Welcome to Pueblo Community College

Let me be the first to welcome you to Pueblo Community College and express my sincere pleasure in your desire to achieve a higher education in an environment that provides quality academics and student support. Our faculty and staff are prepared to fully support you – at PCC you can **expect more** and you will **get more**. Our road map for programs, workforce development, community education, and student success has been designed with each student in mind.

PCC is a comprehensive community college and one of 13 schools that form the Colorado Community College System – the largest system of higher education in the state. Our service area spans more than 11,000 square miles and includes not only the main campus in Pueblo but branch campuses in Canon City and Mancos, in addition to a site in Durango. If the traditional classroom and schedule do not fit your needs, PCC is pleased to offer hybrid and online learning options. We are a Hispanic-Serving Institution; diversity is welcome and respected.

In addition, we offer valuable resources to all PCC students:

> **Learning services** include free tutoring, learning groups, study skills enhancement, test-taking strategies and accelerated basic skills development. These programs are not extras; rather, they are key paths to success. Your participation may allow you to take a higher course load and finish your program of study faster and may also significantly reduce academic stress.
>
> **Financial assistance** includes scholarship guidance, loan programs and one-on-one counseling to help you complete the necessary applications. PCC also offers numerous opportunities for financial support. Funds are available to help meet the needs of students and generally require simple applications, but to be eligible you must apply by specific deadlines.
>
> **Academic, career and transfer advising** are your road maps in your academic journey. Seek guidance early and often to keep on the most direct path to success. Our advisors will help you develop plans that are guaranteed to transfer to your next school or lead directly into job placement.
>
> **Student services** provide critical support and enrich your PCC experience. Some services provide crucial resources to help you stay in school – Project ACCESS, the Panther Student Pantry and peer mentoring are examples. Assistance in locating child care or transportation services is available through our partnerships with community agencies. Our health clinic in Pueblo provides access to a professional medical staff and discounted health services. Finally, involvement in our many student activities and clubs will help you become more connected and engaged in your PCC experience.

We encourage you to begin planning for success by scheduling a visit to one of our campuses and exploring the campus website. Please accept our heartfelt welcome to the PCC family.

With warm regards,

Patricia A. Erjavec, PhD
President

For more information about our services or to arrange for a personal tour of PCC, please contact the Office of Recruitment on the main campus at 719.549.3093 or recruitment@pueblocc.edu. You may also contact the Fremont Campus at 719.296.6100 or the Southwest Campus at 970.564.6201.

Governance & Accreditation

Notice of Non-Discrimination

Pueblo Community College prohibits all forms of discrimination and harassment including those that violate federal and state law or the State Board for Community Colleges and Occupational Education Board Policies 3-120 and 4-120. The College does not discriminate on the basis of sex/gender, race, color, age, creed, national or ethnic origin, physical or mental disability, veteran status, pregnancy status, religion, genetic information, gender identity, or sexual orientation in its employment practices or educational programs and activities. Pueblo Community College will take appropriate steps to ensure that the lack of English language skills will not be a barrier to admission and participation in vocational education programs.

The College has designated the Vice President of Human Resources as its AA/EEO and Title IX Coordinator, with the responsibility to coordinate the college's Civil Rights Compliance Activities and Grievance Procedures. If you have any questions, please contact the Vice President of Human Resources, 900 W. Orman Avenue, Central Administration Building, Room 111, telephone 719.549.3220, email HR.PCC@Pueblocc.edu. You may also contact the Office for Civil Rights, U.S. Department of Education, Region VIII, Federal Office Building, 1244 North Speer Blvd., Suite 310, Denver, CO 80204; phone: 303.844.3417.

Aviso de no discriminación

Pueblo Community College (PCC) prohíbe todas formas de discriminación y acoso, inclusive violación de leyes federales y estatales o las políticas educativas 3-120 y 120 4 del Consejo Estatal de Colegios Comunitarios y Laborales. El Colegio no discrimina en base al sexo/género, raza, color, edad, credo, origen nacional o étnico, incapacidad física o mental, estado de veterano, estado de embarazo, religión, información genética, identidad de género o orientación sexual en sus prácticas de empleo, programas educativos, o actividades que ofrece el Colegio. PCC tomará medidas apropiadas para asegurar que la falta de conocimientos del idioma inglés no será un impedimento para la inscripción y participación en programas de educación vocacional.

El Colegio ha designado el Vicepresidente de Recursos Humanos como su Coordinador de AA/EEO y Título IX, con la responsabilidad de coordinar las actividades de cumplimiento de los derechos civiles de la universidad y los procedimientos de quejas. Si tiene alguna pregunta, comuníquese con el Vicepresidente de Recursos Humanos, 900 W. Orman Avenue, Central Administration Building, Room 111, teléfono 719.549.3220, correo electrónico HR.PCC@Pueblocc.edu. También puede comunicarse con la Oficina de Derechos Civiles, Departamento de Educación de los Estados Unidos, Región VIII, Edificio de Oficinas Federales, 1244 North Speer Blvd., Suite 310, Denver, CO 80204; teléfono: 303.844.3417.

Governance

Pueblo Community College is governed by the State Board for Community Colleges and Occupational Education, which comprises 13 state system community colleges. The Colorado Department of Higher Education (CDHE) is the central policy and coordinating board for all public institutions of higher education and establishes policy on legislative, academic and fiscal matters.

Accreditation

Pueblo Community College is a member of and accredited by The Higher Learning Commission, 230 South LaSalle St., Suite 7-500, Chicago, IL 60604; website; phone: 800.621.7440. In addition, several programs hold approval or accreditation from national and state level associations and agencies:

Culinary Arts Program

Accredited by the American Culinary Federation, 180 Center Place Way, St. Augustine, FL 32095; phone: 800.624.9458.

Dental Hygiene Program

Accredited by the Commission on Dental Accreditation of the American Dental Association, a specialized accrediting body recognized by the Council on Postsecondary Accreditation and the United States Department of Education, 211 E. Chicago Ave., Chicago, IL 60611-2678; phone: 312.440.2500.

Emergency Medical Services Program-Paramedic

Accredited by the Commission on Accreditation of Allied Health Education Programs upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP). To contact CAAHEP: Commission on Accreditation of Allied Health Education Programs, 1361 Park St., Clearwater, FL 33756; phone: 727.210.2350; website; To contact CoAEMSP: 8301 Lakeview Parkway, Suite 111-312, Rowlett, TX 75088; phone: 214.703.8445; fax: 214.703.8992; website.

Machining Technology Program

Accredited by The National Institute for Metalworking skills, 10565 Fairfax Boulevard, Suite 10, Fairfax, VA 22030; phone: 703.352.4971; website.

Medical Coding Certificate Program

Accredited by the American Health Information Management Association (AHIMA), 233 N. Michigan Ave., 21st Floor, Chicago, IL 60601-5809; phone: 312.233.1100; website.

NSA/DHS National Centers of Academic Excellence in Cyber Defense Two-Year Education (CAE-2Y)

Accredited by the National Center of Academic Excellence in Cyber Defense Education 2 Year Education Program criteria for measurement. Jointly sponsored by the National Security Agency and Department of Homeland Security.

Nursing Aide

Approved by the Colorado State Board of Nursing.

Nursing – Associate Degree Nursing Program

Accredited by the Accreditation Commission for Education in Nursing (ACEN), 3343 Peachtree Road NE, Suite 850, Atlanta, GA 30326; phone: 404.975.5000, website. Approved by the Colorado State Board of Nursing.

Occupational Therapy Assistant Program

The Occupational Therapy Assistant Program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), located at 6116 Executive Boulevard, Suite 200, North Bethesda, MD 20852-4929, (301-652-6611). www.acoteonline.org.

Physical Therapist Assistant Program

The Physical Therapist Assistant Program at Pueblo Community College is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE), 3030 Potomac Ave, Suite 100, Alexandria, Virginia 22305-3085; telephone: 703-706-3245; email: accreditation@apta.org; website: www.capteonline.org. If needing to contact the program/institution directly, please call 719-549-3433 or email Margaret.Oreskovich@pueblocc.edu.

Psychiatric Technician Program

Approved by the Colorado State Board of Nursing.

Respiratory Care Program

Accredited by the Commission on Accreditation for Respiratory Care (CoARC), 12248 Harwood Road, Bedford, TX 76021-4244; phone: 817.283.2835.

Surgical Technology Program

The PCC Surgical Technology Program is accredited by the Commission on Accreditation of Allied Health Education Programs, 25400 U.S. Highway 19 North, Suite 158, Clearwater, FL 33763; phone: 727.210.2350; upon the recommendation of the Accreditation Review Council on Education in Surgical Technology and Surgical Assisting (ARC/STSA).

Certification

The following programs have received certification as designated:

Automotive Collision Technology

Certified by National Technicians Education Foundation (NATEF) under the Automotive Service Excellence (ASE) guidelines, 101 Blue Seal Drive S.E., Suite 101, Leesburg, VA 20175; phone: 703.669.6650.

Certified by Automotive Youth Educational System (AYES) Guidelines, 2701 Troy Center Drive, Suite 450, Troy, MI 48084; phone: 888.339.2937.

Automotive Service Technology

Certified by National Technicians Education Foundation (NATEF) under the Automotive Service Excellence (ASE) guidelines, 101 Blue Seal Drive S.E., Suite 101, Leesburg, VA 20175; phone: 703.669.6650.

Certified by Automotive Youth Educational System (AYES) guidelines, 2701 Troy Center Drive, Suite 450, Troy, MI 48084; phone: 888.339.2937.

Law Enforcement Academy

Certified by the Colorado Department of Law, Criminal Justice Section – Colorado POST, Ralph L. Carr Colorado Judicial Center, 1300 Broadway, 9th Floor, Denver, CO 80203; phone: 720.508.6721; fax: 866.858.7486.

Academic Calendar (2022-2023 Catalog)

Current Academic Semester

Semester Length

PCC operates on the semester system and offers the following terms:

- Fall and Spring: Full Term (16 weeks), Fall/Spring I (8 weeks) and Fall/Spring II (8 weeks)
- Summer: Full Term (10 weeks), Summer I (5 weeks) and Summer II (5 weeks)
- Special-length courses offered during all regular semesters

Curriculum and total instructional time are the same regardless of the length of the term.

College Closures

Closure/Delayed Start due to Weather

Pueblo Community College makes every effort to remain open and hold classes as scheduled. Decisions to close or delay due to weather will be made based on current and predicted weather and road conditions. When there is reasonable evidence that inclement weather has created or is expected to create hazardous travel conditions, the College President or Chief Business Officer (in absence of the President) may announce a campus closure.

Closure/Delayed Start due to other Emergency

Closures/delayed starts due to other emergencies are determined on a case-by-case basis depending on the nature of the emergency. The College President or Chief Business Officer (in absence of the President) will announce a campus closure and act in accordance with the Emergency Operations Plan. Staff and Faculty should follow procedures found in the Emergency Procedures Guide (flip chart located in all offices and classrooms) and assist students in vacating college facilities.

Communication Procedure for Closures

When possible, the decision to close a campus or delay the start of classes/opening of offices will be made by 6 a.m. or earlier for full-day closures or delayed starts and by 3 p.m. or earlier for the early closure of a campus or cancellation of evening classes (classes starting at or after 5 p.m.).

MyPCC Alert is the main communication delivery method for announcements regarding a closure/delayed start. The College will also communicate via the College website, Facebook, Twitter and through local television stations, when possible.

Resuming Classes in the event of a Delayed Start

When a delayed start is in effect, all classes starting prior to the delayed start time will be canceled in full. For instance, if a campus has announced a delayed start time of 10 a.m., any classes with a start time occurring prior to 10 a.m. will be canceled in full even if the class would still be in progress after 10 a.m.

Classes/Events in Progress in the event of an early Closure

The College will make every attempt to give ample notice of an early closure; however, in cases of emergencies, this may not be possible. Faculty, instructors and staff must adhere to the procedures detailed in the Emergency Procedures Guide in the event of a sudden early closure due to an emergency.

Pueblo Community College

Academic Calendar Spring 2022-Spring 2024 (202230-202430)

PUEBLO - FREMONT - PCCONLINE - SOUTHWEST

Spring 2022	202230	
Full Term Classes (Not CCCOnline)		
Registration Begins	Monday	November 8, 2021
All Staff Return	Monday	January 3, 2022
Chairs Return	Monday	January 10, 2022
Faculty Return	Wednesday	January 12, 2022
Tuition Due Date	Wednesday	January 12, 2022
Faculty Professional Development Day	Thursday	January 13, 2022
Registration Ends	Friday	January 14, 2022
Full-Term Classes Begin	Monday	January 17, 2022
Schedule Adjustment Period	Monday - Friday	Jan. 17-21, 2022
End of Refund Period/Census	Wednesday	February 2, 2022

Midterm	Monday - Saturday	Mar. 7-12, 2022
Spring Break ALL Campuses	Monday - Saturday	Mar. 21-26, 2022
Last Day to Withdraw	Wednesday	April 20, 2022
Final Week of Classes	Monday - Saturday	May 9-14, 2022
Last Faculty Day	Friday	May 13, 2022
Commencement (Pueblo and Fremont Campus)	Thursday	May 11, 2023
Classes End	Saturday	May 14, 2022
Commencement (Durango and Cortez Campus)	Sunday	May 15, 2022
Grades Due	Monday	May 16, 2022
Spring I (Not CCCOnline)		
Faculty Professional Development Day	Thursday	January 13, 2022
Registration Ends	Friday	January 14, 2022
Session Begins	Monday	January 17, 2022
Schedule Adjustment Period	Monday - Tuesday	Jan. 17-18, 2022
End of Refund Period/Census	Monday	January 24, 2022
Last Day to Withdraw	Tuesday	March 1, 2022
Classes End	Saturday	March 12, 2022
Grades Due	Monday	March 14, 2022
Spring II (Not CCCOnline)		
Session Begins	Monday	March 14, 2022
Schedule Adjustment Period	Monday - Tuesday	Mar. 14-15, 2022
End of Refund Period/Census	Tuesday	March 22, 2022
Spring Break ALL Campuses	Monday - Saturday	Mar. 21-26, 2022
Last Day to Withdraw	Monday	May 2, 2022
Commencement (Pueblo and Fremont Campus)	Friday	May 13, 2022

Classes End	Saturday	May 14, 2022
Commencement (Durango and Cortez Campus)	Sunday	May 15, 2022
Grades Due	Monday	May 16, 2022

Summer 2022 202310

Full Term Session (Not CCCOnline)

Registration Begins	Monday	November 8, 2021
Tuition Due Date	Wednesday	May 18, 2022
Registration Ends	Friday	May 27, 2022
Memorial Day	Monday	May 30, 2022
Classes Begin	Tuesday	May 31, 2022
Schedule Adjustment Period	Tues - Wed	May 31 - June 1, 2022
End of Refund Period/Census	Thursday	June 9, 2022
Juneteenth (observed)	Monday	June 20, 2022
Independence Day Holiday	Monday	July 4, 2022
Last Day to Withdraw	Monday	July 25, 2022
Classes End	Monday	August 8, 2022
Grades Due	Tuesday	August 9, 2022

First 5 Week Session (Not CCCOnline)

Registration Begins	Monday	November 8, 2021
Registration Ends	Friday	May 27, 2022
Classes Begin	Tuesday	May 31, 2022
Schedule Adjustment Period	Tuesday	May 31, 2022
End of Refund Period/Census	Monday	June 6, 2022
Juneteenth (observed)	Monday	June 20, 2022
Last Day to Withdraw	Monday	June 27, 2022

Classes End	Monday	July 4, 2022
Grades Due	Tuesday	July 5, 2022
Second 5 Week Session (Not CCCOnline)		
Registration Begins	Monday	November 8, 2021
Classes Begin	Tuesday	July 5, 2022
Schedule Adjustment Period	Tuesday	July 5, 2022
End of Refund Period/Census	Monday	July 11, 2022
Independence Day Holiday	Monday	July 4, 2022
Last Day to Withdraw	Monday	August 1, 2022
Classes End	Monday	August 8, 2022
Grades Due	Tuesday	August 9, 2022
Fall 2022	**202320**	
Full-Term Classes (Not CCCOnline)		
Registration Begins	Monday	April 4 2022
Chairs Return	Monday	August 15, 2022
Faculty Return	Tuesday	August 16, 2022
Tuition Due Date	Wednesday	August 10, 2022
Pre-drop for Non-Payment Warning	Wednesday	August 17, 2022
Faculty Professional Development Day	Thursday	August 18, 2022
Registration Ends	Friday	August 19, 2022
Full-Term Classes Begin	Monday	August 22, 2022
Schedule Adjustment Period	Monday - Friday	Aug. 22-26, 2022
Pre-drop for Non-Payment Warning	Wednesday	August 24, 2022
Pre-drop for Non-Payment Warning	Wednesday	August 31, 2022
Labor Day Holiday	Monday	September 5, 2022

Drop for Non Payment	Tuesday	September 6, 2022
End of Refund Period/Census	Wednesday	September 7, 2022
Midterm Week	Mon - Fri	Oct. 10-14, 2022
Last Day to Withdraw	Wednesday	November 23, 2022
Thanksgiving	Thursday	November 24, 2022
Thanksgiving Break (No Classes)	Mon-Sat	Nov. 21-26, 2022
Final Week of Classes	Mon - Sat	Dec. 12-17, 2022
Last Faculty Day	Friday	December 16, 2022
Classes End	Saturday	December 17, 2022
Grades Due	Monday	December 19, 2022
Holiday Break (Offices Closed)	Saturday - Monday	Dec. 24, 2022 - Jan. 2, 2023
All Staff Return	Tuesday	January 3, 2023
Fall I (Not CCCOnline)		
Registration Begins	Monday	November 8, 2021
Faculty Professional Development Day	Thursday	August 18, 2022
Registration Ends	Friday	August 19, 2022
Session Begins	Monday	August 22, 2022
Schedule Adjustment Period	Mon-Tues	Aug. 22-23, 2022
End of Refund Period/Census	Monday	August 29, 2022
Labor Day Holiday	Monday	September 5, 2022
Last Day to Withdraw	Tuesday	October 4, 2022
Classes End	Saturday	October 15, 2022
Grades Due	Monday	October 17, 2022
Fall II (Not CCCOnline)		
Registration Begins	Monday	November 8, 2021

Session Begins	Monday	October 17, 2022
Schedule Adjustment Period	Mon-Tues	Oct. 17-18, 2022
End of Refund Period/Census	Tuesday	October 25, 2022
Thanksgiving Break (No Classes)	Mon-Sat	Nov. 21-26, 2022
Last Day to Withdraw	Monday	December 5, 2022
Last Faculty Day	Friday	December 16, 2022
Classes End	Saturday	December 17, 2022
Grades Due	Monday	December 19, 2022
Spring 2023	**202330**	
Full Term Classes (Not CCCOnline)		
Registration Begins	Monday	November 7, 2022
All Staff Return	Tuesday	January 3, 2023
Chairs Return	Monday	January 9, 2023
Faculty Return	Wednesday	January 11, 2023
Tuition Due Date	Wednesday	January 11, 2023
Faculty Professional Development Day	Thursday	January 12, 2023
Registration Ends	Friday	January 13, 2023
Full-Term Classes Begin	Monday	January 16, 2023
Schedule Adjustment Period	Monday - Friday	Jan. 16-20, 2023
End of Refund Period/Census	Wednesday	February 1, 2023
Midterm	Monday - Saturday	Mar. 6-11, 2023
Spring Break ALL Campuses	Monday - Saturday	Mar. 20-25, 2023
Last Day to Withdraw	Wednesday	April 19, 2023
Final Week of Classes	Monday - Saturday	May 8-13, 2023
Last Faculty Day	Friday	May 12, 2023
Commencement (Pueblo and Fremont Campus)	Friday	May 12, 2023

Classes End	Saturday	May 13, 2023
Commencement (PCC Southwest)	Saturday	May 13, 2023
Grades Due	Monday	May 15, 2023
Spring I (Not CCCOnline)		
Registration Begins	Monday	November 7, 2022
Faculty Professional Development Day	Thursday	January 12, 2023
Registration Ends	Friday	January 13, 2023
Session Begins	Monday	January 16, 2023
Schedule Adjustment Period	Monday - Tuesday	Jan. 16-17, 2023
End of Refund Period/Census	Monday	January 23, 2023
Last Day to Withdraw	Tuesday	February 28, 2023
Classes End	Saturday	March 11, 2023
Grades Due	Monday	March 13, 2023
Spring II (Not CCCOnline)		
Registration Begins	Monday	November 7, 2022
Session Begins	Monday	March 13, 2023
Schedule Adjustment Period	Monday - Tuesday	Mar. 13-14, 2023
End of Refund Period/Census	Tuesday	March 21, 2023
Spring Break ALL Campuses	Monday - Saturday	Mar. 20-25, 2023
Last Day to Withdraw	Monday	May 1, 2023
Commencement (Pueblo and Fremont Campus)	Friday	May 12, 2023
Classes End	Saturday	May 13, 2023
Commencement (PCC Southwest)	Saturday	May 13, 2023
Grades Due	Monday	May 15, 2023

Summer 2023	202410	
Full Term Session (Not CCCOnline)		
Registration Begins	Monday	March 13, 2023
Tuition Due Date	Wednesday	May 24, 2023
Registration Ends	Friday	May 26, 2023
Memorial Day	Monday	May 29, 2023
Classes Begin	Tuesday	May 30, 2023
Schedule Adjustment Period	Tues - Wed	May 30-31, 2023
End of Refund Period/Census	Thursday	June 8, 2023
Juneteenth	Monday	June 19, 2023
Independence Day Holiday	Tuesday	July 4, 2023
Last Day to Withdraw	Monday	July 24, 2023
Classes End	Monday	August 7, 2023
Grades Due	Tuesday	August 8, 2023
First 5 Week Session (Not CCCOnline)		
Registration Begins	Monday	March 13, 2023
Registration Ends	Friday	May 26, 2023
Classes Begin	Tuesday	May 30, 2023
Schedule Adjustment Period	Tuesday	May 30, 2023
End of Refund Period/Census	Monday	June 5, 2023
Juneteenth	Monday	June 19, 2023
Last Day to Withdraw	Monday	June 26, 2023
Classes End	Monday	July 3, 2023
Grades Due	Wednesday	July 5, 2023
Second 4 Week Session (Not CCCOnline)		

Registration Begins	Monday	March 13, 2023
Independence Day Holiday	Tuesday	July 4, 2023
Classes Begin	Wednesday	July 5, 2023
Schedule Adjustment Period	Wednesday	July 5, 2023
End of Refund Period/Census	Monday	July 10, 2023
Last Day to Withdraw	Tuesday	August 1, 2023
Classes End	Tuesday	August 8, 2023
Grades Due	Wednesday	August 9, 2023

Fall 2023 202420

Full-Term Classes (Not CCCOnline)

Registration Begins	Monday	March 13, 2023
Tuition Due Date	Wednesday	August 9, 2023
Chairs Return	Monday	August 14, 2023
Faculty Return	Tuesday	August 15, 2023
Faculty Professional Development Day	Thursday	August 17, 2023
Registration Ends	Friday	August 18, 2023
Full-Term Classes Begin	Monday	August 21, 2023
Schedule Adjustment Period	Monday - Friday	Aug. 21-25, 2023
Labor Day Holiday	Monday	September 4, 2023
End of Refund Period/Census	Wednesday	September 6, 2023
Midterm Week	Mon - Fri	Oct. 9-13, 2023
Last Day to Withdraw	Wednesday	November 22, 2023
Thanksgiving	Thursday	November 23, 2023
Thanksgiving Break (No Classes)	Mon-Sat	Nov. 20-25, 2023
Final Week of Classes	Mon - Sat	Dec. 11-16, 2023
Last Faculty Day	Friday	December 15, 2023

Classes End	Saturday	December 16, 2023
Grades Due	Monday	December 18, 2023
Holiday Break (Offices Closed)	Saturday - Monday	Dec. 23, 2023 - Jan. 1, 2024
All Staff Return	Tuesday	January 2, 2024
Fall I (Not CCCOnline)		
Registration Begins	Monday	March 13, 2023
Faculty Professional Development Day	Thursday	August 17, 2023
Registration Ends	Friday	August 18, 2023
Session Begins	Monday	August 21, 2023
Schedule Adjustment Period	Mon-Tues	Aug. 21-22, 2023
End of Refund Period/Census	Monday	August 28, 2023
Labor Day Holiday	Monday	September 4, 2023
Last Day to Withdraw	Tuesday	October 3, 2023
Classes End	Saturday	October 14, 2023
Grades Due	Monday	October 16, 2023
Fall II (Not CCCOnline)		
Registration Begins	Monday	March 13, 2023
Session Begins	Monday	October 16, 2023
Schedule Adjustment Period	Mon-Tues	Oct. 16-17, 2023
End of Refund Period/Census	Tuesday	October 24, 2023
Thanksgiving Break (No Classes)	Mon-Sat	Nov. 20-25, 2023
Last Day to Withdraw	Monday	December 4, 2023
Last Faculty Day	Friday	December 15, 2023
Classes End	Saturday	December 16, 2023
Grades Due	Monday	December 18, 2023

Spring 2024	**202430**	
Full Term Classes (Not CCCOnline)		
Registration Begins	Monday	October 30, 2023
All Staff Return	Tuesday	January 2, 2024
Chairs Return	Monday	January 8, 2024
Faculty Return	Wednesday	January 10, 2024
Tuition Due Date	Wednesday	January 10, 2024
Faculty Professional Development Day	Thursday	January 11, 2024
Registration Ends	Friday	January 12, 2024
Full-Term Classes Begin	Tuesday	January 16, 2024
Schedule Adjustment Period	Monday - Friday	Jan. 15-19, 2024
End of Refund Period/Census	Wednesday	January 31, 2024
Midterm	Monday - Saturday	Mar. 4-9, 2024
Spring Break ALL Campuses	Monday - Saturday	Mar. 18-23, 2024
Last Day to Withdraw	Wednesday	April 17, 2024
Final Week of Classes	Monday - Saturday	May 6-11, 2024
Last Faculty Day	Friday	May 10, 2024
Commencement (Pueblo and Fremont Campus)	Friday	May 10, 2024
Classes End	Saturday	May 11, 2024
Commencement (PCC Southwest)	Sunday	May 12, 2024
Grades Due	Monday	May 13, 2024
Spring I (Not CCCOnline)		
Registration Begins	Monday	October 30, 2023
Faculty Professional Development Day	Thursday	January 11, 2024
Registration Ends	Friday	January 12, 2024

Session Begins	Tuesday	January 16, 2024
Schedule Adjustment Period	Monday - Tuesday	Jan. 15-16, 2024
End of Refund Period/Census	Monday	January 22, 2024
Last Day to Withdraw	Tuesday	February 27, 2024
Classes End	Saturday	March 9, 2024
Grades Due	Monday	March 11, 2024
Spring II (Not CCCOnline)		
Registration Begins	Monday	October 30, 2023
Session Begins	Tuesday	January 16, 2024
Schedule Adjustment Period	Monday - Tuesday	Mar. 11-12, 2024
End of Refund Period/Census	Tuesday	March 19, 2024
Spring Break ALL Campuses	Monday - Saturday	Mar. 18-23, 2024
Last Day to Withdraw	Monday	April 29, 2024
Commencement (Pueblo and Fremont Campus)	Friday	May 10, 2024
Classes End	Saturday	May 11, 2024
Commencement (PCC Southwest)	Sunday	May 12, 2024
Grades Due	Monday	May 13, 2024

Degree and Certificate Programs

Click here for more information on Degree and Certificate Programs

Associate of Arts

Click here for the Associate of Arts Degree Requirements

Anthropology, AA (with Designation)

CIP 24.010

See list of Department Chairs on the Personnel page.

Career Opportunities

The Associate of Arts Degree with Designation in Anthropology prepares students to transfer as a junior to a four-year institution in Colorado in order to pursue a bachelor's degree in anthropology. A degree in anthropology offers many career and educational opportunities. Careers in anthropology include museum education, field and medical research, higher-education teaching, public health, environmental assessment, community studies coordination, ethnic and cultural studies and field studies in archaeology.

Program Description

Anthropology is the study of the evolution of human society, life and culture. Specifically, anthropology answers the questions of how people lived, what they thought and how they interacted with their particular environment. Studying how societies have developed and changed from the past to the present, anthropology provides a critical understanding of the world today and how the future world may evolve.

Program Requirements

In addition to the requirements listed below, you must:

a. Earn a minimum of 60 semester hours of course work
b. Earn a minimum of 15 graded semester hours at PCC
c. Earn a minimum of "C" in all coursework for the degree

Consult with a PCC Arts and Sciences advisor or transfer advisor to find out which Colorado Statewide Guaranteed Transfer Courses (GT Pathways) or elective courses meet the degree requirements of the four-year college to which you plan to transfer.

To earn an AA degree with Designation in Anthropology, you must complete at least 60 college-level credits, as described below:

Total Credits: 60

** Refer to CCCS Guaranteed Transfer (GT) - Pathways Courses for a full list of all GT Pathway Courses*

General Education Core Requirements (32-33 Credits)

(Written) Communication (6 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

or

- ENG 1022 - English Composition II: GT-CP2 **Credit(s): 3** and a GT Pathways Writing course (GT-CO3) *

Mathematics (3-4 Credits)

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

University of Colorado Denver

- University of Colorado Denver requires either: MAT 1260 **or** MAT 1340

Western State Colorado University

- Western State Colorado University requires MAT 1340

Natural and Physical Sciences (8 Credits)

- Select two GT Pathway (GT-SC1) *

Arts and Humanities (6 Credits)

Select two GT Pathway courses from any category:

- Arts and Humanities (GT-AH1) *
- Literature and Humanities (GT-AH2) *
- Ways of Thinking (GT-AH3) *
- Foreign Languages (GT-AH4) *

Social and Behavioral Sciences (6 Credits)

(Select two GT Pathway courses from any category):

- Economics or Political Systems: (GT-SS1) *
- Geography (GT-SS2) *
- Human Behavior, Culture, or Social Frameworks: (GT-SS3) *

History (3 Credits)

- Select one GT Pathways History course (GT- HI1) *

Additional Required Anthropology Courses (22 Credits)

Please Note: Additional ANT courses beyond the four courses (13 credit hours) identified above may not count toward the Anthropology major at the receiving 4-year institutions.

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

or

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

ANT 1001 - Cultural Anthropology: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly ANT 101 Studies human cultural patterns and learned behavior including linguistics, social and political organization, religion, culture and personality, culture change, and applied anthropology.

ANT 1003 - Introduction to Archaeology: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly ANT 107 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. This is a statewide Guaranteed Transfer course in the GT-SS3 category. GT-SS3

ANT 1005 - Biological Anthropology with Laboratory: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly ANT 111 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. This is a statewide Guaranteed Transfer course in the GT-SC1 category. GT-SC1

Arts and Humanities (3 Credits)

Select one GT Pathway course from any category:

- Arts and Humanities (GT-AH1) *
- Literature and Humanities (GT-AH2) *
- Ways of Thinking (GT-AH3) *
- Foreign Languages (GT-AH4

ANT course (3 Credits)

- Select one additional GT Pathway course: Social and Behavioral Science (GT-SS3) *

Social and Behavioral Sciences (3 Credits)

(Select on GT Pathway course from any category):

- Geography (GT-SS2) *
- Human Behavior, Culture, or Social Frameworks: (GT-SS3) *

Electives (5-6 Credits)

Determined by transferring institution

Transfer Degrees

This degree transfers to the following Colorado public four-year institutions of higher education:

- Colorado State University-Ft. Collins (B.A. Anthropology)
- Fort Lewis College (B.A. Anthropology)
- Metropolitan State University of Denver (B.A. Anthropology)
- University of Colorado, Boulder (B.A. Anthropology)
- University of Colorado, Colorado Springs (B.A. Anthropology)
- University of Colorado, Denver (B.A. Anthropology)
- University of Northern Colorado (B.A. Anthropology)
- Western State Colorado University (B.A. Anthropology)

Art History, AA (with Designation)

CIP 24.0101

See list of Department Chairs on the Personnel page.

Career Opportunities

The Associate of Arts (AA) Degree with Designation in Art History prepares the student to transfer as a junior to a four-year institution in Colorado in order to pursue a Bachelor of Arts (BA) or Bachelor of Fine Arts (BFA) degree in Art or Art History. Students who opt for the Bachelor of Arts in Art History can choose to work in several occupational fields including museums, galleries, government, research and academia. Once a BA or BFA is completed, students may pursue a higher or graduate degree in Art, if interested.

Program Description

This program introduces the student to the field of Art History and includes the course work to meet general education requirements that are common to all Colorado four-year institutions, as well a specific courses in various subfields of Art History. Upon transfer, students from Pueblo Community College who have earned the Associate of Arts (AA) Degree with Designation in Art History will be ready to complete the last half of a BA or BFA in Art History at a four-year institution.

Program Requirements

Refer to the course requirements listed below. Some courses may have prerequisites of lower level classes or assessment scores. Refer to the course descriptions for these prerequisites.

Total Credits: 60

** Refer to CCCS Guaranteed Transfer (GT) - Pathways Courses for a full list of all GT Pathway Courses*

General Education Core Requirements (31-32 Credits)

(Written) Communication (6 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

or

- ENG 1022 - English Composition II: GT-CP2 **Credit(s): 3** and a GT Pathways Approved (GT-CO3) *

Mathematics (3 Credits)

- Select one GT Pathways Mathematics course (GT-MA1) *, prefer MAT 1240: Mathematics for the Liberal Arts

Natural and Physical Sciences (7 or 8 Credits)

- Select two GT Pathways Natural and Physical Sciences courses (GT-SC1, GT-SC2) *. One of these courses must include a laboratory component (GT-SC1) *

Arts and Humanities (6 Credits)

- Select two GT Pathways Arts and Humanities Courses from any category (GT-AH1, GT-AH2, GT-AH3, GTAH4) *, **EXCEPT** those courses listed in the additional required courses section below.

Social and Behavioral Sciences (6 Credits)

- Select two GT Pathways Social and Behavioral courses from any category (GT-SS1, GT-SS2, GT- SS3) *

History (3 Credits)

- Select one GT Pathways History Course (GT-HI1) *

Additional Required Art History Courses (18 Credits)

ART 1111 - Art History Ancient to Medieval: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly ART 111 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

ART 1112 - Art History Renaissance to Modern: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly ART 112 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

ART 1201 - Drawing I

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 121 Investigates the various approaches and media that students need to develop drawing skills and visual perception.

ART 1002 - Visual Concepts 2-D Design

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 131 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

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 132 Introduces the fundamentals of three-dimensional design, form, and space. The course applies the elements and principles of design to three-dimensional problems.

ART 1113 - Art History

Credit(s): 3
Lecture Hour(s): 3
Formerly ART 207 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

Electives (10-11 Credits)

Determined by transferring institution;

Note: Students planning to transfer to Colorado State University-Fort Collins will be required to complete a 200-level foreign language for completion of the BA in Art History.

Transfer Degrees

This degree transfers to the following Colorado Public Four-Year institutions of higher education:

- Colorado Mesa University (B.F.A. Art, Art History concentration)
- Colorado State University-Ft. Collins (B.A. Art, Art History concentration)
- Colorado State University-Pueblo (B.A. Art; Art History Emphasis
- Metropolitan State University of Denver (B.A. Art History, Theory, and Criticism)
- University of Colorado, Boulder (B.A. Art History)
- University of Colorado, Colorado Springs (B.A. Visual and Performing Arts, Art History option)
- University of Colorado, Denver (B.A. Fine Arts, Art History emphasis)
- University of Northern Colorado (B.A. Art and Design, Art History emphasis)
- Western State Colorado University (B.A. Art, Art History and Theory emphasis)

Business, AA (with Designation)

CIP 24.0101

See list of Department Chairs on the Personnel page.

Career Opportunities

The Associate of Arts Degree with Designation in Business prepares students to transfer to a bachelor's degree business program.

Program Description

Students who complete an AA degree and the prescribed curriculum in the articulation agreement and are admitted (with no academic deficiencies that require additional coursework) to a receiving institution participating in this agreement are guaranteed the following:

Junior standing with no more than 60 remaining credits to meet the graduation requirements for a bachelor's degree in the degree program covered by this articulation agreement. Completion of the curriculum prescribed within this statewide articulation agreement does not guarantee admission to a participating receiving institution.

Program Requirements

Students must meet all admission and application requirements at the receiving institution including the submission of all required documentation stated deadlines. In addition to the requirements listed below, you must:

a. Earn a minimum of 60 semester hours of course work
b. Earn a minimum of 15 graded semester hours at PCC
c. Earn a minimum of "C" in all coursework for the degree

Consult with a PCC Business advisor or transfer advisor to find out which Colorado Statewide Guaranteed Transfer Courses (GT Pathways) or elective courses meet the degree requirements of the four-year college to which you plan to transfer.

To earn an AA degree with Designation in Business, you must complete at least 60 college-level credits, as described below:

Total Credits: 60

** Refer to CCCS Guaranteed Transfer (GT) - Pathways Courses for a full list of all GT Pathway Courses*

General Education Core Requirements (37 Credits)

Communication (6 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

Mathematics (8 Credits)

MAT 1340 - College Algebra: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 0300.
Formerly MAT 121 Explores topics including intermediate algebra, equations, and inequalities, functions and their graphs, exponential and logarithmic functions, linear and nonlinear systems, selection of topics from among graphing of the conic sections, introduction to sequences and series permutations and combinations, the binomial theorem and theory of equations. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

or

MAT 1320 - Finite Mathematics: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 0300 or Equivalent Test Score.
Formerly MAT 123 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. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 1400 - Survey of Calculus: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 1340 or see Basic Skills Assessment
Formerly MAT 125 Includes derivatives, integrals, and their applications, with attention restricted to algebraic, exponential, and logarithmic functions for business, life science and/or social science majors.. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

Natural and Physical Sciences (8 Credits)

- Select two GT Pathways Natural and Physical Sciences courses (GT-SC1 **or** GT-SC2), one must be with laboratory (GT-SC1) *

Arts and Humanities (6 Credits)

(Select two courses from any category):

- Arts and Expression: Select from a GT Pathways Arts and Expression course (GT-AH1) *
- Literature and Humanities: Select from a GT Pathways Literature and Humanities course (GT-AH2) *
- Ways of Thinking: Select from a GT Pathways Ways of Thinking course (GT-AH3) *
- Foreign Languages: Select from a GT Pathways Foreign Languages course (GT-AH4) *

Social and Behavioral Sciences (6 Credits)

ECO 2001 - Principles of Macroeconomics: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly ECO 201 Focuses on the study of the American economy, stressing the interrelationships among household, business and government sectors. Explores saving and investment decisions, unemployment, inflation, national income accounting, taxing and spending policies, the limits of the market and government, public choice theory, the Federal Reserve System, money and banking, and international trade.

ECO 2002 - Principles of Microeconomics: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly ECO 202 Studies the firm, the nature of cost and how these relate to the economy as a whole. Analyzes economic models of the consumer, perfect competition, monopoly, oligopoly and monopolistic competition. Explores economic issues including market power, population growth, positive and negative externalities, income distribution, poverty and welfare, discrimination, and international economic interdependence.

History (3 Credits)

- Select one GT Pathways History course (GT-HI1) *

Additional Required Courses (23 Credits)

ACC 1021 - Accounting Principles I

Credit(s): 4
Lecture Hour(s): 4
Formerly ACC 121 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

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): ACC 1021
Formerly ACC 122 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.

BUS 1015 - Introduction to Business

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 115 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 2016 - Legal Environment of Business

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 216 Emphasizes public law, regulation of business, ethical considerations, and various relationships existing within society, government, and business. Specific attention is devoted to economic regulation, social regulation, regulation and laws impacting labor-management issues and environmental concerns. Students develop an understanding of the role of law in social, political, and economic change.

BUS 2017 - Business Communication & Report Writing

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 217 Emphasizes effective business writing and covers letters, memoranda, reports, application letters and resumes. Includes the fundamentals of business communication and an introduction to international communication.

BUS 2026 - Business Statistics

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 226 Focuses on statistical study, descriptive statistics, probability, and the binominal distribution, index numbers, time series, decision theory, confidence intervals, linear regression and correlation. Intended for the business major.

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

Transfer Degrees

This degree transfers to the following Colorado public four-year institutions of higher education:

- Adams State University (B.A. Business Administration, emphasis in in Advertising, Business Teacher Education, General Business or International Business; B.S. Business Administration, emphasis in Accounting, Agribusiness, Economics, Finance, General Business, Health Care Administration, Management, Management Information Systems, Marketing, or Small Business Management)
- Colorado Mesa University (Bachelor of Business Administration (B.B.A.) concentrations in Business Economics, Emerging Markets, Energy Management/Landman, Entrepreneurship, Finance, Hospitality Management, Human Resource management, Information Systems, Insurance, Management, Managerial Informatics, or Marketing)
- Colorado Mountain College (as four-year institution) (B.S. Business Administration)

- Colorado State University-Ft. Collins (B.S. Business Administration)
- Colorado State University – Global Campus (B.S. Accounting, Business management, Healthcare Administration and management, Human Resource Management, Information Technology Management, Management Information Systems and Business Analytics, Marketing, Project Management)
- Colorado State University-Pueblo (B.S. Business Administration, majors in Management, Accounting, or Economics)
- Fort Lewis College (B.A. Business Administration, Business Administration option)
- Metropolitan State University of Denver (B.S. Accounting, Computer Information Systems, Finance, Management, Marketing
- University of Colorado, Boulder (B.S. Business Administration)
- University of Colorado, Colorado Springs (B.S. Business, emphasis in Accounting, Business Administration, Finance, Human Resources Management, Information Systems, International Business, Management, Marketing PGA Golf Management, Service Management, or Sport Management)
- University of Colorado, Denver (B.S. Business Administration, emphasis in Accounting, Finance, Financial Management, Human Resources Management, Information Systems, International Business, Management, or Marketing)
- University of Northern Colorado (B.S. Business Administration, all emphasis)
- Western State Colorado University (B.A. Business Administration)

Communication, AA (with Designation)

CIP 24.0101

See list of Department Chairs on the Personnel page.

Career Opportunities

The Associate of Arts (AA) Degree with Designation in Communication prepares the student to transfer as a junior to a four-year institution in Colorado in order to pursue a Bachelor of Arts (BA) degree in Communication. Students who opt for the Bachelor of Arts in Communication can choose to work in several occupational fields, including business, advertising, education, media, journalism or public relations. Once a BA is completed, students may pursue a higher or graduate degree in Communication, if interested.

Program Description

This program introduces the student to the discipline of Communication and includes the course work to meet general education requirements that are common to all Colorado four-year institutions, as well a specific courses in various subfields of Communication. Upon transfer, students from Pueblo Community College who have earned the Associate of Arts (AA) Degree with Designation in Communication will be ready to complete the last half of a BA in Communication at a four-year institution.

Program Requirements

Refer to the course requirements listed below. Some courses may have prerequisites of lower level classes or assessment scores. Refer to the course descriptions for these prerequisites.

Total Credits: 60

** Refer to CCCS Guaranteed Transfer (GT) - Pathways Courses for a full list of all GT Pathway Courses*

General Education Core Requirements (31 Credits)

(Written) Communication (6 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

or

- ENG 1022 - English Composition II: GT-CP2 **Credit(s): 3** and a GT Pathways Advanced Writing Course (GT-CO3) *

Mathematics (3 Credits)

- Select one GT Pathways Mathematics course (GTMA1) *, prefer MAT 1240: Mathematics for the Liberal Arts

Natural and Physical Sciences (7 Credits)

- Select two GT Pathways Natural and Physical Sciences courses (GT-SC1, GT-SC2) *. At least one of these courses must include a laboratory component (GT-SC1) *

Arts and Humanities (6 Credits)

- Select two GT Pathways Arts and Humanities courses from any category (GT-AH1, GT-AH2, GT-AH3, GT-AH4) *

Social and Behavioral Sciences (6 Credits)

COM 2300 - Intercultural Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 220 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. This is a statewide Guaranteed Transfer course in the GT-SS3 category.

- select one other GT Pathways Social and Behavioral course from any category (GT-SS1, GT-SS2, GT-SS3) *

History (3 Credits)

- Select one GT Pathways History Course (GT-HI1) *

Additional Required Communication Courses (18 Credits)

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

COM 2220 - Group Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 217 Examines group communication theories with an emphasis on leadership and group behaviors. The course provides opportunities for group participation. GT-SS3

- Select one three-credit course with a COM prefix **Credit(s): 3**

Select two GT Pathways courses from either: (6 Credits)

- History (GT-HI1) *, **or** Social and Behavioral Sciences (GT-SS1, GT-SS2, **or** GT-SS3) *

Electives (11 Credits)

Determined by transferring institution

Transfer Degrees

This degree transfers to the following Colorado Public Four-Year institutions of higher education:

- Colorado State University-Ft. Collins (B.A. Communication Studies)
- Colorado State University-Global Campus (B.S. Communication)
- Metropolitan State University of Denver (B.A. Speech Communication, Organizational Communication emphasis)
- University of Colorado, Boulder (B.A. Communication)
- University of Colorado, Colorado Springs (B.A.
- Communication, General Communication Studies emphasis)
- University of Colorado, Denver (B.A. Communication)
- University of Northern Colorado (B.A. Communication Studies)
- Western State Colorado University (B.A. Communication Arts, Communication emphasis)

Criminal Justice, AA (with Designation)

CIP 24.0101

See list of Department Chairs on the Personnel page.

Career Opportunities

The Associate of Arts Degree with Designation in Criminal Justice prepares students to transfer as juniors to a four-year institution in Colorado to pursue a bachelor's degree in criminal justice. Graduates can seek a career in federal, state and local criminal justice agencies. This includes correctional institutions, juvenile corrections and varied treatment facilities, law enforcement agencies, courts, private security and forensic investigation work.

Program Description

Courses in the criminal justice degree provide an in-depth analysis of the three main components of the criminal justice system, law enforcement, the judicial system and corrections, with special emphasis on criminology, substantive criminal law and constitutional law. The AA degree coursework requires students learn reading and comprehension skills, written and verbal communication skills, and cultural diversity awareness.

Program Requirements

Students must meet all admission and application requirements at the receiving institution including the submission of all required documentation stated deadlines. In addition to the requirements listed below, you must:

a. Earn a minimum of 60 semester hours of course work
b. Earn a minimum of 15 graded semester hours at PCC
c. Earn a minimum of "C" in all coursework for the degree

Consult with a PCC Criminal Justice advisor or transfer advisor to find out which Colorado Statewide Guaranteed Transfer Courses (GT Pathways) or elective courses meet the degree requirements of the four-year college to which you plan to transfer. To earn an AA degree with Designation in Business, you must complete at least 60 college-level credits, as described below:

Disclaimer

If you have any prior arrests and/or drug/alcohol history, you should discuss this history with a Criminal Justice advisor prior to beginning courses toward this degree. Neither PCC nor the Criminal Justice Department or advisors will be held liable for your decision to continue in pursuit of the degree if you have such a history. Many criminal justice employers will not hire students with a past history of arrests or convictions regardless of the type of offense.

