prerequisite: STE 1000 (minimum grade of D), STE 1001 (minimum grade of D), STE 1005 (minimum grade of D), STE 1010 (minimum grade of D), STE 1015 (minimum grade of D)

Co-requisite: STE 1081 (minimum grade of D), STE 1083 (minimum grade of D)

Allows students to integrate advanced theoretical concepts in a clinical surgical setting.

STE 1083 Internship III

6 Credit Hours • 270 Contact Hours (Internship)

Prerequisite: STE 1000 (minimum grade of D), STE 1001 (minimum grade of D), STE 1010 (minimum grade of D), STE 1015 (minimum grade of D)

Co-requisite: STE 1081 (minimum grade of D), STE 1082 (minimum grade of D)

Allows students to integrate advanced theoretical concepts in a clinical surgical setting.

STE 2068 Surgical Technical Seminar

2 Credit Hours • 30 Contact Hours (Lecture)

Prerequisite: STE 1000 (minimum grade of D), STE 1001 (minimum grade of D), STE 1005 (minimum grade of D), STE 1010 (minimum grade of D), STE 1015 (minimum grade of D)

Co-requisite: STE 1081 (minimum grade of D), STE 1082 (minimum grade of D), STE 1083 (minimum grade of D)

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

SUS 1001 Introduction to Sustainability: SS3

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: SS3

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

THE 1005 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

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

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

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

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

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

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

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

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

1 Credit Hour • 15 Contact Hours (Lecture)

Teaches students to develop skills in nine dialects and accents.

THE 1083 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

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

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

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

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

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

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

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

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

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

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: TRI 1001 (minimum grade of D), TRI 1003 (minimum grade of D)

Presents the theory, history, and skills of consecutive interpretation and fosters the practical application of these skills.

TRI 2002 Simultaneous Interpretation I

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: TRI 1001 (minimum grade of D), TRI 1003 (minimum grade of D)

Presents the theory, history, and skills of simultaneous interpretation and fosters the practical application of these skills.

TRI 2003 Sight Translation

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: TRI 1001 (minimum grade of D), TRI 1003 (minimum grade of D)

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

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

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

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: VET 1003 (minimum grade of C)

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

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: VET 1003 (minimum grade of C), VET 1020 (minimum grade of C)

Co-requisite: VET 1017 (minimum grade of D)

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

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: VET 1002 (minimum grade of C), VET 1003 (minimum grade of C), VET 1009 (minimum grade of C)

Co-requisite: VET 1014 (minimum grade of D)

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

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

3 Credit Hours • 135 Contact Hours (Internship)

Prerequisite: VET 1002 (minimum grade of C), VET 1003 (minimum grade of C), VET 1004 (minimum grade of C), VET 1009 (minimum grade of C), VET 1014 (minimum grade of C), VET 1017 (minimum grade of C), VET 1020 (minimum grade of C)

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

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

Covers the hazards of welding on health and safety.

WEL 1005 Introduction to Nondestructive Testing Methods & Visual Inspection Workshop

4 Credit Hours • 90 Contact Hours (Lecture/lab Combination)

Prerequisite: WEL 1000 (minimum grade of C), WEL 1006 (minimum grade of C)

Introduces the six major Non-Destructive Testing (NDT) disciplines, including Ultrasonic (UT), Magnetic Particle (MT), Eddy Current (ECT), Liquid Penetrant (PT), Radiography (RT), and Visual (VT). This course focuses on the visual identification of welding discontinuities and emphasizes distinguishing visual discontinuities from defects based on specific welding codes using a variety of materials, visual inspection techniques, and equipment.

WEL 1006 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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)
Covers pipe welding operations utilizing processes and positions.

WEL 2040 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

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)
Develops welding and associated skills in metal fabrication.

WEL 2063 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

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

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

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)
Note: Must have faculty consent to enroll
Demonstrates culmination of learning within a given program of study.

Women and Gender Studies Courses

WST 2000 Introduction to Women's and Gender 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

ZOO 1010 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

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

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

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

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

5 Credit Hours • 225 Contact Hours (Internship)
Prerequisite: COM 1150 (minimum grade of C), ZOO 1410 (minimum grade of C), ZOO 1610 (minimum grade of C), ZOO 1710 (minimum grade of C), ZOO 1810 (minimum grade of C)
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

5 Credit Hours • 225 Contact Hours (Internship)
Prerequisite: ZOO 1080 (minimum grade of D)
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

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

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

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)
Prerequisite: ZOO 1010 (minimum grade of D)
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

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

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

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)
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

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

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)
Prerequisite: BIO 1003 (minimum grade of C), ENG 1031 (minimum grade of C) or ENG 1021 (minimum grade of C)
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

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)
Prerequisite: BIO 1003 (minimum grade of C), ZOO 1010 (minimum grade of C)
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

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

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

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

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

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

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

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

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

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)
Prerequisite: ZOO 1030 (minimum grade of C), ZOO 1040 (minimum grade of C)
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

5 Credit Hours • 225 Contact Hours (Internship)
Prerequisite: ZOO 1081 (minimum grade of D)
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

5 Credit Hours • 225 Contact Hours (Internship)

Co-requisite: ZOO 2610 (minimum grade of D) and/or ZOO 1810 (minimum grade of D)

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

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

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Prerequisite: ZOO 1010 (minimum grade of C), ZOO 1020 (minimum grade of C), ZOO 1030 (minimum grade of C)

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

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)

Prerequisite: ZOO 1710 (minimum grade of D)

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.

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REYES, Samantha R., Bachelor of Business Administration, Texas A&M International Univ General Staff Accountant	RUIZ, Kandy, Bachelor of Science, Colorado State Univ-Pueblo Program Director of Single Stop Services
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RIX, Sheryl M., Doctor of Philosophy, University of California-Davis Communications Faculty	SALDANA, Cecilia, Bachelor's Degree Testing Coordinator
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- VIGIL, Gary
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- WEBBER, Nile J.
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- WENNER, Gemma A.
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- WILSON, Dave, Master of Science, Holy Family University
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- WINCHESTER, Bodaniel, University of Colorado Denver
Police Officer I
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WULF, Sheldon L., Master of Arts, Friends University

Associate Vice President for Academic Resources

WYNN, Andrew

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Morningside College

RN-BSN Nursing Faculty

YOUSEF, Rushdi, Doctor of Philosophy

Chemistry Faculty

ZALLAR, Valerie A., Master of Science, University of Denver

Math Faculty

ZEIKUS, Madeline W., Master of Arts, Academy of Art University

Studio Art Faculty & Gallery Director

ZIMBLEMAN, Dana M., Master of Arts, Auburn University

English Faculty

ZYONSE, Laura, Master of Science, Western Governors University

Early Childhood Education Faculty

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		
Library	A-201 • 502-2400		N-201 • 502-2440
Marketing & Communication	A-212 • 502-2082		
Mailroom & Package Services	C-101 • 502-2661		
Military & Veterans Programs	C-222 • 502-4100 502-4200 / 502-4300		
Ombuds	B-200 • 502-2006		
Parking Services	A-101 • 502-2661		
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		
Tutoring	A-300 • 502-3444	S-117 • 502-2443	N-200 • 502-3190
Vending & Micro-Markets	502-2661	502-2661	502-2661
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