Your entrance into any criminal justice course of study, or your subsequent graduation, is no guarantee, explicit or implied, that you are employable in the criminal justice field.

Many criminal justice and related agencies require certain standards prospective employees must meet at the application stage. Job applications will ask if you have ever been arrested for any offense, either misdemeanor or felony. If you have, your prospective employer may deny your application. You may also be required to take psychological tests, lie detector tests, medical tests and physical fitness tests to determine if you are suited to a particular position.

Total Credits: 60

** Refer to CCCS Guaranteed Transfer (GT) - Pathways Courses for a full list of all GT Pathway Courses*

General Education Core Requirements (31-33 Credits)

(Written) Communication (6 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

or

- ENG 1022 - English Composition II: GT-CP2 **Credit(s): 3** and a GT Pathways Advanced Writing course (GT-CO3) *

Mathematics (3-4 Credits)

- One GT Pathways course (GT-MA1, prefer MAT 13: Introduction to Statistics, except:

University of Colorado

- University of Colorado - Colorado Springs **prefers** MAT 1240 - Mathematics for the Liberal Arts: GT-MA1;

Colorado Mesa University

- Colorado Mesa University **requires** either MAT 1240 - Mathematics for the Liberal Arts: GT-MA1 **or** MAT 1340 - College Algebra: GT-MA1;

University of Northern Colorado

- University of Northern Colorado **requires** MAT 1260 - Introduction to Statistics: GT-MA1

Natural and Physical Sciences (7-8 Credits)

- Select two GT Pathways Natural and Physical Sciences courses (GT-SC1 **or** GT-SC2) * At least one of these courses must include a laboratory component (GT-SC1) *

Arts & Humanities (6 Credits)

(Select two courses from two different categories):

- GT-AH1, GT-AH2, GT-AH3, GT-AH4 *

Social and Behavioral Sciences (6 Credits)

SOC 1001 - Introduction to Sociology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 101 Examines the basic concepts, theories and principles of sociology as well as human culture, social groups, and the social issues of age, gender, class and race. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

- select one additional GT Pathways Human Behavior, Culture, or Social Frameworks course (GT-SS3) *

History (3 Credits)

- Select one GT Pathways History course (GT-HI1) *

Additional Required Courses (27 Credits)

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.

Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

CRJ 1010 - Intro to Criminal Justice: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): ENG 1021.
Formerly CRJ 110 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. This is a statewide Guaranteed Transfer course in the GT-SS3 category.

CRJ 1025 - Policing Systems

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): CRJ 1010.
Formerly CRJ 125 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 1045 - Correctional Process

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of CRJ 1010.
Formerly CRJ 145 Examines the history and total correctional process from law enforcement through the administration of justice, probation, prisons, correctional institutions and parole. Also examines the principles, theories, phenomena and problems of the crime, society and the criminal justice system from the perspective of criminology and the criminal justice system in general. Emphasizes the role of sociology and other interdisciplinary approaches to the field of corrections and society's response.

Choose Two Courses from the Following (6 Credits)

CRJ 1035 - Judicial Function

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of CRJ 1010.
Formerly CRJ 135 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 2005 - Principles of Criminal Law

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of CRJ 1010, CRJ 1025, CRJ 1035, CRJ 1045, and ENG 1021.
Prerequisite(s)/Corequisite(s): COM 1150 and ENG 1022.
Formerly CRJ 205 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 2030 - Criminology

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of CRJ 1010 and CRJ 1045.
Prerequisite(s)/Corequisite(s): COM 1150 and ENG 1021.
Formerly CRJ 230 Provides an introduction to the study of crime, understanding the causes of crime, and examines, theoretical frameworks and theories to explain criminal behavior. Within a social context, consideration is given to how theories have emerged and understand how social context contributes to explanations of crime. Examination of the nature of crime, crime victimization, crime patterns, types of crime, crime statistics, and criminal behavior is also included.

Choose Three Courses from the Following (9 Credits)

Note: 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 - Digital Forensics

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): CNG 1024.
Corequisite(s): CIS 2020.
Formerly CNG 258 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.

COM 2220 - Group Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 217 Examines group communication theories with an emphasis on leadership and group behaviors. The course provides opportunities for group participation. GT-SS3

POS 1011 - American Government: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly POS 111 Includes the background of the US Constitution, the philosophy of American government, general principles of the Constitution, federalism and civil liberties. Examines public opinion and citizen participation, political parties, interest groups and the electoral process, and the structure and functions of the national government. This course is one of the statewide Guaranteed Transfer courses, GT-SS1.

POS 1025 - American State and Local Government: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly POS 125 Emphasizes 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. This course is one of the statewide Guaranteed Transfer courses, GT-SS1.

PSY 2770 - Intro to Forensic Psychology

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 207 Introduction to Forensic Psychology is a course in an overview of Forensic Psychology. As such it explores both current research and practice in five areas. These areas are police psychology, criminal psychology, victimology, correctional psychology and the interface of psychology and the courts. The course facilitates an understanding of the numerous careers related to forensic psychology, how to prepare for them and current research and practice in each of the five broad areas of forensic psychology.

PSY 2107 - Human Sexuality: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 217 Surveys physiological, psychological and psychosocial aspects of human sexuality. Topics include relationships, sexual identity and sexual health. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2221 - Social Psychology: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 226 Focuses on the behavior of humans in social settings, including attitudes, aggression, conformity, cooperation and competition, prejudice and interpersonal attraction. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2552 - Abnormal Psychology: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): PSY 1001 or Department Chair Approval.
Formerly PSY 249 Examines abnormal behavior and its classification, causes, treatment and prevention. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

SOC 2031 - The Sociology of Deviant Behavior: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 231 Examines the nature, identification, and explanation of deviant categories. Theories and philosophies, as well as methods of treatment related to deviancy, will also be considered. The course will study society's attempts to control, change and institutionalize those acts, individuals or groups that a population may deem unacceptable. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

Electives (0-2 Credits)

Determined by transferring institution

Transfer Degrees

This degree transfers to the following Colorado public four-year institutions of higher education:

- Colorado Mesa University (B.A. Criminal Justice; Criminal Justice or Law Enforcement concentrations)
- Colorado State University – Global Campus (B.S. Criminal Justice and Law Enforcement Administration; B.S Human Services
- Metropolitan State University of Denver (B.S. Criminal Justice & Criminology)
- University of Colorado, Colorado Springs (B.A. Criminal Justice)
- University of Colorado, Denver (B.A. Criminal Justice)
- University of Northern Colorado (B.A. Criminal Justice)

Criminology, AA (CSU-P Transfer)

CIP 24.0102

See list of Department Chairs on the Personnel page.

Career Opportunities

The criminal justice program prepares you to transfer as a junior to a four-year institution to pursue a Bachelor of Science degree in sociology or criminal Justice, after which you can pursue a career in federal, state and local adult correctional institutions, juvenile corrections and treatment facilities, law enforcement, forensics, private security and private investigations.

Program Description

The criminal justice program provides an in-depth analysis of the three components of the criminal justice system (law enforcement, the judicial system and corrections) with special emphasis on criminology, substantive criminal law, procedural criminal law and constitutional law. It places a strong emphasis on reading and comprehension skills, written and verbal communication skills and empathic awareness of cultural diversity.

Disclaimer

If you have any prior arrests and/or drug/alcohol history, you should discuss this history with a Criminal Justice advisor prior to beginning courses toward this degree. Neither PCC nor the Criminal Justice Department or advisors will be held liable for your decision to continue in pursuit of the degree if you have such a history. Many criminal justice employers will not hire students with a past history of arrests or convictions regardless of typology of offense.

Your entrance into any criminal justice course of study, or your subsequent graduation, is no guarantee, explicit or implied, that you are employable in the criminal justice field. Further, if you cannot be placed and/or remain in the course CRJ 2080 - Cooperative Education/internship, after two good-faith attempts at placement, neither PCC nor its employees accept responsibility in respect to your inability to complete or meet fulfillment requirements of the degree.

Many criminal justice and related agencies require certain standards prospective employees must meet at the application stage. Job applications will ask if you have ever been arrested for any offense, either misdemeanor or felony. If you have, your prospective employer may deny your application. You may also be required to take psychological tests, lie detector tests, medical tests and physical fitness tests to determine if you are suited to a particular position.

Program Requirements

Entrance Requirements:

This is an open enrollment program.

Graduation Requirements:

A grade of "C" or higher is required in each course.

Total Credits: 60

General Education Core Requirements (39 Credits)

Communication (9 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

Mathematics (4 Credits)

MAT 1240 - Mathematics for the Liberal Arts: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 1001 concurrency allowed, or see Basic Skills Assessment
Formerly MAT 120 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. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

Natural and Physical Sciences (8 Credits)

Select two courses:

AST 1110 - Astronomy I With Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly AST 101 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 - Astronomy II with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): AST 1110.
Formerly AST 102 Emphasizes the structure and life cycle of the stars, the sun, galaxies, and the universe as a whole, including cosmology and relativity. Stellar phenomena including white dwarves, black holes will be explored. Incorporates laboratory experience.

BIO 1005 - Science of Biology with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly BIO 105 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 - as is the impact of biological science on society. Includes laboratory experiences. Designed for non-science majors.

BIO 1111 - General College Biology I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): ENG 1021
Formerly BIO 111 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 - General College Biology II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Corequisite(s): ENG 1021.
Formerly BIO 112 A continuation of Biology I. Includes ecology, evolution, classification, structure, and function in plants and animals. This course includes laboratory experience.

BIO 2101 - Human Anatomy and Physiology I with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 201 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, nervous and endocrine systems. Includes a mandatory hands-on laboratory experience covering experimentation, microscopy, observations and dissection. This is the first semester of a two-semester sequence.

BIO 2102 - Human Anatomy and Physiology II with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 202 Focuses on the integrated study of the human body and the histology, anatomy, and physiology of the following systems and topics: cardiovascular, hematology, lymphatic and immune, urinary, fluid and electrolyte control, digestive, nutrition, respiratory, reproductive and development. Includes a mandatory hands-on laboratory experience involving experimentation, microscopy, observations and dissection. This is the second semester of a two-semester sequence.

BIO 2104 - Microbiology with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.

Formerly BIO 204 Designed for health science majors. Examines microorganisms with an emphasis on their structure, development, physiology, classification and identification. The laboratory experience includes culturing, identifying and controlling microorganisms with an emphasis on their role in infectious disease.

CHE 1011 - Introduction to Chemistry I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 0300.
Formerly CHE 101 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: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): CHE 1011.
Formerly CHE 102 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 1005 - Chemistry in Context with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Formerly CHE 105 Covers the study of measurements, matter, molecules, atoms, chemical bonding, nomenclature, energy, acids, bases, and nutrition. Course work examines chemistry in the modern world and surveys the current knowledge as well as the conceptual framework of the discipline. Chemistry as a science is explored, as is the impact of chemistry on society. This course includes laboratory experience and is designed for non-science majors.

CHE 1111 - General College Chemistry I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 1340, CHE 1011.
Corequisite(s): ENG 1021.
Formerly CHE 111 Focuses on basic chemistry and measurement, matter, chemical formulas, reactions and equations, stoichiometry. This course covers the development of atomic theory culminating in the use of quantum numbers to determine electron configurations of atoms, and the relationship of electron configuration to chemical bond theory. The course includes gases, liquids, and solids and problem-solving skills are emphasized through laboratory experiments.

CHE 1112 - General College Chemistry II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): CHE 1111, ENG 1021.
Formerly CHE 112 Presents concepts in the areas of solution properties, chemical kinetics, chemical equilibrium, acid-base and ionic equilibrium, thermodynamics, and electrochemistry. This course emphasizes problem solving skills and descriptive contents for these topics. Laboratory experiments demonstrate qualitative and quantitative analytical techniques.

GEY 1111 - Physical Geology with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly GEY 111 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.

MET 1050 - General Meteorology: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly MET 150 Provides an introduction to general meteorology and atmospheric sciences. It includes the composition and structure of the atmosphere and characteristics that affect the atmosphere, such as temperature, pressure and moisture. Additionally, the development of weather systems such as storm systems, hurricanes, weather fronts and cloud development will also be examined. Finally, concepts of climatology will be stressed. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 1105 - Conceptual Physics with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly PHY 105 Focuses on mechanics, heat, properties of matter, electricity and magnetism, light and modern physics. Incorporates laboratory experience. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 1111 - Physics: Algebra-Based I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 0300.
Formerly PHY 111 Explores the physical world through reasoning, mathematics and experimentation. Examines kinematics, force, circular motion, energy, momentum, torque, rotational dynamics, simple harmonic motion, temperature, heat and thermodynamics. The concepts and theories presented are explored through demonstrations and hands-on experiments. It is a general physics course that is recommended for all of the health sciences and all other interested students. Students entering engineering or one of the advanced sciences should register for PHY 211. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 1112 - Physics: Algebra-Based II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 0300.
Formerly PHY 112 Expands upon PHY 1111and explores sound waves, electric fields, electric circuits, magnetic fields, light, optics and modern physics. Explores the concepts and theories presented in class through demonstrations and hands-on experiments. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 2111 - Physics: Calculus Based I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 2410, ENG 1021.
Formerly PHY 211 Explores the physical world through reasoning, mathematics and experimentation. Covers kinematics, force, gravity, energy, momentum, torque, rotational dynamics and fluids, and may include thermodynamics. The concepts and theories presented in class are explored through demonstrations and hands-on experiments. This first semester calculus-based physics course is recommended for students entering engineering or one of the advanced sciences. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 2112 - Physics: Calculus-Based II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 2410, ENG 1021.
Formerly PHY 212 Expands upon PHY 2111and examines waves, electric fields, electric circuits, magnetic fields, light and optics, and modern physics. The concepts and theories presented in class are explored through demonstrations and hands-on experiments. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

Arts and Humanities (9 Credits)

Choose nine credits from two different disciplines.

ART 1110 - Art Appreciation: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly ART 110 Introduces the cultural significance of the visual arts, including media, processes, techniques, traditions, and terminology. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

ART 1111 - Art History Ancient to Medieval: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly ART 111 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

ART 1112 - Art History Renaissance to Modern: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly ART 112 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

ART 1113 - Art History

Credit(s): 3
Lecture Hour(s): 3
Formerly ART 207 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

HUM 1021 - Humanities: Early Civilization: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Formerly HUM 121 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 prehistoric to the early medieval era. This course is one of the statewide Guaranteed Transfer courses. GT-AH2.

HUM 1022 - Humanities: Medieval - Modern: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Formerly HUM 122 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. This is a statewide Guaranteed Transfer course in the GT-AH2 category. GT-AH2

HUM 1023 - Humanities: Modern World: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Formerly HUM 123 Examines the cultures of the 17th through the 20th centuries by focusing on the interrelationships of the arts, ideas, and history. Considers the influences of industrialism, scientific development and non-European peoples. This course is one of the statewide Guaranteed Transfer courses. GT-AH2.

LIT 1015 - Introduction to Literature I: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly LIT 115 Introduces students to fiction, poetry and drama. Emphasizes active and responsive reading. This course is one of the statewide Guaranteed Transfer courses, GT-AH2.

LIT 2001 - World Literature to 1600: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): ENG 1021.

Formerly LIT 201 Examines significant writings in world literature from the ancients through the Renaissance. Emphasizes careful readings and understanding of the works and their cultural backgrounds. This course is one of the statewide Guaranteed Transfer courses, GT-AH2.

LIT 2002 - World Literature After 1600: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): ENG 1021.
Formerly LIT 202 Examines significant writings in world literature from the 17th century to the present. Emphasizes careful reading and understanding of the works and their cultural backgrounds. This course is one of the statewide Guaranteed Transfer courses, GT-AH2.

LIT 2005 - Race. Ethnicity, and Culture in U.S. Literature: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Formerly LIT 205 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. This is a statewide Guaranteed Transfer course in the GT-AH2 category. GT-AH2

LIT 2011 - American Literature to Civil War: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): ENG 1021.
Formerly LIT 211 Provides an overview of American literature from the Native American through the 19th-century Romantics. It explores ideas, historical and social contexts, themes and literary characteristics of works in various genres by major writers. This course is one of the statewide Guaranteed Transfer courses, GT-AH2.

LIT 2012 - American Literature After Civil War: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): ENG 1021.
Formerly LIT 212 Provides an overview of American literature from the mid-19th century to the present. It explores ideas, historical and social contexts, themes and literary characteristics of works in various genres by major writers. This course is one of the statewide Guaranteed Transfer courses, GT-AH2.

MUS 1020 - Music Appreciation: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly MUS 120 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

MUS 1021 - Music History Medieval Thru Classical Period: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly MUS 121 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

MUS 1022 - Music History Early Romantic Period to the Present: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly MUS 122 Provides an 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

PHI 1011 - Introduction to Philosophy: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 111 ompletion with a minimum C? grade guarantees transfer and application of credit in this GT Pathways category.

PHI 1012 - Ethics: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 112 Examines human life, experience and thought in order to discover and develop the principles and values for pursuing a more fulfilled existence. Theories designed to justify ethical judgments are applied to a selection of contemporary personal and social issues. This course is one of the statewide Guaranteed Transfer courses, GT-AH3.

PHI 1013 - Logic: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 113 Studies effective thinking using language-oriented logic. Provides tools and develops skills for creative and critical thinking. Emphasizes the development of decision-making and problem-solving. This course is one of the statewide Guaranteed Transfer courses, GT-AH3.

PHI 1014 - Comparative Religions: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 114 Introduces students to the major world religions from both the Eastern and Western world such as Hinduism, Buddhism, Confucianism, Taoism, Zoroastrianism, Judaism, Christianity, Islam, Bahand influential preliterate traditions. Utilizes religious studies methods (historical, sociological, legal, psychological and phenomenological) 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. This course is one of the statewide Guaranteed Transfer courses, GT-AH3.

PHI 2014 - Philosophy of Religion: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 214 Focuses on the critical examination of the fundamental concepts, ideas and implications of religion. Includes the nature of God, the varieties of religious experience, argument concerning God`s existence, the problem of evil, faith and reason, religion and human destiny, and the connection between religion and ethics. This course is one of the statewide Guaranteed Transfer courses, GT-AH3.

SPA 2011 - Spanish Language III: GT-AH4

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of SPA 1012 or Department Chair Approval.
Formerly SPA 211 Continues SPA 1011 - Spanish Language Iand SPA 1012 - Spanish Language IIin the development of increased functional proficiency in listening, speaking, reading and writing the Spanish Language. Note: The order of the topics and the methodology will vary according to individual texts and instructors. This course is one of statewide Guaranteed Transfer courses, GT-AH4.

SPA 2012 - Spanish Language IV: GT-AH4

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of SPA 2011 or Department Chair Approval.
Formerly SPA 212 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. This is a statewide Guaranteed Transfer course in the GT-AH4 category. This course is one of statewide Guaranteed Transfer courses, GT-AH4.

THE 1005 - Theatre Appreciation: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly THE 105 Includes discussions, workshops and lectures designed to discover, analyze and evaluate all aspects of the theatre experience: scripts, acting, directing, staging, history, criticism and theory. This course is one of the statewide Guaranteed Transfer courses, GT-AH1.

THE 2011 - Development of Theatre Greek-Renaissance: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly THE 211 Surveys the history and evolution of drama from ancient Greece to the Renaissance, emphasizing all aspects of the art from period values to analysis of dramatic literature and performance. This course is one of the statewide Guaranteed Transfer courses, GT-AH1.

THE 2012 - Development of Theatre Restoration to Modern: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly THE 212 Surveys the history and evolution of drama from the Renaissance to the present, emphasizing all

aspects of the art from period values to the analysis of dramatic literature and performance. This course is one of the statewide Guaranteed Transfer courses, GT-AH1.

Social and Behavioral Sciences (9 Credits)

Select nine credits in at least two categories, one of which must be History:

ANT 1001 - Cultural Anthropology: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly ANT 101 Studies human cultural patterns and learned behavior including linguistics, social and political organization, religion, culture and personality, culture change, and applied anthropology.

ANT 1005 - Biological Anthropology with Laboratory: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly ANT 111 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. This is a statewide Guaranteed Transfer course in the GT-SC1 category. GT-SC1

ECO 2001 - Principles of Macroeconomics: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly ECO 201 Focuses on the study of the American economy, stressing the interrelationships among household, business and government sectors. Explores saving and investment decisions, unemployment, inflation, national income accounting, taxing and spending policies, the limits of the market and government, public choice theory, the Federal Reserve System, money and banking, and international trade.

ECO 2002 - Principles of Microeconomics: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly ECO 202 Studies the firm, the nature of cost and how these relate to the economy as a whole. Analyzes economic models of the consumer, perfect competition, monopoly, oligopoly and monopolistic competition. Explores economic issues including market power, population growth, positive and negative externalities, income distribution, poverty and welfare, discrimination, and international economic interdependence.

GEO 1005 - World Regional Geography: GT-SS2

Credit(s): 3
Lecture Hour(s): 3
Formerly GEO 105 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. This is a statewide Guaranteed Transfer course in the GT-SS2 category.

GEO 1006 - Human Geography: GT-SS2

Credit(s): 3
Lecture Hour(s): 3
Formerly GEO 106 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. This is a statewide Guaranteed Transfer course in the GT-SS2 category. GT-SS2

HIS 1310 - Western Civilization: Antiquity-1650: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 101 Explores a number of events, peoples, groups, ideas, institutions and trends that have shaped western civilization from the prehistoric era to 1650. Reflects the multiple perspectives of gender, class, religion and ethnic groups. Focuses on developing, practicing and strengthening the skills historians use while constructing knowledge in this discipline. This course is one of the statewide Guaranteed Transfer courses, GT-HI1.

HIS 1320 - Western Civ: 1650-present: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 102 Explores a number of events, peoples, groups, ideas, institutions and trends that have shaped western civilization from 1650 to the present. Reflects the multiple perspectives of gender, class, religion and ethnic groups. Focuses on developing, practicing and strengthening the skills historians use while constructing knowledge in this discipline. This course is one of the statewide Guaranteed Transfer courses, GT-HI1.

HIS 1110 - The World: Antiquity-1500: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 111 Explores a number of peoples, groups, ideas, institutions and trends that have shaped world history from the prehistoric era to 1500. Reflects the multiple perspectives of gender, class, religion and ethnic groups in a broad global sense. Focuses on the common denominators among all people. This approach goes beyond political borders to provide a better appreciation for different cultures. Focuses on developing, practicing and strengthening the skills historians use while constructing knowledge in this discipline. This course is one of the statewide Guaranteed Transfer courses, GT-HI1.

HIS 1120 - The World: 1500-present: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 112 Explores a number of peoples, groups, ideas, institutions and trends that have shaped world history from 1500 to the present. Reflects the multiple perspectives of gender, class, religion and ethnic groups in a broad global sense. Focuses on the common denominators among all people. This approach goes beyond political borders to provide a better appreciation for different cultures. Focuses on developing, practicing and strengthening the skills

historians use while constructing knowledge in this discipline. This course is one of the statewide Guaranteed Transfer courses, GT-HI1.

HIS 1210 - U.S. History to Reconstruction: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 121 Explores events, trends, peoples, groups, cultures, ideas and institutions in North America and United States history, including the multiple perspectives of gender, class and ethnicity, between the period when Native American Indians were the sole inhabitants of North America and the American Civil War. Focuses on developing, practicing and strengthening the skills historians use while constructing knowledge in the discipline. This course is one of the statewide Guaranteed Transfer courses, GT-HI1

HIS 1220 - U.S. History Since the Civil War: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 122 Explores events, trends, peoples, groups, cultures, ideas and institutions in United States history, including the multiple perspectives of gender, class and ethnicity, between the period of the American Civil War and the present. Focuses on developing, practicing and strengthening the skills historians use while constructing knowledge in the discipline. This course is one of the statewide Guaranteed Transfer courses, GT-HI1.

HIS 2015 - 20th Century World History: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 247 Investigates the major political, social and economic developments, international relationships, scientific breakthroughs, and cultural trends that have shaped the various global regions and nation-states from 1900 to the present. Emphasizes the interactions of global regions and nation-states. This course is one of the statewide Guaranteed Transfer courses, GT-HI1.

JOU 1005 - Introduction to Mass Media: GT SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly JOU 105 Places the mass media in a historical and cultural perspective, considering the validity, integrity and influence of the media in a democracy. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

POS 2020 - Introduction to Political Science: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly POS 105 Focuses on a survey of the discipline of political science, including political philosophy and ideology, democratic and nondemocratic governments and processes, and international relations. This course is one of the statewide Guaranteed Transfer courses, GT-SS1.

POS 1011 - American Government: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly POS 111 Includes the background of the US Constitution, the philosophy of American government, general

principles of the Constitution, federalism and civil liberties. Examines public opinion and citizen participation, political parties, interest groups and the electoral process, and the structure and functions of the national government. This course is one of the statewide Guaranteed Transfer courses, GT-SS1.

PSY 1001 - General Psychology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 101 Focuses on the scientific study of behavior including motivation, emotion, physiological psychology, stress and coping, research methods, consciousness, sensation, perception, learning and memory. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 1002 - General Psychology II: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 102 Focuses on the scientific study of behavior including cognition, language, intelligence, psychological assessment, personality, abnormal psychology, therapy, lifespan development and social psychology. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2105 - Psychology of Gender: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 205 Examines gender comparisons in work, courtship, family life and sexual behavior throughout the lifespan. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2107 - Human Sexuality: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 217 Surveys physiological, psychological and psychosocial aspects of human sexuality. Topics include relationships, sexual identity and sexual health. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2221 - Social Psychology: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 226 Focuses on the behavior of humans in social settings, including attitudes, aggression, conformity, cooperation and competition, prejudice and interpersonal attraction. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2222 - Psychology of Death and Dying: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 227 Examines the philosophies of life and death, emphasizing dying, death, mourning and the consideration of one's own death. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2440 - Human Growth and Development: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 235 Examines human development from conception through death, emphasizing physical, cognitive, emotional and psychosocial factors. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2441 - Child Development: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 238 Focuses on the growth and development of the individual from conception through childhood, emphasizing physical, cognitive, emotional and psychosocial factors. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2552 - Abnormal Psychology: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): PSY 1001 or Department Chair Approval.
Formerly PSY 249 Examines abnormal behavior and its classification, causes, treatment and prevention. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

SOC 1001 - Introduction to Sociology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 101 Examines the basic concepts, theories and principles of sociology as well as human culture, social groups, and the social issues of age, gender, class and race. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

SOC 1002 - Introduction to Sociology II: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 102 Examines social institutions and organizations from the macro perspective. Emphasizes issues of social change, demography, social movements, and conflicts and trends within education, religion, family, political and economic structures. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

SOC 2005 - Sociology of Family Dynamics: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 205 Develops an understanding of marriage, family and kinship. It examines the family as an institution and how social, cultural and personal factors influence family relations. The stability and diversity of the family will be explored, along with current trends and some alternative lifestyles. This course is one of statewide Guaranteed Transfer courses, GT-SS3.

SOC 2015 - Contemporary Social Problems: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 215 Explores current social issues that result in societal problems. It focuses on such issues as civil liberties, gender discrimination, substance abuse, crime, poverty and social change. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

SOC 2016 - Sociology of Gender: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 216 Gives students the theoretical and factual background necessary to understand the phenomenon of gender stratification in American and other cultures. Students will be exposed to a history of gender stratification in human societies, theoretical explanations for this and insights into the consequences of gender differentiation in our world today. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

SOC 2031 - The Sociology of Deviant Behavior: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 231 Examines the nature, identification, and explanation of deviant categories. Theories and philosophies, as well as methods of treatment related to deviancy, will also be considered. The course will study society's attempts to control, change and institutionalize those acts, individuals or groups that a population may deem unacceptable. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

WST 2000 - Introduction to Women's Studies: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly WST 200 Examines the nature and function of women in society from an interdisciplinary perspective, focusing on the similarity and diversity of women`s experience over time and across cultures. The course will examine topics such as sex role, socialization, political and philosophical perspectives on women`s issues, and women`s accomplishments in history, art, literature, science, health issues and the family. Students will gain an awareness of the limitations of traditional scholarship on women and gain a means of practical application of the new scholarship on women`s roles and nature. This course is one of the statewide Guaranteed Transfer Courses, GT-SS3.

Core Curriculum Requirements (21 Credits)

CRJ 1010 - Intro to Criminal Justice: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): ENG 1021.
Formerly CRJ 110 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. This is a statewide Guaranteed Transfer course in the GT-SS3 category.

CRJ 1025 - Policing Systems

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): CRJ 1010.
Formerly CRJ 125 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 1035 - Judicial Function

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of CRJ 1010.
Formerly CRJ 135 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

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of CRJ 1010.
Formerly CRJ 145 Examines the history and total correctional process from law enforcement through the administration of justice, probation, prisons, correctional institutions and parole. Also examines the principles, theories, phenomena and problems of the crime, society and the criminal justice system from the perspective of criminology and the criminal justice system in general. Emphasizes the role of sociology and other interdisciplinary approaches to the field of corrections and society's response.

CRJ 2005 - Principles of Criminal Law

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of CRJ 1010, CRJ 1025, CRJ 1035, CRJ 1045, and ENG 1021.
Prerequisite(s)/Corequisite(s): COM 1150 and ENG 1022.
Formerly CRJ 205 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 2010 - Constitutional Law

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of CRJ 1010and CRJ 1035.
Prerequisite(s)/Corequisite(s): COM 1150and ENG 1021.
Formerly CRJ 210 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 2030 - Criminology

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of CRJ 1010 and CRJ 1045.
Prerequisite(s)/Corequisite(s): COM 1150 and ENG 1021.
Formerly CRJ 230 Provides an introduction to the study of crime, understanding the causes of crime, and examines, theoretical frameworks and theories to explain criminal behavior. Within a social context, consideration is given to how theories have emerged and understand how social context contributes to explanations of crime. Examination of the nature of crime, crime victimization, crime patterns, types of crime, crime statistics, and criminal behavior is also included.

Transfer Degrees

This degree transfers to the following Colorado public four-year institutions of higher education:

- Colorado State University Global (BS Criminal Justice and Law Enforcement Administration
- Colorado State University, Pueblo (Sociology with a Criminology emphasis)

Early Childhood Teacher Education, AA (with Designation)

CIP 24.0101

See list of Department Chairs on the Personnel page.

Career Opportunities

The Early Childhood Education (ECE) program prepares you for a career in teaching children (birth to age 5). The program can also prepare you to become an early childhood teacher or director in the field of early childhood education.

Program Description

This program prepares you to become a productive, caring and responsible teacher. Classes emphasize child development skills in the areas of language, social, emotional, cognitive and physical development. Classes also focus on cultural diversity among children. You will become familiar with theories concerning child development and ECE, and you will participate in many group discussions and hands-on activities that you can apply in the preschool classroom. You will learn from qualified faculty members who believe in the success of each ECE student.

Before beginning to take classes, you must meet with PCC's Teacher Education faculty advisor to plan a course of study and to examine the list of approved credits for each four-year institution in Colorado.

Program Requirements

Entrance Requirements:

You should demonstrate an interest in the care and well-being of young children. You must also be free from evidence of illness – mental and physical – and free from personal conduct which may be injurious to children as stated in the Colorado Rules and Regulations for Child Care Centers, section 7.702.51.

Total Credits: 60

General Education Core Requirements (33 Credits)

Written Communication (6 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

Mathematics (4 Credits)

MAT 1240 - Mathematics for the Liberal Arts: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 1001 concurrency allowed, or see Basic Skills Assessment
Formerly MAT 120 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. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

Natural and Physical Sciences (8 Credits)

SCI 1055 - Integrated Science I

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly SCI 155 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. Course is for elementary education majors only; both SCI 155 & SCI 1056required. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

SCI 1056 - Integrated Science II

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly SCI 156 Examines earth and biological systems, living and nonliving environments, through the application of fundamental energy and matter concepts. These systems and concepts will be explored in hands-on laboratory experiments. Course is for elementary education majors only; both SCI 1055& SCI 156 required. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

Arts and Humanities (6 Credits)

ART 1110 - Art Appreciation: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly ART 110 Introduces the cultural significance of the visual arts, including media, processes, techniques, traditions, and terminology. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

or

MUS 1020 - Music Appreciation: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly MUS 120 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

or

THE 1005 - Theatre Appreciation: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly THE 105 Includes discussions, workshops and lectures designed to discover, analyze and evaluate all aspects of the theatre experience: scripts, acting, directing, staging, history, criticism and theory. This course is one of the statewide Guaranteed Transfer courses, GT-AH1.

LIT 1015 - Introduction to Literature I: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly LIT 115 Introduces students to fiction, poetry and drama. Emphasizes active and responsive reading. This course is one of the statewide Guaranteed Transfer courses, GT-AH2.

or

LIT 2025 - Introduction to Shakespeare: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at ENG 1021 level or consent of instructor.
Formerly LIT 225 Explores a selection of works by William Shakespeare. It focuses on careful reading and

interpretation of the plays and poems, includes pertinent information about Elizabethan England, and examines formal as well as thematic elements of the selected works. This course is one of the statewide Guaranteed Transfer courses. GT-AH2.

Social and Behavioral Sciences (6 Credits)

GEO 1005 - World Regional Geography: GT-SS2

Credit(s): 3
Lecture Hour(s): 3
Formerly GEO 105 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. This is a statewide Guaranteed Transfer course in the GT-SS2 category.

PSY 1001 - General Psychology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 101 Focuses on the scientific study of behavior including motivation, emotion, physiological psychology, stress and coping, research methods, consciousness, sensation, perception, learning and memory. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

History (3 Credits)

HIS 1210 - U.S. History to Reconstruction: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 121 Explores events, trends, peoples, groups, cultures, ideas and institutions in North America and United States history, including the multiple perspectives of gender, class and ethnicity, between the period when Native American Indians were the sole inhabitants of North America and the American Civil War. Focuses on developing, practicing and strengthening the skills historians use while constructing knowledge in the discipline. This course is one of the statewide Guaranteed Transfer courses, GT-HI1

or

HIS 1220 - U.S. History Since the Civil War: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 122 Explores events, trends, peoples, groups, cultures, ideas and institutions in United States history, including the multiple perspectives of gender, class and ethnicity, between the period of the American Civil War and the present. Focuses on developing, practicing and strengthening the skills historians use while constructing knowledge in the discipline. This course is one of the statewide Guaranteed Transfer courses, GT-HI1.

Additional Required Courses (18 Credits)

ECE 1011 - Introduction to Early Childhood Education

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 101 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 1045 - Introduction to Early Childhood Techniques

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly ECE 102 Focuses on a classroom Seminar and placement in a child care setting. The supervised placement provides the student with the opportunity to observe children, practice appropriate interactions and develop effective guidance and management techniques. Addresses ages birth through 8 years.

ECE 1031 - Guidance Strategies for Young Children

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 103 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 2621 - ECE Curriculum Development: Methods and Techniques

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of ECE 1011, ECE 1045, and ECE 1031.
Formerly ECE 220 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 2381 - Ece Child Growth and Development

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of ECE 1011 and ECE 1045.
Formerly ECE 238 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 2101 - Working with Parents, Families, and Community Systems

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 256 Examines personal attitudes regarding families, family values systems, and how personal attitudes

affect parent-professional partnerships in the early childhood education program. This course covers communication, problem-solving and conflict resolution strategies. Effective activities and resources to support family involvement in the classroom will be created. This course addresses children ages birth through 8 years.

Electives (6 Credits)

Determined by transferring institution

Transfer Degrees

This degree transfers to the following Colorado public four-year institutions of higher education:

- Adams State University (B.A. Early Childhood Education)
- Colorado Mesa University (B.A. Early Childhood Education – Early Childhood Special Education)
- Colorado State University-Fort Collins, (B.S. Early Childhood Education)
- Colorado State University-Pueblo (B.S., Early Childhood Education)
- Fort Lewis College (B.A. Early Childhood Education)
- Metropolitan State University of Denver (B.A. Early Childhood Education)
- University of Colorado, Denver (B.A. Education and Human Development - Early Childhood)
- University of Northern Colorado (B.A. Early Childhood Teacher Education (Birth-Grade 3)

Economics, AA (with Designation)

CIP 24.0101

See list of Department Chairs on the Personnel page.

Career Opportunities

The Associate of Arts Degree with Designation in Economics prepares students to transfer as a junior to a four-year institution in Colorado in order to pursue a bachelor's degree in economics. Bachelor degree curriculums allow students to prepare for graduate school, for teaching careers, or for employment in areas that require economic analysis, such as actuarial science, investment banking, finance or statistics. Students would also be prepared to work in commercial banks, finance companies and insurance companies.

Program Description

The Associate of Arts Degree with Designation in Economics is designed for students who want to transfer to a four-year college or university to pursue a baccalaureate degree in economics. Completion of the AA degree completes the first two years of an economics bachelor's degree and guarantees transfer at junior standing with no more than 60 remaining credits to meet the graduation requirements for a bachelor's degree in economics.

Program Requirements

In addition to the requirements listed below, you must:

1. Earn a minimum of 60 semester hours of course work
2. Earn a minimum of 15 graded semester hours at PCC
3. Earn a minimum of "C" in all coursework for the degree

Consult with a PCC business advisor or transfer advisor to find out which Colorado Statewide Guaranteed Transfer Courses (GT Pathways) or elective courses meet the degree requirements of the four-year college to which you plan to transfer.

To earn an AA degree with Designation in Economics, you must complete at least 60 college-level credits, as described below:

Total Credits: 60

** Refer to CCCS Guaranteed Transfer (GT) - Pathways Courses for a full list of all GT Pathway Courses*

General Education Core Requirements (37 Credits)

(Written) Communication (6 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

Mathematics (5 Credits)

MAT 2410 - Calculus I: GT-MA1

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): MAT 1420.
Formerly MAT 201 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. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

Natural and Physical Sciences (8 Credits)

- Select two GT Pathways Natural and Physical Sciences courses (GT-SC1 **or** GT-SC2), one must be a laboratory (GT-SC1) *

Arts and Humanities (9 Credits)

(Select three courses from any category):

- GT-AH1, GT-AH2, GT-AH3, GT-AH4 *

Social and Behavioral Sciences (6 Credits)

ECO 2001 - Principles of Macroeconomics: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly ECO 201 Focuses on the study of the American economy, stressing the interrelationships among household, business and government sectors. Explores saving and investment decisions, unemployment, inflation, national income accounting, taxing and spending policies, the limits of the market and government, public choice theory, the Federal Reserve System, money and banking, and international trade.

ECO 2002 - Principles of Microeconomics: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly ECO 202 Studies the firm, the nature of cost and how these relate to the economy as a whole. Analyzes economic models of the consumer, perfect competition, monopoly, oligopoly and monopolistic competition. Explores economic issues including market power, population growth, positive and negative externalities, income distribution, poverty and welfare, discrimination, and international economic interdependence.

History (3 Credits)

- Select one GT Pathways History course (GT-HI1) *

Additional Required Courses (3 Credits)

MAT 1260 - Introduction to Statistics: GT-MA1

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 135 Explores and applies data presentation and summarization, introduction to probability concepts and distributions, statistical inference estimation, hypothesis testing, comparison of populations, correlation and regression. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

Electives (20 Credits)

Determined by transferring institution

Transfer Degrees

This degree transfers to the following Colorado public four-year institutions of higher education:

- Adams State University (B.S. Business Administration; Economics emphasis)
- Colorado State University-Fort Collins (B.A. Economics)
- Fort Lewis College – (B.A. Economics; Economics option)
- Metropolitan State University of Denver (B.A. Economics)
- University of Colorado, Boulder (B.A. Economics)
- University of Colorado, Colorado Springs (B.A. Economics)
- University of Colorado, Denver (B.A. Economics)
- University of Northern Colorado (B.A. Economics)
- Western State Colorado University (B.A. Economics)

Elementary Teacher Education, AA (with Transfer Articulation Agreement)

CIP 24.0101

See list of Department Chairs on the Personnel page.

Career Opportunities

The Associate of Arts degree with an emphasis in Elementary Education prepares you to transfer as a junior to a four-year institution in Colorado in order to become an elementary teacher.

Program Description

This program introduces you to the field of education. The course work comprises general education requirements common to all Colorado two- and four-year institutions. It also meets appropriate Colorado Model Content standards for elementary education. Upon transfer, if you have earned the AA degree with an emphasis in Elementary Education, you will be ready to apply for admission to a four-year institution's teacher education program.

Before beginning to take classes, you must meet with PCC's teacher education faculty advisor to plan a course of study and to examine the list of approved credits for each four-year institution in Colorado.

Students interested in majoring in education need to identify the four-year college/university to which they plan to transfer. Each individual institution requires different curriculum electives for graduation.

There are no current statewide articulation agreements in secondary or K-12 education, but students can still effectively pursue these options at PCC.

Emphasis in Elementary Education (Grades K-6)

If you want to teach grades K through 6, you may pursue an Associate of Arts degree with Elementary Education emphasis.

Emphasis in Secondary Education (Grades 7-12)

If you want to teach grades 7 through 12, you should identify the four-year college or university to which you intend to transfer and the appropriate curriculum. You may pursue an Associate of Arts degree with Secondary Education emphasis in one of the following licensure areas:

- English
- Math
- Science
- Social Science (History/Political Science)
- Spanish

Emphasis in K-12 Education

If you would like to teach in the K-12 content areas of art, music or physical education, you should pursue an Associate of Arts degree at PCC. Your advisor will help you select the electives that will be required for your bachelor's degree.

Total Credits: 60

General Education Core Requirements (32 Credits)

Written Communication (6 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

Mathematics (6 Credits)

MAT 1220 - Integrated Math I

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): MAT 0250.
Formerly MAT 155 Engages students in the concepts of school mathematics, including the recognition of numerical and geometric patterns and their application to a variety of mathematical situations; mathematical problem-solving,

reasoning, critical thinking, and communication; algebraic thinking, representation, analysis, manipulation, generalizations and extensions. (This course is only offered in the fall semester.)

MAT 1230 - Integrated Math II

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): MAT 1220.
Formerly MAT 156 Furthers MAT 1220concepts and will include fundamentals of probability, statistics and Euclidean geometry. Mathematical problem-solving, reasoning, critical thinking and communication will continue to be an integral part of this sequence. (This course is only offered in the spring semester.)

Natural and Physical Sciences (8 Credits)

SCI 1055 - Integrated Science I

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly SCI 155 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. Course is for elementary education majors only; both SCI 155 & SCI 1056required. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

SCI 1056 - Integrated Science II

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly SCI 156 Examines earth and biological systems, living and nonliving environments, through the application of fundamental energy and matter concepts. These systems and concepts will be explored in hands-on laboratory experiments. Course is for elementary education majors only; both SCI 1055& SCI 156 required. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

Arts and Humanities (3 Credits)

LIT 1015 - Introduction to Literature I: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly LIT 115 Introduces students to fiction, poetry and drama. Emphasizes active and responsive reading. This course is one of the statewide Guaranteed Transfer courses, GT-AH2.

or

LIT 2001 - World Literature to 1600: GT-AH2

Credit(s): 3
Lecture Hour(s): 3

Corequisite(s): ENG 1021.
Formerly LIT 201 Examines significant writings in world literature from the ancients through the Renaissance. Emphasizes careful readings and understanding of the works and their cultural backgrounds. This course is one of the statewide Guaranteed Transfer courses, GT-AH2.

or

LIT 2002 - World Literature After 1600: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): ENG 1021.
Formerly LIT 202 Examines significant writings in world literature from the 17th century to the present. Emphasizes careful reading and understanding of the works and their cultural backgrounds. This course is one of the statewide Guaranteed Transfer courses, GT-AH2.

or

LIT 2011 - American Literature to Civil War: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): ENG 1021.
Formerly LIT 211 Provides an overview of American literature from the Native American through the 19th-century Romantics. It explores ideas, historical and social contexts, themes and literary characteristics of works in various genres by major writers. This course is one of the statewide Guaranteed Transfer courses, GT-AH2.

Social and Behavioral Sciences (6 Credits)

GEO 1005 - World Regional Geography: GT-SS2

Credit(s): 3
Lecture Hour(s): 3
Formerly GEO 105 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. This is a statewide Guaranteed Transfer course in the GT-SS2 category.

POS 1011 - American Government: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly POS 111 Includes the background of the US Constitution, the philosophy of American government, general principles of the Constitution, federalism and civil liberties. Examines public opinion and citizen participation, political parties, interest groups and the electoral process, and the structure and functions of the national government. This course is one of the statewide Guaranteed Transfer courses, GT-SS1.

History (3 Credits)

HIS 1210 - U.S. History to Reconstruction: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 121 Explores events, trends, peoples, groups, cultures, ideas and institutions in North America and United States history, including the multiple perspectives of gender, class and ethnicity, between the period when Native American Indians were the sole inhabitants of North America and the American Civil War. Focuses on developing, practicing and strengthening the skills historians use while constructing knowledge in the discipline. This course is one of the statewide Guaranteed Transfer courses, GT-HI1

Education Requirements (9 Credits)

Please note: If these credits are not required for the major at a receiving 4-year institution, they will be applied to the bachelor's degree as elective credits towards graduation. Please check with the receiving institution to determine in which way these courses will be applied.

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

EDU 2211 - Introduction to Education

Credit(s): 3
Lecture Hour(s): 3
Formerly EDU 221 Focuses on the historical, social, political, philosophical, cultural and economic forces that shape the United States public school system. Includes current issues of educational reform, technology as it relates to education and considerations related to becoming a teacher in the state of Colorado. Special interest will be paid to the topic of diversity in the K-12 school system.

PSY 2441 - Child Development: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 238 Focuses on the growth and development of the individual from conception through childhood, emphasizing physical, cognitive, emotional and psychosocial factors. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

Other Required Courses (19 Credits)

Determined by transferring institution.

Students must meet with an academic advisor to determine which specific other courses are required pertaining to their emphasis area and transfer institution.

Transfer Degrees

This degree transfers to the following Colorado public four-year institutions of higher education:Adams State University (B.A. Interdisciplinary Studies)

- Colorado Mesa University (B.A. Liberal Arts)
- Colorado Mountain College (B.A. Interdisciplinary Studies)
- Colorado State University-Pueblo (B.S. Liberal Studies)
- Fort Lewis College (B.A. Elementary Education)
- Metropolitan State University of Denver (B.A. Human Development, B.A. Elementary Education)
- University of Colorado, Boulder (B.A. Elementary Education)
- University of Colorado, Colorado Springs (B.A. Inclusive Elementary Education, B.A. Biology, B.A. English Literature, B.A. Geography and Environmental Studies, B.A. History, or B.A. Spanish)
- University of Colorado, Denver (B.A., Elementary Education emphasis; B.A. Education and Human Development – Elementary Education)
- University of Northern Colorado (B.A. Elementary Education)
- Western State Colorado University (B.A. Elementary Education, CLD emphasis)

English, Literature Emphasis, AA (with Designation)

CIP 24.0101

See list of Department Chairs on the Personnel page.

Career Opportunities

The Associate of Arts (AA) Degree with Designation in English prepares the student to transfer as a junior to a four-year institution in Colorado in order to pursue a Bachelor of Arts (BA) degree in English. Students who opt for the Bachelor of Arts in English can choose to work in a wide variety of occupational fields including teaching, journalism, law, publishing, medicine and the fine arts. Once a BA is completed, students may pursue a higher or graduate degree in English, if interested.

Program Description

This program introduces the student to the discipline of English and includes the course work to meet general education requirements that are common to all Colorado four-year institutions. Upon transfer, students from Pueblo Community College who have earned the Associate of Arts (AA) Degree with Designation in English will be ready to complete the last half of a BA in English at a four-year institution.

Program Requirements

Refer to the course requirements listed below. Some courses may have prerequisites of lower level classes or assessment scores. Refer to the course descriptions for these prerequisites.

Total Credits: 60

** Refer to CCCS Guaranteed Transfer (GT) - Pathways Courses for a full list of all GT Pathway Courses*

General Education Core Requirements (34 Credits)

Written Communication (6 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

or

- ENG 1022 - English Composition II: GT-CP2 **Credit(s): 3 and**

ENG 2001 - Composition III: Writing for Public Discourse GT-CO3

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of ENG 1022 with a grade of C or better.
Formerly ENG 201 Provides students with skills necessary to enter into higher-level undergraduate academic discourse or professional workplace writing. ENG 201 extends students' rhetorical knowledge and develops critical reading, thinking and writing strategies in multiple specialized areas of discourse beyond what they encounter in ENG 1022. In ENG 201, students deepen their rhetorical and writing skills by learning to analyze, synthesize and summarize complex texts and incorporate this information into specific writing conventions for a defined discipline. As a more advanced composition course, ENG 201 provides interested students with the opportunity to continue their exploration of expository writing with the added benefit of learning to write for distinct audiences (format, language, level of specificity, length and documentation style). Students will also learn effective editing and revising techniques, discipline-specific writing strategies, and how to extend their mastery of rhetorical strategies. While ENG 201 may be taught with the focus in a variety of disciplines (science writing, gender studies, literary criticism, writing in the humanities, business writing, political geography, philosophy, and so on), every discipline will allow students the opportunity to learn how to communicate with specialized audiences and adapt content to the needs of varying rhetorical situations.

Mathematics (3 Credits)

- Select one GT Pathways Mathematics course (GT- MA1) *, prefer MAT 1240 - Mathematics for the Liberal Arts: GT-MA1

Natural and Physical Sciences (7 Credits)

- Select two GT Pathways Natural and Physical Sciences courses (GT-SC1) *. At least one of these courses must include a laboratory component (GT-SC1) *.

Arts and Humanities (9 Credits)

Note: Courses from the Literature and Humanities category (GT-AH2) may **not** be used to meet this requirement.

- Select three GT Pathways Arts and Humanities courses

Social and Behavioral Sciences (6 Credits)

- Select two GT Pathways Social and Behavioral courses from any category (GT-SS1, GT-SS2, GT-SS3) *

History (3 Credits)

- Select one GT Pathways History Course (GT-HI1) *

Additional Required Courses (18 Credits)

Verbal Communication (3 Credits)

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

or

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

Select five GT Pathways Arts and Humanities Literature (LIT) courses within the GT-AH2 category (15 Credits)

Note: Students are required to take a total of five (5) LIT courses (15 credits), four (4) of which must be at the 200-level. Please consult with your receiving institution regarding best choices for literature courses.

Electives (8 Credits)

Determined by transferring institution.

Recommended elective:

ENG 2021 - Creative Writing I

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 221 Teaches techniques for creative writing. Explores imaginative uses of language through creative genres (fiction, poetry, literary nonfiction) with emphasis on the student's own unique style, subject matter and needs.

Transfer Degrees

This degree transfers to the following Colorado Public Four-Year institutions of higher education:

- Adams State University (B.A. English, Liberal Arts emphasis)
- Colorado Mesa University (B.A. English, Literature concentration)
- Colorado State University-Fort Collins (B.A. English)
- Colorado State University-Pueblo (B.A. English)
- Ft. Lewis College (B.A. English, General Option)
- Metropolitan State University of Denver (B.A. English)
- University of Colorado, Boulder (B.A. English)
- University of Colorado, Colorado Springs (B.A. English)
- University of Colorado, Denver (B.A. English, Literature emphasis)
- University of Northern Colorado (B.A. English, Liberal Arts emphasis)
- Western State Colorado University (B.A. English)

History, AA (with Designation)

CIP 24.0101

See list of Department Chairs on the Personnel page.

Career Opportunities

The Associate of Arts Degree with Designation in History prepares students to transfer as a junior to a four-year institution in Colorado in order to pursue a Bachelor of Arts degree (BA) in history. Students who opt for a bachelor's degree in history can choose to work in several occupational fields including education at multiple levels, historical and/or corporate research, public history and many other related areas of social sciences. Once a BA is completed, students may pursue a higher or graduate degree in history, if interested.

Program Description

The Associate of Arts Degree with Designation in History introduces students to the field of history and includes the course work to meet general education requirements that are common to all Colorado four-year institutions. The degree is designed for students who want to transfer to a four-year college or university to pursue a bachelor's degree in history. Completion of the AA degree completes the first two years of a bachelor's degree in history, and guarantees transfer at junior standing with no more than 60 remaining credits to meet the graduation requirements for a bachelor's degree in history.

Program Requirements

In addition to the requirements listed below, you must:

a. Earn a minimum of 60 semester hours of course work
b. Earn a minimum of 15 graded semester hours at PCC
c. Earn a minimum of "C" in all coursework for the degree

Consult with a PCC Arts and Sciences advisor or transfer advisor to find out which Colorado Statewide Guaranteed Transfer Courses (GT Pathways) or elective courses meet the degree requirements of the four-year college to which you plan to transfer.

To earn an AA degree with a designation in history, you must complete at least 60 college-level credits, as described below:

Total Credits: 60

** Refer to CCCS Guaranteed Transfer (GT) - Pathways Courses for a full list of all GT Pathway Courses*

General Education Core Requirements (34 Credits)

Written Communication (6 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

or

- ENG 1022 - English Composition II: GT-CP2 **Credit(s): 3 and** a GT Pathways Advanced Writing course (GT-CO3) *

Mathematics (3 Credits)

- Select from a GT Pathways Mathematics course (GT-MA1) *, prefer MAT 1240 - Mathematics for the Liberal Arts: GT-MA1

Natural and Physical Sciences (7 Credits)

One of these courses must include a laboratory component

- Select two GT Pathways Natural and Physical Sciences courses (GT-SC1 **or** GT-SC2) *

Arts and Humanities (9 Credits)

- Select three from a GT Pathway course from any category (GT-AH1, GT-AH2, GT-AH3, **or** GT-AH4) *

Social and Behavioral Sciences (6 Credits)

- Select two from a GT Pathway course from any category (GT-SS1, GT-SS2, GT-SS3) *

History (3 Credits)

HIS 1310 - Western Civilization: Antiquity-1650: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 101 Explores a number of events, peoples, groups, ideas, institutions and trends that have shaped western civilization from the prehistoric era to 1650. Reflects the multiple perspectives of gender, class, religion and ethnic groups. Focuses on developing, practicing and strengthening the skills historians use while constructing knowledge in this discipline. This course is one of the statewide Guaranteed Transfer courses, GT-HI1.

or

HIS 1110 - The World: Antiquity-1500: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 111 Explores a number of peoples, groups, ideas, institutions and trends that have shaped world history from the prehistoric era to 1500. Reflects the multiple perspectives of gender, class, religion and ethnic groups in a broad global sense. Focuses on the common denominators among all people. This approach goes beyond political borders to provide a better appreciation for different cultures. Focuses on developing, practicing and strengthening the skills historians use while constructing knowledge in this discipline. This course is one of the statewide Guaranteed Transfer courses, GT-HI1.

Additional Required History Courses (15 Credits)

HIS 1320 - Western Civ: 1650-present: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 102 Explores a number of events, peoples, groups, ideas, institutions and trends that have shaped western civilization from 1650 to the present. Reflects the multiple perspectives of gender, class, religion and ethnic groups. Focuses on developing, practicing and strengthening the skills historians use while constructing knowledge in this discipline. This course is one of the statewide Guaranteed Transfer courses, GT-HI1.

or

HIS 1120 - The World: 1500-present: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 112 Explores a number of peoples, groups, ideas, institutions and trends that have shaped world history from 1500 to the present. Reflects the multiple perspectives of gender, class, religion and ethnic groups in a broad global sense. Focuses on the common denominators among all people. This approach goes beyond political borders to provide a better appreciation for different cultures. Focuses on developing, practicing and strengthening the skills historians use while constructing knowledge in this discipline. This course is one of the statewide Guaranteed Transfer courses, GT-HI1.

HIS 1210 - U.S. History to Reconstruction: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 121 Explores events, trends, peoples, groups, cultures, ideas and institutions in North America and United States history, including the multiple perspectives of gender, class and ethnicity, between the period when Native American Indians were the sole inhabitants of North America and the American Civil War. Focuses on developing, practicing and strengthening the skills historians use while constructing knowledge in the discipline. This course is one of the statewide Guaranteed Transfer courses, GT-HI1

HIS 1220 - U.S. History Since the Civil War: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 122 Explores events, trends, peoples, groups, cultures, ideas and institutions in United States history, including the multiple perspectives of gender, class and ethnicity, between the period of the American Civil War and the present. Focuses on developing, practicing and strengthening the skills historians use while constructing knowledge in the discipline. This course is one of the statewide Guaranteed Transfer courses, GT-HI1.

- Choose one additional GT Pathways HIS course (GT-HI1) *

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

or

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

Electives (11 Credits)

Determined by transferring institution
Note: Students planning to transfer to University of Colorado Boulder must take either HIS 1310 or HIS 1320 to fulfill this requirement.

Students planning to transfer to CSU-Fort Collins are advised to complete at least two semesters of one college-level foreign language.

Transfer Degrees

This degree transfers to the following Colorado public four-year institutions of higher education:

- Adams State University (B.A. History, Anthropology, & Political Science: History)
- Colorado Mesa University (B.A. History; History or Secondary Education concentrations)
- Colorado State University-Ft. Collins (B.A. History; General History concentration)
- Colorado State University-Pueblo (B.A. History; General emphasis; B.S. History; General emphasis)
- Fort Lewis College (B.A. History; United States Option)
- Metropolitan State University of Denver (B.A. History)
- University of Colorado, Boulder (B.A. History)
- University of Colorado, Colorado Springs (B.A. History)
- University of Colorado, Denver (B.A. History)
- University of Northern Colorado (B.A. History; Liberal Arts emphasis)
- Western State Colorado University (B.A. History)

Philosophy, AA (with Designation)

CIP 24.0101

See list of Department Chairs on the Personnel page.

Career Opportunities

The Associate of Arts (AA) Degree with Designation in Philosophy prepares the student to transfer as a junior to a four-year institution in Colorado in order to pursue a Bachelor of Arts (BA) degree in Philosophy. Students who opt for the Bachelor of Arts in Philosophy can choose to work in several occupational fields, including law, government, business, science, clergy, teaching and academia. Once a BA is completed, students may pursue a higher or graduate degree in Philosophy, if interested.

Program Description

This program introduces the student to the field of Philosophy and includes the course work to meet general education requirements that are common to all Colorado four-year institutions, as well a specific courses in various subfields of Philosophy. Upon transfer, students from Pueblo Community College who have earned the Associate of Arts (AA) Degree with Designation in Philosophy will be ready to complete the last half of a BA in Philosophy at a four-year institution.

Program Requirements

Refer to the course requirements listed below. Some courses may have prerequisites of lower level classes or assessment scores. Refer to the course descriptions for these prerequisites.

Total Credits: 60

** Refer to CCCS Guaranteed Transfer (GT) - Pathways Courses for a full list of all GT Pathway Courses*

General Education Core Requirements (31 Credits)

Written Communication (6 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

or

- ENG 1022 - English Composition II: GT-CP2 **Credit(s): 3 and** a GT Pathways Advanced Writing Course (GT-CO3) *

Mathematics (3 Credits)

- Select one GT Pathways Mathematics course (GT-MA1) *, prefer MAT 1240 - Mathematics for the Liberal Arts: GT-MA1

Natural and Physical Sciences (7 Credits)

- Select two GT Pathways Natural and Physical Sciences courses (GT-SC1, GT-SC2) *. At least one of these courses must include a laboratory component (GT-SC1) *

Arts and Humanities (6 Credits)

- Select two GT Pathways Arts and Humanities courses from any category (GT-AH1, GT-AH2, GT-AH4) *

Social and Behavioral Sciences (6 Credits)

- Select two GT Pathways Social and Behavioral courses from any category (GT-SS1, GT-SS2, GT-SS3) *

History (3 Credits)

- Select one GT Pathways History Course (GT-HI1) *

Additional Required Philosophy Courses (15 Credits)

PHI 1011 - Introduction to Philosophy: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 111 ompletion with a minimum C? grade guarantees transfer and application of credit in this GT Pathways category.

PHI 1012 - Ethics: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 112 Examines human life, experience and thought in order to discover and develop the principles and values for pursuing a more fulfilled existence. Theories designed to justify ethical judgments are applied to a selection of contemporary personal and social issues. This course is one of the statewide Guaranteed Transfer courses, GT-AH3.

PHI 1013 - Logic: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 113 Studies effective thinking using language-oriented logic. Provides tools and develops skills for creative and critical thinking. Emphasizes the development of decision-making and problem-solving. This course is one of the statewide Guaranteed Transfer courses, GT-AH3.

Choose Two Courses from the Following: (6 Credits)

PHI 2014 - Philosophy of Religion: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 214 Focuses on the critical examination of the fundamental concepts, ideas and implications of religion. Includes the nature of God, the varieties of religious experience, argument concerning God`s existence, the problem of evil, faith and reason, religion and human destiny, and the connection between religion and ethics. This course is one of the statewide Guaranteed Transfer courses, GT-AH3.

PHI 2018 - Environmental Ethics: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 218 Critically analyzes theories of value of the natural world. Topics include the relation between scientific and moral principles; theories of the moral worth of persons, animals, plants and other natural objects; historical, religious and cultural influences on conceptions of nature; alternative accounts of human relationships and

responsibilities to nature, including deep ecology and eco-feminism; and the connection between moral and political values and economic policies. This course is one of the statewide Guaranteed Transfer courses, GT-AH3.

PHI 2005 - Business Ethics: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 205 Examines major ethical theories and then applies ethical decision-making criteria to various moral issues and challenges in a business environment. This course includes issues such as job discrimination, worker's rights, consumerism, advertising, whistle-blowing, product safety, responsibility to the environment, as well as compassionate and fair responsibility to society. This is a statewide Guaranteed Transfer course in the GT-AH3 category. GT-AH3

PHI 2020 - Philosophy of-Death and Dying: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 220 Explores the major philosophical questions surrounding death and dying: the metaphysical arguments for and against the existence of a soul and life after bodily death; the epistemological assessment of arguments for the soul and life after death; the ethical justifications taken on positions such as rational suicide and physician assisted suicide, as well as a focus on philosophy's existentialist contribution to questions about the meaning of life and the meaning of death. This course is one of the statewide Guaranteed Transfer courses. GT-AH3.

Electives (14 Credits)

Determined by transferring institution

Transfer Degrees

This degree transfers to the following Colorado Public Four-Year institutions of higher education:

- Colorado State University-Fort Collins (B.A. Philosophy, General Philosophy concentration)
- Fort Lewis College (B.A. Philosophy)
- Metropolitan State University of Denver (B.A. Philosophy)
- University of Colorado, Boulder (B.A. Philosophy)
- University of Colorado, Colorado Springs (B.A. Philosophy)
- University of Colorado, Denver (B.A. Philosophy)
- University of Northern Colorado (B.A. Philosophy)

Political Science, AA (with Designation)

CIP 24.0101

See list of Department Chairs on the Personnel page.

Career Opportunities

The Associate of Arts Degree with Designation in Political Science prepares students to transfer as a junior to a four-year institution in Colorado in order to pursue a Bachelor of Arts degree (BA) in political science. Students who opt for

a bachelor's degree in political science may choose to work in federal, state and local governments, law, business, international organizations, nonprofit organizations, campaign management and polling, journalism, electoral politics, research or education. Once a BA is completed, students may pursue a higher or graduate degree in political science if interested.

Program Description

The Associate of Arts Degree with Designation in Political Science includes the course work to meet general education requirements that are common to all Colorado four-year institutions. The degree is designed for students who want to transfer to a four-year college or university to pursue a bachelor's degree in political science. Completion of the AA degree completes the first two years of a bachelor's degree and guarantees transfer at junior standing with no more than 60 remaining credits to meet the graduation requirements for a bachelor's degree in political science.

Program Requirements

In addition to the requirements listed below, you must:

a. Earn a minimum of 60 semester hours of course work
b. Earn a minimum of 15 graded semester hours at PCC
c. Earn a minimum of "C" in all coursework for the degree

Consult with a PCC Arts and Sciences advisor or transfer advisor to find out which Colorado Statewide Guaranteed Transfer Courses (GT Pathways) or elective courses meet the degree requirements of the four-year college to which you plan to transfer.

To earn an AA degree with a designation in political science, you must complete at least 60 college-level credits, as described below:

Total Credits: 60

** Refer to CCCS Guaranteed Transfer (GT) - Pathways Courses for a full list of all GT Pathway Courses*

General Education Core Requirements (32 Credits)

Written Communication (6 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.

Formerly ENG 122 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 persuasive papers that incorporate research.

or

- ENG 1022 - English Composition II: GT-CP2 **Credit(s): 3 and** a GT Pathways Advanced Writing course (GT-CO3) *

Mathematics (3 Credits)

- Select from a GT Pathways Mathematics course (GT-MA1), prefer MAT 1260 *

Natural and Physical Sciences (8 Credits)

- Select two GT Pathways Natural and Physical Sciences courses (GT-SC1) *

Arts and Humanities (6 Credits)

Select two GT Pathway courses from any category

- (GT-AH1, GT-AH2, GT-AH3, GT-AH4) *

Social and Behavioral Sciences (6 Credits)

ECO 2001 - Principles of Macroeconomics: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly ECO 201 Focuses on the study of the American economy, stressing the interrelationships among household, business and government sectors. Explores saving and investment decisions, unemployment, inflation, national income accounting, taxing and spending policies, the limits of the market and government, public choice theory, the Federal Reserve System, money and banking, and international trade.

ECO 2002 - Principles of Microeconomics: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly ECO 202 Studies the firm, the nature of cost and how these relate to the economy as a whole. Analyzes economic models of the consumer, perfect competition, monopoly, oligopoly and monopolistic competition. Explores economic issues including market power, population growth, positive and negative externalities, income distribution, poverty and welfare, discrimination, and international economic interdependence.

History (3 Credits)

- Select one GT Pathways History course (GT-HI1) *

Additional Required Political Science Courses (12 Credits)

POS 2020 - Introduction to Political Science: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly POS 105 Focuses on a survey of the discipline of political science, including political philosophy and ideology, democratic and nondemocratic governments and processes, and international relations. This course is one of the statewide Guaranteed Transfer courses, GT-SS1.

POS 1011 - American Government: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly POS 111 Includes the background of the US Constitution, the philosophy of American government, general principles of the Constitution, federalism and civil liberties. Examines public opinion and citizen participation, political parties, interest groups and the electoral process, and the structure and functions of the national government. This course is one of the statewide Guaranteed Transfer courses, GT-SS1.

- POS 205 - OFFERED ONLINE
- POS 225 - OFFERED ONLINE

Electives (16 Credits)

Determined by transferring institution

Transfer Degrees

This degree transfers to the following Colorado public four-year institutions of higher education:

- Adams State University (B.A. History, Anthropology, & Political Science: Political Science)
- Colorado Mesa University (B.A. Political Science)
- Colorado State University-Fort Collins (B.A. Political Science)
- Colorado State University-Pueblo (B.A. Political Science; B.S. Political Science)
- Fort Lewis College (B.A. Political Science)
- Metropolitan State University of Denver (B.A. Political Science)
- University of Colorado, Boulder (B.A. Political Science)
- University of Colorado, Colorado Springs (B.A. Political Science)
- University of Colorado, Denver (B.A. Political Science)
- University of Northern Colorado (B.A. Political Science)
- Western State Colorado University (B.A. Politics & Government)

Psychology, AA (with Designation)

CIP 24.0101

See list of Department Chairs on the Personnel page.

Career Opportunities

The Associate of Arts Degree with Designation in Psychology prepares students to transfer as a junior to a four-year institution in Colorado in order to pursue a Bachelor of Arts degree (BA) in psychology. Much of the coursework for BA and BS degrees in psychology tends to overlap (for example, social science requirements and core courses), but those with a BA degree are geared toward more modern scientific psychology – how we adapt to rapidly changing social and physical environments. Students who opt for the Bachelor of Arts in Psychology can choose to work in the human services field (crisis intervention or case management) or in business areas (human resources, personnel or management). Once a BA is completed, students may pursue a higher degree in psychology, if interested.

Program Description

This program introduces the student to the field of psychology and includes the coursework to meet general education requirements that are common to all Colorado four-year institutions, as well a specific courses in various subfields of psychology. Upon transfer, students from Pueblo Community College who have earned the Associate of Arts (AA) Degree with Designation in Psychology will be ready to complete the last half of a BA in Psychology at a four-year institution.

Program Requirements

In addition to the requirements listed below, you must:

a. Earn a minimum of 60 semester hours of course work
b. Earn a minimum of 15 graded semester hours at PCC
c. Earn a minimum of "C" in all coursework for the degree

Consult with a PCC Arts and Sciences advisor or transfer advisor to find out which Colorado Statewide Guaranteed Transfer Courses (GT Pathways) or elective courses meet the degree requirements of the four-year college to which you plan to transfer.

To earn an AA degree with a designation in psychology, you must complete at least 60 college-level credits, as described below:

Total Credits: 60

** Refer to CCCS Guaranteed Transfer (GT) - Pathways Courses for a full list of all GT Pathway Courses*

General Education Core Requirements (34-36 Credits)

Written Communication (6 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

or

- ENG 1022 - English Composition II: GT-CP2 **Credit(s): 3 and** a GT C03 course

Mathematics (3-4 Credits)

- One GT Pathways course (GT-MA1), prefer MAT 1260 - Introduction to Statistics: GT-MA1, except:

Colorado Mesa University

- Colorado Mesa University requires either MAT 1240; or MAT 1340;

Colorado State University-Pueblo

- Colorado State University-Pueblo prefers MAT 1340;

Fort Lewis College

- Fort Lewis college requires MAT 1260;

University of Colorado Boulder

- University of Colorado Boulder requires MAT 1340 or higher;

University of Colorado, Colorado Springs

- University of Colorado, Colorado Springs requires MAT 1340;

Western State Colorado University

- Western State Colorado University requires MAT 1340

Natural and Physical Sciences (7-8 Credits)

- One GT Pathways Biology course. Must be GT-SC1 course with lab
- One GT Pathways GT-SC1 course of the student's choosing.

Arts and Humanities (9 Credits)

No more than two courses from any one category

- Select three GT Pathways Arts & Humanities Courses (GT-AH1, GT-AH2, GT-AH3, GT-AH4) *

Social and Behavioral Sciences (6 Credits)

- (Select two GT Pathways Social & Behavioral Science courses (GT-SS1, GT-SS2, GT-SS3) *

History (3 Credits)

- Select one GT Pathway course (GT-HI1) *

Additional Required Psychology Courses (18 Credits)

PSY 1001 - General Psychology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 101 Focuses on the scientific study of behavior including motivation, emotion, physiological psychology, stress and coping, research methods, consciousness, sensation, perception, learning and memory. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 1002 - General Psychology II: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 102 Focuses on the scientific study of behavior including cognition, language, intelligence, psychological assessment, personality, abnormal psychology, therapy, lifespan development and social psychology. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

- Three GT Pathways Psychology courses (GT-SS3) **Credits(s): 9** *

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

or

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

Electives (6-8 Credits)

Determined by transferring institution

Transfer Degrees

This degree transfers to the following Colorado public four-year institutions of higher education:

- Adams State University (B.A. Psychology; Developmental, Clinical, Sport Psychology, or Psychology emphasis)
- Colorado Mesa University (B.A. Psychology; Psychology or Counseling Psychology concentrations)
- Colorado State University-Pueblo (B.A. Psychology)
- Fort Lewis College (B.A. Psychology)
- Metropolitan State University of Denver (B.A. Psychology)
- University of Colorado, Boulder (B.A. Psychology)
- University of Colorado, Colorado Springs (B.A. Psychology)
- University of Colorado, Denver (B.A. Psychology)
- University of Northern Colorado (B.A. Psychology)
- Western State Colorado University (B.A. Psychology)

Public Health, DwD

See list of Department Chairs on the Personnel page.

Total Credits: 60

Fall-Year 1 (15)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

PSY 1001 - General Psychology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 101 Focuses on the scientific study of behavior including motivation, emotion, physiological psychology, stress and coping, research methods, consciousness, sensation, perception, learning and memory. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

PHI 1012 - Ethics: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 112 Examines human life, experience and thought in order to discover and develop the principles and values for pursuing a more fulfilled existence. Theories designed to justify ethical judgments are applied to a selection of contemporary personal and social issues. This course is one of the statewide Guaranteed Transfer courses, GT-AH3.

HIS 1220 - U.S. History Since the Civil War: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 122 Explores events, trends, peoples, groups, cultures, ideas and institutions in United States history, including the multiple perspectives of gender, class and ethnicity, between the period of the American Civil War and the present. Focuses on developing, practicing and strengthening the skills historians use while constructing knowledge in the discipline. This course is one of the statewide Guaranteed Transfer courses, GT-HI1.

Spring-Year 1 (17)

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

MAT 1260 - Introduction to Statistics: GT-MA1

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 135 Explores and applies data presentation and summarization, introduction to probability concepts and distributions, statistical inference estimation, hypothesis testing, comparison of populations, correlation and regression. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

BIO 1111 - General College Biology I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): ENG 1021
Formerly BIO 111 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.

PSY 2440 - Human Growth and Development: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 235 Examines human development from conception through death, emphasizing physical, cognitive, emotional and psychosocial factors. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PHI 1013 - Logic: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 113 Studies effective thinking using language-oriented logic. Provides tools and develops skills for creative and critical thinking. Emphasizes the development of decision-making and problem-solving. This course is one of the statewide Guaranteed Transfer courses, GT-AH3.

Fall-Year 2 (14)

BIO 1112 - General College Biology II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Corequisite(s): ENG 1021.
Formerly BIO 112 A continuation of Biology I. Includes ecology, evolution, classification, structure, and function in plants and animals. This course includes laboratory experience.

SOC 2031 - The Sociology of Deviant Behavior: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 231 Examines the nature, identification, and explanation of deviant categories. Theories and philosophies, as well as methods of treatment related to deviancy, will also be considered. The course will study society's attempts to control, change and institutionalize those acts, individuals or groups that a population may deem unacceptable. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

LIT 1015 - Introduction to Literature I: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly LIT 115 Introduces students to fiction, poetry and drama. Emphasizes active and responsive reading. This course is one of the statewide Guaranteed Transfer courses, GT-AH2.

PSY 2221 - Social Psychology: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 226 Focuses on the behavior of humans in social settings, including attitudes, aggression, conformity, cooperation and competition, prejudice and interpersonal attraction. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

Spring-Year 2 (16)

PSY 2552 - Abnormal Psychology: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): PSY 1001 or Department Chair Approval.
Formerly PSY 249 Examines abnormal behavior and its classification, causes, treatment and prevention. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2222 - Psychology of Death and Dying: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 227 Examines the philosophies of life and death, emphasizing dying, death, mourning and the consideration of one's own death. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2333 - Health Psychology: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 240 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. This is a statewide Guaranteed Transfer course in the GT-SS3 category. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

SOC 2005 - Sociology of Family Dynamics: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 205 Develops an understanding of marriage, family and kinship. It examines the family as an institution and how social, cultural and personal factors influence family relations. The stability and diversity of the family will be explored, along with current trends and some alternative lifestyles. This course is one of statewide Guaranteed Transfer courses, GT-SS3.

BIO 2104 - Microbiology with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 204 Designed for health science majors. Examines microorganisms with an emphasis on their structure, development, physiology, classification and identification. The laboratory experience includes culturing, identifying and controlling microorganisms with an emphasis on their role in infectious disease.

Social Work, AA (with Transfer Articulation Agreement)

CIP 24.0101

See list of Department Chairs on the Personnel page.

Career Opportunities

The Associate of Arts degree with an emphasis in Social Work prepares students to transfer as a junior to a four-year institution in order to earn a bachelor's degree in social work. Social workers are professionals who are specially trained to work with people to provide a variety of services to individuals, families, groups or even communities. Social workers are employed in many different settings including schools, corrections, victims programs, child welfare, nursing homes, foster care agencies, domestic violence shelters and homeless programs.

Program Description

This program introduces students to the field of social work and includes general education requirements as well as specific courses in the area of social work. The courses included in this program are part of an articulation agreement with Colorado State University-Pueblo. Upon transfer to CSU-Pueblo, students who have earned the AA degree with an emphasis in social work will be ready to apply for admission to the social work program.

Program Requirements

Students interested in the field of social work should be aware that social workers must adhere to a strict code of ethics and values that are meant to protect the dignity and worth of clients and the profession. Social work students should be prepared to challenge their own attitudes, values and beliefs in order to be successful in the field.

Total Credits: 60

** Refer to CCCS Guaranteed Transfer (GT) - Pathways Courses for a full list of all GT Pathways Courses*

General Education Requirements (38 Credits)

Communication (9 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

Mathematics (3 Credits)

MAT 1260 - Introduction to Statistics: GT-MA1

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 135 Explores and applies data presentation and summarization, introduction to probability concepts and distributions, statistical inference estimation, hypothesis testing, comparison of populations, correlation and regression. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

Natural and Physical Sciences (8 Credits)

BIO 1005 - Science of Biology with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly BIO 105 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 - as is the impact of biological science on society. Includes laboratory experiences. Designed for non-science majors.

- Select one additional GT Pathways Natural and Physical Science course. The course must include a laboratory component (GT-SC1) *

Arts and Humanities (9 Credits)

PHI 1012 - Ethics: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 112 Examines human life, experience and thought in order to discover and develop the principles and values for pursuing a more fulfilled existence. Theories designed to justify ethical judgments are applied to a selection of contemporary personal and social issues. This course is one of the statewide Guaranteed Transfer courses, GT-AH3.

- Select two additional GT Pathways courses from either Arts and Expression, Literature and Humanities, Ways of Thinking **or** Foreign Languages (GT-AH1, AH2, AH3, **or** AH4) *

Social and Behavioral Sciences (9 Credits)

HIS 1220 - U.S. History Since the Civil War: GT-HI1

Credit(s): 3
Lecture Hour(s): 3

Formerly HIS 122 Explores events, trends, peoples, groups, cultures, ideas and institutions in United States history, including the multiple perspectives of gender, class and ethnicity, between the period of the American Civil War and the present. Focuses on developing, practicing and strengthening the skills historians use while constructing knowledge in the discipline. This course is one of the statewide Guaranteed Transfer courses, GT-HI1.

POS 1011 - American Government: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly POS 111 Includes the background of the US Constitution, the philosophy of American government, general principles of the Constitution, federalism and civil liberties. Examines public opinion and citizen participation, political parties, interest groups and the electoral process, and the structure and functions of the national government. This course is one of the statewide Guaranteed Transfer courses, GT-SS1.

PSY 1001 - General Psychology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 101 Focuses on the scientific study of behavior including motivation, emotion, physiological psychology, stress and coping, research methods, consciousness, sensation, perception, learning and memory. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

Electives (28 Credits)

AAA 1009 - Advanced Academic Achievement

Credit(s): 3
Lecture Hour(s): 3
Formerly AAA 109 Examines theories and practices associated with successful learning to enhance college success. Recommended for new and returning students, this course study areas including education and career planning, effective communication, personal management, critical and creative thinking, development of community and awareness of diversity, leadership, and techniques for successful academic performance.

ETH 2024 - Introduction to Chicano Studies

Credit(s): 3
Lecture Hour(s): 3
Formerly ETH 224 Introduces students to skills development in multicultural education. Covers Chicano history, migration and labor, education, law and Chicano culture.

HWE 1062 - Health and Fitness

Credit(s): 3
Lecture Hour(s): 3
Formerly HWE 111 Studies health and fitness in the US today. The course will look at personal health issues, managing stress, nutrition and health lifestyles.

PSY 2440 - Human Growth and Development: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 235 Examines human development from conception through death, emphasizing physical, cognitive, emotional and psychosocial factors. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

SOC 1001 - Introduction to Sociology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 101 Examines the basic concepts, theories and principles of sociology as well as human culture, social groups, and the social issues of age, gender, class and race. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

SWK 1000 - Introduction to Social Work

Credit(s): 3
Lecture Hour(s): 3
Formerly SWK 100 Introduces students to the philosophy of the social work profession including the knowledge, values, ethics, roles and skills inherent to generalist social work.

SWK 2010 - Human Behavior in the Social Environment I

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of PSY 1001 and SOC 1001 .
Prerequisite(s)/Corequisite(s): SWK 1000.
Formerly SWK 201 Focuses on the person in environment throughout the lifespan with an examination of the relationship between biological, psychological, social, spiritual and cultural systems.

SWK 2020 - Human Behavior in the Social Environment II

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of SWK 2010
Formerly SWK 202 Focus in this course is on an understanding and analysis of larger social systems which include the family, groups, communities and organizations. Emphasis on social systems as an organizing theoretical framework for understanding social functioning and change.

SWK 2050 - Social Welfare in the United States

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): SWK 1000 (concurrency allowed)
Prerequisite(s)/Corequisite(s): SWK 1000.
Formerly SWK 205 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.

WST 2000 - Introduction to Women's Studies: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly WST 200 Examines the nature and function of women in society from an interdisciplinary perspective, focusing on the similarity and diversity of women`s experience over time and across cultures. The course will examine topics such as sex role, socialization, political and philosophical perspectives on women`s issues, and women`s accomplishments in history, art, literature, science, health issues and the family. Students will gain an awareness of the limitations of traditional scholarship on women and gain a means of practical application of the new scholarship on women`s roles and nature. This course is one of the statewide Guaranteed Transfer Courses, GT-SS3.

Sociology, AA (with Designation)

CIP 24.0101

See list of Department Chairs on the Personnel page.

Career Opportunities

The Associate of Arts Degree with Designation in Sociology prepares students to transfer as a junior to a four-year institution in Colorado in order to pursue a Bachelor of Arts degree (BA) in sociology. Students who opt for a bachelor's degree in sociology may choose to work in the criminal justice system, business and industry, research and planning, agencies, government, education or advocacy. Once a BA is completed, students may pursue a higher or graduate degree in sociology if interested.

Program Description

The Associate of Arts Degree with Designation in Sociology includes the course work to meet general education requirements that are common to all Colorado four-year institutions. The degree is designed for students who want to transfer to a four-year college or university to pursue a bachelor's degree in sociology. Completion of the AA degree completes the first two years of a bachelor's degree and guarantees transfer at junior standing with no more than 60 remaining credits to meet the graduation requirements for a bachelor's degree in sociology.

Program Requirements

In addition to the requirements listed below, you must:

a. Earn a minimum of 60 semester hours of course work
b. Earn a minimum of 15 graded semester hours at PCC
c. Earn a minimum of "C" in all coursework for the degree

Consult with a PCC Arts and Sciences advisor or transfer advisor to find out which Colorado Statewide Guaranteed Transfer Courses (GT Pathways) or elective courses meet the degree requirements of the four-year college to which you plan to transfer.

To earn an AA Degree with Designation in Sociology, you must complete at least 60 college-level credits, as described below:

Total Credits: 60

** Refer to CCCS Guaranteed Transfer (GT) - Pathways Courses for a full list of all GT Pathway Courses*

General Education Core Requirements (35-36 Credits)

Written Communication (6 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

or

- ENG 1022 - English Composition II: GT-CP2 **Credit(s): 3 and** a GT C03 course

Mathematics (3-4 Credits)

- One GT Pathways course (GT-MA1), prefer MAT 1260 - Introduction to Statistics: GT-MA1: except:

Adams State University

- Adams State University prefers MAT 1340 - College Algebra: GT-MA1:

Colorado Mesa University

- Colorado Mesa University requires either MAT 1240 - Mathematics for the Liberal Arts: GT-MA1 **or** MAT 1340 - College Algebra: GT-MA1;

University of Colorado Denver

- University of Colorado Denver requires MAT 1340 - College Algebra: GT-MA1 **or** MAT 1320 - Finite Mathematics: GT-MA1 **or** MAT 1260 - Introduction to Statistics: GT-MA1;

Western State Colorado University

- Western State Colorado University requires MAT 1240 - Mathematics for the Liberal Arts: GT-MA1 **or** MAT 1340 - College Algebra: GT-MA1

Natural and Physical Sciences (8 Credits)

- Select two GT Pathways Natural and Physical Sciences courses: GT-SC1 *

Arts and Humanities (9 Credits)

- Any three approved GT Pathways Arts & Humanities courses (GT-AH1, GT-AH2, GT-AH3, GT-AH4 *

Social and Behavioral Sciences (6 Credits)

- Select two GT Pathways Social and Behavioral Sciences courses (GT-SS1, GT-SS2, GT-SS3 *

History (3 Credits)

- Select one GT Pathways History course: GT-HI1 *

Additional Required Sociology Courses (18 Credits)

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

or

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

SOC 1001 - Introduction to Sociology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 101 Examines the basic concepts, theories and principles of sociology as well as human culture, social groups, and the social issues of age, gender, class and race. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

SOC 1002 - Introduction to Sociology II: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 102 Examines social institutions and organizations from the macro perspective. Emphasizes issues of social change, demography, social movements, and conflicts and trends within education, religion, family, political and economic structures. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

- Choose three additional GT Pathways SOC courses (GT-SS3) **Credit(s): 9** *

Electives (6-7 Credits)

Determined by transferring institution

Transfer Degrees

This degree transfers to the following Colorado public four-year institutions of higher education:

- Adams State University (B.A. Sociology; Criminology or Social Welfare emphasis)
- Colorado Mesa University (B.A. Sociology; Sociology concentration)
- Colorado State University-Fort Collins (B.A. Sociology; General Sociology concentration)
- Colorado State University-Pueblo (BA Sociology; B.S. Sociology)
- Fort Lewis College (B.A. Sociology; Human Services-General option)
- Metropolitan State University of Denver (B.A. Sociology)
- University of Colorado, Boulder (B.A. Sociology)
- University of Colorado, Colorado Springs (B.A. Sociology)
- University of Colorado, Denver (B.A. Sociology)
- University of Northern Colorado (B.A. Sociology; all emphasis)
- Western State Colorado University (B.A. Sociology)

Studio Art, AA (with Designation)

CIP 24.0101

See list of Department Chairs on the Personnel page.

Career Opportunities

The Associate of Arts (AA) Degree with Designation in Art History prepares the student to transfer as a junior to a four-year institution in Colorado in order to pursue a Bachelor of Arts (BA) or Bachelor of Fine Arts (BFA) degree in Art or Studio Art. Students who opt for the Bachelor of Arts in Studio Art can choose to work in several occupational fields, including museums, galleries, commercial art, education, media, photography and academia. Once a BA or BFA is completed, students may pursue a higher or graduate degree in Art, if interested.

Program Description

This program introduces the student to the field of Studio Art and includes the course work to meet general education requirements that are common to all Colorado four-year institutions, as well a specific courses in various subfields of Studio Art. Upon transfer, students from Pueblo Community College who have earned the Associate of Arts (AA) Degree with Designation in Studio Art will be ready to complete the last half of a BA or BFA in Studio Art at a four-year institution.

Program Requirements

Refer to the course requirements listed below. Some courses may have prerequisites of lower level classes or assessment scores. Refer to the course descriptions for these prerequisites.

Total Credits: 60

** Refer to CCCS Guaranteed Transfer (GT) - Pathways Courses for a full list of all GT Pathway Courses*

General Education Core Requirements (31 Credits)

Written Communication (6 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

or

- ENG 1022 - English Composition II: GT-CP2 **Credit(s): 3 and** a GT Pathways Advanced Writing Course (GT-CO3) *

Mathematics (3 Credits)

- Select one GT Pathways Mathematics course (GT- MA1) *, prefer MAT 1240 - Mathematics for the Liberal Arts: GT-MA1

Natural and Physical Sciences (7 Credits)

- Select two GT Pathways Natural and Physical Sciences courses (GT-SC1, GT-SC2) *. At least one of these courses must include a laboratory component (GT-SC1) *

Arts and Humanities (6 Credits)

Note: Courses from the Arts and Expression category (GT-AH1) may not be used to meet this requirement

- Select two GT Pathways Arts and Humanities courses from any category (GT-AH2, GT-AH3, GT-AH4) *

Social and Behavioral Sciences (6 Credits)

- Select two GT Pathways Social and Behavioral courses from any category (GT-SS1, GT-SS2, GT-SS3) *

History (3 Credits)

- Select one GT Pathways History Course (GT-HI1) *

Additional Required Studio Art Courses (21 Credits)

ART 1111 - Art History Ancient to Medieval: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly ART 111 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

ART 1112 - Art History Renaissance to Modern: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly ART 112 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

ART 1201 - Drawing I

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 121 Investigates the various approaches and media that students need to develop drawing skills and visual perception.

ART 1002 - Visual Concepts 2-D Design

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 131 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

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 132 Introduces the fundamentals of three-dimensional design, form, and space. The course applies the elements and principles of design to three-dimensional problems.

ART 1202 - Drawing II

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 221 Explores expressive drawing techniques with an emphasis on formal composition, black and white, and color media and content or thematic development.

or

ART 1203 - Figure Drawing I

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 128 Introduces the basic techniques of drawing the human figure.

- Select one additional 3-credit Studio Art course **Credit(s): 3**

Electives (8 Credits)

Determined by transferring institution;

Note: Students planning to transfer to Colorado State University-Fort Collins will be required to complete two semesters of one foreign language for their electives, or be able to pass the CSU-FC foreign language placement exam for completion of the BA in Studio Art.

Transfer Degrees

This degree transfers to the following Colorado Public Four-Year institutions of higher education:

- Adams State University (B.A. Liberal Arts, Studio Art emphasis)
- Colorado Mesa University (B.F.A. Art, Studio Art concentration)
- Colorado State University-Ft. Collins (B.A. Art, Studio concentration)
- Colorado State University-Pueblo (B.A. Art)
- Fort Lewis College (B.A. Art, Art option)
- Metropolitan State University of Denver (B.A. Art)
- University of Colorado, Boulder (B.A. Studio Arts)
- University of Colorado, Colorado Springs (B.A. Visual and Performing Arts, Visual Art option)
- University of Colorado, Denver (B.A. Fine Arts, Studio Art emphasis)
- University of Northern Colorado (B.A. Art and Design, Art emphasis)
- Western State Colorado University (B.A. Art, Studio Art emphasis)

Associate of Applied Science

Click here for the Associate of Applied Science Degree Requirements

Accounting, AAS

CIP 52.0302

See list of Department Chairs on the Personnel page.

Program Description

The Accounting program offers training in theory and practice of modern accounting. It places emphasis on reasoning to make logical accounting policy decisions. Learn to use state-of-the-art equipment and software used in the industry. Gain valuable on-the-job training through the internship experience.

Career Options

The AAS in Accounting prepares you for a career in entry-level accounting or upper-level bookkeeping positions.

Total Credits: 61

Semester One, Fall (16 credits)

MAT 1160 - Financial Mathematics

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 112 Covers topics including pricing, taxes, insurance, interest, annuities, amortization, investments using financial calculators and spreadsheets.

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ACC 1021 - Accounting Principles I

Credit(s): 4
Lecture Hour(s): 4
Formerly ACC 121 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.

BUS 1015 - Introduction to Business

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 115 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.

ENP 1005 - Introduction to Entrepreneurship

Credit(s): 3
Lecture Hour(s): 3
Formerly ENP 105 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.

CIS 1018 - Intro to PC Applications

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 118 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.

Semester Two, Spring (16 credits)

ACC 1022 - Accounting Principles II

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): ACC 1021
Formerly ACC 122 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

Credit(s): 3
Vocational Lab Hour(s): 4.50
Prerequisite(s): ACC 1022
Formerly ACC 125 Introduces the capabilities of computer applications in accounting. Includes solving accounting problems of a financial nature and hardware and software controls.

BUS 2016 - Legal Environment of Business

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 216 Emphasizes public law, regulation of business, ethical considerations, and various relationships existing within society, government, and business. Specific attention is devoted to economic regulation, social regulation, regulation and laws impacting labor-management issues and environmental concerns. Students develop an understanding of the role of law in social, political, and economic change.

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3

Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

ACC 1035 - Spreadsheet Applications for Accounting

Credit(s): 3
Lecture Hour(s): 3
Formerly ACC 135 Introduces spreadsheets as an accounting tool in the application of fundamental accounting concepts, problem-solving, and decision-making skills.

Semester Three, Fall (13 credits)

ECO 2001 - Principles of Macroeconomics: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly ECO 201 Focuses on the study of the American economy, stressing the interrelationships among household, business and government sectors. Explores saving and investment decisions, unemployment, inflation, national income accounting, taxing and spending policies, the limits of the market and government, public choice theory, the Federal Reserve System, money and banking, and international trade.

ECO 2002 - Principles of Microeconomics: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly ECO 202 Studies the firm, the nature of cost and how these relate to the economy as a whole. Analyzes economic models of the consumer, perfect competition, monopoly, oligopoly and monopolistic competition. Explores economic issues including market power, population growth, positive and negative externalities, income distribution, poverty and welfare, discrimination, and international economic interdependence.

ACC 2011 - Intermediate Accounting I

Credit(s): 4
Lecture Hour(s): 4
Formerly ACC 211 Focuses on comprehensive analysis of generally accepted accounting principles (GAAP), accounting theory, concepts and financial reporting principles for public corporations. It is the first of a two-course sequence in financial accounting and is designed primarily for accounting and finance majors. Focuses on the preparation and analysis of business information relevant and useful to external users of financial reports. Explores the theories, principles and practices surveyed in Accounting Principles and critically examines real-world financial analysis and reporting issues.

BUS 1016 - Personal Finance

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 116 Surveys the basic personal financial needs of most individuals. Emphasizes the basics of budgeting and buying, saving and borrowing money, the intricacies of home ownership, income tax and investments, and the wise use of insurance, wills and trusts.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

Semester Four, Spring (16 credits)

BUS 2026 - Business Statistics

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 226 Focuses on statistical study, descriptive statistics, probability, and the binominal distribution, index numbers, time series, decision theory, confidence intervals, linear regression and correlation. Intended for the business major.

ACC 1038 - Payroll and Sales Tax

Credit(s): 3
Lecture Hour(s): 3
Formerly ACC 138 Introduces laws pertaining to payroll and sales taxes including record keeping rules; preparation of various federal, state and local forms for reporting payroll and sales taxes; and computerized payroll procedures.

ACC 1031 - Income Tax

Credit(s): 3
Lecture Hour(s): 3
Formerly ACC 131 Introduces basic concepts of federal income taxation and tax administration with emphasis on taxation of individuals and sole proprietorships.

ACC 2012 - Intermediate Accounting II

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): ACC 2011
Formerly ACC 212 Focuses on the theoretical and practical aspects of accounting for long-term liabilities, stockholders' equity, investments, pensions and leases. Includes income tax allocation, financial statement analysis, cash flow statements and accounting methods changes.

ACC 2087 - Cooperative Education

Credit(s): 3
Internship Hour(s): 9
Formerly ACC 287 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.

MAN 2016 - Small Business Management

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): MAT 1140

Formerly MAN 216 Examines the elements necessary for the successful formation of a new small business. It is also designed 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

Credit(s): 3
Lecture Hour(s): 3
Formerly MAN 226 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.

Advanced Emergency Medical Technology AAS

Program Description

See list of Department Chairs on the Personnel page.

This program prepares students with the knowledge and skills needed for employment in a health care facility or in prehospital patient care. It will also prepare students to continue their education in more advanced careers in EMS, nursing and other health care fields. Upon successful completion of the CNA, EMT, and AEMT portions of the program, students will be eligible to take the certifying exams, and with successful Completion of the exam, may apply for state certification at that level of training.

All Health & Public Safety programs have essential functions you must be able to perform for you to be successful in the program and career.

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.

Career Information

Career opportunities include ambulance service, skilled nursing facilities, critical care transport, and emergency department technician. If you graduate with an AAS degree, you have additional career opportunities in administrative and management in the pre-hospital field.

Total Program Credits -- 64

All courses must be completed with a grade of "C" or higher.

Total Credits: 64

First (13 credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of

critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

PSY 2440 - Human Growth and Development: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 235 Examines human development from conception through death, emphasizing physical, cognitive, emotional and psychosocial factors. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

NUA 1001 - Nurse Aide Health Care Skills

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Formerly NUA 101 Prepares the student to perform the fundamental skills of the nurse aide. Basic nursing skills, communication 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 Aid Clinical Experience

Credit(s): 1
Vocational Clinic Hour(s): 1.5

Formerly NUA 170 Applies knowledge and skill gained in NUA 101 to patient care. Pass/fail grading (F).

HPR 1011 - CPR for Professionals: Professional Rescuer

Credit(s): 0.50
Lecture Hour(s): 0.50
Formerly HPR 102 Meets the requirement for American Red Cross Professional Rescuer CPR or American Heart Association Basic Life Support for those who work in emergency services, healthcare 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.

Second (14 credits)

HPR 1039 - Medical Terminology

Credit(s): 2
Lecture Hour(s): 2
Formerly HPR 139 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.

EMS 1015 - Emergency Medical Responder

Credit(s): 3
Lecture Hour(s): 3
Formerly EMS 115 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.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

MAT 1260 - Introduction to Statistics: GT-MA1

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 135 Explores and applies data presentation and summarization, introduction to probability concepts and distributions, statistical inference estimation, hypothesis testing, comparison of populations, correlation and regression. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

Third (12 credits)

EMS 1021 - EMT Fundamentals

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly EMS 121 Introduces the Emergency Medical Technician (EMT) student to prehospital 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

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Prerequisite(s): EMS 1021. EMS 1070.
Formerly EMS 122 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

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): EMS 1021.
Formerly EMS 123 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

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): EMS 1021.
Formerly EMS 124 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 1070 - EMT Clinical

Credit(s): 1
Vocational Lab Hour(s): 1.50
Formerly EMS 170 Provides the EMT student with the clinical experience required for initial certification and some renewal processes.

Fourth (12 credits)

BIO 2101 - Human Anatomy and Physiology I with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 201 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, nervous and endocrine systems. Includes a mandatory hands-on laboratory experience covering experimentation, microscopy, observations and dissection. This is the first semester of a two-semester sequence.

BIO 2102 - Human Anatomy and Physiology II with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 202 Focuses on the integrated study of the human body and the histology, anatomy, and physiology of the following systems and topics: cardiovascular, hematology, lymphatic and immune, urinary, fluid and electrolyte control, digestive, nutrition, respiratory, reproductive and development. Includes a mandatory hands-on laboratory

experience involving experimentation, microscopy, observations and dissection. This is the second semester of a two-semester sequence.

HPR 1050 - Basic EKG Interpretation

Credit(s): 2
Lecture Hour(s): 2
Formerly HPR 190 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.

EMS 1080 - EMT Clinical Internship

Credit(s): 2
Internship Hour(s): 6
Formerly EMS 180 Provides the Emergency Medical Technician (EMT) with a supervised clinical learning experience that goes beyond the initial EMT requirements for the State of Colorado Department of Health. Enables the student to work with an assigned preceptor for 90 hours of clinical experience to develop an understanding of the role and responsibilities of the EMT-Basic.

Fifth (13 credits)

EMS 1127 - AEMT Special Considerations

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Prerequisite(s): Acceptance into the AEMT Program.
Formerly EMS 127 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 - AEMT Pharmacology

Credit(s): 1
Lecture Hour(s): 0.50
Vocational Lab Hour(s): 0.75
Prerequisite(s): Acceptance into the AEMT Program.
Formerly EMS 129 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

Credit(s): 2
Lecture Hour(s): .25
Vocational Lab Hour(s): 1.9
Vocational Clinic Hour(s): 1

Prerequisite(s): Current Colorado Certification as EMT or Department Chair Approval
Formerly EMS 132 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 1125 - AEMT Fundamentals

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): Acceptance into the AEMT Program.
Formerly EMS 131 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 1133 - AEMT Medical Emergencies

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): Acceptance into the AEMT Program.
Formerly EMS 133 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 - AEMT Trauma Emergencies

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): Acceptance into the AEMT Program.
Formerly EMS 135 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 1071 - AEMT Clinical Internship

Credit(s): 2
Internship Hour(s): 6
Prerequisite(s): Acceptance into the AEMT Program.
Formerly EMS 171 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.

Notes

[1] Successful completion of courses, student is eligible to sit for Nurse Aide Certification exam

[2] Successful completioon of courses, student is eligible to sit for the EMT certification exam

[3] Successful completion of courses, student is elgibile to sit for the Advanced EMT certification exam

Applied Technology, AAS

CIP 41.9999

See list of Department Chairs on the Personnel page.

Program Description

PCC offers the AAS degree in Applied Technology as part of a statewide consortium of community colleges and Area Vocational Technical Schools (AVTS) consortium and other Colorado public community colleges.

To attain the degree, you must complete the technical course work for a state-approved Career and Technical Education Certificate at one of the following AVTS's: Delta Montrose Area Vocational Technical Center, Emily Griffith Opportunity School, San Juan Basin Area Vocational Technical School and T.H. Pickens Technical Center.

You will complete the general education and other degree requirements at PCC. Course work from the AVTS will be credited to your transcript when you complete the requirements of both institutions.

Program Requirements

You must comply with the regulations and requirements related to admissions and attendance at each institution.

Minimum Requirements for This Degree Include:

a. Minimum of 60 credit hours of course work.
b. Cumulative GPA of 2.0 **or** higher.
c. General Education course of 15-18 semester hours
d. Additional requirements of at least 42 semester hours:
   * From an individual program with current state approval a one of four AVTS's
   * If the program certificate is less than 42 semester hours, then the program certificate hours plus elective credit hours from Pueblo Community College will be used for the total of at least 42 semester hours
e. Minimum of 15 semester credits earned at Pueblo Community College.

Total Credits: 60

Degree Requirements

AVTS Certificate (42-45 Credits)

General Education Courses (15-18 Credits)

The below general education courses must be selected from the general education courses listed in the AGS, AA or AS general education sections of this catalog.

- English/Speech **Credit(s): 3**
- Humanities **Credit(s): 3**
- Mathematics **Credit(s): 3**
- Natural Science **Credit(s): 3**
- Social Science **Credit(s): 3**

Associate Degree Nursing

See list of Department Chairs on the Personnel page.

Program Description

The Associate Degree Nursing (ADN) program teaches you skills of direct patient care that you can apply in any healthcare setting. It offers theoretical and applied instruction in classrooms, simulated laboratories, and clinical settings. It integrates education in adult, gerontological, obstetric, pediatric, and psychiatric-mental health nursing. Your clinical learning will take place in diverse types of institutions.

The Nursing program has a selective and limited admission policy. The application is available online at Pueblo Community College Nursing from **March 1 to May 19 2023 for Fall of 2023 admission**. All Health & Public Safety programs have essential functions to help you be successful in the program and career. **In progress grades will be accepted, however course must show in progress at time of application, and be completed in Spring semester.**

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.

Career Information

The ADN program prepares you to provide safe, therapeutic, and competent nursing care in hospitals and other healthcare settings. You may also work as an entry level patient-care manager.

Total Credits: 71.5

General Education and Program Prerequisites

First (12 credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

BIO 1111 - General College Biology I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): ENG 1021
Formerly BIO 111 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.

HPR 1010 - Dietary Nutrition

Credit(s): 1
Lecture Hour(s): 1
Formerly HPR 108 Studies the basic nutritional principles in clinical practice in health care. The course will cover factors which influence the nutritional status of individuals, methods of nutritional assessment and support, and diet modification for specific disease states.

PSY 2440 - Human Growth and Development: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 235 Examines human development from conception through death, emphasizing physical, cognitive, emotional and psychosocial factors. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

Second (12 credits)

BIO 2101 - Human Anatomy and Physiology I with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 201 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, nervous and endocrine systems. Includes a mandatory hands-on laboratory experience covering experimentation, microscopy, observations and dissection. This is the first semester of a two-semester sequence.

BIO 2102 - Human Anatomy and Physiology II with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 202 Focuses on the integrated study of the human body and the histology, anatomy, and physiology of

the following systems and topics: cardiovascular, hematology, lymphatic and immune, urinary, fluid and electrolyte control, digestive, nutrition, respiratory, reproductive and development. Includes a mandatory hands-on laboratory experience involving experimentation, microscopy, observations and dissection. This is the second semester of a two-semester sequence.

BIO 2104 - Microbiology with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 204 Designed for health science majors. Examines microorganisms with an emphasis on their structure, development, physiology, classification and identification. The laboratory experience includes culturing, identifying and controlling microorganisms with an emphasis on their role in infectious disease.

1 Course must be completed within 10 years of entrance into the program

Program Course Schedule (First Year)

Apply to the Program – April 1 to May 21 2022 For Fall 2022, online at Pueblo Community College Nursing

Application Admission Requirements:

Complete NUA 101 Certified Nurse Aide Health Care Skills, or the Nurse Aide coursework within the Colorado Community College System (CCCS) or have an Active Colorado CNA certificate. (If Nursing Assistant Certificate is obtained through a private company or an out-of-state institution, student must obtain an Active Colorado CNA Certificate). Nurse Aide certificate must be in good standing without stipulation. Nurse Aide courses must be completed within seven (7) years of entry into PCC Nursing program. If the applicant is a current Colorado Certified Nurse Aide, in good standing there is no time limit.

Third (13 credits)

NUR 1009 - Fundamentals of Nursing

Credit(s): 6
Lecture Hour(s): 2
Vocational Lab Hour(s): 6
Vocational Clinic Hour(s): 6

Prerequisite(s): Admission to Nursing or Psychiatric Technician programs.
Corequisite(s): Nursing: NUR 1012, HPR 1010, MAT 1120. Psych Tech: NUR 1012.
Formerly NUR 109 Introduces the fundamental concepts necessary for safe, patient-centered nursing care to a diverse patient population while integrating legal and ethical responsibilities of the nurse. Introduces caring, critical thinking, the nursing process, quality improvement and communication used when interacting with patients and members of the interdisciplinary team, and relates evidence-based nursing practice. Application of knowledge and skills occurs in the nursing skills laboratory and a variety of clinical settings providing care to stable patients with common health alterations.

NUR 1012 - Basic Concepts of Pharmacology

Credit(s): 2
Lecture Hour(s): 2

Prerequisite(s): Admission to Nursing or Psychiatric Technician programs.
Corequisite(s): Nursing: NUR 1009, HPR 1010, MAT 1120; Psych Tech: NUR 1009.
Formerly NUR 112 Overview of the basic principles of pharmacology including major drug classifications and prototypes of commonly used medications. Principles of medication administration include aspects of best practice for safe, quality, patient-centered care. Central points include safety, quality improvement factors in the administration of medications, patient teaching and variations encountered when administering medications to diverse patient populations across the lifespan.

NUR 1001 - Pharmacology Calculations

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): Admission to Practical Nurse Program.
Formerly NUR 101 Prepares nurse to provide safe, patient-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.

BIO 2116 - Human Pathophysiology

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): BIO 2101, BIO 2102
Formerly BIO 216 Focuses on the alterations in physiological, cellular and biochemical processes, the associated homeostatic response, and the manifestations of disease. Prior knowledge of cellular biology, anatomy and physiology is essential for the study of pathophysiology.

Fourth (13 credits)

NUR 1006 - Med-Surg Nursing Concepts

Credit(s): 7
Lecture Hour(s): 3.40
Vocational Lab Hour(s): 0.90
Vocational Clinic Hour(s): 9.90

Prerequisite(s): Admission to Nursing Program and completion of preceding required program course work or permission of the program director.
Corequisite(s): NUR 1050 or permission of the program director.
Formerly NUR 106 NUR106 is the first medical/surgical nursing course. Building on NUR 1009, this course provides for the acquisition of basic medical/surgical nursing theory, as well as application of mental health concepts, communication, collaboration, caring, and critical thinking/clinical reasoning necessary for safe, patient-centered care to a developmentally and culturally diverse adult patient population experiencing various medical/surgical interventions. Incorporates evidence-based practice, quality improvement, professional standards, and legal and ethical responsibilities of the nurse. Application of knowledge and skills occurs in the nursing skills laboratory and a variety of clinical settings.

NUR 1050 - Maternal-Child Nursing

Credit(s): 6
Lecture Hour(s): 3.30
Vocational Lab Hour(s): 2.10
Vocational Clinic Hour(s): 6

Prerequisite(s): Admission to Nursing program and completion of preceding required program course work or permission of the program director.
Corequisite(s): NUR 1006 or permission of the program director.
Formerly NUR 150 Nursing 150 provides for the acquisition of maternal/child nursing theory, as well as application of mental health concepts, communication, collaboration, caring, and critical thinking/clinical reasoning necessary for safe, family-centered nursing care to childbearing families and children that is developmentally and culturally appropriate. Incorporates evidence-based practice, standards of practice, quality improvement, and legal and ethical responsibilities of the nurse. Application of knowledge and skills occurs in the nursing skills laboratory and in a variety of maternal/child and pediatric clinical settings.

First Summer (4 credits)

Optional

NUR 1069 - Transition into Practical Nursing

Credit(s): 4
Lecture Hour(s): 2
Vocational Clinic Hour(s): 6

Prerequisite(s): Admission to Nursing program and completion of preceding required program course work or program director permission.
Formerly NUR 169 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.

Program Course Schedule (Second Year)

Fifth (12.5 credits)

NUR 2006 - Advanced Concepts of Medical-Surgical Nursing I

Credit(s): 6.50
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Vocational Clinic Hour(s): 9

Prerequisite(s): Admission to Nursing program and successful completion of preceding Nursing program course work or permission of the program director.
Corequisite(s): NUR 2012 or permission of the program director.
Formerly NUR 206 NUR 206 builds on NUR 1006focusing on advanced concepts of nursing applied to care of patients with high acuity medical/surgical conditions. Builds on medical/surgical nursing theory, mental health concepts, communication, collaboration, caring, and critical thinking/clinical reasoning necessary for safe, patient-centered nursing care to developmentally and culturally diverse adult patients. Incorporates evidence-based practice, quality improvement, professional standards, and legal and ethical responsibilities of the professional nurse as applied in a

variety of healthcare settings. Application of knowledge and skills occurs in the nursing skills laboratory and in a variety of clinical settings.

NUR 2011 - Psychiatric-Mental Health Nursing

Credit(s): 4
Lecture Hour(s): 2.70
Vocational Clinic Hour(s): 3.90

Prerequisite(s): Admission to Nursing program and successful completion of preceding Nursing program course work or permission of the program director.
Corequisite(s): NUR 2012 or permission of program director.
Formerly NUR 211 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

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Admission to Nursing program and successful completion of preceding required program course work or permission of the program director.
Corequisite(s): NUR 2011 or permission of the program director.
Formerly NUR 212 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.

Sixth (9 credits)

NUR 2016 - Advanced Concepts of Medical Surgical Nursing II

Credit(s): 5
Lecture Hour(s): 2.30
Vocational Clinic Hour(s): 8.10

Prerequisite(s): Admission to Nursing program and successful completion of preceding program course work or permission of the program director.
Corequisite(s): NUR 2006 and NUR 2012 or permission of the program director.
Formerly NUR 216 Nursing 216 is a continuation of Nursing 206, focusing on complex medical/surgical conditions of the high acuity patient. Builds on medical/surgical nursing theory, mental health concepts, communication, collaboration, caring, and critical thinking/clinical reasoning necessary for safe, patient-centered nursing care to developmentally and culturally diverse adult patients experiencing high acuity medical/surgical conditions. Incorporates evidence-based practice, quality improvement, professional standards, and legal and ethical responsibilities of the professional nurse as applied in the acute care and high acuity settings. Application of knowledge and skills occurs in a variety of clinical settings.

NUR 2030 - Transition to Professional Nursing Practice

Credit(s): 4
Lecture Hour(s): 1.60
Vocational Clinic Hour(s): 7.20

Prerequisite(s): Admission to Nursing program and successful completion of preceding program course work or permission of the program director.
Corequisite(s): NUR 2016 or permission of the program director.
Formerly NUR 230 Nursing 230 is a Seminar and practice Capstone course that provides an integrative experience applying all dimensions of the professional nurse in the care of diverse patient populations across a variety of healthcare settings. All major concepts of the nursing program are addressed. Leadership and the management of multiple patients are emphasized. Application of knowledge and skills occurs in the clinical setting to facilitate an effective transition from student to registered professional nurse.

Behavioral Health AAS

Behavioral Health

See list of Department Chairs on the Personnel page.

Program Description

The Behavioral Health (BHP) program is a degree option for those who are interested in human behavior especially in a clinical or health related settings. During the program, students will study behavioral health concepts related to addiction and substance abuse, counseling, group dynamics and human development. The Behavior health program will also cover current trends, best practices and up-to-date research findings. If you wish to pursue a bachelor's degree after earning your AGS you can take advantage of a smooth transfer to University of Colorado, Colorado Springs (UCCS) BA in Human Services.

Graduates from the behavioral health program can look forward to a rapidly growing job market that has several options.

Career Information

A behavior health specialist is a professional who works with people who have disabilities or problems with behavior and learning impairment in a variety of settings ranging from residential to outpatient, including but not limited to department of corrections, youth residential facilities, hospitals and outpatient facilities.

- Behavioral health technician
- Case manager
- Peer support worker
- Community health worker
- Family support worker
- Respite car worker
- Paraprofessional counselor
- Social service liaison

Total Credits: 65

Certified Addiction Counselor I (CAC I) courses are offered fall only. Certified Addiction Counselor II (CAC II) courses are offered spring and summer only. **Note: Students must complete all CAC I courses before completing CAC II courses.**

1st Spring (16 credits)

AAA 1009 - Advanced Academic Achievement

Credit(s): 3
Lecture Hour(s): 3
Formerly AAA 109 Examines theories and practices associated with successful learning to enhance college success. Recommended for new and returning students, this course study areas including education and career planning, effective communication, personal management, critical and creative thinking, development of community and awareness of diversity, leadership, and techniques for successful academic performance.

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

PSY 1001 - General Psychology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 101 Focuses on the scientific study of behavior including motivation, emotion, physiological psychology, stress and coping, research methods, consciousness, sensation, perception, learning and memory. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

BIO 1006 - Basic Anatomy and Physiology

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly BIO 106 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, Paramedic Program, and the Medical Office Technology Program.

1st Summer (7 credits)

HPR 1038 - Intro to Medical Terminology

Credit(s): 1
Lecture Hour(s): 1
Formerly HPR 138 Introduces the student to the structure of medical terms with emphasis on using and combining the most common prefixes, roots and suffixes. Includes terms related to major body systems, oncology and psychiatry, as well as clinical laboratory and diagnostic procedures and imaging. Class structure provides accepted pronunciation of terms and relative use in the healthcare setting.

SOC 1001 - Introduction to Sociology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 101 Examines the basic concepts, theories and principles of sociology as well as human culture, social groups, and the social issues of age, gender, class and race. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2440 - Human Growth and Development: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 235 Examines human development from conception through death, emphasizing physical, cognitive, emotional and psychosocial factors. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

Fall (18.5 credits)

PTE 1010 - Intro to Behavioral Health Care and Wellness

Credit(s): 3
Lecture Hour(s): 3
Formerly PTE 110 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.

COM 2063 - Conflict Resolution

Credit(s): 1
Lecture Hour(s): 1
Formerly COM 263 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.

HPR 1008 - Law & Ethics for Health Professions

Credit(s): 2
Lecture Hour(s): 2
Formerly HPR 106 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.

SOC 2031 - The Sociology of Deviant Behavior: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 231 Examines the nature, identification, and explanation of deviant categories. Theories and philosophies, as well as methods of treatment related to deviancy, will also be considered. The course will study society's attempts to control, change and institutionalize those acts, individuals or groups that a population may deem unacceptable. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

CSL 2046 - Professional Ethics I

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): High School diploma or equivalent.
Formerly CSL 245 This course focuses on ethical issues specific to the practice of addiction counseling and on jurisprudence, which is the law and the practice of psychotherapy in Colorado. The class will cover the Colorado Mental Health Practice Act and introduce the student to the regulatory system and the role of DORA (Dept. of Regulatory Agencies) and DBH (Division of Behavioral Health) in the development and credentialing of the addiction counselor. There will be emphasis on developing ethical decision making skills, knowledge of confidentiality and the prohibited activities in the Mental Health Practice Act. Students will become familiar with the NAADAC Code of Ethics and acquire the tools for ethical and legal practice.

CSL 2051 - Pharmacology I for Addiction Counselors

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): High School diploma or equivalent.
Formerly CSL 251 This class will provide a solid base of knowledge about the drugs of abuse, including what is happening in human physiology and behaviors, and will enhance the ability of the counselor to offer treatment services in a manner that respects gender, race and ethnicity, sexual orientation, cultural, familial, systemic and socioeconomic diversity.

CSL 2068 - Addictions Counseling Skills

Credit(s): 1.50
Lecture Hour(s): 1.50
Prerequisite(s): High School diploma or equivalent.
Formerly CSL 268 This class will provide a framework and counseling model for working with clients with substance abuse or dependence. This course will teach the counseling skills needed to help clients process their information and move toward the change process. The models utilized in this class are client-centered, counselor-directed therapy using a motivational style and spirit.

CSL 2061 - Client Records Management

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): High School diploma or equivalent.
Formerly CSL 260 This class will provide the counselor with an understanding of the clinical record and the continuum of client care that the record documents and tracks. The class presents screening, assessment and evaluation, diagnosis, ASAM patient placement criteria, treatment planning, progress note completion, documentation requirements and discharge planning. It emphasizes the confidentiality of the client record and includes releases of information, mandatory disclosure and informed consent among others.

CSL 2065 - Culturally Informed Treatment

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): High School diploma or equivalent.
Formerly CSL 265 This class will provide a basic foundation for understanding how cultural competence, awareness and sensitivity can improve quality of care and increase positive outcomes. Cultural variables to be considered will include age, gender, sexual orientation, religious affiliation, language, educational level, physical ability, economic status and social class as well as racial and ethnic backgrounds. This course is intended to provide participants with basic skills to recognize and respect the behavior, ideas, attitudes, values, beliefs, customs, language, rituals, ceremonies and practices characteristic of diverse groups of people. Course design will include definitions and descriptions of culture including concepts of assimilation and acculturation. Exercises will involve self-examination and discussion of the evolution of one's own personal beliefs, values and attitudes.

CSL 2050 - Motivational Interviewing I

Credit(s): 1.5
Lecture Hour(s): 1.5
Prerequisite(s): CSL 2068
Formerly CSL 250 Provides the opportunity for students to learn both the model of Motivational Interviewing as well as the underlying Stages of Development model. Discussion of the populations of clients where these models have proven most effective will be discussed. Student opportunity for skills practice during class that includes skill sets specific to each stage of client readiness will be used. Presentation of assessment instruments to evaluate client readiness for change.

CSL 2054 - Trauma Informed Care

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): High School Diploma or equivalent
Formerly CSL 254 Covers the concept of trauma?informed care, an approach being adopted within human services based upon an increased awareness of the ways trauma impacts functioning. Course will define what trauma informed care is and ways a traditional treatment setting can be modified to increase the sense of safety experienced by clients. Participants will learn how to incorporate trauma?informed practices into treatment with diverse populations, such as military veterans, women, and people with co?occurring disorders.

CSL 2069 - Principles of Addiction

Credit(s): 1.50
Lecture Hour(s): 1.50
Prerequisite(s): High School diploma or equivalent.
Formerly CSL 269 Focuses on the major theories of addiction in an historical and theoretical context. Includes an elaboration on NIDA's Principles of Drug Addiction Treatment. This class meets the principles of addictions training requirement for the Counselor I level of the Colorado Alcohol and Drug Abuse Program.

2nd Spring (17.5 credits)

PSY 2552 - Abnormal Psychology: GT-SS3

Credit(s): 3
Lecture Hour(s): 3

Corequisite(s): PSY 1001 or Department Chair Approval.
Formerly PSY 249 Examines abnormal behavior and its classification, causes, treatment and prevention. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PTE 1017 - Theoretical Concepts of Psychiatric Care II

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): PTE 1010
Formerly PTE 117 Explores psychiatric problems common to four (4) special populations: children/adolescents, developmentally disabled individuals, aging persons and forensic clients. The student will learn how to recognize and intervene with problems common to these four groups.

PTE 1020 - Application of Behavioral Health Care & Wellness

Credit(s): 5
Lecture Hour(s): 3
Vocational Lab Hour(s): 3
Prerequisite(s): PTE 1010
Formerly PTE 120 Explores basic etiology, symptoms, and interventions for common behavioral and mental health disorders. Provides the opportunity for students to experience the mileu of a behavioral health care setting while providing basic care to clients experiencing common behavioral and mental health issues.

SOC 2018 - Sociology of Diversity: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 218 Explores the variety of intergroup relations regarding race, nationality, ethnicity, gender, sexual orientation and other diversity issues. Patterns of prejudice, discrimination and possible solutions to these issues will be addressed. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

CSL 2055 - Infectious Diseases for Addiction Counselors

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): High School diploma or equivalent.
Formerly CSL 255 This class will help prepare addiction professionals to identify diseases frequently associated with drug abuse, determine client risk for infection, educate clients about disease prevention and treatment options, and assist clients in obtaining appropriate treatment as needed. This class will enhance the ability of the counselor to offer treatment services in a manner that respects gender, race and ethnicity, sexual orientation, cultural, familial, systemic and socioeconomic diversity.

CSL 2052 - Pharmacology II for Counselors

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): High school diploma or equivalent
Formerly CSL 252 Focuses on the pharmacology of alcohol and drugs such as stimulants, nicotine, cannabis, hallucinogens, designer drugs, over the counter medications, and medications for psychiatric illnesses. When combined with CSL 251, this course meets the pharmacology training requirement for the Counselor II level of the Colorado Alcohol and Drug Abuse Program.

CSL 2058 - Group Counseling Skills

Credit(s): 1.5
Lecture Hour(s): 1.5
Prerequisite(s): CSL 2068
Formerly CSL 258 Provides students with the skills that allow one therapist to facilitate a group process that help a number of clients simultaneously, and provides positive peer support and pressure for recovery. This class will help the student understand the use of group therapy and be able to demonstrate the skills necessary to facilitate a therapy group. The class will focus on group process and discuss diversity within groups, as well as challenges for group leaders.

CSL 2059 - Advanced Professional and Ethical Practice

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): CSL 2046
Formerly CSL 259 Addresses organizational ethics and practices, individual provider ethics and practices, and guidelines for setting up a private practice. Topics will include Office of Behavioral Health (OBH) licensing rules; OBH behavioral health rules and regulations; practice standards and guidelines; Department of Regulatory Agencies (DORA) and the Mental Health Practice Act; the purpose of and the need for written policies and procedures; professional competencies, boundaries and ethical relationships; reporting violations; employee drug testing; liability insurance; clinical versus administrative supervision; the ethical delivery of culturally-responsive care and trauma-informed care; and the need for professional self-care plan. This course will build on Ethical Practice in Addiction Treatment course.

2nd Summer (7 credits)

CSL 2053 - Cognitive Behavior Therapy

Credit(s): 1
Lecture Hour(s): 1
Formerly CSL 253 Opportunity for students to learn the model of Cognitive Behavior Therapy as it applies to addiction. Discussion of the populations of clients where this model has proven most effective. Opportunity for skills practice during class that includes clincial feeback. Minimum of 14 contact hours.

MAT 1260 - Introduction to Statistics: GT-MA1

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 135 Explores and applies data presentation and summarization, introduction to probability concepts and distributions, statistical inference estimation, hypothesis testing, comparison of populations, correlation and regression. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

CSL 2048 - Clinical Assessment & Treatment Planning

Credit(s): 1
Lecture Hour(s): 1
Formerly CSL 248 Covers the differences between screening and assessment and use of assessment instruments. In this course components of the clinical assessment include a biopsychosocial interview, assessing risk for self-harm, identifying cultural needs and supports, problem domains, determining stage of readiness for change and strengths of the client. Stages of treatment and systems of care will be covered along with facets of treatment planning.

CSL 2056 - Co-occurring Disorders

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): High School Diploma or equivalent
Formerly CSL 256 Presents the basics of working with clients with co-occurring mental health and substance abuse disorders. This class will address clinical assessment, treatment philosophy, strategies, and guidelines to provide integrated treatment with co?occurring disorders. It will include an introduction to the diagnostic criteria for the mental disorders most often seen with substance use disorders. The essential values, attitudes, and competencies of the counselor working with this population are discussed.

1 Indicates Guaranteed Transfer course (GT)

2 Indicates program core course

3 Requires departmental approval

4 CAC I courses

5 CAC II courses

Business Management, AAS

See list of Department Chairs on the Personnel page.

Program Description

The Business Management AAS degree provides the basic skills needed for management positions. Students learn principles of management. They also gain practical skills as they engage with the business world.

Career Options

The Business Management program prepares students for careers in entry-level positions in Marketing, Management, Sales, and Entrepreneurship (opening your own business).

Total Credits: 62

Semester One, Fall (15 credits)

BUS 1015 - Introduction to Business

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 115 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.

ENP 1005 - Introduction to Entrepreneurship

Credit(s): 3
Lecture Hour(s): 3

Formerly ENP 105 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.

CIS 1018 - Intro to PC Applications

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 118 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.

ACC 1035 - Spreadsheet Applications for Accounting

Credit(s): 3
Lecture Hour(s): 3
Formerly ACC 135 Introduces spreadsheets as an accounting tool in the application of fundamental accounting concepts, problem-solving, and decision-making skills.

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1031 - Technical Writing I

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 131, then ENG 1020 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.

MAT 1160 - Financial Mathematics

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 112 Covers topics including pricing, taxes, insurance, interest, annuities, amortization, investments using financial calculators and spreadsheets.

Semester Two, Spring (17 credits)

ACC 1021 - Accounting Principles I

Credit(s): 4
Lecture Hour(s): 4
Formerly ACC 121 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

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): ACC 1021
Formerly ACC 122 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.

ECO 2001 - Principles of Macroeconomics: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly ECO 201 Focuses on the study of the American economy, stressing the interrelationships among household, business and government sectors. Explores saving and investment decisions, unemployment, inflation, national income accounting, taxing and spending policies, the limits of the market and government, public choice theory, the Federal Reserve System, money and banking, and international trade.

ECO 2002 - Principles of Microeconomics: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly ECO 202 Studies the firm, the nature of cost and how these relate to the economy as a whole. Analyzes economic models of the consumer, perfect competition, monopoly, oligopoly and monopolistic competition. Explores economic issues including market power, population growth, positive and negative externalities, income distribution, poverty and welfare, discrimination, and international economic interdependence.

AAA 1009 - Advanced Academic Achievement

Credit(s): 3
Lecture Hour(s): 3
Formerly AAA 109 Examines theories and practices associated with successful learning to enhance college success. Recommended for new and returning students, this course study areas including education and career planning, effective communication, personal management, critical and creative thinking, development of community and awareness of diversity, leadership, and techniques for successful academic performance.

- Any communications (COM) course **Credit(s): 3**

Summer Semester Option

Enroll in any courses found on this page that would reduce the course load for other semesters.

Semester Three, Fall (15 credits)

BUS 2016 - Legal Environment of Business

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 216 Emphasizes public law, regulation of business, ethical considerations, and various relationships existing within society, government, and business. Specific attention is devoted to economic regulation, social regulation, regulation and laws impacting labor-management issues and environmental concerns. Students develop an understanding of the role of law in social, political, and economic change.

ENP 2006 - Entrepreneurship Legal Issues

Credit(s): 3
Lecture Hour(s): 3
Formerly ENP 206 Explores legal issues related to business entities including sole proprietorship, general partnerships, limited partnerships, and corporations. This course reviews articles of incorporation and the filing process, employment law, property, landlord tenant rights and duties, and business insurance.

BUS 2017 - Business Communication & Report Writing

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 217 Emphasizes effective business writing and covers letters, memoranda, reports, application letters and resumes. Includes the fundamentals of business communication and an introduction to international communication.

MAN 1028 - Human Relations in Organizations

Credit(s): 3
Lecture Hour(s): 3
Formerly MAN 128 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 2024 - Leadership

Credit(s): 3
Lecture Hour(s): 3
Formerly MAN 224 Focuses on the leadership skills for contemporary organizations. Covers development and communication a shared vision to motivate and empower employees to manage conflict, to negotiate, and to develop teams.

BUS 1016 - Personal Finance

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 116 Surveys the basic personal financial needs of most individuals. Emphasizes the basics of budgeting and buying, saving and borrowing money, the intricacies of home ownership, income tax and investments, and the wise use of insurance, wills and trusts.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

ENP 2007 - Entrepreneurship Financial Topics

Credit(s): 3
Lecture Hour(s): 3
Formerly ENP 207 Will cover topics such as financial planning for entrepreneurs, understanding tax considerations, understanding financial documents, financial ratio analysis, cash flow management, cost of capital and budgeting, raising capital, valuation, risk assessment, and venture exits.

Semester Four, Spring (15 credits)

ACC 1025 - Computerized Accounting

Credit(s): 3
Vocational Lab Hour(s): 4.50
Prerequisite(s): ACC 1022
Formerly ACC 125 Introduces the capabilities of computer applications in accounting. Includes solving accounting problems of a financial nature and hardware and software controls.

ACC 1038 - Payroll and Sales Tax

Credit(s): 3
Lecture Hour(s): 3
Formerly ACC 138 Introduces laws pertaining to payroll and sales taxes including record keeping rules; preparation of various federal, state and local forms for reporting payroll and sales taxes; and computerized payroll procedures.

BUS 2026 - Business Statistics

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 226 Focuses on statistical study, descriptive statistics, probability, and the binominal distribution, index numbers, time series, decision theory, confidence intervals, linear regression and correlation. Intended for the business major.

MAN 2026 - Principles of Management

Credit(s): 3
Lecture Hour(s): 3
Formerly MAN 226 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.

MAR 2016 - Principles of Marketing

Credit(s): 3
Lecture Hour(s): 3
Formerly MAR 216 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.

ENP 2005 - Marketing for the Entrepreneur

Credit(s): 3
Lecture Hour(s): 3
Formerly ENP 205 Covers marketing strategies to launch and sustain an entrepreneurial venture. This course will include topics on marketing entrepreneurial ventures utilizing innovative and financially responsible marketing strategies. This course will help students to develop an understanding of entrepreneurial marketing goals and objectives. The course covers marketing principles and electronic marketing.

PSV 2030 - Introduction to Civic Leadership

Credit(s): 3
Lecture Hour(s): 3
Formerly PSV 230 Enables the student to develop a critical understanding of public leadership through the study of pertinent models, theories and research.

Business Ownership AAS

See list of Department Chairs on the Personnel page.

Program Description

The Business Management program (AAS Degree and Certificates) prepares students for entry level positions in Marketing, Management, Sales, and Entrepreneurship. These offerings also provide opportunities for individuals working within the industry to up-skill and advance their careers. The (AA) in Business Management prepares students to transfer to bachelor's degree programs in Business Management. Per the statewide articulation agreement, students can complete fundamental courses at PCC and transfer to complete a Bachelor's Degree with a specific emphasis.

Total Credits: 61

General Education Requirements (15 credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1031 - Technical Writing I

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 131, then ENG 1020 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.

MAT 1160 - Financial Mathematics

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 112 Covers topics including pricing, taxes, insurance, interest, annuities, amortization, investments using financial calculators and spreadsheets.

ECO 2001 - Principles of Macroeconomics: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly ECO 201 Focuses on the study of the American economy, stressing the interrelationships among household, business and government sectors. Explores saving and investment decisions, unemployment, inflation, national income accounting, taxing and spending policies, the limits of the market and government, public choice theory, the Federal Reserve System, money and banking, and international trade.

CIS 1018 - Intro to PC Applications

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 118 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.

AAA 1009 - Advanced Academic Achievement

Credit(s): 3
Lecture Hour(s): 3
Formerly AAA 109 Examines theories and practices associated with successful learning to enhance college success. Recommended for new and returning students, this course study areas including education and career planning, effective communication, personal management, critical and creative thinking, development of community and awareness of diversity, leadership, and techniques for successful academic performance.

- Any Communications Course(s) **Credit(s): 3**

Core Curriculum Requirements (31 credits)

ACC 1021 - Accounting Principles I

Credit(s): 4
Lecture Hour(s): 4
Formerly ACC 121 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 1035 - Spreadsheet Applications for Accounting

Credit(s): 3
Lecture Hour(s): 3
Formerly ACC 135 Introduces spreadsheets as an accounting tool in the application of fundamental accounting concepts, problem-solving, and decision-making skills.

BUS 2017 - Business Communication & Report Writing

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 217 Emphasizes effective business writing and covers letters, memoranda, reports, application letters and resumes. Includes the fundamentals of business communication and an introduction to international communication.

ENP 1005 - Introduction to Entrepreneurship

Credit(s): 3
Lecture Hour(s): 3
Formerly ENP 105 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.

ENP 1006 - Entrepreneurship Opportunity Analysis/Feasibility Study

Credit(s): 3
Lecture Hour(s): 3
Formerly ENP 106 Determines if a business venture is feasible based on personal, professional, and financial goals. This course will help to identify and analyze the present climate for business ideas through an industry analysis, target market analysis, competitive analysis, and financial analysis.

ENP 2005 - Marketing for the Entrepreneur

Credit(s): 3
Lecture Hour(s): 3
Formerly ENP 205 Covers marketing strategies to launch and sustain an entrepreneurial venture. This course will include topics on marketing entrepreneurial ventures utilizing innovative and financially responsible marketing strategies. This course will help students to develop an understanding of entrepreneurial marketing goals and objectives. The course covers marketing principles and electronic marketing.

ENP 2006 - Entrepreneurship Legal Issues

Credit(s): 3
Lecture Hour(s): 3
Formerly ENP 206 Explores legal issues related to business entities including sole proprietorship, general partnerships, limited partnerships, and corporations. This course reviews articles of incorporation and the filing process, employment law, property, landlord tenant rights and duties, and business insurance.

ENP 2007 - Entrepreneurship Financial Topics

Credit(s): 3
Lecture Hour(s): 3
Formerly ENP 207 Will cover topics such as financial planning for entrepreneurs, understanding tax considerations, understanding financial documents, financial ratio analysis, cash flow management, cost of capital and budgeting, raising capital, valuation, risk assessment, and venture exits.

ENP 2009 - Entrepreneurship Business Plan

Credit(s): 3
Lecture Hour(s): 3
Formerly ENP 209 Guides students through the evaluation of a business concept. This course will include writing a comprehensive business plan. This course explores both traditional and lean business planning as a means to establish strategic vision and direction for a business. This course assesses the strengths and weaknesses of a business concept. This course will include identifying external and environmental factors related to business ownership and evaluating various resources available for funding small businesses.

MAN 2026 - Principles of Management

Credit(s): 3
Lecture Hour(s): 3
Formerly MAN 226 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.

CTE Focused Elective Options (15 credits)

Students will choose courses within a specific discipline to gain content knowledge of a specific industry, e.g., Business, Culinary Arts, Automotive, Welding, Cosmetogloy, etc. **Credit(s): 15**

Cosmetology, AAS

CIP 12.0401

See list of Department Chairs on the Personnel page.

Career Opportunities

The Cosmetology program prepares students for careers in cosmetology, hairstyling, esthetics (facial care) and manicure (nail care). Students will receive the specialized training necessary to be prepared for a successful career with limitless opportunities for both men and women. Students learn the skills to keep pace with the fashion world and stand ready to meet the constantly changing demands of one of today's largest-growing service industries. Those opportunities can provide both part-time and full-time employment in specialty areas.

Program Description

The Cosmetology program teaches students job entry skills, customer communication and shop procedures. Instruction includes professional ethics, bacteriology, shampoo and rinses, color theory, hair coloring techniques, permanent waving, hairstyling, hair cutting, manicures, pedicures, facials, makeup, OSHA regulations, sanitation, safety and Colorado laws. Clinical practice involves working on the public under supervision and parallels, as close as possible, actual shop procedures in order to prepare students for working in the field. Students can choose from the following:

- Cosmetology degree or certificate – This program provides training in hair, skin and nail care services. Instruction is provided in hair cutting, hair styling, hair coloring, chemical texture services, skin care, waxing services, make-up application and nail care needs.

- Hairstylist certificate – This certificate program provides training in hair care. Instruction is provided in hair cutting, hair styling, hair coloring and chemical textures services.
- Manicurist certificate – This certificate program provides training in nail care. Instruction is provided in manicuring, pedicure, nail design extensions and nail artistry.
- Esthetician certificate – This certificate program provides training in facial care.

Program Requirements:

Successful completion of any CCR course or qualifying placement score or exemption.

Total Credits: 68

Degree Requirements

General Education Requirements (15 Credits)

English (3 Credits)

Recommended:

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

or

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

Math (3 Credits)

Recommended:

MAT 1140 - Career Math

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 107 Covers material designed for career technical or general studies students who need to study

particular mathematical topics. Topics may include measurement, algebra, geometry, trigonometry, graphs and/or finance. These are presented on an introductory level and the emphasis is on applications.

or

MAT 1150 - Technical Mathematics

Credit(s): 4
Lecture Hour(s): 4
Formerly MAT 108 Covers material designed for career technical or general studies students who need to study particular mathematical topics. Topics may include measurement, algebra, geometry, trigonometry, graphs and/or finance. These are presented at an introductory level and the emphasis is on applications.

or

MAT 1240 - Mathematics for the Liberal Arts: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 1001 concurrency allowed, or see Basic Skills Assessment
Formerly MAT 120 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. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

Art and Humanities (9 Credits)

Recommended:

ART 1110 - Art Appreciation: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly ART 110 Introduces the cultural significance of the visual arts, including media, processes, techniques, traditions, and terminology. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

ART 1205 - Drawing for the Graphic Novel

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 122 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 1002 - Visual Concepts 2-D Design

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 131 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

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 132 Introduces the fundamentals of three-dimensional design, form, and space. The course applies the elements and principles of design to three-dimensional problems.

ART 1604 - Jewelry and Metalwork I

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 133 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 1401 - Digital Photography I

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 139 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.

or

ART 1703 - Ceramics I

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 161 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.

Core Requirements (53 Credits)

COS 1003 - Shampoo/Rinses/Conditioners I

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly COS 103 Introduces various types of scalp treatments and shampoos. Enables student to recognize and treat disorders of hair and scalp. Covers product knowledge and proper massage techniques to help control disorders and to cleanse the hair and scalp. Includes terminology dealing with hair structure, scalp and hair disorders. Provides training in a lab or classroom setting.

COS 1010 - Introduction to Hair Coloring

Credit(s): 2
Vocational Clinic Hour(s): 4

Formerly COS 110 Provides theory pertaining to the law of color, theory of color, chemistry of color, product knowledge and analysis of hair and scalp. Covers basic techniques and procedures for the application of hair coloring.

COS 1011 - Intermediate: Hair Coloring

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 1010.
Formerly COS 111 Focuses on theory and practical application of color products, formulations of color, level and shades of color. Examines techniques in a specialized class or in a supervised salon setting.

COS 1020 - Introduction to Hair Cutting

Credit(s): 2
Vocational Clinic Hour(s): 4

Formerly COS 120 Introduction to the theory relevant to patron protection, angles, elevations and the analysis of hair textures as related to hair cutting. Covers the proper use and care of hair-cutting implements. Focuses on basic hair-cutting techniques using all cutting implements, disinfection and sanitation procedures as they relate to haircutting.

COS 1021 - Intermediate I: Haircutting

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 120.
Formerly COS 121 Focuses on theory related to facial shapes, head and body forms to determine the clients appropriate haircut. Incorporates practical applications of hair cutting techniques in specialized classes or in the supervised salon (clinical setting).

COS 1030 - Introduction to Hair Styling

Credit(s): 2
Vocational Clinic Hour(s): 4

Formerly COS 130 Combines theory with the practical application of roller placement, shaping, pin curls, finger waves, air forming iron curling, soft pressing and hard pressing.

COS 1031 - Intermediate I: Hair Styling

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 1030.
Formerly COS 131 Focuses on the accepted methods of styling hair, air forming roller sets, finger waves pin curls braiding and hair pressing.

COS 1040 - Introduction to Chemical Texture

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly COS 140 Introduces a combination of theory and practice focusing on the analysis of hair and scalp, proper equipment and product knowledge. Includes basic techniques in permanent waving and chemical relaxing. Provides training in a classroom or lab setting on mannequins or live models.

COS 1041 - Intermediate I: Chemical Texture

Credit(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): COS 1040.
Formerly COS 141 Emphasizes theory and practical application of permanent waves and chemical relaxers in specialized classes or a supervised salon setting. Enables the student to practice different wrapping techniques required by trend styles.

COS 1050 - Laws, Rules and Regulations

Credit(s): 1
Lecture Hour(s): 1
Formerly COS 150 Provides instruction on the laws, rules and regulations and how they govern the cosmetology and barber industry, as well as the effects they have on the student, licensed individual, salons and school owners.

COS 2003 - Shampoo/Rinses/Conditioners II

Credit(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): COS 1003.
Formerly COS 203 Provides theory and practical training in shampoos, rinses and conditioners. Examines advanced techniques to prepare the student for employment. Includes preparation for the State Board Licensing Examination in shampoos, rinses and conditioners.

COS 2010 - Intermediate II: Hair Coloring

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 1010.
Formerly COS 210 Provides continued instruction in the theory and practical application of color products, formulations of color, level and shades of color. Enables students to practice techniques in a specialized class or in a supervised salon setting.

COS 2011 - Advanced Hair Coloring

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 1011.
Formerly COS 211 Provides continued instruction on advanced theory and practical techniques in hair coloring. Focuses on the recognition of color problems and color correction procedures. Covers advanced techniques and product knowledge to prepare the student for employment. Prepares the student for the State Board Licensing Examination pertaining to hair coloring.

COS 2020 - Intermediate II: Haircutting

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 1020.
Formerly COS 220 Provides continued instruction in the theory related to facial shapes, head and body forms to determine the client's appropriate haircut. Incorporates practical applications of haircutting techniques.

COS 2021 - Advanced Hair Cutting

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 1021.
Formerly COS 221 Focuses on advanced cutting techniques using all the cutting tools. Emphasizes current fashion trends. Includes student preparation for the State Licensure examination.

COS 2030 - Intermediate II: Hair Styling

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 1030.
Formerly COS 230 Provides continued instruction on accepted methods of styling hair, air forming, roll set, finger waves and hair pressing. Examines techniques in specialized classes or in a supervised salon setting.

COS 2031 - Advanced Hair Styling

Credit(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): COS 1031.
Formerly COS 231 Focuses on theory and advanced techniques in all phases of hair styling to prepare the student for employment. Training is a combination of supervised salon (clinical) work and specialized classes. Includes student preparation for the State Board Licensing Examination relating to hairstyling.

COS 2040 - Intermediate II: Chemical Texture

Credit(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): COS 1040.
Formerly COS 240 Provides continued instruction in the theory and practical application of permanent waves and

chemical relaxers in specialized classes or a supervised salon setting. Enables students to practice different wrapping techniques required by trend styles.

COS 2041 - Advanced Chemical Texture

Credit(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): COS 1041.
Formerly COS 241 Focuses on advanced techniques to prepare the student for employment and the changes in current industry standards. Instruction is provided in specialized classes or supervised salon (clinical) setting. Includes student preparation for the State Board Licensing Examination pertaining to permanent waves and chemical relaxers.

COS 2050 - Management, Ethics, Interpersonal Skills & Salesmanship

Credit(s): 1
Lecture Hour(s): 1
Formerly COS 250 Emphasizes the importance of salon management and the knowledge and skills necessary to build a successful business. Focuses on the importance of interpersonal skills and basic techniques in salesmanship and customer services. Integrates job readiness skills and professional ethics.

EST 1010 - Introduction to Facials and Skin Care

Credit(s): 3
Vocational Clinic Hour(s): 6

Formerly EST 110 Provides a basic understanding of massage manipulations when providing facials, the study of skin in both theory and practical applications, and benefits derived from proper facial and good skin care routines. Training is conducted in a classroom or lab setting using mannequins or models.

EST 1011 - Intermediate Facials & Skin Care

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): EST 1010.
Formerly EST 111 Covers theory and practical application pertaining to anatomy, skin disorders, skin types and facial shapes. Students help patrons to select the proper skin care treatment. Practical and theory application can be done in specialized classes or supervised salon (clinical) setting using models or customer service.

EST 2010 - Advanced Massage & Skin Care

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): EST 1011.
Formerly EST 210 Provides the student with advanced techniques in massage, skin care and lash/brow tinting. Theory and practical procedures ready the student for employment. Instruction is provided in specialized classes or in a supervised salon (clinical) setting. Student preparation for State Board Licensing Examination.

EST 2011 - Facial Make-up

Credit(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): EST 1010.
Formerly EST 211 Provides instruction on cosmetics and their functions. The importance of color theory, facial types and skin tones as they relate to facial makeup. Instruction from the basic makeup application to the corrective makeup procedure is taught. Disinfection and sanitation is taught as it pertains to all aspects of makeup.

EST 2012 - Hair Removal

Credit(s): 3
Vocational Clinic Hour(s): 6

Prerequisite(s): EST 1010.
Formerly EST 212 Provides in-depth study and practice of hair removal and the practice of patron protection and safety. Training for general waxing and body waxing procedures are provided. Demonstration of disinfection and sanitation as it pertains to Colorado rules and regulations will be practiced.

NAT 1008 - Introduction of Manicuring/Pedicures/Artificial Nails

Credit(s): 3
Vocational Clinic Hour(s): 6

Formerly NAT 108 Provides a basic introduction into the proper use of implements used in manicures, pedicures and artificial nails. Theory and practical application of proper set-up, safety, sanitation, nail shapes, anatomy, product knowledge and terminology dealing with manicures, pedicures and artificial nails is covered. Training is done in a classroom or lab setting using models or other techniques.

NAT 1058 - Intermediate Manicuring/Pedicures/Artificial Nails

Credit(s): 2
Vocational Clinic Hour(s): 4

Formerly NAT 158 Presents theory and practical application dealing with different types of manicures, pedicures and massage techniques. Theory and practical application of procedures, products, nail shapes and maintenance of artificial nails is covered. Students learn to recognize different nail disorders and their proper treatment. Training is done in a specialized class or in supervised salon (clinical) setting, using models or customer service.

NAT 1059 - Intermediate Manicuring/Pedicures/Artificial Nails II

Credit(s): 2
Vocational Clinic Hour(s): 4

Formerly NAT 159 Presents theory and practical application dealing with different types of manicures, pedicures and massage techniques. Theory and practical application of procedures, products, nail shapes and maintenance of artificial nails is covered. Students learn to recognize different nail disorders and their proper treatment. Training is done in a specialized class or in supervised salon (clinical) setting, using models or customer service.

NAT 2008 - Advanced Manicuring/Pedicures/Artificial Nails

Credit(s): 4
Vocational Clinic Hour(s): 8

Formerly NAT 208 Provides advanced theory and practical application of manicures, pedicures and nail art techniques. Theory and advanced practical techniques of silk wraps, tip overlays, acrylics and product knowledge to ready the student for employment is presented. Instruction is provided in specialized classes or in supervised salon (clinical) setting using models or customer service. Student preparation for state board licensing examination pertaining to manicures and pedicures is covered.

Dental Hygiene, AAS

CIP 51.0602

See list of Department Chairs on the Personnel page.

Career Opportunities

The Dental Hygiene program prepares you for a career in a variety of professional settings. The most familiar setting is the private dental office, where hygienists perform critical services to detect and prevent diseases of the mouth. Beyond the private dental office, you can find employment in nursing homes and long-term care facilities, hospitals, corporate health facilities, school systems and public health clinics. You may also work as an educator or researcher.

Program Description

The AAS Degree prepares you to provide dental hygiene services to patients and educate them in aspects of preventive dentistry. In our on-campus clinic, you will provide preventive and therapeutic services for patients under the supervision of Dental Hygiene faculty.

In the traditional role of dental hygienist, training includes prophylaxis, patient data gathering for dental hygiene diagnosis and treatment planning, fluoride treatment, sealant application, radiographic examination and nutritional counseling. In the expanded role of the dental hygienist, training includes treatment of periodontally-involved patients and treatment of handicapped, institutionalized and other medically compromised patients. You also learn to perform local anesthesia and administer nitrous oxide.

Because of the high level of personal and professional responsibility required of a dental hygienist, you must have integrity, maturity, individual motivation, good interpersonal skills, excellent manual dexterity and a solid science and general studies academic background to be successful in this program. We are firmly committed to fostering your intellectual growth and to developing well-qualified dental hygienists with high professional standards and ethics.

The Mini-Certificate in Local Anesthesia and Nitrous Oxide/Oxygen Sedation provides you with knowledge of the theory and practice of local anesthesia and nitrous oxide/oxygen sedation. This program teaches you to administer local anesthetics and nitrous oxide proficiently and safely. The administration of local anesthesia and nitrous oxide/oxygen sedation may be performed by licensed dental hygienists under the Colorado State Dental Practice Act. You must be currently enrolled in the Dental Hygiene program to enter this program.

Program Requirements

Entrance Requirements:

You must complete a current Dental Hygiene program application and meet all minimum requirements and application timelines. The application is available through the Dental Hygiene program, at the PCC Dental Hygiene website or in Admissions & Records. You should seek advisement from program faculty for assistance with applications, minimum requirements and required general education courses for admissions. In addition, all students entering the program will need a current CPR card good for 2 years.

If you are an AAS Dental Hygiene student, you must complete all General Education/Related Requirements.

Note: All students are accepted provisionally pending completion of a criminal background check. Disclaimer: The Colorado Board of Dental Examiners requires a dental hygienist applying for licensure to answer questions concerning felony history, excessive use or abuse of controlled substances/alcoholic beverages (within the last five years) and any physical or mental condition that may affect the ability to practice dental hygiene. Other questions asked by the State Board pertain to an applicant's history of malpractice judgment and any disciplinary action by any government or private agency. The PCC Department of Dental Hygiene assumes no responsibility for the denial of licensure by the Colorado State Board of Dental Examiners.

Total Credits: 92.5

*** Within five years of application**

Degree Requirements

General Education Requirements (28 Credits)

BIO 2101 - Human Anatomy and Physiology I with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 201 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, nervous and endocrine systems. Includes a mandatory hands-on laboratory experience covering experimentation, microscopy, observations and dissection. This is the first semester of a two-semester sequence.

BIO 2102 - Human Anatomy and Physiology II with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 202 Focuses on the integrated study of the human body and the histology, anatomy, and physiology of the following systems and topics: cardiovascular, hematology, lymphatic and immune, urinary, fluid and electrolyte control, digestive, nutrition, respiratory, reproductive and development. Includes a mandatory hands-on laboratory experience involving experimentation, microscopy, observations and dissection. This is the second semester of a two-semester sequence.

BIO 2104 - Microbiology with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 204 Designed for health science majors. Examines microorganisms with an emphasis on their structure, development, physiology, classification and identification. The laboratory experience includes culturing, identifying and controlling microorganisms with an emphasis on their role in infectious disease.

CHE 1009 - General, Organic, and Biochemistry

Credit(s): 4
Lecture Hour(s): 4
Formerly CHE 109 Focuses on fundamentals of inorganic, organic and biochemistry primarily for students in health science, non-science majors and/or students in the occupational and health related career areas. Includes the study of measurement, atomic theory, chemical bonding, nomenclature, stoichiometry, solutions, acid and base chemistry, gas laws, condensed states of matter and nuclear chemistry, nomenclature of organic compounds, properties of different functional groups, nomenclature of various biological compounds, their properties and biological pathways. This course has no lab and may not be transferable.

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

PSY 1001 - General Psychology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 101 Focuses on the scientific study of behavior including motivation, emotion, physiological psychology, stress and coping, research methods, consciousness, sensation, perception, learning and memory. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

SOC 1001 - Introduction to Sociology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 101 Examines the basic concepts, theories and principles of sociology as well as human culture, social groups, and the social issues of age, gender, class and race. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

Core Curriculum Requirements (64.5 Credits)

First Year-Fall Semester (14 Credits)

DEH 1001 - Preclinical Dental Hygiene Lecture

Credit(s): 2
Vocational Lab Hour(s): 3
Prerequisite(s): Current enrollment in the Dental Hygiene program.
Formerly DEH 101 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 Care

Credit(s): 3
Vocational Clinic Hour(s): 6

Prerequisite(s): Current enrollment in the Dental Hygiene program.
Formerly DEH 102 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

Credit(s): 3
Lecture Hour(s): 2
Vocational Clinic Hour(s): 2

Prerequisite(s): Current enrollment in the Dental Hygiene program.
Formerly DEH 103 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

Credit(s): 3
Lecture Hour(s): 2
Vocational Clinic Hour(s): 2

Prerequisite(s): Current enrollment in the Dental Hygiene program.
Formerly DEH 104 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

Credit(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): Current enrollment in the Dental Hygiene program.
Formerly DEH 105 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 2002 - Applied Nutrition in Dentistry

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Current enrollment in the Dental Hygiene program.
Formerly DEH 202 Gives students a fundamental understanding of general nutrition with an emphasis on the interrelationship between nutrition and dental health. Focuses on recognizing nutritional deficiencies and how to conduct and evaluate nutritional surveys on patients.

First Year-Spring Semester (13.5 Credits)

DEH 1011 - Dental and Medical Emergencies

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Current enrollment in Dental Hygiene program.
Formerly DEH 111 Introduces the management of emergency situations in the dental office setting. 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

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Current enrollment in Dental Hygiene program.
Formerly DEH 122 Introduces the principles of periodontics. Focuses on recognition of the tissues in health and disease, macro and microanatomy of the periodontium, and histopathology of periodontal diseases and other related gingival conditions. Provides the theory and discussion of periodontal assessment, etiology, epidemiology, inflammatory process/immune response, and the AAP classification system.

DEH 1023 - Head & Neck Anatomy

Credit(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): BIO 2101, BIO 2102, current enrollment in Dental Hygiene program.
Formerly DEH 123 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, lymphatic, glandular system, vascular supply, nervous system, and the oral cavity.

DEH 1026 - Dental Materials

Credit(s): 2
Lecture Hour(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): Current enrollment in Dental Hygiene program.
Formerly DEH 126 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 1053 - Clinical Theory of Dental Hygiene I

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Current enrollment in Dental Hygiene program.
Formerly DEH 153 Builds on the broad theoretical basis provided in DEH 1001and DEH 1002. Focuses on enhancing patient assessment skills, instrumentation and additional information on preventative and prophylactic clinical procedures.

DEH 1070 - Clinical Practice of Dental Hygiene I

Credit(s): 4.50
Vocational Clinic Hour(s): 9

Prerequisite(s): Current enrollment in Dental Hygiene program.
Formerly DEH 170 Provides clinical experience in patient skills assessment, instrumentation and additional preventative and prophylactic clinical procedures.

Second Year-Summer Semester (6 Credits)

DEH 1033 - Local Anesthesia

Credit(s): 2
Lecture Hour(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): DEH 1011, DEH 1023, current enrollment in Dental Hygiene program.
Formerly DEH 133 Provides a working knowledge of the theory and practice of local anesthesia as applied to the practice of dentistry/dental hygiene. Emphasizes mastery of the armamentarium and techniques of regional anesthesia. Covers the knowledge and skills necessary to administer local anesthetics proficiently and safely.

DEH 1034 - Advanced Clinical Skills

Credit(s): 1
Lecture Hour(s): 0.70
Vocational Clinic Hour(s): 0.60

Prerequisite(s): Current enrollment in Dental Hygiene program.
Formerly DEH 134 Focuses on dental hygiene theory and laboratory experiences with major topics related to advanced

clinical skills, including advanced instrumentation fulcrums, root morphology, periodontal files, periodontal file sharpening, mini curettes, after five curettes, nabors probe, universal focus spray ultrasonics and scaling implants.

DEH 1038 - Nitrous Oxide/Oxygen Sedation

Credit(s): 1
Lecture Hour(s): 0.80
Vocational Clinic Hour(s): 0.40

Prerequisite(s): BIO 2101, BIO 2102, current enrollment in Dental Hygiene program.
Formerly DEH 138 Provides a working knowledge of the latest equipment and methods of nitrous oxide/oxygen sedation administration in the dental office.

DEH 1071 - Clinical Practice of Dental Hygiene I-A

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): Current enrollment in Dental Hygiene program.
Formerly DEH 171 Continues patient care sessions for the performance of traditional dental hygiene treatment. Enables the student to provide treatment to periodontally involved patients utilizing advanced instrumentation and power scaling.

Second Year Fall Semester (17 Credits)

DEH 1032 - Applied Pharmacology

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Current enrollment in Dental Hygiene program.
Formerly DEH 132 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 2004 - Community Dental Health I

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Current enrollment in Dental Hygiene program.
Formerly DEH 204 Course provides instruction in the concepts, methods and issues of dental public health. Emphasis is placed on evidence-based criteria for effective promotion and prevention of dental disease in the public health setting. Concepts of dental health education and program planning in the community setting are reinforced through case-based materials, including methods of assessment, planning, implementation and evaluation of effectiveness. Course activities will reinforce skills in speaking and writing effectively in preparation for the subsequent community dental health field experience course.

DEH 2013 - General and Oral Pathology

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Current enrollment in Dental Hygiene program.

Formerly DEH 213 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 2042 - Periodontics II

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): DEH 1022.
Formerly DEH 242 Continues to explore theoretical/clinical preparations with emphasis on dental hygiene process of care, treatment planning, nonsurgical 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

Credit(s): 2
Vocational Lab Hour(s): 3
Prerequisite(s): Current enrollment in Dental Hygiene program.
Formerly DEH 268 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

Credit(s): 6
Vocational Clinic Hour(s): 12

Prerequisite(s): Current enrollment in Dental Hygiene program.
Formerly DEH 270 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.

Second Year-Spring Semester (14 Credits)

DEH 2021 - Ethics and Practice Management

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Current enrollment in Dental Hygiene program.
Formerly DEH 221 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

Credit(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): DEH 2004.
Formerly DEH 225 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 2059 - Advanced Dental Hygiene Theory

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Current enrollment in Dental Hygiene program.
Formerly DEH 259 Focuses on the care of patients with special needs, such as physical and mental disabilities and systemic conditions. Emphasizes patient management and treatment considerations.

DEH 2071 - Clinical Practice of Dental Hygiene III

Credit(s): 6
Vocational Clinic Hour(s): 12

Prerequisite(s): Current enrollment in Dental Hygiene program.
Formerly DEH 271 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 extramural clinical sites for additional practice.

DEH 2082 - Periodontics III

Credit(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): DEH 1022.
Formerly DEH 282 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

Credit(s): 2
Vocational Lab Hour(s): 3
Prerequisite(s): Current enrollment in Dental Hygiene program.
Formerly DEH 285 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.

Optional Recommended Courses (2.5 Credits)

DEH 1036 - Clinical Dental Roentgenology

Credit(s): 0.50
Vocational Clinic Hour(s): 1

Prerequisite(s): Current enrollment in Dental Hygiene program.
Formerly DEH 136 Enhances clinical competence of basic radiographic principles including intra-oral, positioning techniques, exposure factors, bisecting technique, vertical bitewing survey and management of anatomical deviations.

DEH 2066 - National Boards Review

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Current enrollment in Dental Hygiene program.
Formerly DEH 266 Provides formal review sessions for second-year dental hygiene students preparing to sit for the National Board Examination.

Early Childhood Education, AAS

CIP 13.1210

See list of Department Chairs on the Personnel page.

Program Description

This program prepares you to become a productive, caring, and responsible teacher. Classes emphasize child development skills in the areas of language, social, emotional, cognitive, and physical development. Clsses also focus on culutral diversity among children. You will become familiar with theories concerning child development and ECE, and you will participate in many group discussions and hands-on activities that you can apply in the preschool classroom. You will learn from qualified faculty members who believe in the success of each ECE student.

Total Credits: 60

Degree Requirements

General Education Requirements (15 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of

critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

OR

ENG 1031 - Technical Writing I

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 131, then ENG 1020 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.

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

OR

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

MAT 1140 - Career Math

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 107 Covers material designed for career technical or general studies students who need to study particular mathematical topics. Topics may include measurement, algebra, geometry, trigonometry, graphs and/or finance. These are presented on an introductory level and the emphasis is on applications.

Core Curriculum Requirements (39 Credits)

ECE 1011 - Introduction to Early Childhood Education

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 101 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 1045 - Introduction to Early Childhood Techniques

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly ECE 102 Focuses on a classroom Seminar and placement in a child care setting. The supervised placement provides the student with the opportunity to observe children, practice appropriate interactions and develop effective guidance and management techniques. Addresses ages birth through 8 years.

ECE 1031 - Guidance Strategies for Young Children

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 103 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 1111 - Infant and Toddler Theory and Practice

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 111 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. Focuses on birth through age 3.

ECE 2051 - Nutrition, Health and Safety

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 205 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 2621 - ECE Curriculum Development: Methods and Techniques

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of ECE 1011, ECE 1045, and ECE 1031.
Formerly ECE 220 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 and Cognition for the Young Child

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 225 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 8 years.

ECE 2641 - Creativity and the Young Child

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 226 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 8 years.

ECE 2381 - Ece Child Growth and Development

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of ECE 1011 and ECE 1045.
Formerly ECE 238 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 and Education Programs

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of ECE 1011, ECE 1045, ECE 1031, ECE 2621, and ECE 2381.
Formerly ECE 240 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

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of ECE 1011, ECE 1045, ECE 1031, ECE 2621, and ECE 2381.
Formerly ECE 241 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

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 260 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 2088 - Practicum: Early Childhood Education

Credit(s): 3
Lecture Hour(s): 1
Practicum Hour(s): 4
Prerequisite(s): Successful completion of ECE 1011 and ECE 1045

Formerly ECE 288 Provides students with advanced field experience opportunities in early childhood education programs.

Electives (6 Credits)

Select two courses:

ECE 1125 - Intro to Infant/Toddler Lab Techniques

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly ECE 112 Includes a classroom Seminar and placement in an infant and/or toddler setting. The supervised placement provides the student with the opportunity to observe, practice appropriate interactions and develop effective guidance and nurturing techniques with infants and/or toddlers. Addresses ages prenatal through age 2.

ECE 2661 - Science/Math and the Young Child

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 125 Examines theories of cognitive development as a framework for conceptualizing the way young children acquire scientific and mathematical skills, concepts and abilities. Enables students to research and develop appropriate individual and group scientific/mathematical activities for young children.

ECE 2101 - Working with Parents, Families, and Community Systems

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 256 Examines personal attitudes regarding families, family values systems, and how personal attitudes affect parent-professional partnerships in the early childhood education program. This course covers communication, problem-solving and conflict resolution strategies. Effective activities and resources to support family involvement in the classroom will be created. This course addresses children ages birth through 8 years.

LIT 2055 - Children's Literature

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the Composition I level
Formerly LIT 255 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 GT:AH2

EDU 2211 - Introduction to Education

Credit(s): 3
Lecture Hour(s): 3
Formerly EDU 221 Focuses on the historical, social, political, philosophical, cultural and economic forces that shape the United States public school system. Includes current issues of educational reform, technology as it relates to education and considerations related to becoming a teacher in the state of Colorado. Special interest will be paid to the topic of diversity in the K-12 school system.

AAA 1009 - Advanced Academic Achievement

Credit(s): 3
Lecture Hour(s): 3
Formerly AAA 109 Examines theories and practices associated with successful learning to enhance college success. Recommended for new and returning students, this course study areas including education and career planning, effective communication, personal management, critical and creative thinking, development of community and awareness of diversity, leadership, and techniques for successful academic performance.

Electromechanical Technology, AAS

CIP 15.0303

See list of Department Chairs on the Personnel page.

Career Opportunities

The AAS degree in Industrial Electronics Technology prepares you for a career as an electronics technician, an electromechanical technician, a semiconductor manufacturing technician or an electromechanical field service technician.

Program Description

This program develops essential skills for maintaining the complex electromechanical systems found in modern automated manufacturing facilities. After completing a core of courses in math, physics, fundamental analog and digital electronics, robotics and programmable logic controllers, you will branch off into one of two optional tracks. The electromechanical option emphasizes a broader range of skills, including print reading, motors and controls, and mechanical components. In addition to the two AAS degree options, several certificate options are also available.

Program Requirements

Entrance Requirements:

You should have good basic reading, language and math competencies. High school algebra and physics are recommended but not required. Refresher classes are available.

Total Credits: 64

Degree Requirements

General Education Requirements (15 Credits)

CIS 1010 - Intro to Computing Technology (Device)

Credit(s): 1
Vocational Lab Hour(s): 1
Formerly CIS 110 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.

COM 2063 - Conflict Resolution

Credit(s): 1
Lecture Hour(s): 1
Formerly COM 263 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.

or

- Any 1 credit hour COM class offered in the fall semester

ENG 1031 - Technical Writing I

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 131, then ENG 1020 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.

MAT 1150 - Technical Mathematics

Credit(s): 4
Lecture Hour(s): 4
Formerly MAT 108 Covers material designed for career technical or general studies students who need to study particular mathematical topics. Topics may include measurement, algebra, geometry, trigonometry, graphs and/or finance. These are presented at an introductory level and the emphasis is on applications.

PHY 1105 - Conceptual Physics with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly PHY 105 Focuses on mechanics, heat, properties of matter, electricity and magnetism, light and modern physics. Incorporates laboratory experience. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

SOC 1001 - Introduction to Sociology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 101 Examines the basic concepts, theories and principles of sociology as well as human culture, social groups, and the social issues of age, gender, class and race. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

or

- Any Social/Behavior Science-Arts/Humanities Course

Common Core Requirements (46 Credits)

ELT 1206 - Fundamentals of DC/AC

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Corequisite(s): ELT 1207.
Formerly ELT 106 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 - Industrial Electronics

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Corequisite(s): ELT 1206.
Formerly ELT 107 Provides a basic knowledge of generators, motors and the solid state devices and digital techniques used for industrial control applications.

ELT 2252 - Motors and Controls

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly ELT 252 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. 68 contact hours.

ELT 2254 - Industrial Wiring

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly ELT 254 Focuses on the required and recommended practice for industrial wiring. The National Electrical Code is applied to industrial power and control wiring. Covers specification and installation of wiring, conduit, enclosures and termination components in lecture and applied during lab.

ELT 2357 - Sensors and Transducers

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Prerequisite(s): ELT 1001 , ELT 1206.
Formerly ELT 257 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. 68 contact hours.

ELT 2358 - Programmable Logic Controllers

Credit(s): 3
Lecture Hour(s): 1

Vocational Lab Hour(s): 3
Formerly ELT 258 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

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Prerequisite(s): ELT 2358.
Formerly ELT 259 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 2080 - Internship

Credit(s): 1-12
Internship Hour(s): 3-36
Formerly ELT 280 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 2089 - Capstone: Automated Systems

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly ELT 289 Enables the student to plan, construct and evaluate a modified flexible manufacturing system using a programmable logic controller, industrial computer, robot and work cell peripherals. Addresses safety and emergency control procedures throughout this course.

MAC 1005 - Introduction to Machining Technology

Credit(s): 4
Lecture Hour(s): 1.50
Vocational Lab Hour(s): 3.75
Formerly MAC 105 Introduces the student to the changing era of machining technology, emphasizing terminology, referencing and applications related to manufacturing environments. The fundamental use of bench tools, layout procedures, materials, precision measuring tools, machining processes, drilling and cut-off machines and other machining/manufacturing processes will be stressed. Skill competencies and standards will be identified. Use of the Machinery's Handbook will be strictly required and particular competencies may require performance evaluations.

MAC 2056 - Industrial Components

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly MAC 256 Covers common mechanical components used on industrial equipment. It is designed to assist

maintenance staff in removal, installation and maintenance of plant equipment. It includes safety, fits, threads, bearings, fasteners, and hardware, lubrication, assembly and the use of hand tools.

MAC 2065 - Mechanical Component II

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly MAC 265 Covers common mechanical components used on industrial equipment. It is designed to assist maintenance staff in removal, installation and maintenance of plant equipment. It includes coupling, vibration, shafting, keys and keyways, belts and chain drives, gears and gear drive, and seals.

MTE 1102 - Safety Manufacturing Environment

Credit(s): 1
Lecture Hour(s): 1
Formerly MTE 105 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 2320 - Fluid Power Control

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly MTE 238 Introduces fluid power application in industry and various types of industrial control devices used in modern manufacturing equipment and machinery. Enables the student to produce the graphics required to incorporate these items into a mechanical design.

WEL 1002 - Oxy-fuel Joining Processes

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.5
Formerly WEL 102 Covers Oxy-fuel joining operations.

or

WEL 1024 - Gas Tungsten Arc Welding I

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.5
Formerly WEL 124 Covers Gas Tungsten Arc Welding (GTAW) operations in various positions and joint designs.

Electives (3 Credits)

(Select one class)

CAD 1101 - Computer Aided Drafting/2D I

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly CAD 101 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.

CIS 2020 - Fundamentals of Unix

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 220 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.

CNG 1021 - Computer Technician I: A+

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Formerly CNG 121 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+

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Prerequisite(s): CNG 1021 or Department Chair Approval.
Formerly CNG 122 Provides students with an in-depth look at desktop and mobile Operating System support, maintenance and troubleshooting, and an overview of 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 current operating systems, including using common GUI and command line tools, registry editing, system backup and recovery, and advanced troubleshooting. This course helps prepare you for the second CompTIA A+ Exam.

CNG 1024 - Networking I: Network +

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 124 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.

CSC 1019 - Introduction to Programming

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CSC 119 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.

WEL 1024 - Gas Tungsten Arc Welding I

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.5
Formerly WEL 124 Covers Gas Tungsten Arc Welding (GTAW) operations in various positions and joint designs.

WEL 2050 - Layout and Fabrication

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1002.
Formerly WEL 250 Develops welding and associated skills in metal fabrication.

Emergency Medical Services, AAS

Career Opportunities

See list of Department Chairs on the Personnel page.

The EMS program prepares you for a career in the pre-hospital health care field as an emergency medical care provider at the EMT, EMT-Intermediate or Paramedic level. Career opportunities include providing patient care while working for an ambulance agency, fire service or hospital emergency room. Additional opportunities are in such areas as tactical EMS, critical care transport and ski patrol. If you graduate with an AAS degree you have additional opportunities in administration and management in the pre-hospital field.

Program Description

This program teaches you the knowledge and skills needed for scene management, emergency patient care and transport. This includes scene safety, patient assessment and treatment, medication administration, documentation and patient transport. Upon successful completion of the program, you may take the National Registry exam and, upon passing the exam, you may apply for Colorado State Certification at your level of training.

Program Requirements

Entrance Requirements:

To enroll in the EMT, EMT-Intermediate or Paramedic programs, you must be at least 18 years of age, have all current immunizations and be able to meet the requirements of the PCC EMS Common Functional Abilities Standard. For enrollment into the EMT-Intermediate or Paramedic programs, you must have a current Colorado EMT certification, an EMT IV endorsement, successfully complete all prescreening examinations and prerequisites, and obtain department approval for enrollment into these programs.

The EMS Department is offering an EMT-Intermediate to Paramedic Bridge course for those who are EMT-Intermediates. To qualify for this program you must be an EMT-I99, be eligible for state certification, and pass an EMT-I prescreening exam or be nationally registered as an EMT-I99. For more information on prerequisites and classes, please call the EMS Department.

Note: Clinical agencies used during the program require that you successfully complete a background check and a drug screen, immunization series and CPR training. Please check with a program advisor for any changes to admission requirements.

Total Credits: 69

Semester One

BIO 1111 - General College Biology I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): ENG 1021
Formerly BIO 111 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 2101 - Human Anatomy and Physiology I with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 201 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, nervous and endocrine systems. Includes a mandatory hands-on laboratory experience covering experimentation, microscopy, observations and dissection. This is the first semester of a two-semester sequence.

Semester Two

BIO 2102 - Human Anatomy and Physiology II with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 202 Focuses on the integrated study of the human body and the histology, anatomy, and physiology of the following systems and topics: cardiovascular, hematology, lymphatic and immune, urinary, fluid and electrolyte control, digestive, nutrition, respiratory, reproductive and development. Includes a mandatory hands-on laboratory

experience involving experimentation, microscopy, observations and dissection. This is the second semester of a two-semester sequence.

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

MAT 1120 - Math for Clinical Calculations

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 103 Provides a review of general mathematics, introductory algebra and an opportunity to learn systems of measurement and methods of solving problems related to drug dosage and intravenous fluid administration. It is designed for students in the health disciplines. Topics may include algebra, graphs, measurement and conversion between various systems of measurement.

or

MAT 1140 - Career Math

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 107 Covers material designed for career technical or general studies students who need to study particular mathematical topics. Topics may include measurement, algebra, geometry, trigonometry, graphs and/or finance. These are presented on an introductory level and the emphasis is on applications.

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

or

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

Semester Three

EMS 2025 - Fundamentals of Paramedic Practice

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Prerequisite(s): BIO 2101, current Colorado Certification as an EMT with IV endorsement or higher and acceptance into the Paramedic Education Program.
Corequisite(s): EMS 2026.
Formerly EMS 225 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

Credit(s): 2
Vocational Lab Hour(s): 1.50
Vocational Clinic Hour(s): 2

Prerequisite(s): Currently enrolled in EMS 2025, or have successfully completed EMS 2025.
Formerly EMS 226 Complete all pre-course screening requirements, including drug test and criminal background check. Instructor approval. Serves as the lab experience to coincide with EMS 2025topics.

EMS 2029 - Paramedic Pharmacology

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Prerequisite(s): BIO 2101, current Colorado Certification as an EMT with IV endorsement or higher and acceptance into the Paramedic Education Program.
Corequisite(s): EMS 2030.
Formerly EMS 229 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

Credit(s): 2
Vocational Lab Hour(s): 1.50
Vocational Clinic Hour(s): 2

Prerequisite(s): Currently enrolled in EMS 2029, or have successfully completed EMS 2029.
Formerly EMS 230 Teaches the skills necessary for the paramedic to safely and effectively administer emergency medications. Serves as the companion course to Paramedic Pharmacology.

EMS 2033 - Paramedic Medical Emergencies

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Prerequisite(s): BIO 2101, current Colorado Certification as an EMT with IV endorsement or higher and acceptance into the Paramedic Education Program.

Corequisite(s): EMS 2034.
Formerly EMS 233 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, nontraumatic musculoskeletal disorders and diseases of the eyes, ears, nose and throat.

EMS 2034 - Paramedic Medical Emergencies Lab

Credit(s): 1
Vocational Lab Hour(s): 0.75
Vocational Clinic Hour(s): 1

Prerequisite(s): Completion of pre-course screening including drug screen and criminal background check.
Corequisite(s): EMS 2033.
Formerly EMS 234 Teaches the skills necessary for the paramedic to effectively assess and treat patients with a variety of medical emergencies utilizing skills and simulation scenarios. Serves as the companion course to Paramedic Medical Emergencies.

Semester Four

EMS 2027 - Paramedic Special Considerations

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): BIO 2101, current Colorado Certification as an EMT with IV endorsement or higher and acceptance into the Paramedic Education Program.
Formerly EMS 227 Introduces the paramedic student to concepts in assessing and meeting the emergency care needs of the neonate, pediatric, geriatric and special needs patient. This course focuses on epidemiology, pathophysiology, assessment and treatment of these patient groups. Common medical and traumatic presentations are addressed. Relevant psychosocial and ethno cultural concepts and legal and ethical implications are integrated throughout.

EMS 2028 - Paramedic Special Considerations Lab

Credit(s): 2
Vocational Lab Hour(s): 1.50
Vocational Clinic Hour(s): 2

Prerequisite(s): Completion of pre-course screening including drug screen and criminal background check.
Corequisite(s): EMS 2027.
Formerly EMS 228 Teaches the skills necessary for the paramedic to effectively assess and treat neonatal, pediatric, geriatric and special needs patients utilizing skills and simulation scenarios. Serves as the companion course to Paramedic Special Considerations.

EMS 2031 - Paramedic Cardiology

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): BIO 2101, current Colorado Certification as an EMT with IV endorsement or higher and acceptance into the Paramedic Education Program.

Formerly EMS 231 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

Credit(s): 1
Vocational Lab Hour(s): 0.75
Vocational Clinic Hour(s): 1

Prerequisite(s): Completion of pre-course screening including drug screen and criminal background check.
Corequisite(s): EMS 2031.
Formerly EMS 232 Teaches the skills necessary for the paramedic to effectively assess and treat patients presenting with cardiovascular emergencies utilizing skills and simulation scenarios. Serves as the companion course to Paramedic Cardiology.

EMS 2036 - Paramedic Trauma Emergencies Lab

Credit(s): 1
Vocational Lab Hour(s): 0.75
Vocational Clinic Hour(s): 1

Prerequisite(s): Completion of pre-course screening including drug screen and criminal background check.
Corequisite(s): EMS 2035.
Formerly EMS 236 Teaches the skills necessary for the paramedic to effectively assess and treat patients with a variety of traumatic emergencies utilizing skills and simulation scenarios. Serves as the companion lab course for Paramedic Trauma Emergencies.

EMS 2037 - Paramedic Internship Preparatory

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Prerequisite(s): EMS 2025, EMS 2027, EMS 2029, EMS 2031, EMS 2033, EMS 2035
Formerly EMS 237 Reviews concepts and techniques used in the prehospital setting.

Semester Five

EMS 2080 - Paramedic Internship I

Credit(s): 6
Internship Hour(s): 18
Prerequisite(s): EMS 2037.
Formerly EMS 280 Provides the first course of a proctored Internship to develop paramedic skills in a field setting. The student will gain experience in scene management as a member of an ALS team. The student will also apply advanced life support patient care knowledge to the assessment and treatment of patients.

PSY 2440 - Human Growth and Development: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 235 Examines human development from conception through death, emphasizing physical, cognitive, emotional and psychosocial factors. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

Semester Six

EMS 2081 - Paramedic Internship II

Credit(s): 6
Internship Hour(s): 18
Prerequisite(s): EMS 2080.
Formerly EMS 281 Provides the second course of a proctored Internship to develop paramedic skills in a field setting. The student will gain experience in scene management as a leader of the ALS team. The student will also apply advanced life support patient care knowledge to the assessment and treatment of patients.

Fire Science Technology, AAS

See list of Department Chairs on the Personnel page.

Program Description

The Fire Science Technology is an Associate of Applied Science (AAS) degree designed to meet the needs of fire protection and safety personnel. The program will prepare you for a career in fire science or a related field. Courses are offered through traditional classroom instruction, online, independent study, and hands on training.

Career Information.

The Fire Science Technology program prepares students for entry level positions in the fire service industry. Students **are not** required to take EMT courses as a prerequisites to the Fire Science AAS degree.

Total Credits: 60

General Education Requirements (15 credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

ENG 1031 - Technical Writing I

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 131, then ENG 1020 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.

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

MAT 1140 - Career Math

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 107 Covers material designed for career technical or general studies students who need to study particular mathematical topics. Topics may include measurement, algebra, geometry, trigonometry, graphs and/or finance. These are presented on an introductory level and the emphasis is on applications.

MAT 1340 - College Algebra: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 0300.
Formerly MAT 121 Explores topics including intermediate algebra, equations, and inequalities, functions and their graphs, exponential and logarithmic functions, linear and nonlinear systems, selection of topics from among graphing of the conic sections, introduction to sequences and series permutations and combinations, the binomial theorem and theory of equations. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

POS 1011 - American Government: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly POS 111 Includes the background of the US Constitution, the philosophy of American government, general principles of the Constitution, federalism and civil liberties. Examines public opinion and citizen participation, political parties, interest groups and the electoral process, and the structure and functions of the national government. This course is one of the statewide Guaranteed Transfer courses, GT-SS1.

POS 1025 - American State and Local Government: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly POS 125 Emphasizes 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. This course is one of the statewide Guaranteed Transfer courses, GT-SS1.

Technical Courses (33 credits)

FST 1000 - Firefighter I

Credit(s): 9
Lecture Hour(s): 6
Vocational Lab Hour(s): 4.50
Formerly FST 100 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 using IFSTA Essentials.

FST 1001 - Firefighter II

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Prerequisite(s): FST 1000.
Formerly FST 101 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

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 102 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

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 103 Explores the theories and fundamentals of how and why fires start, spread and are controlled.

FST 1005 - Building Construction for Fire Protection

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 105 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

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 106 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)

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 107 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

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 109 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 2002 - Strategy and Tactics

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 202 Provides an in-depth analysis of the principles of fire control through utilization of personnel, equipment, and extinguishing agents on the fire ground.

FST 2009 - Fire Protection Systems

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 209 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.

Technical Elective Courses (12 credits)

Select up to 12 hours from any of the following: FST, FSW or EMS courses

General Automotive Technology, AAS

CIP 47.0604

See list of Department Chairs on the Personnel page.

To enter the automotive collision or automotive service program, you must successfully complete any CCR course or qualifying placement score or exemption.

Entrance into the program involves a screening and selection process. You can obtain an application and information by calling the Automotive Department at 719.549.3354.

Career Opportunities

The Automotive Service Technology program prepares you for a range of careers in automotive maintenance and repair.

Program Description

This program teaches you to perform general maintenance, as well as to diagnose and repair electrical, engine, transmission, suspension, brake and air conditioning systems. The program has met the National Institute for Automotive Technicians Education Foundation (NATEF) accreditation in the areas of Automatic Transmissions & Transaxles, Brakes, Electrical/Electronic Systems, Engine Performance, Engine Repair, Heating & Air Conditioning and Suspension & Steering. We also offer Automotive Services courses for students in the Concurrent Enrollment Program at Pueblo Community College, Cañon City High School, and PCC Southwest Campus in Mancos. We encourage you to take the Automotive Service Excellence (ASE) certification tests while enrolled at PCC. We offer a paid apprenticeship for high school students through the Automotive Youth Education System (AYES).

As a student in the program, you will become a member of the Skills USA club and participate in a number of leadership activities and competitions.

Program Requirements

Entrance Requirements:
Admissions to the Automotive Service Technology program is by application only. For admission requirements, please go to MT-129 and see the department chair.

Total Credits: 78

Degree Requirements

General Education Courses (16 Credits)

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

or

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

COM 2063 - Conflict Resolution

Credit(s): 1
Lecture Hour(s): 1
Formerly COM 263 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.

or

COM 2064 - Negotiation

Credit(s): 1
Lecture Hour(s): 1
Formerly COM 264 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.

or

COM 2069 - Leadership

Credit(s): 1
Lecture Hour(s): 1
Formerly COM 269 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.

or

PSY 1001 - General Psychology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 101 Focuses on the scientific study of behavior including motivation, emotion, physiological psychology, stress and coping, research methods, consciousness, sensation, perception, learning and memory. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

or

ENG 1031 - Technical Writing I

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 131, then ENG 1020 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.

MAT 1140 - Career Math

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 107 Covers material designed for career technical or general studies students who need to study particular mathematical topics. Topics may include measurement, algebra, geometry, trigonometry, graphs and/or finance. These are presented on an introductory level and the emphasis is on applications.

or

MAT 1240 - Mathematics for the Liberal Arts: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 1001 concurrency allowed, or see Basic Skills Assessment
Formerly MAT 120 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. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 1340 - College Algebra: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 0300.
Formerly MAT 121 Explores topics including intermediate algebra, equations, and inequalities, functions and their graphs, exponential and logarithmic functions, linear and nonlinear systems, selection of topics from among graphing of the conic sections, introduction to sequences and series permutations and combinations, the binomial theorem and theory of equations. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 1420 - College Trigonometry: GT-MA1

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): MAT 1340.
Formerly MAT 122 Covers topics including trigonometric functions (with graphs and inverse functions), identities and equations, solutions of triangles, complex numbers, and other topics as time permits. This is a traditional prerequisite course to the calculus sequence. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 1320 - Finite Mathematics: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 0300 or Equivalent Test Score.
Formerly MAT 123 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. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 1400 - Survey of Calculus: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 1340 or see Basic Skills Assessment
Formerly MAT 125 Includes derivatives, integrals, and their applications, with attention restricted to algebraic, exponential, and logarithmic functions for business, life science and/or social science majors.. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2420 - Calculus II: GT-MA1

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): MAT 2410.
Formerly MAT 202 Continues the study of single variable calculus which will include techniques of integration, polar coordinates, analytic geometry, improper integrals and infinite series. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2430 - Calculus III: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 2420.
Formerly MAT 203 Focuses the traditional subject matter of the Calculus. Topics include vectors, vector-valued functions, and multivariable calculus including partial derivatives, multiple integrals, line integrals and application. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2431 - Calculus III with Engineering Applications: GT-MA1

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): Successful completion of MAT 2420 with a grade of C or better.
Formerly MAT 204 Focuses on the competencies established in MAT 2430 - Calculus III: GT-MA1with an additional emphasis on word problems and problem solving. This is the third course in the three-course calculus sequence. This course will additionally contain a thorough examination of multiple integration. This will include double and triple integrals, line integrals, Stokes' and Green's Theorems, and their applications. A graphing calculator is required for this course. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2520 - Discrete Mathematics: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): Successful completion of MAT 2410 with a C or better.
Formerly MAT 215 Concentrates on formal logic, algorithms, induction proofs, equivalence relations and graphs. This course is designed for mathematics and computer science students.

MAT 2561 - Differential Equations with Engineering Applications: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): Successful completion of MAT 2420 with a grade of C or better.
Formerly MAT 261 This course introduces ordinary differential equations. The content of this course includes all the topics of MAT 2560 - Differential Equations: GT-MA1with an additional emphasis on applications and problem solving. A graphing calculator is required for this course. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2560 - Differential Equations: GT-MA1

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of MAT 2420 with a C or better.
Formerly MAT 265 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.

PHY 1105 - Conceptual Physics with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly PHY 105 Focuses on mechanics, heat, properties of matter, electricity and magnetism, light and modern physics. Incorporates laboratory experience. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

Core Requirements (62 Credits)

ASE 1002 - Introduction to the Automotive Shop

Credit(s): 2
Lecture Hour(s): 2
Formerly ASE 102 Prepares the incoming automotive student to work in the shop safely and gain familiarity with the shop and common equipment.

ASE 1010 - Brakes I

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 110 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

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Prerequisite(s): ASE 1010.
Formerly ASE 111 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 Auto Electricity

Credit(s): 2
Lecture Hour(s): 1.5
Vocational Lab Hour(s): 0.75
Formerly ASE 120 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 and Charging System

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 123 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

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 130 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 and Repair

Credit(s): 2
Lecture Hour(s): 1.50
Vocational Lab Hour(s): 0.75
Formerly ASE 132 Focuses on lecture and related laboratory experiences in the diagnosis, service, adjustments and repair of various automotive ignition systems.

ASE 1034 - Automotive Fuel and Emissions Systems I

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 134 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 and Steering I

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 140 Focuses on diagnosis and service of suspension and steering systems and components. This course meets MLR/AST/MAST requirements.

ASE 1041 - Suspension and Steering II

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 141 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 1051 - Automotive Manual Transmission/Transaxles & Clutches

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 151 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 and Clutches II

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 152 Focuses on lecture and related laboratory experiences in the diagnosis and repair of automotive differentials, four wheel and all-wheel drive units.

ASE 1061 - Engine Repair & Rebuild

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly ASE 161 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 1062 - Automotive Engine Repair

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 162 Covers engine sealing requirements and repair procedures including engine fasteners, bolt torque, repair of fasteners, cooling system, and basic engine maintenance. This course meets AST/MAST requirements.

ASE 2010 - Automotive Power and ABS Brake Systems

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 210 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 - Auto/Diesel Body Electrical

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Formerly ASE 221 Provides a comprehensive study of the theory, operation, diagnosis, and repair of vehicle accessories.

ASE 2033 - Auto Fuel Injection and Emissions Systems II

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Formerly ASE 233 Focuses on lecture and related laboratory experiences in the diagnosis and repair of electronic fuel injection systems and modern exhaust systems.

ASE 2036 - Advanced Drivability Diagnosis/Repair

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Formerly ASE 236 Focuses on lecture and laboratory experiences in the inspection, testing and repair of typical computerized engine control systems on customer vehicles.

ASE 2040 - Suspension and Steering III

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Formerly ASE 240 Covers operation of steering and power steering systems. It will also include different alignment types and procedures.

ASE 2050 - Automatic Transmission/Transaxle Service

Credit(s): 1
Lecture Hour(s): 1
Formerly ASE 250 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 and Transaxle Repair

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly ASE 251 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 2052 - Advanced Automatic Transmissions/Transaxles

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 252 Covers the diagnosis, repair, and rebuild of automatic transmissions and transaxles including the hydraulic, electronic, and mechanical components. This course meets MAST requirements.

ASE 2053 - Advanced Manual Transmission/Transaxles

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Formerly ASE 253 Focuses on lecture and laboratory experiences in the diagnosis and repair of automotive manual transmissions, transaxles, clutches and their related components on customer vehicles.

ASE 2060 - Advanced Engine Diagnosis

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Formerly ASE 260 Focuses on lecture and related laboratory experiences in the diagnosis and necessary corrective actions of automotive engine performance factors related to customer vehicles.

ASE 2064 - Introduction Automotive Heating and Air Conditioning

Credit(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 264 Covers basic operation of heating and air conditioning components. This course meets MLR/AST/MAST requirements.

ASE 2065 - Heating and Air Conditioning Systems

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Formerly ASE 265 Emphasizes lecture and related laboratory experiences in the diagnosis and service of vehicle heating and air conditioning systems and their components.

ASE 2181 - Internship: Basic Heavy Duty and Power Train

Credit(s): 1
Internship Hour(s): 3
Formerly ASE 281 Focuses on 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 (FAST) Fundamental Automotive Systems Training (Chrysler) or others as required by the program track.

ASE 2182 - Internship: General (Summer)

Credit(s): 1
Internship Hour(s): 3
Formerly ASE 282 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 (FAST) Fundamental Automotive Systems Training (Chrysler) or others as required by the program track.

Graphic Design, AAS

CIP 09.0702

See list of Department Chairs on the Personnel page.

Career Opportunities

Careers in Media Communications are in demand and PCC offers an affordable way for students to begin their education. Some of the exciting career options within this field include: Graphic Designers; Web Developers; Broadcast Technicians; Film Video Editors; and Advertising & Promotion Managers.

Program Description

The Media Communications program teaches students to think critically and develop skills in Web Design, Graphic Design, Advertising, Videography, News Writing, and TV-Radio Production. Courses provide a solid foundation in these areas through a combination of lecture and hands on applications. There are multiple labs with state of the art equipment and software for your area of emphasis. The Media Communications program provides a high technical skill attainment in this changing field of communication. Students have multiple options to pursue. The AAS degrees with emphases in Graphic Design and Web Design offer advanced technical skills in these areas. Certificates provide basic skill sets to enhance an existing degree or occupation. The AGS degree provides a transfer option to a four year university. If interested in this option, please refer to the Transferring Credits section of the catalog.

Total Credits: 63

Degree Requirements

Semester 1 - Fall (15 Credits)

ART 1002 - Visual Concepts 2-D Design

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 131 Examines the basic elements of design, visual perception, and artistic form and composition as they relate to two-dimensional media.

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.

Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

or

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

or

ENG 1031 - Technical Writing I

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 131, then ENG 1020 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.

MGD 1002 - Introduction to Multimedia

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly MGD 102 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 1015 - Typography & Layout

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly MGD 105 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.

Semester 2 - Spring (15 Credits)

ART 1201 - Drawing I

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 121 Investigates the various approaches and media that students need to develop drawing skills and visual perception.

or

ART 1401 - Digital Photography I

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 139 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.

MAR 2020 - Principles of Advertising

Credit(s): 3
Lecture Hour(s): 3
Formerly MAR 220 Examines the principles and practices of advertising and its relationship to business in order to promote a business or organization. Areas of major emphasis include advertising principles, strategies, media, copy and layout, and ethical considerations.

MGD 1011 - Adobe Photoshop I

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly MGD 111 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 1013 - Adobe Indesign

Credit(s): 3
Vocational Lab Hour(s): 4.5
Formerly MGD 114 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.

Mathematics (3 Credits)

MAT 1160 - Financial Mathematics

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 112 Covers topics including pricing, taxes, insurance, interest, annuities, amortization, investments using financial calculators and spreadsheets.

or

MAT 1260 - Introduction to Statistics: GT-MA1

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 135 Explores and applies data presentation and summarization, introduction to probability concepts and distributions, statistical inference estimation, hypothesis testing, comparison of populations, correlation and regression. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

Or Choose Any GT-MA1 Mathematics

MAT 1240 - Mathematics for the Liberal Arts: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 1001 concurrency allowed, or see Basic Skills Assessment
Formerly MAT 120 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. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 1340 - College Algebra: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 0300.
Formerly MAT 121 Explores topics including intermediate algebra, equations, and inequalities, functions and their graphs, exponential and logarithmic functions, linear and nonlinear systems, selection of topics from among graphing of the conic sections, introduction to sequences and series permutations and combinations, the binomial theorem and theory of equations. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 1420 - College Trigonometry: GT-MA1

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): MAT 1340.
Formerly MAT 122 Covers topics including trigonometric functions (with graphs and inverse functions), identities and equations, solutions of triangles, complex numbers, and other topics as time permits. This is a traditional prerequisite course to the calculus sequence. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 1320 - Finite Mathematics: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 0300 or Equivalent Test Score.
Formerly MAT 123 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. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 1400 - Survey of Calculus: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 1340 or see Basic Skills Assessment
Formerly MAT 125 Includes derivatives, integrals, and their applications, with attention restricted to algebraic, exponential, and logarithmic functions for business, life science and/or social science majors.. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2420 - Calculus II: GT-MA1

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): MAT 2410.
Formerly MAT 202 Continues the study of single variable calculus which will include techniques of integration, polar coordinates, analytic geometry, improper integrals and infinite series. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2430 - Calculus III: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 2420.
Formerly MAT 203 Focuses the traditional subject matter of the Calculus. Topics include vectors, vector-valued functions, and multivariable calculus including partial derivatives, multiple integrals, line integrals and application. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2431 - Calculus III with Engineering Applications: GT-MA1

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): Successful completion of MAT 2420 with a grade of C or better.
Formerly MAT 204 Focuses on the competencies established in MAT 2430 - Calculus III: GT-MA1with an additional emphasis on word problems and problem solving. This is the third course in the three-course calculus sequence. This course will additionally contain a thorough examination of multiple integration. This will include double and triple integrals, line integrals, Stokes' and Green's Theorems, and their applications. A graphing calculator is required for this course. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2520 - Discrete Mathematics: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): Successful completion of MAT 2410 with a C or better.
Formerly MAT 215 Concentrates on formal logic, algorithms, induction proofs, equivalence relations and graphs. This course is designed for mathematics and computer science students.

MAT 2561 - Differential Equations with Engineering Applications: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): Successful completion of MAT 2420 with a grade of C or better.
Formerly MAT 261 This course introduces ordinary differential equations. The content of this course includes all the topics of MAT 2560 - Differential Equations: GT-MA1with an additional emphasis on applications and problem

solving. A graphing calculator is required for this course. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2560 - Differential Equations: GT-MA1

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of MAT 2420 with a C or better.
Formerly MAT 265 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.

Semester 3 - Fall (12 Credits)

JOU 1005 - Introduction to Mass Media: GT SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly JOU 105 Places the mass media in a historical and cultural perspective, considering the validity, integrity and influence of the media in a democracy. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

MGD 1012 - Adobe Illustrator I

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly MGD 112 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.

or

MGD 1043 - Motion Graphic Design I: (Software)

Credit(s): 3
Vocational Lab Hour(s): 4.5
Formerly MGD 143 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 1033 - Graphic Design I

Credit(s): 3
Vocational Lab Hour(s): 4.50
Prerequisite(s): MGD 1015 and MGD 1011 or MGD 1013, or Department Chair Approval.
Formerly MGD 133 Focuses upon the study of design layout and conceptual elements concerning graphic design projects such as posters, advertisements, logos and brochures.

MGD 1041 - Web Design I

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly MGD 141 Introduces website planning, design and creation using industry standards-based website development tools. Screen-based color theory, web aesthetics, use of graphics editors and intuitive interface design are explored.

Semester 4 - Spring (15 Credits)

MGD 2033 - Graphic Design II

Credit(s): 3
Vocational Lab Hour(s): 4.50
Prerequisite(s): MGD 1033.
Formerly MGD 233 Continues instruction in idea development for advanced graphic design.

MGD 2041 - Web Design II

Credit(s): 3
Vocational Lab Hour(s): 4.50
Prerequisite(s): MGD 1041, or department chair approval.
Formerly MGD 241 Expands on previously learned fundamentals of HTML introducing cascading style sheets, DHTML, Java Scripts and CGI forms. Color usage and interface design principles are emphasized in this course. In this course we'll examine websites that employ more complex structures, optimal site architecture and navigation necessary for larger and more complex sites.

MGD 2056 - Graphic Design Production

Credit(s): 3
Vocational Lab Hour(s): 4.50
Prerequisite(s): MGD 1033
Formerly MGD 256 Provides an opportunity to combine several draw and paint applications into one design and layout class. Students will explore advanced techniques in creating and designing computer art.

MGD 2068 - Business for Creatives

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021 or ENG 1031
Formerly MGD 268 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.

Human Nutrition (3 Credits)

HWE 1050 - Human Nutrition

Credit(s): 3
Lecture Hour(s): 3
Formerly HWE 100 Introduces basic principles of nutrition with emphasis on personal nutrition. This course focuses on macro and micro nutrients and their effects on the functions of the human body. Special emphasis is placed on the application of wellness, disease, and lifespan as it pertains to nutrition.

Or Choose any GT-SC1 Physical & Life Sciences with lab

ANT 1005 - Biological Anthropology with Laboratory: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly ANT 111 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. This is a statewide Guaranteed Transfer course in the GT-SC1 category. GT-SC1

AST 1110 - Astronomy I With Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly AST 101 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 - Astronomy II with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): AST 1110.
Formerly AST 102 Emphasizes the structure and life cycle of the stars, the sun, galaxies, and the universe as a whole, including cosmology and relativity. Stellar phenomena including white dwarves, black holes will be explored. Incorporates laboratory experience.

BIO 1005 - Science of Biology with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly BIO 105 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 - as is the impact of biological science on society. Includes laboratory experiences. Designed for non-science majors.

BIO 1111 - General College Biology I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): ENG 1021

Formerly BIO 111 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 - General College Biology II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Corequisite(s): ENG 1021.
Formerly BIO 112 A continuation of Biology I. Includes ecology, evolution, classification, structure, and function in plants and animals. This course includes laboratory experience.

BIO 2101 - Human Anatomy and Physiology I with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 201 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, nervous and endocrine systems. Includes a mandatory hands-on laboratory experience covering experimentation, microscopy, observations and dissection. This is the first semester of a two-semester sequence.

BIO 2102 - Human Anatomy and Physiology II with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 202 Focuses on the integrated study of the human body and the histology, anatomy, and physiology of the following systems and topics: cardiovascular, hematology, lymphatic and immune, urinary, fluid and electrolyte control, digestive, nutrition, respiratory, reproductive and development. Includes a mandatory hands-on laboratory experience involving experimentation, microscopy, observations and dissection. This is the second semester of a two-semester sequence.

BIO 2104 - Microbiology with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 204 Designed for health science majors. Examines microorganisms with an emphasis on their structure, development, physiology, classification and identification. The laboratory experience includes culturing, identifying and controlling microorganisms with an emphasis on their role in infectious disease.

CHE 1011 - Introduction to Chemistry I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2

Prerequisite(s): MAT 0300.
Formerly CHE 101 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: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): CHE 1011.
Formerly CHE 102 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 1005 - Chemistry in Context with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Formerly CHE 105 Covers the study of measurements, matter, molecules, atoms, chemical bonding, nomenclature, energy, acids, bases, and nutrition. Course work examines chemistry in the modern world and surveys the current knowledge as well as the conceptual framework of the discipline. Chemistry as a science is explored, as is the impact of chemistry on society. This course includes laboratory experience and is designed for non-science majors.

CHE 1111 - General College Chemistry I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 1340, CHE 1011.
Corequisite(s): ENG 1021.
Formerly CHE 111 Focuses on basic chemistry and measurement, matter, chemical formulas, reactions and equations, stoichiometry. This course covers the development of atomic theory culminating in the use of quantum numbers to determine electron configurations of atoms, and the relationship of electron configuration to chemical bond theory. The course includes gases, liquids, and solids and problem-solving skills are emphasized through laboratory experiments.

CHE 1112 - General College Chemistry II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): CHE 1111, ENG 1021.
Formerly CHE 112 Presents concepts in the areas of solution properties, chemical kinetics, chemical equilibrium, acid-base and ionic equilibrium, thermodynamics, and electrochemistry. This course emphasizes problem solving skills and descriptive contents for these topics. Laboratory experiments demonstrate qualitative and quantitative analytical techniques.

ENV 1111 - Environmental Science with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly ENV 101 Provides an introduction to the basic concepts of ecology and the relationship between environmental problems and biological systems. Includes interdisciplinary discussions on biology, chemistry, geology, energy, natural resources, pollution and environmental protection. Using a holistic approach, students will study how the foundations of natural sciences interconnect with the environment. This course includes laboratory experience.

GEO 1011 - Physical Geography: Landforms with Lab: GT-SCI

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly GEO 111 Introduces students to 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. The course incorporates an integrated process of lectures, discussion and laboratory assignments.

GEO 1012 - Physical Geography: Weather and Climate with Lab: GT-SCI

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly GEO 112 Introduces the principles of meteorology, climatology, world vegetation patterns and world regional climate classification. The course includes investigating the geographic factors which influence climate, such as topography, location, elevation, winds and latitude.

GEY 1111 - Physical Geology with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly GEY 111 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: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly GEY 112 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: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): MAT 0300 with a grade of S/C or better.
Formerly GEY 135 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.

MET 1050 - General Meteorology: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly MET 150 Provides an introduction to general meteorology and atmospheric sciences. It includes the composition and structure of the atmosphere and characteristics that affect the atmosphere, such as temperature, pressure and moisture. Additionally, the development of weather systems such as storm systems, hurricanes, weather fronts and cloud development will also be examined. Finally, concepts of climatology will be stressed. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 1105 - Conceptual Physics with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly PHY 105 Focuses on mechanics, heat, properties of matter, electricity and magnetism, light and modern physics. Incorporates laboratory experience. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 1107 - Energy Science & Technology with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): MAT 0300 with a grade of S/C or better.
Formerly PHY 107 Explores the science of energy and energy technologies, with a focus on renewable energy resources and clean technologies. It provides a background in the physics of energy, energy transfer and the current state of technology. Students will evaluate the future utilization of renewable technologies. Activities may include investigating conservation of energy, mechanical, electrical, heat and fluid power systems; energy transfer and loss; understanding energy audits; testing solar collectors and wind generators; and investigating hydrogen fuel cells. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 1111 - Physics: Algebra-Based I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 0300.
Formerly PHY 111 Explores the physical world through reasoning, mathematics and experimentation. Examines kinematics, force, circular motion, energy, momentum, torque, rotational dynamics, simple harmonic motion, temperature, heat and thermodynamics. The concepts and theories presented are explored through demonstrations and hands-on experiments. It is a general physics course that is recommended for all of the health sciences and all other

interested students. Students entering engineering or one of the advanced sciences should register for PHY 211. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 1112 - Physics: Algebra-Based II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 0300.
Formerly PHY 112 Expands upon PHY 1111and explores sound waves, electric fields, electric circuits, magnetic fields, light, optics and modern physics. Explores the concepts and theories presented in class through demonstrations and hands-on experiments. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 2111 - Physics: Calculus Based I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 2410, ENG 1021.
Formerly PHY 211 Explores the physical world through reasoning, mathematics and experimentation. Covers kinematics, force, gravity, energy, momentum, torque, rotational dynamics and fluids, and may include thermodynamics. The concepts and theories presented in class are explored through demonstrations and hands-on experiments. This first semester calculus-based physics course is recommended for students entering engineering or one of the advanced sciences. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 2112 - Physics: Calculus-Based II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 2410, ENG 1021.
Formerly PHY 212 Expands upon PHY 2111and examines waves, electric fields, electric circuits, magnetic fields, light and optics, and modern physics. The concepts and theories presented in class are explored through demonstrations and hands-on experiments. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

SCI 1055 - Integrated Science I

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly SCI 155 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. Course is for elementary education majors only; both SCI 155 & SCI 1056required. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

SCI 1056 - Integrated Science II

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2

Formerly SCI 156 Examines earth and biological systems, living and nonliving environments, through the application of fundamental energy and matter concepts. These systems and concepts will be explored in hands-on laboratory experiments. Course is for elementary education majors only; both SCI 1055& SCI 156 required. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

Semester 5 - Summer (6 Credits)

MGD 2080 - Internship

Credit(s): 3
Internship Hour(s): 9
Prerequisite(s): Department Chair Approval.
Formerly MGD 280 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

Credit(s): 3
Internship Hour(s): 9
Prerequisite(s): Department Chair Approval.
Formerly MGD 289 A demonstrated culmination of learning within a given program of study.

Healthcare Information Systems AAS

CIP: 51.0705

See list of Department Chairs on the Personnel Page

Program Description

Few professions offer the level of diversity in positions and tasks, as well as job security, as Health Information Technology (HIT). HIT is positioned at the intersection of healthcare, technology, and business. HIT professional duties span medical coding, clinical documentation integrity, supporting and creating required computer systems, data analytics, management, patient privacy, network security, and beyond. HIT professionals empower partners in healthcare to provide high-quality, efficient, financially prudent, and life-saving care.

What Do Healthcare Information Systems Specialists Do?

Health information technology (health IT) specialists handle the technical aspects of managing patient health information. Depending on their position, health IT professionals might build, implement, or support electronic health records (EHRs) and other systems that store patient-related data. They know what data is needed, where it is stored, and how the data is used.

Their work affects quality of care tremendously. As they move up the ladder, health IT specialists become more involved in collaborating with other health-care teams to drive improved patient outcomes, lower costs, and new developments in patient care.

PCC's HIT programs, staff, and students are affiliated with the global Health information Management Systems Society (HIMSS), the premier national association of health information management (HIM) professionals and the leading source of HIM knowledge.

After completing the stringent processes through the American Health Information Management Association to be identified with the AHIMA Professional Certificate Approval Program (PCAP) and successfully earning the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM) accreditation, PCC HIT students are not only prepared to earn the AHIMA Medical Coding Credentials, they are eligible to sit for the Registered Health Information Technician (RHIT) credentialing exam.

Total Credits: 61

General Education (15 credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1031 - Technical Writing I

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 131, then ENG 1020 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.

MAT 1260 - Introduction to Statistics: GT-MA1

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 135 Explores and applies data presentation and summarization, introduction to probability concepts and distributions, statistical inference estimation, hypothesis testing, comparison of populations, correlation and regression. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

- Gen Ed Elective (PSY or COM) **Credit(s):** 3

PHI 1013 - Logic: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 113 Studies effective thinking using language-oriented logic. Provides tools and develops skills for creative and critical thinking. Emphasizes the development of decision-making and problem-solving. This course is one of the statewide Guaranteed Transfer courses, GT-AH3.

CIS 1018 - Intro to PC Applications

Credit(s): 3
Lecture Hour(s): 2

Vocational Lab Hour(s): 1.50
Formerly CIS 118 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.

HIT Core Curriculum (46-47 credits)

HIT 1002 - Medical Vocabulary for Documentation

Credit(s): 3
Lecture Hour(s): 3
Formerly HIT 102 Introduces medical vocabulary through the study of word structures and phrases with reinforcement in writing narratives and the study of medical records. Anatomy and physiology of all body systems are reviewed with discussion of related diseases, diagnostic procedures, treatments and drugs. Emphasis on learning to read, pronounce and interpret medical documentation prepares the student for document review in HIT fields. Illustrates the importance of HIPAA in both physical and electronic dissemination of medical records.

HIT 1011 - Health Data Management and Information Systems

Credit(s): 3
Lecture Hour(s): 3
Formerly HIT 111 Introduces the electronic health record (EHR)/components and health informatics including infrastructure, privacy, security and legal implications. Federal involvement and its impact on information technology regarding health data will be discussed. Students will study the roles and relationships, in the transformation of data into meaningful information, through research, vital statistics and epidemiology. Data quality, integrity, collection, access and retention will also be emphasized.

HIT 1050 - Healthcare Delivery Systems

Credit(s): 3
Lecture Hour(s): 3
Formerly HIT 150 Provides an overview of the healthcare delivery system at the national, state and local level. The course provides healthcare education, including applicable regulations and standards, reimbursement methods, and evolution and current trends in healthcare delivery.

HIT 2061 - Healthcare Software

Credit(s): 3
Lecture Hour(s): 3
Formerly HIT 261 This course covers basic computer system architecture, file structure and design for healthcare settings. Topics include system analysis, design, security and selection for a variety of hardware environments. This course provides students with a review of computer fundamentals and the fundamentals of the electronic health record and an introduction to the information systems life cycle with software application. Security and confidentiality issues, concerns and implications in relation to the electronic health record will be addressed.

HIT 2022 - Quality Management

Credit(s): 3
Lecture Hour(s): 3
Formerly HIT 222 Introduces the student to the basic concepts of quality management in the healthcare environment. Requirements by regulatory agencies regarding quality documentation, utilization and risk management are discussed.

Data collection, verification, analysis, descriptive statistics and presentation techniques will be studied. The course emphasizes the ongoing use of objective data and feedback to improve processes, systems and patient outcomes. Analysis of documentation for various purposes is also covered.

HIT 1012 - Legal Aspects for Health Records

Credit(s): 2
Lecture Hour(s): 2
Formerly HIT 112 Introduces the student to the legal system and defines the role of the healthcare professionals. Specific federal and state laws are identified and discussed as they relate to release of medical information.

HIT 2089 - HIT Capstone Course

Credit(s): 3
Internship Hour(s): 9
Prerequisite(s): Department approval required
Formerly HIT 289 Provides a demonstrated culmination of learning within a given program of study.

HIT 1020 - Working with Health IT Systems

Credit(s): 4
Lecture Hour(s): 4
Formerly HIT 120 Provides hands-on experience with a computerized HIT system/electronic health record, utilizing contemporary online systems with simulated data. The course will include additional lecture, project work and practice in the use of HIT systems. Students will play the role of practitioners using these systems and experience threats to security and gain an appreciation of the need for standards and high levels of usability. Students will also learn how errors can occur and ways to minimize them.

HIT 1022 - Workflow Fund of Healthcare

Credit(s): 3
Lecture Hour(s): 3
Formerly HIT 122 Introduces the fundamentals of healthcare workflow, process analysis and redesign in various healthcare settings. Health information technology culture changes (IT/clinicians) and project management, including HIT system selection, design, implementation and support will also be covered. Electronic health record/practice management systems will be evaluated for quality and process improvement, clinical decision support, health information exchange, public health, and population health management in ambulatory and alternative care settings.

CNG 1020 - A+ Certification Preparation

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Formerly CNG 120 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 1024 - Networking I: Network +

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50

Formerly CNG 124 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 1032 - Network Security Fundamentals

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 132 Examines the field of information security to prepare information systems students for their future roles as business decision-makers. The course presents a balance of the managerial and the technical aspects of information security. The concepts covered in this course should be helpful for students working towards the Certified Information Systems Security Professional (CISSP) certification.

CNG 1036 - Guide to Disaster Recovery

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Department Chair Approval.
Formerly CNG 136 Presents methods to identify vulnerabilities and take appropriate countermeasures to prevent and mitigate failure risks for an organization. It will take an enterprise-wide approach to developing a disaster recovery plan.

Electives (Select 2 out of 3 of the below classes)

HIT 1075 - Special Topics

Credit(s): 0-12
Formerly HIT 175 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

HIT 2064 - Data Visualization

Credit(s): 4
Lecture Hour(s): 4
Formerly HIT 264 Introduces data visualization tools and techniques software, as well as increasing proficiency in Excel. Students will be able to tell a story with data, communicating observations in a clear, compelling way that provides meaning and explanation. As part of this course, students are also required to complete a professional practicum experience to apply classroom knowledge in a clinical setting.

HIT 2065 - Data Analytics Applications

Credit(s): 3
Lecture Hour(s): 3
Formerly HIT 265 Deepens understanding of current and emerging practices in the application of data analytics. Topics include clinical, financial, operations and qualitative analytics; trends in practices; customer expectations; regulations that affect analytics; and ethical issues in gathering, analyzing and reporting healthcare data. Explore the roles and applications of descriptive, retrospective and prescriptive analytics in various settings.

HIT Medical Coding AAS

See list of Department Chairs on the Personnel page.

Program Description

Health Information Technology (HIT) is the combination study of healthcare and information technology. The Medical Coding student has the option to complete the HIT Medical Coding Certificate and test for the Certified Coding Associate (CCA) or Certified Coding Specialist (CCS) exam. This will make the student immediately employable for an entry-level or mid-level position as a certified coder in an acute-care hospital, ambulatory, long-term or skilled-care nursing facility, physician office, insurance company, and any other setting using medical coding.

Specialization is growing in all areas of coding and coding management, allowing the coding professional to narrow or broaden their scope of practice through new and innovative roles within the healthcare field (e.g., clinical data specialist, medical records reviewer, medical records field technician, remote medical coder, reimbursement specialist, various registries, and coding auditor).

PCC's HIT programs, staff, and students are affiliated with the American Health Information Management Association (AHIMA), the premier national association of health information management (HIM) professionals and the leading source of HIM knowledge.

After completing the stringent processes through the American Health Information Management Association to be identified with the AHIMA Professional Certificate Approval Program (PCAP) and successfully earning the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM) accreditation, PCC HIT students are not only prepared to earn the AHIMA Medical Coding Credentials, they are eligible to sit for the Registered Health Information Technician (RHIT) credentialing exam.

Total Credits: 62

State Guaranteed Transfer Courses (16 credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1031 - Technical Writing I

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 131, then ENG 1020 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.

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

MAT 1260 - Introduction to Statistics: GT-MA1

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 135 Explores and applies data presentation and summarization, introduction to probability concepts and distributions, statistical inference estimation, hypothesis testing, comparison of populations, correlation and regression. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

BIO 1006 - Basic Anatomy and Physiology

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly BIO 106 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, Paramedic Program, and the Medical Office Technology Program.

PSY 1001 - General Psychology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 101 Focuses on the scientific study of behavior including motivation, emotion, physiological psychology, stress and coping, research methods, consciousness, sensation, perception, learning and memory. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

Core Curriculum Requirements (23 credits)

HIT 1002 - Medical Vocabulary for Documentation

Credit(s): 3
Lecture Hour(s): 3
Formerly HIT 102 Introduces medical vocabulary through the study of word structures and phrases with reinforcement in writing narratives and the study of medical records. Anatomy and physiology of all body systems are reviewed with discussion of related diseases, diagnostic procedures, treatments and drugs. Emphasis on learning to read, pronounce and interpret medical documentation prepares the student for document review in HIT fields. Illustrates the importance of HIPAA in both physical and electronic dissemination of medical records.

CIS 1018 - Intro to PC Applications

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 118 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.

HIT 1050 - Healthcare Delivery Systems

Credit(s): 3
Lecture Hour(s): 3
Formerly HIT 150 Provides an overview of the healthcare delivery system at the national, state and local level. The course provides healthcare education, including applicable regulations and standards, reimbursement methods, and evolution and current trends in healthcare delivery.

HIT 2061 - Healthcare Software

Credit(s): 3
Lecture Hour(s): 3
Formerly HIT 261 This course covers basic computer system architecture, file structure and design for healthcare settings. Topics include system analysis, design, security and selection for a variety of hardware environments. This course provides students with a review of computer fundamentals and the fundamentals of the electronic health record and an introduction to the information systems life cycle with software application. Security and confidentiality issues, concerns and implications in relation to the electronic health record will be addressed.

HIT 2025 - Health Information Management

Credit(s): 3
Lecture Hour(s): 3
Formerly HIT 225 Concentrates on the principles of management as they relate to the administration of the health information management department as part of a healthcare organization.

HIT 2022 - Quality Management

Credit(s): 3
Lecture Hour(s): 3
Formerly HIT 222 Introduces the student to the basic concepts of quality management in the healthcare environment. Requirements by regulatory agencies regarding quality documentation, utilization and risk management are discussed. Data collection, verification, analysis, descriptive statistics and presentation techniques will be studied. The course emphasizes the ongoing use of objective data and feedback to improve processes, systems and patient outcomes. Analysis of documentation for various purposes is also covered.

HIT 1012 - Legal Aspects for Health Records

Credit(s): 2
Lecture Hour(s): 2
Formerly HIT 112 Introduces the student to the legal system and defines the role of the healthcare professionals. Specific federal and state laws are identified and discussed as they relate to release of medical information.

HIT 2089 - HIT Capstone Course

Credit(s): 3
Internship Hour(s): 9
Prerequisite(s): Department approval required
Formerly HIT 289 Provides a demonstrated culmination of learning within a given program of study.

Medical Coding (23 credits)

HIT 1011 - Health Data Management and Information Systems

Credit(s): 3
Lecture Hour(s): 3
Formerly HIT 111 Introduces the electronic health record (EHR)/components and health informatics including infrastructure, privacy, security and legal implications. Federal involvement and its impact on information technology regarding health data will be discussed. Students will study the roles and relationships, in the transformation of data into meaningful information, through research, vital statistics and epidemiology. Data quality, integrity, collection, access and retention will also be emphasized.

HIT 2020 - ICD Coding I

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): HPR 1032
Formerly HIT 220 Introduces the ICD coding classification system and provides a basic understanding of ICD structure, conventions and principles utilized in code assignment. The student will be introduced to the official coding guidelines. They will apply knowledge of anatomy, physiology, pathophysiology and pharmacology in the assignment of diagnostic and procedural codes.

HIT 2041 - CPT Coding Basic Principles

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): HPR 1032.
Formerly HIT 241 Provides the student with skill sets to apply the current procedural terminology (CPT) and HCPCS code set principles and guidelines for application in reporting/communicating information and data about clinical services provided to patients by healthcare providers. Includes understanding what the CPT nomenclature is, how and why it is used, and guidelines for each code category and how it is applied to represent services within each code category.

HPR 1032 - Disease Process and Treatment

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): BIO 1006
Formerly HPR 232 Covers disease processes and drug therapy used to treat commonly found pathological conditions. Normal anatomy and physiology of each body system is reviewed. Conditions that disrupt homeostasis are examined. Conditions considered are both acquired and congenital. Diagnostic methods, management, treatment modalities and prognosis are discussed. Classifications of drugs are introduced. A general understanding of the actions; absorption, metabolism and excretion; and reasons for use of various groups of pharmacologic agents are introduced.

HIT 2052 - Coding II for Certification

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): HIT 2020, HIT 2041
Formerly HIT 252 Covers medical necessity and coding issues using ICD and CPT coding principles. Students should already possess a fundamental understanding of the CPT, ICD and HCPCS coding principle. Intensive coding application will be achieved through the use of medical records, case studies and scenarios. DRGs, APCs, RUGs, RBRVs and the Correct Coding Initiative (CCI) will also be covered in this class.

HIT 1005 - Principles of Healthcare Reimbursement

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): HIT 2020, HIT 2041
Formerly HIT 105 Provides students with the knowledge needed to perform necessary tasks involved in healthcare reimbursement systems, including payment methodologies, use of clinical data and compliance.

HIT 1088 - Health Information Practicum I

Credit(s): 2
Practicum Hour(s): 4
Prerequisite(s): HIT 2052 or Department Chair Approval.
Formerly HIT 188 Provides a directed clinical experience which focuses on the practice of skills related to the application of legal principles, record analysis and abstraction and record retention and retrieval.

HIT 2068 - Certification Test Preparation

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): Department Chair Approval.
Formerly HIT 268 Prepares students who have made the decision to obtain a national health information technology credential by completing national credentialing exams.

Industrial Technology Maintenance, AAS

CIP 15.0303

See list of Department Chairs on the Personnel page.

Career Opportunities

The AAS degree in Industrial Technology Maintenance prepares you for a career as an electronics technician, an electro-mechanical technician, a semiconductor manufacturing technician, or an electro-mechanical field service technician.

Total Credits: 61

Degree Requirements

General Education Requirements (15 Credits)

ENG 1031 - Technical Writing I

Credit(s): 3
Lecture Hour(s): 3

Formerly ENG 131, then ENG 1020 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.

MAT 1150 - Technical Mathematics

Credit(s): 4
Lecture Hour(s): 4
Formerly MAT 108 Covers material designed for career technical or general studies students who need to study particular mathematical topics. Topics may include measurement, algebra, geometry, trigonometry, graphs and/or finance. These are presented at an introductory level and the emphasis is on applications.

Any general education courses in (8 Credits)

- Arts/Humanities, or Social/Behavioral Science, or Communications, or Natural & Physical Sciences.

Recommendations are

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

COM 2069 - Leadership

Credit(s): 1
Lecture Hour(s): 1
Formerly COM 269 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.

PHY 1105 - Conceptual Physics with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly PHY 105 Focuses on mechanics, heat, properties of matter, electricity and magnetism, light and modern physics. Incorporates laboratory experience. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

Core Curriculum Requirements (46 Hours)

ELT 1206 - Fundamentals of DC/AC

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Corequisite(s): ELT 1207.

Formerly ELT 106 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 - Industrial Electronics

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Corequisite(s): ELT 1206.
Formerly ELT 107 Provides a basic knowledge of generators, motors and the solid state devices and digital techniques used for industrial control applications.

ELT 2252 - Motors and Controls

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly ELT 252 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. 68 contact hours.

ELT 2254 - Industrial Wiring

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly ELT 254 Focuses on the required and recommended practice for industrial wiring. The National Electrical Code is applied to industrial power and control wiring. Covers specification and installation of wiring, conduit, enclosures and termination components in lecture and applied during lab.

ELT 2357 - Sensors and Transducers

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Prerequisite(s): ELT 1001 , ELT 1206.
Formerly ELT 257 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. 68 contact hours.

ELT 2358 - Programmable Logic Controllers

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly ELT 258 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

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Prerequisite(s): ELT 2358.
Formerly ELT 259 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 2080 - Internship

Credit(s): 1-12
Internship Hour(s): 3-36
Formerly ELT 280 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 2089 - Capstone: Automated Systems

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly ELT 289 Enables the student to plan, construct and evaluate a modified flexible manufacturing system using a programmable logic controller, industrial computer, robot and work cell peripherals. Addresses safety and emergency control procedures throughout this course.

MAC 1000 - Machine Shop Safety

Credit(s): 1
Lecture Hour(s): 1
Formerly MAC 100 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 1005 - Introduction to Machining Technology

Credit(s): 4
Lecture Hour(s): 1.50
Vocational Lab Hour(s): 3.75
Formerly MAC 105 Introduces the student to the changing era of machining technology, emphasizing terminology, referencing and applications related to manufacturing environments. The fundamental use of bench tools, layout procedures, materials, precision measuring tools, machining processes, drilling and cut-off machines and other machining/manufacturing processes will be stressed. Skill competencies and standards will be identified. Use of the Machinery's Handbook will be strictly required and particular competencies may require performance evaluations.

MAC 2056 - Industrial Components

Credit(s): 3
Lecture Hour(s): 2

Vocational Lab Hour(s): 1.50
Formerly MAC 256 Covers common mechanical components used on industrial equipment. It is designed to assist maintenance staff in removal, installation and maintenance of plant equipment. It includes safety, fits, threads, bearings, fasteners, and hardware, lubrication, assembly and the use of hand tools.

MAC 2065 - Mechanical Component II

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly MAC 265 Covers common mechanical components used on industrial equipment. It is designed to assist maintenance staff in removal, installation and maintenance of plant equipment. It includes coupling, vibration, shafting, keys and keyways, belts and chain drives, gears and gear drive, and seals.

MTE 2320 - Fluid Power Control

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly MTE 238 Introduces fluid power application in industry and various types of industrial control devices used in modern manufacturing equipment and machinery. Enables the student to produce the graphics required to incorporate these items into a mechanical design.

WEL 1002 - Oxy-fuel Joining Processes

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.5
Formerly WEL 102 Covers Oxy-fuel joining operations.

or

WEL 1024 - Gas Tungsten Arc Welding I

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.5
Formerly WEL 124 Covers Gas Tungsten Arc Welding (GTAW) operations in various positions and joint designs.

IT Systems Administration AAS

See list of Department Chairs on the Personnel page.

Career Opportunities

The CIS program prepares you for careers in computer science, computer networking and electronic commerce. The AAS Degree with an emphasis in local area networking prepares you to work as a network technician on small and large networks. You may also administer smaller networks as a System Administrator. The AGS Degree with an

emphasis in Computer Information Systems prepares you to transfer to a university to continue studies in Computer Science or Computer Information Systems.

Program Description

The CIS program provides training in basic technical computer and networking skills. You will study computer networking, programming, and database technologies along with classes that teach the technical aspects of the internet and data communications. Note: Students interested in transferring ot a baccalaureate program in Computer Information Systems should refer to the Transfer Degree section of this catalog.

Total Credits: 60

Communications (3 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

OR

ENG 1031 - Technical Writing I

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 131, then ENG 1020 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.

Mathematics (4 Credits)

MAT 1150 - Technical Mathematics

Credit(s): 4
Lecture Hour(s): 4
Formerly MAT 108 Covers material designed for career technical or general studies students who need to study particular mathematical topics. Topics may include measurement, algebra, geometry, trigonometry, graphs and/or finance. These are presented at an introductory level and the emphasis is on applications.

OR

MAT 1340 - College Algebra: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 0300.

Formerly MAT 121 Explores topics including intermediate algebra, equations, and inequalities, functions and their graphs, exponential and logarithmic functions, linear and nonlinear systems, selection of topics from among graphing of the conic sections, introduction to sequences and series permutations and combinations, the binomial theorem and theory of equations. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

General Education Electives (9 Credits)

CIS 1015 - Introduction to Computer Information Systems

Credit(s): 3
Lecture Hour(s): 3
Formerly CIS 115 Focuses on an overview of the needs for and roles of computer information systems. Emphasizes computer requirements in organizations, history, hardware functions, programming, systems development and computer operations. Introduces computer applications.

CIS 1018 - Intro to PC Applications

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 118 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.

CSC 1020 - Problem Solving with Java

Credit(s): 3
Lecture Hour(s): 3
Formerly CSC 120 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 1019 - Introduction to Programming

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CSC 119 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.

CIS Core (16 Credits)

CIS 2020 - Fundamentals of Unix

Credit(s): 3
Lecture Hour(s): 2

Vocational Lab Hour(s): 1.50
Formerly CIS 220 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

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly CIS 223 Introduces students to the concepts of installing, configuring, and managing the Linux operating system. Topics covered include working with various desktops, use of filesystem commands, and management of user and group permissions.

CIS 2087 - Cooperative Education

Credit(s): 1-12
Internship Hour(s): 3-36
Formerly CIS 287 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 works with the student to select an appropriate work site, establish learning objectives and to coordinate learning activities with the employer work site supervisor.

Credit(s) needed: 3

CNG 1024 - Networking I: Network +

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 124 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 1032 - Network Security Fundamentals

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 132 Examines the field of information security to prepare information systems students for their future roles as business decision-makers. The course presents a balance of the managerial and the technical aspects of information security. The concepts covered in this course should be helpful for students working towards the Certified Information Systems Security Professional (CISSP) certification.

CNG 2012 - Configuring Windows Server

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Formerly CNG 212 Provides students with the knowledge and skills that are required to install and configure a Microsoft Windows Server. This course helps prepare students for a MTA (Microsoft Technology Associate) and/or MCSA (Microsoft Certified Solutions Associate) exams.

IT Systems Administration Core (28 Credits)

CIS 2040 - Database Design and Development

Credit(s): 3
Lecture Hour(s): 3
Formerly CIS 240 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)

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Prerequisite(s): CIS 2040, Database Design and Development
Formerly CIS 243 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.

CNG 1004 - Intro to TCP/IP

Credit(s): 3
Lecture Hour(s): 3
Formerly CNG 104 Covers the basic elements of the Transmission Control Protocol and the Internet Protocol, the basic technologies that implement the Internet and computer networking. In addition to TCP and IP the course covers networking media, link layer, network layer and transport layer protocols. Also included are routing, broadcast, multicast and network address translation. IP version 4 and IP version 6 are both covered.

CNG 1020 - A+ Certification Preparation

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Formerly CNG 120 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 1042 - Introduction to Cloud Computing Concepts

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Formerly CNG 142 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 2024 - Microsoft Windows Wireless Network

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50

Prerequisite(s): CNG 1004 or instructor approval.
Formerly CNG 224 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.

MAN 2026 - Principles of Management

Credit(s): 3
Lecture Hour(s): 3
Formerly MAN 226 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.

CNG 2040 - Virtual Environment Admin

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Formerly CNG 240 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 2042 - Cloud Computing

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Formerly CNG 242 Installs, configures and manages a cloud environment. Builds on knowledge of hypervisor and virtual machine environments.

Law Enforcement, AAS

CIP 43.0107

See list of Department Chairs on the Personnel page.

Career Opportunities

The Law Enforcement program prepares students for careers in law enforcement as a police officers, desk officer, bailiff or corrections officer. Additionally, students could work as criminal investigators, detectives, police agencies, or in correction and judicial facilities.

Program Description

The Law Enforcement program teaches students an in-depth analysis of the three (3) components of the criminal justice system (law enforcement, the judicial system and corrections) with special emphasis on criminology, substantive criminal law, procedural criminal law and constitutional law. It places a strong emphasis on reading and comprehension skills, written and verbal communication skills and empathetic awareness of cultural diversity.

Program Requirements

Entrance Requirements:

Successful completion of any CCR course or qualifying placement score or exemption to complete the Criminal Justice courses. Admission into the Law Enforcement Academy courses requires a student to file an application with the PLEA Department Chair and meet specific guidelines prior to admission into the program (such as state statutory requirements for background checks). You may enroll in PLEA courses only if you are admitted into the program.

Graduation Requirements:

In addition to program requirements for this program, you must complete ENG 1021, COM 1150, MAT 1140 and six (6) credits of social and behavioral science courses.

Total Credits: 67

Degree Requirements

General Education Requirements (15 Credits)

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

MAT 1140 - Career Math

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 107 Covers material designed for career technical or general studies students who need to study particular mathematical topics. Topics may include measurement, algebra, geometry, trigonometry, graphs and/or finance. These are presented on an introductory level and the emphasis is on applications.

- Select two courses in Social & Behavior Science **Credit(s): 6**

Related Requirements (15 Credits)

CRJ 1010 - Intro to Criminal Justice: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): ENG 1021.
Formerly CRJ 110 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. This is a statewide Guaranteed Transfer course in the GT-SS3 category.

CRJ 1035 - Judicial Function

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of CRJ 1010.
Formerly CRJ 135 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

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of CRJ 1010.
Formerly CRJ 145 Examines the history and total correctional process from law enforcement through the administration of justice, probation, prisons, correctional institutions and parole. Also examines the principles, theories, phenomena and problems of the crime, society and the criminal justice system from the perspective of criminology and the criminal justice system in general. Emphasizes the role of sociology and other interdisciplinary approaches to the field of corrections and society's response.

CRJ 2010 - Constitutional Law

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of CRJ 1010and CRJ 1035.
Prerequisite(s)/Corequisite(s): COM 1150and ENG 1021.
Formerly CRJ 210 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 2030 - Criminology

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of CRJ 1010 and CRJ 1045.
Prerequisite(s)/Corequisite(s): COM 1150 and ENG 1021.
Formerly CRJ 230 Provides an introduction to the study of crime, understanding the causes of crime, and examines, theoretical frameworks and theories to explain criminal behavior. Within a social context, consideration is given to how theories have emerged and understand how social context contributes to explanations of crime. Examination of the

nature of crime, crime victimization, crime patterns, types of crime, crime statistics, and criminal behavior is also included.

or

CRJ 2080 - Cooperative Education/internship

Credit(s): 3
Internship Hour(s): 9
Prerequisite(s): Department chair or program coordinator approval.
Formerly CRJ 280 Provides work experience for students to gain practical work experience related to their educational program. *Individuals desiring this Peace Officers Standard and Training (P.O.S.T.) course of study must file an application with the Police Academy coordinator before registering. Colorado State law requires that Police Academy students meet specific guidelines prior to admission. *Students pursuing a Police Science area of emphasis are expected to complete the Pueblo Law Enforcement Academy. This must be coordinated with the Director of the Academy and the assigned CRJ student advisor.

Common Core Requirements (37 Credits)

LEA 1001 - Basic Police Academy I

Credit(s): 6
Lecture Hour(s): 6
Formerly LEA 101 Conforms to POST standards and state certification requirements as well as the basic skills and knowledge necessary to perform the entry-level duties of a peace officer. Emphasis will be on simulating actual situations utilizing a lecture and laboratory mode of learning.

LEA 1002 - Basic Police Academy II

Credit(s): 12
Lecture Hour(s): 12
Formerly LEA 102 Conforms to POST standards and state certification requirements as well as the basic skills and knowledge to perform the entry-level duties of a peace officer. Emphasis will be on simulating actual situations utilizing a lecture and laboratory mode of learning.

LEA 1003 - Basic Law Enforcement Academy III

Credit(s): 2
Lecture Hour(s): 0.50
Vocational Lab Hour(s): 2.25
Formerly LEA 103 Enhances the standards established by the POST 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 POST curriculum to create a unique learning experience.

LEA 1005 - Basic Law

Credit(s): 8
Lecture Hour(s): 8
Formerly LEA 105 Conforms to POST standards and state certification requirements as well as the basic skills and knowledge necessary to perform the entry-level duties of a peace officer. Emphasis will be on United States Constitution, arrest, search and seizure, interrogation and confessions, rules of evidence, Colorado Criminal Code, Colorado Traffic Code, Colorado Children's Code, Liquor Code and controlled substances.

LEA 1006 - Arrest Control Techniques

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly LEA 106 Covers the skills, knowledge and abilities necessary to effectively maintain control of a suspect when making an arrest. Emphasizes the continuum of force and de-escalation of force.

LEA 1007 - Law Enforcement Driving

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly LEA 107 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

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly LEA 108 Discusses the skills, knowledge and abilities necessary to safely use police firearms. Students will demonstrate skills by firing weapons on a firing range. The student will demonstrate basic safety techniques and will explain the firearms role within the continuum of force.

Library Technician, AAS

CIP 25.0301

See list of Department Chairs on the Personnel page.

Career Opportunities

The LTN program prepares you for a career in a variety of information environments including academic libraries, public libraries, school media centers, special libraries – corporate, correctional, law and medical – and other information services. In rural settings, the Library/Media Technician manages the library/media center and is the person responsible for providing additional library services, such as maintaining the computerized catalog and library webpage, conducting patron orientation and directing library programs.

Program Description

This program offers instruction in a variety of library functions including collection management (selecting and acquiring materials); cataloging; processing and repair of library materials; circulating and shelving materials; helping patrons with reference, readers' advisory and resource sharing services; and managing a small library or media center. We also train you in the nontechnical skills you need to be a successful library technician: customer service, listening, speaking, writing, attention to detail and working as a member of a team.

Program Requirements

Entrance Requirements:

The LTN program is designed for the student who, because of time or distance constraints, is looking for an online degree. The courses use the Desire2Learn platform.

If you plan to transfer to a bachelor's level program, consult with your advisor to determine the transferability of courses.

Total Credits: 60

Degree Requirements

General Education Requirements (33 Credits)

* General Education must total 33 credits.

- English/Speech (Select one) **Credit(s): 6**
    - (ENG 1021 and COM 1150) or COM 1250
- Mathematics **Credit(s): 3**
    - MAT 1140 or higher
- Social and Behavioral Sciences **Credit(s): 12**
- Arts and Humanities **Credit(s): 12**

English/Speech (6 Credits)

Select one:

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

or

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

Mathematics

MAT 1140 - Career Math

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 107 Covers material designed for career technical or general studies students who need to study particular mathematical topics. Topics may include measurement, algebra, geometry, trigonometry, graphs and/or finance. These are presented on an introductory level and the emphasis is on applications.

Core Curriculum Requirements (18 Credits)

LTN 1001 - Introduction to Library Services

Credit(s): 3
Lecture Hour(s): 3
Formerly LTN 101 Introduces libraries and their procedures through research, vocabulary, readings and assignments. Identifies current tools such as wikis, blogs, podcasting, interactive web pages and other online services. Presents resources for library technicians.

LTN 1010 - Selection and Acquisitions

Credit(s): 3
Lecture Hour(s): 3
Formerly LTN 110 Introduces the student to the tools, vendors, jobbers and approval plans that comprise the selection process. In addition, the student is introduced to acquisitions policy. The student engages in a course project whereby he/she applies a collection evaluation methodology to a section of a library collection and locates and recommends replacement titles.

LTN 1015 - Library Circulation

Credit(s): 3
Lecture Hour(s): 3
Formerly LTN 115 Discusses customer service and circulation issues and procedures. Students will learn the role of customer service and the effects that automation has had on the circulation function of the library.

LTN 2005 - Introduction to Cataloging & Classification

Credit(s): 3
Lecture Hour(s): 3
Formerly LTN 205 Introduces the library organization, how to use Dewey and Sears subject headings, elements of cataloging, practice in the use of Dewey and the Library of Congress classification systems, use of cutter tables, subject classification, accession numbers, and bar codes. Basic philosophy, procedures, tools and techniques for library routines are emphasized.

LTN 2010 - Reference Materials

Credit(s): 3
Lecture Hour(s): 3
Formerly LTN 210 Teaches how to select reference materials, how to use at least 100 reference resources, the reference interview, and the role of resource sharing (interlibrary loan) in reference. Students will prepare a bibliography of the 100 titles they would want in their reference collection and 10 online sources they find useful.

LTN 2020 - Library/Media Center Management & Public Relations

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of LTN 1001.
Formerly LTN 220 Includes budget preparation, how to work with staff, the public, and administrators, and the use of statistics.

Electives Approved by Advisor (9 Credits)

All electives must be approved by the LTN Advisor. Students must take sufficient electives to meet the minimum 60 credit hour requirements for the associate degree.

Machining Technology, AAS

CIP 48.0503

See list of Department Chairs on the Personnel page.

This is a NIMS Accredited program

Career Opportunities

The AAS Degree and certificate programs in Machining Technology prepare you to enter the manufacturing world using the latest technology and metalworking skills.

Program Description

Students will start their career in Machining Technology by building a strong foundation in machining by learning to use various tools, such as hand tools, manual machines and grinding tools. Students develop introductory skills in print reading. They are also taught how to use CAD CAM software, which enables students to create two-dimensional drawings and gain experience with computer-aided manufacturer software. Learning G&M Code for manual CNC (Computer Numerical Control) programming is a focus, as well as setup and operations of CNC equipment.

The AAS degree provides training in advanced manufacturing using manual and computer-controlled machines. Students will use CAD CAM software to create three-dimensional drawings, solids and surfaces. Students will then utilize geometry to create parts, which are then inspected for industry standard accuracy with top-of-the-line metrology equipment. If completing the AAS degree or currently working in the field, CAD CAM certification and NIMS credentials may be available.

Work experience may be converted to college credit through credit-by-portfolio or credit-by-challenge.

Total Credits: 63

Degree Requirements

General Education Requirements (15 Credits)

ENG 1031 - Technical Writing I

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 131, then ENG 1020 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.

MAT 1150 - Technical Mathematics

Credit(s): 4
Lecture Hour(s): 4
Formerly MAT 108 Covers material designed for career technical or general studies students who need to study particular mathematical topics. Topics may include measurement, algebra, geometry, trigonometry, graphs and/or finance. These are presented at an introductory level and the emphasis is on applications.

CIS 1018 - Intro to PC Applications

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 118 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.

- Any combination of Arts/Humanities/Social Sci/COM/Science **Credit(s): 5**

Core Curriculum Requirements (48 Credits)

MAC 1000 - Machine Shop Safety

Credit(s): 1
Lecture Hour(s): 1
Formerly MAC 100 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 1002 - Print Reading for Machinists

Credit(s): 3
Lecture Hour(s): 3
Formerly MAC 102 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 1005 - Introduction to Machining Technology

Credit(s): 4
Lecture Hour(s): 1.50
Vocational Lab Hour(s): 3.75
Formerly MAC 105 Introduces the student to the changing era of machining technology, emphasizing terminology, referencing and applications related to manufacturing environments. The fundamental use of bench tools, layout procedures, materials, precision measuring tools, machining processes, drilling and cut-off machines and other machining/manufacturing processes will be stressed. Skill competencies and standards will be identified. Use of the Machinery's Handbook will be strictly required and particular competencies may require performance evaluations.

MAC 1030 - Conventional Lathe Operations

Credit(s): 4
Lecture Hour(s): 1.50
Vocational Lab Hour(s): 3.75
Formerly MAC 130 Includes calculation of speeds and feeds on various materials, identification and application of various work holding techniques, tool forming, advanced machining practices and applications, and spindle tooling. Students will learn how to calculate and turn tapers using the compound slide or taper attachment, offset work on a four jaw chuck, turning between centers, boring, grooving, finishing, single point threading, knurling, tool grinding, drilling operations, and reaming.

MAC 1031 - Milling Machines & Operations

Credit(s): 4
Lecture Hour(s): 1.50
Vocational Lab Hour(s): 3.75
Formerly MAC 131 Introduces vertical milling machines. The operations and applications will consist of using the machine controls, speeds and feeds, spindles, arbors and adapters cutting tools, tool holders, conventional and climb milling applications simple indexing, fixture alignments, work holding methods. Students will become familiar with set-up applications considering offset boring operations, face milling, plain milling, and precision drilling applications. Students will be required to produce parts to a tolerance of +/- .004in. and perform competencies set by manufacturing standards.

MAC 1041 - Advanced Machining Operations

Credit(s): 4
Lecture Hour(s): 1.50
Vocational Lab Hour(s): 3.75
Formerly MAC 141 Provides the student the use of various conventional machine tools used in a machine shop environment. The use of engine lathes, horizontal and vertical milling machines, surface grinders, drill presses, pedestal grinders, power cut-off saws and other machine tools commonly used to produce quality machined parts in today 's manufacturing environments. Machining competencies will be stressed and students will be required to produce parts manufactured by local manufacturing companies with the consideration of ISO quality standards.

MAC 2003 - Introduction to CNC Operations

Credit(s): 6
Lecture Hour(s): 2
Vocational Lab Hour(s): 6
Formerly MAC 203 Introduces basic writing and editing of CNC programs. G&M codes, math, speeds feeds,

production processes including basic process controls, simple fixturing, and documentation associated with manufacturing will be covered.

MAC 2008 - CNC Operations II

Credit(s): 6
Lecture Hour(s): 2
Vocational Lab Hour(s): 6
Formerly MAC 208 Further develops skills in writing and editing advanced CNC programs. G&M codes, math, speeds deeds, production processes including multi-part, process controls, fixturing, and documentation associated with manufacturing will be covered.

MAC 2043 - Mastercam

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Formerly MAC 243 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 2041 - CAD CAM 2D Lab

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly MAC 241 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 remachining operations. Coursework will primarily focus on 2D geometry projects.

MAC 2050 - Advanced Inspection Techniques

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly MAC 250 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.

EGT 2305 - Geometric Dimension & Tolerance

Credit(s): 3
Lecture Hour(s): 3
Formerly EGT 205 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.

CAD 2455 - Solidworks/Mechanical

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly CAD 255 Introduces parametric feature-based solid modeling 3D concepts to build confidence in 3D thinking and progresses to three-dimensional parameters. The student learns to construct, modify, and manage complex parts in 3D space as well as to produce 2D drawings from the 3D models.

Medical Assistant, AAS

CIP 51.0801

See list of Department Chairs on the Personnel page.

Career Opportunities

The Medical Assistant Program will prepare the student for a career in medical assisting. Medical assistants can work in a variety of settings – physician offices, outpatient facilities, urgent care centers and other ambulatory health care services. Medical assistants play a vital role in the success of a medical practice and play the role of a liaison between the physician and the patients.

Program Description

The Medical Assistant program will prepare the student to primarily work in the back office of a medical practice, along with teaching some basic front office duties. Students will be taught the clinical tasks of drawing blood, giving injections, performing lab tests, taking patient histories and measuring vital signs. The administrative tasks include scheduling appointments, coding medical information and bookkeeping. Students will serve an internship and prepare for a national certification exam to become a Registered Medical Assistant.

Program Requirements

Entrance Requirements:

Successful completion of any CCR course or qualifying placement score or exemption.

Enrollment in the program is limited. Students must apply for admission to the program prior to the deadline. Students will be notified in writing of conditional acceptance. Clinical sites used during the program require that you successfully complete a background check and drug screen. These need to be completed before final acceptance into the program. Students must also obtain CPR certification and immunization series within the first semester of the program.

Graduation Requirements:

Students must complete all credits and courses listed in the curriculum with a "C" grade or higher.

Total Credits: 61

Degree Requirements

General Education Requirements (15 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

or

ENG 1031 - Technical Writing I

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 131, then ENG 1020 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.

MAN 1028 - Human Relations in Organizations

Credit(s): 3
Lecture Hour(s): 3
Formerly MAN 128 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.

or

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

MAT 1120 - Math for Clinical Calculations

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 103 Provides a review of general mathematics, introductory algebra and an opportunity to learn systems of measurement and methods of solving problems related to drug dosage and intravenous fluid administration.

It is designed for students in the health disciplines. Topics may include algebra, graphs, measurement and conversion between various systems of measurement.

or

MAT 1240 - Mathematics for the Liberal Arts: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 1001 concurrency allowed, or see Basic Skills Assessment
Formerly MAT 120 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. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 1340 - College Algebra: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 0300.
Formerly MAT 121 Explores topics including intermediate algebra, equations, and inequalities, functions and their graphs, exponential and logarithmic functions, linear and nonlinear systems, selection of topics from among graphing of the conic sections, introduction to sequences and series permutations and combinations, the binomial theorem and theory of equations. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 1420 - College Trigonometry: GT-MA1

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): MAT 1340.
Formerly MAT 122 Covers topics including trigonometric functions (with graphs and inverse functions), identities and equations, solutions of triangles, complex numbers, and other topics as time permits. This is a traditional prerequisite course to the calculus sequence. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 1320 - Finite Mathematics: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 0300 or Equivalent Test Score.
Formerly MAT 123 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. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 1400 - Survey of Calculus: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 1340 or see Basic Skills Assessment
Formerly MAT 125 Includes derivatives, integrals, and their applications, with attention restricted to algebraic, exponential, and logarithmic functions for business, life science and/or social science majors.. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2420 - Calculus II: GT-MA1

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): MAT 2410.
Formerly MAT 202 Continues the study of single variable calculus which will include techniques of integration, polar coordinates, analytic geometry, improper integrals and infinite series. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2430 - Calculus III: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 2420.
Formerly MAT 203 Focuses the traditional subject matter of the Calculus. Topics include vectors, vector-valued functions, and multivariable calculus including partial derivatives, multiple integrals, line integrals and application. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2431 - Calculus III with Engineering Applications: GT-MA1

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): Successful completion of MAT 2420 with a grade of C or better.
Formerly MAT 204 Focuses on the competencies established in MAT 2430 - Calculus III: GT-MA1with an additional emphasis on word problems and problem solving. This is the third course in the three-course calculus sequence. This course will additionally contain a thorough examination of multiple integration. This will include double and triple integrals, line integrals, Stokes' and Green's Theorems, and their applications. A graphing calculator is required for this course. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2520 - Discrete Mathematics: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): Successful completion of MAT 2410 with a C or better.
Formerly MAT 215 Concentrates on formal logic, algorithms, induction proofs, equivalence relations and graphs. This course is designed for mathematics and computer science students.

MAT 2561 - Differential Equations with Engineering Applications: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): Successful completion of MAT 2420 with a grade of C or better.
Formerly MAT 261 This course introduces ordinary differential equations. The content of this course includes all the topics of MAT 2560 - Differential Equations: GT-MA1with an additional emphasis on applications and problem solving. A graphing calculator is required for this course. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2560 - Differential Equations: GT-MA1

Credit(s): 3
Lecture Hour(s): 3

Prerequisite(s): Successful completion of MAT 2420 with a C or better.
Formerly MAT 265 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.

PSY 1001 - General Psychology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 101 Focuses on the scientific study of behavior including motivation, emotion, physiological psychology, stress and coping, research methods, consciousness, sensation, perception, learning and memory. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

or

PSY 2440 - Human Growth and Development: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 235 Examines human development from conception through death, emphasizing physical, cognitive, emotional and psychosocial factors. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

- Arts and Humanities **Credit(s): 3**

Core Curriculum Requirements (40 Credits)

Semester 1 - Fall

HPR 1008 - Law & Ethics for Health Professions

Credit(s): 2
Lecture Hour(s): 2
Formerly HPR 106 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 1039 - Medical Terminology

Credit(s): 2
Lecture Hour(s): 2
Formerly HPR 139 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.

MAP 1010 - Medical Office Administration

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): Department Chair Approval.
Formerly MAP 110 Introduces the administrative duties specifically used in medical offices.

MOT 1025 - Basic Medical Sciences I

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Department Approval Required.
Formerly MOT 125 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

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Department Approval Required
Formerly MOT 133 Introduces the anatomy, physiology, pathophysiology, and drug therapy of the cardiovascular, respiratory, integumentary, and senses systems. The scope of the material is limited for the medical office technology personnel.

MOT 1027 - Basic Medical Sciences III

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Department Approval Required
Formerly MOT 135 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.

Semester 2 - Spring

HPR 1007 - Computers in Healthcare

Credit(s): 2
Lecture Hour(s): 2
Formerly HPR 119 Introduces basic computer technology, file management, and PC system components as used in Health Care settings. Provides an overview of word processing, spreadsheets, and personal information management software. Introduces the Electronic Health Record (EHR), its content, EHR software, EHR management, patient management and scheduling, and privacy and security of the EHR.

MAP 1020 - Medical Office Financial Management

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): Department Chair Approval.
Formerly MAP 120 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 2038 - Medical Assisting Laboratory

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 4
Prerequisite(s): Department Chair Approval.
Formerly MAP 138 Introduces the student to 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

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 4
Prerequisite(s): Department Chair Approval.
Formerly MAP 140 Provides hands-on experience with clinical skills required in medical offices. Delivers theory and skills presentations allowing for students to properly demonstrate techniques for a variety of medical needs.

MAP 1050 - Pharmacology for Medical Assistants

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Department Chair Approval.
Formerly MAP 150 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.

Semester 3 - Summer

HPR 1010 - Dietary Nutrition

Credit(s): 1
Lecture Hour(s): 1
Formerly HPR 108 Studies the basic nutritional principles in clinical practice in health care. The course will cover factors which influence the nutritional status of individuals, methods of nutritional assessment and support, and diet modification for specific disease states.

MAP 1083 - Medical Assistant Internship

Credit(s): 4
Internship Hour(s): 12
Prerequisite(s): Department Chair Approval.
Formerly MAP 183 Provides supervised placement in contracted facility for guided experience in application of knowledge and skill acquired in the classroom. The student assists with a variety of business and clinical procedures. Positions are nonpaid. Student must have permission by program coordinator to begin Internship.

MAP 2069 - Review for Medical Assistant National Exam

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): Department Chair Approval.

Formerly MAP 189 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, supporting quality care in the office or clinic.

Electives (6 Credits)

- Select 3 from Arts and Humanities

or

- Social & Behavioral Science

Medical Sonography, AAS

CIP 51.0910

See list of Department Chairs on the Personnel page.

Associate of Applied Science (AAS) Degree

Applicants to this program must possess a two-year health degree with direct patient care-responsibility or a bachelor's degree in any discipline from a regionally accredited institution.

Career Opportunities

The program prepares you for a career in medical sonography (ultrasound). After graduating from the program, you may take the America Registry of Diagnostic Medical Sonographers (ARDMS) national certification examinations in ultrasound. A Registered Ultrasound Technologist (ultrasonographer) specializes in ultrasound procedures that demonstrate anatomy and pathologies on medical film or electronic (PACS) systems. These images are, in turn, interpreted by radiologists and other physicians for the diagnosis and treatment of disease.

Program Description

DMS is a four-semester program.

The program teaches students to function as critical members of today's health care team. Students will learn and practice important critical thinking/problem-solving skills. Learning appropriate interpersonal and communication skills allows students to interact effectively with other health care team members, patients, and families.

We teach 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.

This curriculum includes lab/clinical experience to gain competencies in the areas of ultrasound physics and instrumentation, ultrasound of the abdomen, OB/GYN, small parts and basic vascular sonongraphy.

Total Credits: 68.5

Degree Requirements

General Education Requirements (9 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

PSY 2440 - Human Growth and Development: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 235 Examines human development from conception through death, emphasizing physical, cognitive, emotional and psychosocial factors. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

or

PSY 1001 - General Psychology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 101 Focuses on the scientific study of behavior including motivation, emotion, physiological psychology, stress and coping, research methods, consciousness, sensation, perception, learning and memory. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

- Any Arts & Humanities Classes **Credit(s): 3**

Prerequisite Requirements (12 Credits)

BIO 2101 - Human Anatomy and Physiology I with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 201 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, nervous and endocrine systems. Includes a mandatory hands-on laboratory experience covering experimentation, microscopy, observations and dissection. This is the first semester of a two-semester sequence.

BIO 2102 - Human Anatomy and Physiology II with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 202 Focuses on the integrated study of the human body and the histology, anatomy, and physiology of the following systems and topics: cardiovascular, hematology, lymphatic and immune, urinary, fluid and electrolyte control, digestive, nutrition, respiratory, reproductive and development. Includes a mandatory hands-on laboratory experience involving experimentation, microscopy, observations and dissection. This is the second semester of a two-semester sequence.

DMS 1001 - Introduction to Sonography

Credit(s): 2
Lecture Hour(s): 2
Formerly DMS 101 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.

RTE 2055 - Multiplanar Sectional Imaging

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Radiologic Technology student or imaging professional or permission of instructor.
Formerly RTE 255 Offers a course designed to increase knowledge in multiplanar/multimodality sectional anatomy for imaging professionals, radiologic technology students and other interested health care professionals. Correlative studies of line drawings, cadaverous photographs, MRI and CT images are thoroughly studied.

Core Curriculum Requirements (51.5 Credits)

Semester 1 – Fall (11.5 Credits)

DMS 2201 - OB/GYN Ultrasound I

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Program admission and DMS 1001.
Formerly DMS 221 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 2101 - Abdominal Ultrasound I

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Program admission and DMS 1001.
Formerly DMS 231 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 2001 - Ultrasound Physics I

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Program admission and DMS 1001
Formerly DMS 241 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 2111 - Ultrasound Scanning Lab

Credit(s): 3
Vocational Lab Hour(s): 4.5
Prerequisite(s): Program admission. Enrollment in a DMS Program.
Formerly DMS 244 Prepares the sonography student for ultrasound Internship with an emphasis on applied instrumentation, ergonomics and image optimization.

DMS 2080 - Clinical Observation

Credit(s): 2.50
Internship Hour(s): 7.50
Prerequisite(s): BIO 2101, BIO 2102, RTE 2055.
Corequisite(s): DMS 2201, DMS 2101, DMS 2001 and DMS 2111 .
Formerly DMS 280 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.

Semester 2 – Spring (14 Credits)

DMS 2202 - OB/GYN Ultrasound II

Credit(s): 2
Lecture Hour(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): DMS 2201, DMS 2101, DMS 2001, DMS 2081.
Corequisite(s): DMS 2102, DMS 2002, DMS 2083.
Formerly DMS 222 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 2102 - Abdominal Ultrasound II

Credit(s): 2
Lecture Hour(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): DMS 2201, DMS 2001, DMS 2081.
Corequisite(s): DMS 2202, DMS 2002, DMS 2083.
Formerly DMS 232 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 2002 - Ultrasound Physics II

Credit(s): 2
Lecture Hour(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): DMS 2201, DMS 2101, DMS 2001, DMS 2082.
Corequisite(s): DMS 2202, DMS 2102, DMS 2083.
Formerly DMS 242 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 2081 - Clinical Internship I

Credit(s): 8
Internship Hour(s): 24
Prerequisite(s): DMS 2111 , DMS 2080.
Formerly DMS 281 Offers the initial clinical course wherein the fundamental principles of abdominal, OB/GYN and ultrasound physics will be applied under the direct supervision of a registered sonographer. The mastery of the foundations of instrumentation, scanning techniques, and image evaluation in sectional planes in abdominal and OB/GYN sonography will be stressed.

Semester 3 – Summer (12 Credits)

DMS 2100 - Small Parts Ultrasound

Credit(s): 2
Lecture Hour(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): DMS 2201, DMS 2101, DMS 2001, DMS 2081.
Corequisite(s): DMS 2400, DMS 2082.
Formerly DMS 205 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 2400 - Vascular Ultrasound

Credit(s): 2
Lecture Hour(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): DMS 2201, DMS 2101, DMS 2001, DMS 2081.
Corequisite(s): DMS 2100, DMS 2082.
Formerly DMS 206 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.

DMS 2082 - Clinical Internship II

Credit(s): 8
Internship Hour(s): 24
Prerequisite(s): DMS 2081.
Formerly DMS 282 Offers continued clinical experience for the ultrasound student. Application of the small parts didactic lectures will be applied and will include image evaluation and cross-sectional anatomy of the thyroid, breast and scrotum. The foundations of vascular anatomy, instrumentation, scanning techniques and image evaluation will be

stressed. The student will spend 30 hours per week at the clinical site under the direct supervision of a registered sonographer.

Semester 4 – Fall (11 Credits)

DMS 2083 - Clinical Internship III

Credit(s): 8
Internship Hour(s): 24
Prerequisite(s): DMS 2082.
Formerly DMS 283 Continues clinical experience for the ultrasound student. Application of the topics covered in advanced didactic lectures to include an introduction to invasive procedures using ultrasound guidance. Sterile technique and standard precautions will be reviewed. The student will spend 30 hours per week at the clinical site under the direct supervision of a registered sonographer.

DMS 2089 - Ultrasound Capstone

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): DMS 2082.
Corequisite(s): DMS 2083.
Formerly DMS 289 Prepares the sonography student to effectively search for a job and sit for the American Registry of Diagnostic Medical Sonographers examination in their specialty.

Networking Cyber Security, AAS

CIP 11.0101

See list of Department Chairs on the Personnel page.

Career Opportunities

The CIS program prepares you for careers in computer science, computer networking and electronic commerce. The AAS Degree with an emphasis in local area networking prepares you to work as a network technician on small and large networks. You may also administer smaller networks as a System Administrator. The AGS Degree with an emphasis in Computer Information Systems prepares you to transfer to a university to continue studies in Computer Science or Computer Information Systems.

Program Description

The CIS program provides training in basic technical computer and networking skills. You will study computer networking, programming and database technologies along with classes that teach the technical aspects of the Internet and data communications. Note: Students interested in transferring to a baccalaureate program in Computer Information Systems should refer to the Transfer Degree section.

Total Credits: 60

General Education Requirements (16 credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1031 - Technical Writing I

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 131, then ENG 1020 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.

MAT 1150 - Technical Mathematics

Credit(s): 4
Lecture Hour(s): 4
Formerly MAT 108 Covers material designed for career technical or general studies students who need to study particular mathematical topics. Topics may include measurement, algebra, geometry, trigonometry, graphs and/or finance. These are presented at an introductory level and the emphasis is on applications.

General Education Electives (9 credits)

Choose 3 of the below courses with an advisor

CIS 1015 - Introduction to Computer Information Systems

Credit(s): 3
Lecture Hour(s): 3
Formerly CIS 115 Focuses on an overview of the needs for and roles of computer information systems. Emphasizes computer requirements in organizations, history, hardware functions, programming, systems development and computer operations. Introduces computer applications.

CIS 1018 - Intro to PC Applications

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 118 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.

CSC 1019 - Introduction to Programming

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CSC 119 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 Java

Credit(s): 3
Lecture Hour(s): 3
Formerly CSC 120 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 1029 - Introduction to Secure Coding

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Prerequisite(s): CSC 1060 , Computer Science I
Formerly CSC 129 Focuses on introduction to secure coding. Emphasizes concepts, principles, and 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.

ECO 2001 - Principles of Macroeconomics: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly ECO 201 Focuses on the study of the American economy, stressing the interrelationships among household, business and government sectors. Explores saving and investment decisions, unemployment, inflation, national income accounting, taxing and spending policies, the limits of the market and government, public choice theory, the Federal Reserve System, money and banking, and international trade.

Core Curriculum Requirements (35 credits)

CNG 1020 - A+ Certification Preparation

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Formerly CNG 120 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 1024 - Networking I: Network +

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 124 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.

CIS 2020 - Fundamentals of Unix

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 220 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

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly CIS 223 Introduces students to the concepts of installing, configuring, and managing the Linux operating system. Topics covered include working with various desktops, use of filesystem commands, and management of user and group permissions.

CNG 1036 - Guide to Disaster Recovery

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Department Chair Approval.
Formerly CNG 136 Presents methods to identify vulnerabilities and take appropriate countermeasures to prevent and mitigate failure risks for an organization. It will take an enterprise-wide approach to developing a disaster recovery plan.

CNG 1032 - Network Security Fundamentals

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 132 Examines the field of information security to prepare information systems students for their future roles as business decision-makers. The course presents a balance of the managerial and the technical aspects of information security. The concepts covered in this course should be helpful for students working towards the Certified Information Systems Security Professional (CISSP) certification.

CNG 1004 - Intro to TCP/IP

Credit(s): 3
Lecture Hour(s): 3
Formerly CNG 104 Covers the basic elements of the Transmission Control Protocol and the Internet Protocol, the basic technologies that implement the Internet and computer networking. In addition to TCP and IP the course covers

networking media, link layer, network layer and transport layer protocols. Also included are routing, broadcast, multicast and network address translation. IP version 4 and IP version 6 are both covered.

CNG 2012 - Configuring Windows Server

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Formerly CNG 212 Provides students with the knowledge and skills that are required to install and configure a Microsoft Windows Server. This course helps prepare students for a MTA (Microsoft Technology Associate) and/or MCSA (Microsoft Certified Solutions Associate) exams.

CNG 2024 - Microsoft Windows Wireless Network

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Prerequisite(s): CNG 1004 or instructor approval.
Formerly CNG 224 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 2058 - Digital Forensics

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): CNG 1024.
Corequisite(s): CIS 2020.
Formerly CNG 258 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.

CIS 2087 - Cooperative Education

Credit(s): 1-12
Internship Hour(s): 3-36
Formerly CIS 287 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 works with the student to select an appropriate work site, establish learning objectives and to coordinate learning activities with the employer work site supervisor.

CNG 1031 - Principles of Information Assurance

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 131 Delivers a comprehensive overview of network security, including general security concepts. Communication Security is studied, including remote access, email, 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

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 133 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.

Academic or Vocational Electives (9 credits)

Choose 3 of the below courses with an advisor

CNG 2056 - Vulnerability Assessment I

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Prerequisite(s): CIS 2020, CNG 1024, and CNG 1032.
Formerly CNG 256 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.

CSC 1060 - Computer Science I: (Language)

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Prerequisite(s): CSC 1020.
Formerly CSC 160 Introduces students to the discipline of computer science. Covers algorithm development, data representation, logical expressions, sub-programs and input/output operations using a structured programming language. Requires intensive lab work outside of class time.

CSC 1061 - Computer Science II: (Language)

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Prerequisite(s): CSC 1060 or instructor approval.
Formerly CSC 161 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 2067 - Object-Oriented Analysis and Design

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): CSC 1060, Computer Science I
Formerly CSC 267 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.

CIS 2040 - Database Design and Development

Credit(s): 3
Lecture Hour(s): 3
Formerly CIS 240 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)

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Prerequisite(s): CIS 2040, Database Design and Development
Formerly CIS 243 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.

CNG 1042 - Introduction to Cloud Computing Concepts

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Formerly CNG 142 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.

- Any course with an HIT prefix **Credit(s): 3**

Nursing, LPN to ADN, AAS

CIP 51.3801

See list of Department Chairs on the Personnel page.

Program Description

The LPN-ADN program teaches you skills of direct patient care and critical thinking in the role of a registered nurse that you can apply in any healthcare setting. It offers theoretical and applied instruction in classrooms, simulated laboratories, and clinical settings. It integrates education in adult, gerontological, obstetric, pediatric, and psychiatric-mental health nursing. Your clinical learning will take place in diverse types of institutions.

The Nursing program has a selective and limited admission policy. The application is available online at Pueblo Community College Nursing from October 1 to November 15. All Health Professions programs have essential functions to help you be successful in the program and career. Applicants must have a current Colorado LPN license in good standing. PCC will accept a block transfer of up to 21 credits. Official transcripts from the student's LPN program

and proof of LPN licensure are required for admission to this program. PCC will accept a block transfer of up to 24 PLA credits.

In progress grades will be accepted, however, course must show in progress at time of application and be completed in Fall semester. It is the applicant's responsibility to submit final spring semester course grade(s) as soon as possible to the admission committee for consideration**.**

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.

Career Information

The LPN-ADN program prepares you to provide safe, therapeutic, and competent nursing care in hospitals and other healthcare settings.

Total Credits: 71.5

General Education and Program Prerequisites

First (11 credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

BIO 2101 - Human Anatomy and Physiology I with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 201 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, nervous and endocrine systems. Includes a mandatory hands-on laboratory experience covering experimentation, microscopy, observations and dissection. This is the first semester of a two-semester sequence.

BIO 2102 - Human Anatomy and Physiology II with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 202 Focuses on the integrated study of the human body and the histology, anatomy, and physiology of the following systems and topics: cardiovascular, hematology, lymphatic and immune, urinary, fluid and electrolyte control, digestive, nutrition, respiratory, reproductive and development. Includes a mandatory hands-on laboratory

experience involving experimentation, microscopy, observations and dissection. This is the second semester of a two-semester sequence.

Second (12 credits)

BIO 2104 - Microbiology with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 204 Designed for health science majors. Examines microorganisms with an emphasis on their structure, development, physiology, classification and identification. The laboratory experience includes culturing, identifying and controlling microorganisms with an emphasis on their role in infectious disease.

BIO 2116 - Human Pathophysiology

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): BIO 2101, BIO 2102
Formerly BIO 216 Focuses on the alterations in physiological, cellular and biochemical processes, the associated homeostatic response, and the manifestations of disease. Prior knowledge of cellular biology, anatomy and physiology is essential for the study of pathophysiology.

HPR 1010 - Dietary Nutrition

Credit(s): 1
Lecture Hour(s): 1
Formerly HPR 108 Studies the basic nutritional principles in clinical practice in health care. The course will cover factors which influence the nutritional status of individuals, methods of nutritional assessment and support, and diet modification for specific disease states.

PSY 2440 - Human Growth and Development: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 235 Examines human development from conception through death, emphasizing physical, cognitive, emotional and psychosocial factors. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

1 Course must be completed within 10 years of entrance into the program

2 The 10-year science requirement will not apply to LPNs with 2000 hours worked in the past two (2) years

Program Course Schedule

Apply to the Program – **October 1 to November 15** for a spring start

Application is online at Pueblo Community College Nursing

Accepted applicants must have a current Colorado LPN license in good standing and 21 credits will be transcribed as prior learning credits to complete this degree.

Credits received for Practical Nursing License: 24

Spring (9 credits)

NUR 1089 - Transition from LPN to ADN

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Vocational Clinic Hour(s): 1.50

Prerequisite(s): Admission to Nursing program.
Formerly NUR 189 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 2012 - Pharmacology II

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Admission to Nursing program and successful completion of preceding required program course work or permission of the program director.
Corequisite(s): NUR 2011 or permission of the program director.
Formerly NUR 212 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 2011 - Psychiatric-Mental Health Nursing

Credit(s): 4
Lecture Hour(s): 2.70
Vocational Clinic Hour(s): 3.90

Prerequisite(s): Admission to Nursing program and successful completion of preceding Nursing program course work or permission of the program director.
Corequisite(s): NUR 2012 or permission of program director.
Formerly NUR 211 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.

Summer (6.5 credits)

NUR 2006 - Advanced Concepts of Medical-Surgical Nursing I

Credit(s): 6.50
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Vocational Clinic Hour(s): 9

Prerequisite(s): Admission to Nursing program and successful completion of preceding Nursing program course work or permission of the program director.

Corequisite(s): NUR 2012 or permission of the program director.
Formerly NUR 206 NUR 206 builds on NUR 1006focusing on advanced concepts of nursing applied to care of patients with high acuity medical/surgical conditions. Builds on medical/surgical nursing theory, mental health concepts, communication, collaboration, caring, and critical thinking/clinical reasoning necessary for safe, patient-centered nursing care to developmentally and culturally diverse adult patients. Incorporates evidence-based practice, quality improvement, professional standards, and legal and ethical responsibilities of the professional nurse as applied in a variety of healthcare settings. Application of knowledge and skills occurs in the nursing skills laboratory and in a variety of clinical settings.

Fall (9 credits)

NUR 2016 - Advanced Concepts of Medical Surgical Nursing II

Credit(s): 5
Lecture Hour(s): 2.30
Vocational Clinic Hour(s): 8.10

Prerequisite(s): Admission to Nursing program and successful completion of preceding program course work or permission of the program director.
Corequisite(s): NUR 2006 and NUR 2012 or permission of the program director.
Formerly NUR 216 Nursing 216 is a continuation of Nursing 206, focusing on complex medical/surgical conditions of the high acuity patient. Builds on medical/surgical nursing theory, mental health concepts, communication, collaboration, caring, and critical thinking/clinical reasoning necessary for safe, patient-centered nursing care to developmentally and culturally diverse adult patients experiencing high acuity medical/surgical conditions. Incorporates evidence-based practice, quality improvement, professional standards, and legal and ethical responsibilities of the professional nurse as applied in the acute care and high acuity settings. Application of knowledge and skills occurs in a variety of clinical settings.

NUR 2030 - Transition to Professional Nursing Practice

Credit(s): 4
Lecture Hour(s): 1.60
Vocational Clinic Hour(s): 7.20

Prerequisite(s): Admission to Nursing program and successful completion of preceding program course work or permission of the program director.
Corequisite(s): NUR 2016 or permission of the program director.
Formerly NUR 230 Nursing 230 is a Seminar and practice Capstone course that provides an integrative experience applying all dimensions of the professional nurse in the care of diverse patient populations across a variety of healthcare settings. All major concepts of the nursing program are addressed. Leadership and the management of multiple patients are emphasized. Application of knowledge and skills occurs in the clinical setting to facilitate an effective transition from student to registered professional nurse.

Occupational Therapy Assistant, AAS

CIP 51.0803

See list of Department Chairs on the Personnel page.

Career Opportunities

The OTA Program prepares you for a career in helping others improve their quality of life. You will use rehabilitative activities and exercises to help clients of all ages overcome physical, emotional, mental and/or social challenges and maximize one's independence in their activities of daily living. You can work in hospitals, schools, mental health centers, skilled nursing facilities and in the community. PCC graduates hold positions throughout Colorado and in many different states. The US Department of Labor projects that this will be one of the fastest-growing careers in the foreseeable future.

Program Description

This program teaches you to work under the supervision of a registered occupational therapist to assess clients of all ages, design individual rehabilitative programs, create goals and help clients meet their goals while monitoring their progress.

The program consists of 18 months of academic preparation and 16 weeks of fieldwork prior to graduation. When you graduate from the program, you are eligible to take the national certification examination administered by the National Board for Certification in Occupational Therapy (NBCOT). In addition, Colorado requires licensure through the Colorado Department of Regulatory Agencies (DORA).

Program Requirements

Entrance Requirements:

The OTA program has a selective admissions policy due to a limited number of fieldwork sites. You must submit a completed application packet, available through the Health and Public Safety office or on the Pueblo Community College's OTA website (available Nov. 1-March 1). You must have completed all basic skills requirements to perform at a college level in Reading, Math and English. You must also have a cumulative 2.5 GPA in college courses or on high school transcripts if no college courses have been taken. In addition, you must have vision, hearing, tactile sensation, gross and fine motor strength and coordination, memory, critical thinking and interpersonal skills adequate to allow effective communication, ensure safety of self and others, document accurately, and provide effective assessment and treatment in order to meet facility standards.

The OTA Program is primarily an in-person program and requires one to bring their own computer device to campus for instructional purposes. Please refer to this link for further information: https://www.pueblocc.edu/IT

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 the NBCOT certification exam. Contact NBCOT at 301.990.7979 or www.nbcot.org for an Early Determination Review.

Total Credits: 69

Degree Requirements

Note: All courses other than OTA may be taken prior to admission to the program.

Semester 1 — Fall

BIO 1006 - Basic Anatomy and Physiology

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly BIO 106 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, Paramedic Program, and the Medical Office Technology Program.

or

BIO 2101 - Human Anatomy and Physiology I with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 201 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, nervous and endocrine systems. Includes a mandatory hands-on laboratory experience covering experimentation, microscopy, observations and dissection. This is the first semester of a two-semester sequence.

HPR 1038 - Intro to Medical Terminology

Credit(s): 1
Lecture Hour(s): 1
Formerly HPR 138 Introduces the student to the structure of medical terms with emphasis on using and combining the most common prefixes, roots and suffixes. Includes terms related to major body systems, oncology and psychiatry, as well as clinical laboratory and diagnostic procedures and imaging. Class structure provides accepted pronunciation of terms and relative use in the healthcare setting.

OTA 1000 - Introduction to Occupational Therapy

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Program admission
Formerly OTA 100 Explores career options in occupational therapy through discussion, observation and participation. Identifies the need for areas of occupation and the differences between health, illness and wellness. Describes the history and philosophy of occupational therapy and the roles, responsibilities and relationships between other healthcare professionals. Discusses ethical and legal implications of health care and explores basic sociological issues.

OTA 1005 - Occupational Disruption and Activity Analysis

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Prerequisite(s): Admission into the OTA program.
Formerly OTA 105 Explores the diseases and aspects of health and wellness common to occupational therapy intervention and occupational disruption and gains insight to various treatment methods and techniques as well as applying activity/task analysis.

OTA 1006 - Basic Occupational Therapy Frames of Reference and Documentation

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Admission into the OTA program.
Formerly OTA 106 Develops the ability to identify the types of occupational therapy documentation and practice basic documentation skills. Identifies models of practice, frames of reference and occupational therapy theories, founders, underlying assumptions of the theories, and implications to occupational therapy practice and treatment interventions.

PSY 1001 - General Psychology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 101 Focuses on the scientific study of behavior including motivation, emotion, physiological psychology, stress and coping, research methods, consciousness, sensation, perception, learning and memory. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

or

PSY 1002 - General Psychology II: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 102 Focuses on the scientific study of behavior including cognition, language, intelligence, psychological assessment, personality, abnormal psychology, therapy, lifespan development and social psychology. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

or

PSY 2440 - Human Growth and Development: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 235 Examines human development from conception through death, emphasizing physical, cognitive, emotional and psychosocial factors. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

Semester 2 — Spring

MAT 1140 - Career Math

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 107 Covers material designed for career technical or general studies students who need to study particular mathematical topics. Topics may include measurement, algebra, geometry, trigonometry, graphs and/or finance. These are presented on an introductory level and the emphasis is on applications.

or

MAT 1340 - College Algebra: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 0300.
Formerly MAT 121 Explores topics including intermediate algebra, equations, and inequalities, functions and their

graphs, exponential and logarithmic functions, linear and nonlinear systems, selection of topics from among graphing of the conic sections, introduction to sequences and series permutations and combinations, the binomial theorem and theory of equations. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

OTA 1021 - Assessing Movement Through Occupation

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Prerequisite(s): OTA 1005, BIO 1006 or BIO 2101
Formerly OTA 121 Provides communication strategies with clients and caregivers in an inter-professional setting. Students will demonstrate an understanding of how performance skills affect occupation and how assessments such as muscle movement, body mechanics, transfers, range of motion and manual muscle testing will influence rehabilitation.

OTA 1022 - Origins of Occupation and Performance from the Neonate to Adulthood

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Admission into the OTA program.
Formerly OTA 122 Explores the impact and influences of environment, community and various contexts of the client, focusing on a dynamic and ever changing occupational status through the influences of areas of occupation, contexts, performance patterns, client factors, performance skills, and activity demands from neonate through middle-age development.

OTA 1025 - Basic Occupational Therapy Application to Mental Health

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Prerequisite(s): OTA 1005, OTA 1006, PSY 1001 or PSY 1002 or PSY 2440
Formerly OTA 125 Identifies commonly seen signs and symptoms of mental illness that affect health and wellness and learn methods of screening and various occupational therapy techniques for the assessment and treatment of occupational disruption within a variety of contexts. A Level I Fieldwork experience is integrated within this course.

OTA 1031 - Geriatric Concerns, Diseases and Treatment Techniques

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Prerequisite(s): OTA 1005 and OTA 1006.
Formerly OTA 131 Explores aging trends and the impact of context and environmental influences on the older individual, focusing on an ever-changing occupational status through the influences of client factors, activity demands, and performance skills and patterns. Identify geriatric diseases and conditions common to occupational therapy and discuss strategies and methods of intervention.

Semester 3 — Summer

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

OTA 1081 - Geriatric Level I Fieldwork Experience

Credit(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): OTA 1031.
Formerly OTA 181 Identifies and provides practical experience in commonly seen disabilities, aspects of health and wellness, evaluation/assessment techniques, and methods for treatment for the geriatric population from diverse backgrounds in an inter-professional setting. Students will demonstrate universal precautions and safety standards in a variety of situations.

OTA 2017 - Occupational Therapy Rehabilitation Techniques

Credit(s): 2
Vocational Lab Hour(s): 3
Prerequisite(s): OTA 1021
Formerly OTA 217 Examines and demonstrates various treatment interventions and techniques based on aspects of health and wellness and physical/cognitive/psychosocial occupational disruption. The course focuses on adaptive equipment, assistive devices, areas of occupation and specialized physical disability assessments.

Semester 4 — Fall

- Humanities **Credit(s): 3**

or

- Social Behavioral Science **Credit(s): 3**

OTA 1082 - Physical Disabilities Level I Fieldwork Experience

Credit(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): OTA 2018
Formerly OTA 182 Identify and provide practical experience with commonly seen disabilities, aspects of health and wellness, evaluation/assessment techniques, and methods of treatment intervention for conditions affecting adult clients from diverse backgrounds in collaboration with intra-professional and inter-professional team members.

OTA 1083 - Pediatric Level I Fieldwork Experience

Credit(s): 1
Vocational Lab Hour(s): 1.50
Corequisite(s): OTA 2021.
Formerly OTA 183 Provides the student with the practical experience necessary to identify commonly seen disabilities, aspects of health and wellness, evaluation/assessment techniques, and methods of treatment for the pediatric population from diverse backgrounds in collaboration with intra-professional and inter-professional team members.

OTA 2016 - Physical Disabilities Neuro-Retraining

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Prerequisite(s): OTA 1021.
Formerly OTA 216 Provides skills necessary to utilize the occupational therapy treatment planning process, including age-appropriate assessments, treatment interventions and discharge planning within a client-centered and inter-professional context.

OTA 2018 - Occupational Therapy Application to Adult Physical Disabilities

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Prerequisite(s): OTA 1021.
Formerly OTA 218 Provides students with the ability to identify commonly seen medical and orthopedic diseases and disabilities, aspects of health and wellness, and areas of occupational disruption. Students will learn treatment interventions within appropriate frames of reference through a variety of methodologies and will explore aspects of intervention including, but not limited to, splinting, transfers, positioning and communication techniques.

OTA 2021 - Pediatric Concerns, Diseases, Disabilities, and Treatment

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Prerequisite(s): OTA 1021 and OTA 1022.
Formerly OTA 221 Explains the impact of environment, culture and community on the child. Focuses on an ever-changing occupational status through the influences of performance skills. Provides the skills necessary to identify commonly seen diseases and disabilities and treatment techniques used in pediatrics to promote health and wellness. Identifies occupational therapy evaluation/assessment techniques and methods of intervention within the context and environment of health care and the community.

OTA 2035 - Professional Management for the OTA

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Admission into the OTA program.
Formerly OTA 235 Provides the student with the basic management skills needed as an occupational therapy assistant as well as provides an understanding of effective job seeking skills, the role of the OTA in research, professional responsibilities and lifelong learning.

Semester 5 — Spring

*OTA 2080 AND OTA 2081 must be completed within 18 months of the didactic coursework.

OTA 2078 - OTA Seminar

Credit(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): OTA 2080 or OTA 2081.
Formerly OTA 278 Provides the opportunity for discussion of Level II experiences and how to apply logical thinking,

critical analysis and clinical reasoning strategies to future scenarios. Students will have discussions on continuing lifelong learning opportunities and professional responsibilities.

OTA 2080 - Fieldwork in Occupational Therapy I

Credit(s): 7
Internship Hour(s): 21
Prerequisite(s): All OTA courses except OTA 2078 and OTA 2081.
Formerly OTA 280 Provides an 8-week, full-time (or an equal amount of hours completed through part-time rotation), supervised fieldwork to develop professional behaviors consistent with the profession's standards and ethics and apply previously learned academic knowledge as an occupational therapy team member. Students will gain experience in the application of occupational therapy treatment process from admission to discharge for clients from a variety of sociocultural backgrounds and age levels in the practice area of physical disabilities to promote health and wellness.

OTA 2081 - Fieldwork in Occupational Therapy II

Credit(s): 7
Internship Hour(s): 21
Prerequisite(s): All OTA courses except OTA 2078 and OTA 2080.
Formerly OTA 281 n), supervised fieldwork to develop professional behaviors consistent with the profession's standards and ethics and apply previously learned academic knowledge as an occupational therapy team member. Students will gain experience in the application of occupational therapy treatment process from admission to discharge for clients from a variety of sociocultural backgrounds and age levels in the practice area of behavioral/mental health, sensorimotor and/or developmental disabilities as well as promoting health and wellness.

Paramedic to Associate Degree Nursing

See list of Department Chairs on the Personnel page.

Program Description

The Paramedic to RN program teaches you skills of direct patient care that you can apply in any healthcare setting. It offers theoretical and applied instruction in classrooms, simulated laboratories, and clinical settings. The program integrates education in adult, gerontological, obstetric, pediatric, and psychiatric-mental health nursing. Your clinical learning will take place in diverse types of institutions.

The Nursing program has a selective and limited admission policy. The application is available online at Pueblo Community College Nursing from October 1 to November 15. All Health & Public Safety programs have essential functions to help you be successful in the program and career. Applicants must have two (2) years of Paramedic work experience. Eligible paramedics must have an unencumbered license. Accepted applicants will receive 21 PLA credits.

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.

Career Information

The Paramedic-ADN program prepares you to provide safe, therapeutic, and competent nursing care in hospitals and other healthcare settings. You may also work as an entry-level patient-care manager.

Total Credits: 71.5

General Education and Program Prerequisites

First (8 credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

BIO 1111 - General College Biology I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): ENG 1021
Formerly BIO 111 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.

Second (11 credits)

BIO 2101 - Human Anatomy and Physiology I with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 201 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, nervous and endocrine systems. Includes a mandatory hands-on laboratory experience covering experimentation, microscopy, observations and dissection. This is the first semester of a two-semester sequence.

BIO 2102 - Human Anatomy and Physiology II with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 202 Focuses on the integrated study of the human body and the histology, anatomy, and physiology of the following systems and topics: cardiovascular, hematology, lymphatic and immune, urinary, fluid and electrolyte control, digestive, nutrition, respiratory, reproductive and development. Includes a mandatory hands-on laboratory

experience involving experimentation, microscopy, observations and dissection. This is the second semester of a two-semester sequence.

PSY 2440 - Human Growth and Development: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 235 Examines human development from conception through death, emphasizing physical, cognitive, emotional and psychosocial factors. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

Third (4 credits)

BIO 2116 - Human Pathophysiology

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): BIO 2101, BIO 2102
Formerly BIO 216 Focuses on the alterations in physiological, cellular and biochemical processes, the associated homeostatic response, and the manifestations of disease. Prior knowledge of cellular biology, anatomy and physiology is essential for the study of pathophysiology.

1 Courses must be complete or in progress (Fall Semester) to apply to the program

2 Course must be completed within 10 years of entrance into the Program

3 BIO 106 Basic Anatomy & Physiology plus one credit general education may be used as substitution for BIO 111 General College Biology I

Program Course Schedule

Spring (12.5 credits)

- NUR 175 - Paramedic to ADN Transition **Credit(s): 6**

NUR 2006 - Advanced Concepts of Medical-Surgical Nursing I

Credit(s): 6.50
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Vocational Clinic Hour(s): 9

Prerequisite(s): Admission to Nursing program and successful completion of preceding Nursing program course work or permission of the program director.
Corequisite(s): NUR 2012 or permission of the program director.
Formerly NUR 206 NUR 206 builds on NUR 1006focusing on advanced concepts of nursing applied to care of patients with high acuity medical/surgical conditions. Builds on medical/surgical nursing theory, mental health concepts, communication, collaboration, caring, and critical thinking/clinical reasoning necessary for safe, patient-centered nursing care to developmentally and culturally diverse adult patients. Incorporates evidence-based practice, quality improvement, professional standards, and legal and ethical responsibilities of the professional nurse as applied in a variety of healthcare settings. Application of knowledge and skills occurs in the nursing skills laboratory and in a variety of clinical settings.

Summer (6 credits)

NUR 2011 - Psychiatric-Mental Health Nursing

Credit(s): 4
Lecture Hour(s): 2.70
Vocational Clinic Hour(s): 3.90

Prerequisite(s): Admission to Nursing program and successful completion of preceding Nursing program course work or permission of the program director.
Corequisite(s): NUR 2012 or permission of program director.
Formerly NUR 211 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

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Admission to Nursing program and successful completion of preceding required program course work or permission of the program director.
Corequisite(s): NUR 2011 or permission of the program director.
Formerly NUR 212 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.

Fall (9 credits)

NUR 2016 - Advanced Concepts of Medical Surgical Nursing II

Credit(s): 5
Lecture Hour(s): 2.30
Vocational Clinic Hour(s): 8.10

Prerequisite(s): Admission to Nursing program and successful completion of preceding program course work or permission of the program director.
Corequisite(s): NUR 2006 and NUR 2012 or permission of the program director.
Formerly NUR 216 Nursing 216 is a continuation of Nursing 206, focusing on complex medical/surgical conditions of the high acuity patient. Builds on medical/surgical nursing theory, mental health concepts, communication, collaboration, caring, and critical thinking/clinical reasoning necessary for safe, patient-centered nursing care to developmentally and culturally diverse adult patients experiencing high acuity medical/surgical conditions. Incorporates evidence-based practice, quality improvement, professional standards, and legal and ethical responsibilities of the professional nurse as applied in the acute care and high acuity settings. Application of knowledge and skills occurs in a variety of clinical settings.

NUR 2030 - Transition to Professional Nursing Practice

Credit(s): 4
Lecture Hour(s): 1.60
Vocational Clinic Hour(s): 7.20

Prerequisite(s): Admission to Nursing program and successful completion of preceding program course work or permission of the program director.
Corequisite(s): NUR 2016 or permission of the program director.
Formerly NUR 230 Nursing 230 is a Seminar and practice Capstone course that provides an integrative experience applying all dimensions of the professional nurse in the care of diverse patient populations across a variety of healthcare settings. All major concepts of the nursing program are addressed. Leadership and the management of multiple patients are emphasized. Application of knowledge and skills occurs in the clinical setting to facilitate an effective transition from student to registered professional nurse.

Physical Therapist Assistant, AAS

CIP 51.0806

See list of Department Chairs on the Personnel page.

Career Opportunities

PTAs work under the direction of physical therapists, helping to manage conditions such as back and neck injuries, sprains/strains and fractures, arthritis, burns, amputations, strokes, multiple sclerosis, birth defects, injuries related to work and sports, and many other conditions. You will work in a broad range of settings, including hospitals, outpatient clinics, rehabilitation facilities, skilled nursing, extended care, sub-acute facilities, homes, schools, fitness centers and sports training facilities.

Program Description

The AAS degree prepares you to serve as a PTA within 5 semesters. The program is offered 2-2½ days per week except during the clinical experiences which occur in the third and fifth semester. Clinical experiences are scheduled for 40 hours per week and placement is typically anywhere in Southern Colorado. Learning experiences include lecture and interactive lab opportunities in a spacious lab with state-of-the-art equipment.

The Physical Therapist Assistant Program at Pueblo Community College is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE), 3030 Potomac Ave, Suite 100, Alexandria, Virginia 22305-3085; telephone: 703-706-3245; email: accreditation@apta.org; website: http://www.capteonline.org. If needing to contact the program/institution directly, please call 719-549-3433 or email Margaret.Oreskovich@pueblocc.edu.

Students accepted into the PTA program must pass a background check and drug screen before being officially admitted into the program. The background check and drug screen must be repeated before the student begins the second year of the program. Students are responsible for all expenses associated with internships and must provide their own transportation to and from clinicals. Financial aid is available through the PCC Financial Aid Office. Additional scholarship and grant information will be posted on the PTA bulletin board as it becomes available.

Program Requirements

The PTA Program has a selective admissions policy. You must submit a PTA application that is available through the Health and Public Safety Division or the PTA website. General Education requirements include ENG 1021, COM 1150, PSY 1001, HPR 1038, BIO 2101 and PHY 1105. BIO 2101 and PHY 1105 must be completed before the application due date of May 25. All general education courses must be completed with a "C" or above and the applicant must have a minimum GPA of 2.50. Once in the program you must also have a health care provider CPR card to attend clinical experiences and you must provide proof of current immunizations and purchase liability insurance.

Note: Clinical sites used during the program require that you successfully complete a background check and drug screen. These need to be completed before final acceptance into the program.

Total Credits: 75

Degree Requirements

*** May** be completed prior to program admission
**** Must** be completed prior to program admission

Prerequisites

BIO 2101 - Human Anatomy and Physiology I with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 201 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, nervous and endocrine systems. Includes a mandatory hands-on laboratory experience covering experimentation, microscopy, observations and dissection. This is the first semester of a two-semester sequence.

PHY 1105 - Conceptual Physics with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly PHY 105 Focuses on mechanics, heat, properties of matter, electricity and magnetism, light and modern physics. Incorporates laboratory experience. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

Core Curriculum Requirements

Semester 1 — Fall

HPR 1017 - Anatomical Kinesiology

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Prerequisite(s): BIO 2101
Formerly HPR 117 Studies the Anatomical Bases of Human Movement.

PTA 1010 - Basic Patient Care in Physical Therapy

Credit(s): 5
Lecture Hour(s): 2
Vocational Lab Hour(s): 4.50
Prerequisite(s): Program Admission

Formerly PTA 110 Examines the basic patient care skills for the healthcare practitioner enabling understanding and demonstration of skills that include positioning, body mechanics, transfers, range of motion, palpation, vital signs, aseptic techniques, bandaging, medical terminology, activities of daily living (ADLs), wheelchair management, architectural barriers, and gait training.

PTA 1015 - Principles and Practices of Physical Therapy

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Program admission
Formerly PTA 115 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 1031 - Professional Communications I

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): Program admission
Formerly PTA 131 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.

HPR 1038 - Intro to Medical Terminology

Credit(s): 1
Lecture Hour(s): 1
Formerly HPR 138 Introduces the student to the structure of medical terms with emphasis on using and combining the most common prefixes, roots and suffixes. Includes terms related to major body systems, oncology and psychiatry, as well as clinical laboratory and diagnostic procedures and imaging. Class structure provides accepted pronunciation of terms and relative use in the healthcare setting.

Semester 2 — Spring

PTA 1020 - Modalities in Physical Therapy

Credit(s): 5
Lecture Hour(s): 2
Vocational Lab Hour(s): 4.50
Prerequisite(s): PTA 1010.
Formerly PTA 120 Examines the theory and principles of physical therapy modalities. This course includes therapeutic heat and cold, traction, hydrotherapy, and light therapies.

PTA 1035 - Principles of Electrical Stimulation

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): Program admission

Formerly PTA 135 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

Credit(s): 5
Lecture Hour(s): 2
Vocational Lab Hour(s): 4.5
Prerequisite(s): HPR 1017, Program Admission.
Formerly PTA 140 Focuses on the science of human motion, theories of biomechanics and muscle/joint structure and function. Emphasizes basic principles of therapeutic exercise and their application to specific body regions. A laboratory experience that includes the application of kinesiology and exercise principles is integrated in the learning experience.

PTA 1041 - Professional Communications II

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): PTA 1031.
Formerly PTA 141 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 1024 - Rehab Principles of Medical I

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Program admission
Formerly PTA 124 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.

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

Semester 3 — Summer

PTA 1034 - Rehab Principles of Medical II

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Program admission
Formerly PTA 134 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 2080 - PTA Internship I

Credit(s): 4
Internship Hour(s): 12
Prerequisite(s): PTA 1020, PTA 1040
Formerly PTA 280 Focuses on 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 will provide supervision.

PSY 1001 - General Psychology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 101 Focuses on the scientific study of behavior including motivation, emotion, physiological psychology, stress and coping, research methods, consciousness, sensation, perception, learning and memory. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

Semester 4 — Fall

PTA 2005 - Psychosocial Issues in Health Care

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Program admission
Formerly PTA 205 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 and Management

Credit(s): 5
Lecture Hour(s): 2
Vocational Lab Hour(s): 4.5
Prerequisite(s): PTA 1020, PTA 1040.
Formerly PTA 230 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 and Management Techniques

Credit(s): 5
Lecture Hour(s): 2
Vocational Lab Hour(s): 4.50
Prerequisite(s): PTA 1020 and PTA 1040
Formerly PTA 240 Examines the theory and principles of physical therapy with an introduction to assessment, management techniques and advanced physical therapy procedures as they relate to neurologic, cardiac, and pulmonary conditions.

PTA 2051 - Professional Communications III

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): PTA 1041.
Formerly PTA 251 Advances development and application of the written and oral communication skills utilized in healthcare and physical therapy workplace settings.

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

Semester 5 — Spring

PTA 2078 - PTA Seminar

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Successful completion of all previous PTA courses, department approval required
Formerly PTA 278 Provides a summary of all coursework, Internships and prepares the student for transition into the workforce as an entry level PTA. It includes a comprehensive review and mock exam in preparation for the national PTA exam, employment benefits, licensing, state practice act review, professional development, employment opportunities and community service.

PTA 2081 - PTA Internship II

Credit(s): 5
Internship Hour(s): 15
Prerequisite(s): Successful completion of all prevous courses, department approval required
Formerly PTA 281 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

Credit(s): 5
Internship Hour(s): 15
Prerequisite(s): Successful completion of all previous PTA courses, department approval required
Formerly PTA 282 Incorporates advanced clinical experience providing hands on patient practicum skills and techniques. Students will 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 will present an in-service on a physical therapy-related topic.

Radiologic Technology, AAS

CIP 51.0911

See list of Department Chairs on the Personnel page.

Career Opportunities

The Radiologic Technology program prepares you for a career in radiologic technology (radiography). As a graduate of the program, you are eligible to take the American Registry of Radiologic Technologists (ARRT) national certification examination in radiography. You will specialize in radiographic procedures that demonstrate anatomy and pathologies on medical x-ray film, fluoroscopic screens and other electronic imaging devices. These images are, in turn, interpreted by radiologists and other physicians for the diagnosis and treatment of disease and injury.

Program Description

The AAS in Radiologic Technology prepares you to work as a critical member of today's health care team. We teach you important critical thinking/problem-solving techniques as well as interpersonal and communication skills that allow you to interact effectively with other health care team members, patients and families from a variety of professional, social, emotional, cultural and intellectual backgrounds. We provide you with the skills you need to work with highly complex medical imaging equipment, analyze acquired images for quality, assess patient condition and apply appropriate techniques of patient care and education, and achieve the highest degree of clinical competency. The program focuses on developing your intellectual abilities as well as the judgment you need to demonstrate a professional attitude and demeanor, display the highest moral and ethical standards, and foster the safety of yourself and your patients.

Program Requirements

Entrance Requirements:

Prerequisite Requirements: ENG 1021, BIO 1006, MAT 1140, RTE 1001, HPR 1038

Graduation Requirements:

PSY 2440, Arts/Humanities. In addition, students must complete all required Clinical Competencies.

Total Credits: 77

Degree Requirements

* Indicates prerequisite courses for program entry.

General Education Requirements (16 Credits)

BIO 1006 - Basic Anatomy and Physiology

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly BIO 106 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, Paramedic Program, and the Medical Office Technology Program.

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

MAT 1140 - Career Math

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 107 Covers material designed for career technical or general studies students who need to study particular mathematical topics. Topics may include measurement, algebra, geometry, trigonometry, graphs and/or finance. These are presented on an introductory level and the emphasis is on applications.

PSY 1001 - General Psychology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 101 Focuses on the scientific study of behavior including motivation, emotion, physiological psychology, stress and coping, research methods, consciousness, sensation, perception, learning and memory. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

or

PSY 2440 - Human Growth and Development: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 235 Examines human development from conception through death, emphasizing physical, cognitive, emotional and psychosocial factors. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

- Arts/Humanities **Credit(s): 3**
  or
- Social and Behavioral Science **Credit(s): 3**

Related Requirements (3 Credits)

RTE 1001 - Introduction to Radiography

Credit(s): 2
Lecture Hour(s): 2
Formerly RTE 101 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.

HPR 1038 - Intro to Medical Terminology

Credit(s): 1
Lecture Hour(s): 1
Formerly HPR 138 Introduces the student to the structure of medical terms with emphasis on using and combining the most common prefixes, roots and suffixes. Includes terms related to major body systems, oncology and psychiatry, as well as clinical laboratory and diagnostic procedures and imaging. Class structure provides accepted pronunciation of terms and relative use in the healthcare setting.

Core Curriculum Requirements (58 Credits)

Semester 1 – Fall

RTE 1011 - Radiographic Patient Care

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): RTE 1001.
Corequisite(s): RTE 1021, RTE 1031, RTE 1041, RTE 1081.
Formerly RTE 111 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 - Radiologic Procedures I

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Prerequisite(s): RTE 1001
Formerly RTE 121 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 1031 - Radiographic Pathology and Image Evaluation I

Credit(s): 1.50
Lecture Hour(s): 1.50
Prerequisite(s): RTE 1001.
Formerly RTE 131 Provides a detailed anatomic discussion of the respiratory, digestive, genitourinary systems and

related medical terminology. The course will also cover the details of bony anatomy including bone structure, pathology and arthrology.

RTE 1041 - Radiographic Equipment/Imaging I

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Program admission, RTE 1001.
Formerly RTE 141 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 1081 - Radiographic Internship I

Credit(s): 5
Internship Hour(s): 15
Prerequisite(s): Program admission, RTE 1001.
Formerly RTE 181 Introduces the clinical education experience at the clinical education center. The student applies knowledge learned in the classroom to the actual practice of radiography. Introduces the clinical education experience at the healthcare facility. The course focuses on the application of knowledge to the actual practice of radiography.

Semester 2 – Spring

RTE 1022 - Radiologic Procedures II

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Prerequisite(s): RTE 1021.
Formerly RTE 122 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 1032 - Radiographic Pathology and Image Evaluation II

Credit(s): 1.50
Lecture Hour(s): 1.50
Prerequisite(s): RTE 1031.
Formerly RTE 132 Provides a detailed anatomic/pathologic discussion of the spine, circulatory system, nervous system and skull and related medical terminology.

RTE 1042 - Radiographic Equipment/Imaging II

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): RTE 1041.
Formerly RTE 142 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 1082 - Radiographic Internship II

Credit(s): 5
Internship Hour(s): 15
Prerequisite(s): RTE 1081.
Formerly RTE 182 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.

Semester 3 – Summer

RTE 1083 - Radiographic Internship III

Credit(s): 7
Internship Hour(s): 21
Prerequisite(s): RTE 1082.
Formerly RTE 183 Reinforces and builds independence in the clinical Internship experience. Applies radiographic knowledge learned in the classroom and prior clinical Internship experience.

Semester 4 – Fall

RTE 2021 - Advanced Medical Imaging

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): RTE 1022.
Formerly RTE 221 Introduces advanced imaging techniques including radiography of the cranium, facial bones and special radiographic procedures. These concepts are combined with the basic oral communication techniques necessary for the professional radiographer.

RTE 2031 - Radiation Biology/Protection

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): RTE 1042.
Formerly RTE 231 Provides the basic knowledge and understanding of the biologic effects of ionizing radiation and radiation protection and safety.

RTE 2081 - Radiographic Internship IV

Credit(s): 8
Internship Hour(s): 24
Prerequisite(s): RTE 1083.
Formerly RTE 281 Introduces the student to the radiographic specialty areas of pediatrics, geriatrics, the outpatient clinic, as well as increasing proficiency in general radiography.

Semester 5 – Spring

RTE 2082 - Radiographic Internship V

Credit(s): 8
Internship Hour(s): 24

Prerequisite(s): RTE 2081
Formerly RTE 282 Introduces the student to the radiographic specialty areas of pediatrics, geriatrics, the outpatient clinic, portable and trauma radiography, as well as increasing proficiency in general radiography.

RTE 2089 - Capstone

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): All core curriculum or permission of instructor.
Corequisite(s): RTE 2082.
Formerly RTE 289 Prepares the radiology technology student to effectively search for a job in radiography and sit for the American Registry of Radiologic Technologists examination.

Respiratory Therapy, AAS

See list of Department Chairs on the Personnel page.

Career Opportunities

The Respiratory Therapy program prepares you for a career in a variety of professional settings. The most familiar setting is in the hospital, where respiratory therapists care for patients with cardiopulmonary disorders. Beyond the hospital setting, you can find employment in long-term care facilities, rehabilitation hospitals/clinics, corporate health facilities, outpatient diagnostic centers, emergency medical transport, education and clinical researcher.

Program Description

The AAS Degree prepares you to provide respiratory therapy to patients and educate them in their continuing care. In our off-campus scheduled clinical hours, you will provide respiratory therapy for patients under the supervision of preceptor or clinical instructor who is a licensed and credentialed respiratory therapist.

A respiratory therapist can provide care to patients by gathering patient data, performing a physical assessment, and making a diagnostic clinical treatment plan, which can include oxygen therapy, airway clearance therapy, aerosol therapy, medication delivery, airway management, arterial blood sampling, and most importantly invasive and non-invasive mechanical ventilation.

Because of the high level of personal and professional responsibility required of a respiratory therapist, you must have integrity, maturity, individual motivation, good interpersonal skills, excellent manual dexterity and a solid science and general studies academic background to be successful in this program. We are firmly committed to fostering your intellectual growth and to developing well-qualified respiratory therapists with high professional standards and ethics.

Program Requirements

Entrance Requirements:

You must complete a current Respiratory Therapy program application and meet all minimum requirements and application timelines. The application is available through the Respiratory Therapy program, at the PCC Respiratory Therapy website or in Admissions & Records. You should seek advisement from program faculty for assistance with applications, minimum requirements and required general education courses for admissions. In addition, all students entering the program will need a current American Heart Association CPR card good for 2 years.

If you are an AAS Respiratory Therapy student, you must complete all General Education/Related Requirements.

Note: All students are accepted provisionally pending completion of a criminal background check and cleared drug screen. 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.

Total Credits: 72.5

General Education Requirements (20 Credits)

Applicants must have all 6 general education courses completed with a "C" or higher, to begin the first fall semester of the program.

*All BIO courses must be within 7 years of submitting application

Fall (9 credits)

BIO 1111 - General College Biology I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): ENG 1021
Formerly BIO 111 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.

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

HPR 1038 - Intro to Medical Terminology

Credit(s): 1
Lecture Hour(s): 1
Formerly HPR 138 Introduces the student to the structure of medical terms with emphasis on using and combining the most common prefixes, roots and suffixes. Includes terms related to major body systems, oncology and psychiatry, as well as clinical laboratory and diagnostic procedures and imaging. Class structure provides accepted pronunciation of terms and relative use in the healthcare setting.

Spring (11 credits)

BIO 2102 - Human Anatomy and Physiology II with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2

Prerequisite(s): BIO 1111.
Formerly BIO 202 Focuses on the integrated study of the human body and the histology, anatomy, and physiology of the following systems and topics: cardiovascular, hematology, lymphatic and immune, urinary, fluid and electrolyte control, digestive, nutrition, respiratory, reproductive and development. Includes a mandatory hands-on laboratory experience involving experimentation, microscopy, observations and dissection. This is the second semester of a two-semester sequence.

BIO 2104 - Microbiology with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 204 Designed for health science majors. Examines microorganisms with an emphasis on their structure, development, physiology, classification and identification. The laboratory experience includes culturing, identifying and controlling microorganisms with an emphasis on their role in infectious disease.

PSY 1001 - General Psychology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 101 Focuses on the scientific study of behavior including motivation, emotion, physiological psychology, stress and coping, research methods, consciousness, sensation, perception, learning and memory. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

OR

PSY 2440 - Human Growth and Development: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 235 Examines human development from conception through death, emphasizing physical, cognitive, emotional and psychosocial factors. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

Core Curriculum Requirements (52.5 Credits)

First Fall (10 credits)

RCA 1005 - Introduction to Respiratory Care

Credit(s): 1
Lecture Hour(s): 1
Formerly RCA 105 Introduces the principles and practices of Respiratory Therapy, to include the study of: the profession's history, current and future roles of the respiratory therapist, working cohesively with other professional organizations, quality care and evidence-based practice, patient safety, effective communication with patients, patient health records, principles of infection control, and implications of legal and ethical practices.

RCA 1051 - Cardiopulmonary Anatomy and Physiology

Credit(s): 3
Lecture Hour(s): 3

Prerequisite(s): Department Approval Required
Formerly RCA 151 Examines the cardiopulmonary anatomy and physiology related to respiratory therapy. This course also includes the study and analysis of the functional interrelationships between the pulmonary and cardiovascular systems.

RCA 1056 - Application of Science in Respiratory Care

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to the program.
Formerly RCA 156 Applying the basic concepts of chemistry and physics in relation to the practices of Respiratory Therapy. Interpretation of laboratory data collected from an arterial and/or venous blood sample for identifying a patient's homeostasis with oxygenation and ventilation to maintain a normal acid-base balance. Applying an index of O2 calculation to determine how gases are exchanged and transported from the atmosphere to the body for the assessment of the cardiopulmonary patient.

First Spring (13 credits)

RCA 1032 - Basic Techniques in Respiratory Care II

Credit(s): 5
Lecture Hour(s): 3
Vocational Lab Hour(s): 3
Prerequisite(s): RCA 1041 or consent of the instructor
Formerly RCA 132 Introduces the principles and practices of respiratory therapy, to include the study and application of aerosol therapy for medication delivery, airway clearance, and lung expansion techniques to promote bronchial hygiene for patients with cardiopulmonary disease pathologies.

RCA 1053 - Cardiopulmonary Disease and Pathology

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Program admission.
Formerly RCA 153 Covers the pathological abnormalities and clinical manifestations associated with cardiopulmonary diseases. This course includes the study of patient assessment, treatment modalities, and management for both chronic and acute cardiopulmonary diseases.

RCA 1066 - Monitoring and Diagnostics of the Cardiopulmonary Patient I

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): Program admission.
Formerly RCA 166 Provides the student an introduction to the monitoring and diagnostics for the cardiopulmonary patient, to include an analysis of the various clinical procedures, laboratory tests, and monitoring devices.

RCA 1010 - Pharmacology of Respiratory Therapy

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Department approval required

Formerly RCA 110 Introduces pharmacology associated with respiratory therapy, to include the study and application of prescribed medications for the indications, administration, adverse reactions and calculations; a study of specific topics include patient education of medication delivery devices, patient monitoring devices, utilization techniques, and the standards for therapeutic efficacy in relation to asthma, chronic obstructive pulmonary disease, and smoking cessation.

Summer (6.5 credits)

RCA 2035 - Mechanical Ventilation I

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Prerequisite(s): Department approval required
Formerly RCA 235 Introduces the principles and practices of invasive and non-invasive mechanical ventilation, to include the study of respiratory failure and physiological effects of mechanical ventilation. This course covers the management of equipment for various types of mechanical ventilator systems.

RCA 2070 - Clinical I

Credit(s): 4.5
Vocational Clinic Hour(s): 13.5

Prerequisite(s): Department approval required.
Formerly RCA 270 Serves as the first patient care internship and focuses on the care and analysis of the noncritical patient. Includes procedures presented in RCA 131 and RCA 132.

Second Fall (11.5 credits)

RCA 2071 - Clinical II

Credit(s): 8
Vocational Clinic Hour(s): 24

Prerequisite(s): Department approval required.
Formerly RCA 271 Serves as the second patient care internship and focuses on the care and analysis of the critically ill patient. Rotations into specialty areas are carried out as the schedule permits.

RCA 2036 - Mechanical Ventilation II

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Prerequisite(s): Department approval required. **Elaborates on the principles and practices of mechanical ventilation in high-risk situations, to include the study of ventilator graphics, management of patient asynchrony with ventilator support, and long-term mechanical ventilation.**
Formerly RCA 236 Elaborates on the principles and practices of mechanical ventilation in high-risk situations, to include the study of ventilator graphics, management of patient asynchrony with ventilator support, and long-term mechanical ventilation.

RCA 2046 - Neonatal and Pediatric Respiratory Care

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Department approval required
Formerly RCA 246 Introduces the theory and principles of respiratory therapy unique to pediatric and neonatology. This course examines fetal development, prenatal and antenatal assessment, and high risk delivery. Including the analysis of anatomy and physiology, clinical assessment, therapeutic modalities, and cardiopulmonary disorders for neonatal and pediatric patients.

Second Spring (11.5 credits)

RCA 2072 - Clinical III

Credit(s): 8
Vocational Clinic Hour(s): 24

Prerequisite(s): Department approval required.
Formerly RCA 272 Offers the clinical practicum required for the program.

RCA 2065 - Professional Development

Credit(s): 2
Lecture Hour(s): 2
Corequisite(s): RCA 2083 or consent of instructor.
Formerly RCA 265 Reviews the respiratory therapy concepts, theory, and therapeutic applications covered within the program curriculum to prepare for the national credential examination, job placement, and state licensure requirements.

RCA 2066 - Advanced Monitoring and Diagnostics of the Cardiopulmonary Patient II

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): Program admission.
Formerly RCA 266 Provides the student with an advanced opportunity for analysis and the monitoring and diagnosis of the cardiopulmonary patient, to include current medical diagnostic procedures, laboratory testing, and advance monitoring equipment.

Notes

[1] BIO 111 is a required prerequisite course for BIO 202

Software Development and Security AAS

CIP 11.0101

See list of Department Chairs on the Personnel page.

Program Description

The Computer Information Systems program provides skills to ensure secure programming. You will learn about essential principles of programming, security maintenance, and troubleshooting. If you plan to transfer for a bachelor's degree, refer to the Transfer Degree or speak with an advisor.

Career Options

The CIS Software Development and Security degree provides training to become a computer programmer.

Total Credits: 60

Semester One , Fall (13 credits)

CIS 1015 - Introduction to Computer Information Systems

Credit(s): 3
Lecture Hour(s): 3
Formerly CIS 115 Focuses on an overview of the needs for and roles of computer information systems. Emphasizes computer requirements in organizations, history, hardware functions, programming, systems development and computer operations. Introduces computer applications.

CIS 1018 - Intro to PC Applications

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 118 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 2020 - Fundamentals of Unix

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 220 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

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly CIS 223 Introduces students to the concepts of installing, configuring, and managing the Linux operating system. Topics covered include working with various desktops, use of filesystem commands, and management of user and group permissions.

MAT 1340 - College Algebra: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 0300.
Formerly MAT 121 Explores topics including intermediate algebra, equations, and inequalities, functions and their graphs, exponential and logarithmic functions, linear and nonlinear systems, selection of topics from among graphing of the conic sections, introduction to sequences and series permutations and combinations, the binomial theorem and theory of equations. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

Semester Two, Spring (15 credits)

CIS 2040 - Database Design and Development

Credit(s): 3
Lecture Hour(s): 3
Formerly CIS 240 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.

CNG 1042 - Introduction to Cloud Computing Concepts

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Formerly CNG 142 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.

CSC 1020 - Problem Solving with Java

Credit(s): 3
Lecture Hour(s): 3
Formerly CSC 120 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 1019 - Introduction to Programming

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CSC 119 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.

CWB 2005 - Client-Side Scripting: (Software)

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Formerly CWB 205 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.

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1031 - Technical Writing I

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 131, then ENG 1020 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.

Semester Three, Fall (16 credits)

CIS 2043 - Introduction to Structured Query Language (SQL)

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Prerequisite(s): CIS 2040, Database Design and Development
Formerly CIS 243 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.

CNG 1032 - Network Security Fundamentals

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 132 Examines the field of information security to prepare information systems students for their future roles as business decision-makers. The course presents a balance of the managerial and the technical aspects of information security. The concepts covered in this course should be helpful for students working towards the Certified Information Systems Security Professional (CISSP) certification.

CSC 1060 - Computer Science I: (Language)

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Prerequisite(s): CSC 1020.
Formerly CSC 160 Introduces students to the discipline of computer science. Covers algorithm development, data

representation, logical expressions, sub-programs and input/output operations using a structured programming language. Requires intensive lab work outside of class time.

CSC 2017 - Advanced Python Programming

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Prerequisite(s): CSC 1020
Formerly CSC 217 Continues program development and problem solving not covered in CSC119: Introduction to Programming. Students will create larger programs in the areas of advanced expression, iterator objects, parsing, and GUI applications.

CWB 2006 - Server-Side Scripting: (Software)

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Prerequisite(s): MGD 1041
Formerly CWB 206 Explores the creation of dynamic web pages and applications using server-side scripting with database interactivity, server-based scripting languages, and database manipulation languages.

Semester Four, Spring (16 credits)

CIS 2087 - Cooperative Education

Credit(s): 1-12
Internship Hour(s): 3-36
Formerly CIS 287 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 works with the student to select an appropriate work site, establish learning objectives and to coordinate learning activities with the employer work site supervisor.

CSC 1061 - Computer Science II: (Language)

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Prerequisite(s): CSC 1060 or instructor approval.
Formerly CSC 161 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 1029 - Introduction to Secure Coding

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Prerequisite(s): CSC 1060 , Computer Science I
Formerly CSC 129 Focuses on introduction to secure coding. Emphasizes concepts, principles, and 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 2025 - Computer Architecture/Assembly Language Programming

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.5
Prerequisite(s): CIS 2023, Linux, and CSC 1060, Computer Science I
Formerly CSC 225 Introduces concepts of computer architecture, functional logic, design and computer arithmetic. Focuses on the mechanics of information transfer and control within a computer system. Includes symbolic programming techniques, implementing high level control structures, addressing modes and their relation to arrays, subprograms, parameters, linkage to high level languages and the assembly process.

CSC 2067 - Object-Oriented Analysis and Design

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): CSC 1060, Computer Science I
Formerly CSC 267 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.

Surgical Technology, AAS

CIP 51.0909

See list of Department Chairs on the Personnel page.

Program Description

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).

The Surgical Technology program teaches students classroom and hands-on learning in surgical techniques, patient prep, and Operating Room (O.R.) prep. Students will learn how to create and maintain a sterile field. They will also learn how to scrub, gown, glove, drape, and case management. Students will be taught hemostasis, how to use sutures, needles, stapling devices, and how to handle specimens. In addition, students will learn pharmacology and anesthesia, wound care, and use the principles of infection control. How to handle sharps, pass instruments and supplies during procedures will also be taught. Training will include how to perform surgical counts, room turnover and terminal cleaning processes. You will also learn to properly process instruments. Finally, students will engage in extensive clinical work to gain experience working with surgeons and staff in a real O.R.

The Surgical Technology (STE) program has a selective admissions process. The program application and requirements are available in the Medical & Behavioral Health office or at Pueblo Community College STE from January 1 to May 15 All Medical & Behavioral Health programs have essential functions to help you be successful in the program and career.

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.

Career Information

A Surgical Technologist is a vital member of the operating room team and requires extensive commitment and special qualities for those who practice in this profession. A PCC Surgical Technology student will become prepared to immediately assume the wide range of entry-level responsibilities encompassed by the profession of Surgical Technology. Students will gain quality classroom and hands-on training for working in the field of Surgical Technology.

Total Credits: 63.5

First Semester (13 credits)

BIO 1006 - Basic Anatomy and Physiology

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly BIO 106 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, Paramedic Program, and the Medical Office Technology Program.

COM 1105 - Career Communication

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 105 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.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

BIO 1016 - Introduction to Human Disease: GT-SC2

Credit(s): 3
Lecture Hour(s): 3
Formerly BIO 116 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.

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

First Fall (12.5 credits)

STE 1002 - Intro to Surgical Technology

Credit(s): 6
Lecture Hour(s): 6
Prerequisite(s): Program Admittance
Formerly STE 102 Introduces the principles and practices of surgical technology including standards of conduct, professional practice, communication, physical, psychological, social and spiritual needs of the surgical patient, death and dying, special populations, physical environment, safety standards, all-hazards preparedness, biomedical science, asepsis and sterile technique, hemostasis, emergency situations, surgical pharmacology and anesthesia, wound healing, sutures, needles, stapling devices and surgical instrumentation, equipment, and supplies. Perioperative technical skills of the surgical technologist will be demonstrated.

STE 1003 - Introduction to Surgical Technology Lab

Credit(s): 4
Vocational Lab Hour(s): 8
Prerequisite(s): Program Admittance
Formerly STE 103 Introduces hands-on skills in a mock operating room environment for the preoperative phase of surgical technology that includes scrubbing, gowning and gloving, assisting team members, creating and organizing a sterile field, setting up instrumentation on the mayo stand, surgical case management, operative routines, patient transport, patient positioning, prepping, and draping, as well as learning procedures for counting instruments, sponges, needles, sharps, and other items on the sterile field.

STE 1033 - Surgical Instruments Lab I

Credit(s): 1.5
Vocational Lab Hour(s): 3
Prerequisite(s): Program admittance.
Formerly STE 133 Introduces the history and materials used in the manufacture of surgical instruments, as well as the methods used to maintain, clean, and sterilize surgical instrumentation and equipment. Students will learn supplies, equipment, and the names, category, and use of instrumentation used in general, obstetric and gynecologic, otorhinolaryngology, oral, maxillofacial, plastic, reconstructive and ophthalmic surgical specialties. This course is the first of two courses.

COM 2063 - Conflict Resolution

Credit(s): 1
Lecture Hour(s): 1
Formerly COM 263 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.

First Spring (14 credits)

STE 1011 - Surgical Procedures and Case Management

Credit(s): 6
Lecture Hour(s): 6
Prerequisite(s): STE 1002
Formerly STE 111 Identifies the anatomy, physiology, pathology, and terminology, as well as specific variations in the preoperative, intraoperative, and postoperative care related to general, obstetric, gynecologic, ophthalmic, otorhinolaryngologic, oral, maxillary, plastic and reconstructive, genitourinary, orthopedic, cardiothoracic, peripheral vascular, and neuro surgery. Focus will also be placed on diagnostic procedures and tests, operating room set-up according to the surgical procedure, patient positioning, prepping, and draping, instrumentation, equipment, supplies and drugs, procedural steps, purpose and expected outcomes and possible complications.

STE 1051 - Surgical Procedures & Case Management Lab

Credit(s): 4.5
Vocational Lab Hour(s): 9
Prerequisite(s): STE 1002, STE 1003, STE 1033
Formerly STE 151 Introduces surgical case management and the skills required for the surgical technologist to perform in the first and second scrub role in a simulated surgical environment, as it relates to general, obstetric, gynecologic, ophthalmic, otorhinolaryngologic, oral, maxillofacial, plastic, genitourinary, orthopedic, cardiothoracic, peripheral vascular, and neurologic surgical specialties.

STE 1034 - Surgical Instruments Lab II

Credit(s): 1.5
Vocational Lab Hour(s): 3
Prerequisite(s): STE 1002, STE 1003
Formerly STE 134 Introduces the history and materials used in the manufacture of surgical instruments, as well as the methods used to maintain, clean, and sterilize surgical instrumentation and equipment. Introduces supplies, equipment, and the names, category, and use of instrumentation used for genitourinary, orthopedic, cardiothoracic, peripheral vascular, and neurologic surgical specialties.

STE 1005 - Pharmacology for the Surgical Technologist

Credit(s): 2
Vocational Lab Hour(s): 4
Prerequisite(s): Program admittance
Formerly STE 105 Discuss relevant knowledge as it pertains to surgical pharmacology including the metric system, pharmacology theory, drugs and aspects of anesthesia.

Summer (6 credits)

STE 2081 - Surgical Technology Clinical Internship I

Credit(s): 6
Internship Hour(s): 18
Prerequisite(s): STE 111, STE 112, STE 131, STE 141.
Formerly STE 281 Provides clinical hands-on experience for student to perform surgical technology duties in the first-scrub, second-scrub, and observation role during any given surgical procedure with proficiency and increased complexity while progressing towards entry-level graduate achievement. Clinical experience will be documented by procedure, date and student role while verifying case counts throughout the surgical rotation as defined by accreditation standards through a total of 120 cases. This is the first of three surgical technology clinical Internships.

Second Fall (10 credits)

STE 2082 - Surgical Technology Clinical Internship II

Credit(s): 6
Internship Hour(s): 18
Prerequisite(s): STE 2081.
Formerly STE 282 Provides clinical hands-on experience for student to perform surgical technology duties in the first-scrub, second-scrub, and observation role during any given surgical procedure with proficiency and increased complexity while progressing towards entry-level graduate achievement. Clinical experience will be documented by procedure, date and student role while verifying case counts throughout the surgical rotation as defined by accreditation standards through a total of 120 cases. This is the second of three surgical technology clinical Internships.

STE 2069 - CST Exam Review Course

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): STE 2081.
Formerly STE 279, then STE 2079 Prepares students for the National Certification Exam administered by The National Board for Surgical Technology and Surgical Assisting (NBSTSA) by introducing test taking skills and strategies for success. Students will review major concepts in the surgical technology program in preparation for the CST examination.

HPR 1039 - Medical Terminology

Credit(s): 2
Lecture Hour(s): 2
Formerly HPR 139 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.

COM 2069 - Leadership

Credit(s): 1
Lecture Hour(s): 1
Formerly COM 269 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.

Second Spring (8 credits)

STE 2083 - Surgical Technology Clinical Internship III

Credit(s): 6
Internship Hour(s): 18
Prerequisite(s): STE 2082.
Formerly STE 283 Provides clinical hands-on experience for student to perform surgical technology duties in the first-scrub, second-scrub, and observation role during any given surgical procedure with proficiency and increased complexity while progressing towards entry-level graduate achievement. Clinical experience will be documented by procedure, date and student role while verifying case counts throughout the surgical rotation as defined by accreditation standards through a total of 120 cases. This is the third of three surgical technology clinical Internships.

STE 2089 - Surgical Technology Capstone

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): STE 2082, STE 2069
Formerly STE 289 Outlines the skills needed in obtaining and keeping a job. Students will learn how to develop a personal marketing plan, set short and long term goals, manage targeted job searches, fill out paper and electronic applications, write a cover letter and resume, and practice mock interviews especially tailored to surgical technology. Students will also continue reviewing major concepts in the surgical technology program in preparation for the CST examination and take a final practice exam.

Web Design and Development, AAS

CIP 09.0702

See list of Department Chairs on the Personnel page.

Career Opportunities

Careers in Media Communications are in demand and PCC offers an affordable way for students to begin their education. Some of the exciting career options within this field include: Graphic Designers; Web Developers; Broadcast Technicians; Film Video Editors; and Advertising & Promotion Managers.

Program Description

The Media Communications program teaches students to think critically and develop skills in Web Design, Graphic Design, Advertising, Videography, News Writing, and TV-Radio Production. Courses provide a solid foundation in these areas through a combination of lecture and hands on applications. There are multiple labs with state of the art equipment and software for your area of emphasis. The Media Communications program provides a high technical skill attainment in this changing field of communication. Students have multiple options to pursue. The AAS degrees with emphases in Graphic Design and Web Design offer advanced technical skills in these areas. Certificates provide basic skill sets to enhance an existing degree or occupation. The AGS degree provides a transfer option to a four year university. If interested in this option, please refer to the Transferring Credits section of the catalog.

Total Credits: 60

Degree Requirements

General Education Requirements (15 Credits)

Communications

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

OR

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

Mathematics

MAT 1260 - Introduction to Statistics: GT-MA1

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 135 Explores and applies data presentation and summarization, introduction to probability concepts and distributions, statistical inference estimation, hypothesis testing, comparison of populations, correlation and regression. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

OR

MAT 1340 - College Algebra: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 0300.
Formerly MAT 121 Explores topics including intermediate algebra, equations, and inequalities, functions and their graphs, exponential and logarithmic functions, linear and nonlinear systems, selection of topics from among graphing of the conic sections, introduction to sequences and series permutations and combinations, the binomial theorem and theory of equations. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

Gen Ed Elective

CIS 1018 - Intro to PC Applications

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 118 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.

Social Behavioral Sciences

JOU 1005 - Introduction to Mass Media: GT SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly JOU 105 Places the mass media in a historical and cultural perspective, considering the validity, integrity and influence of the media in a democracy. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

Digital Media Requirements

MGD 2080 - Internship

Credit(s): 3
Internship Hour(s): 9
Prerequisite(s): Department Chair Approval.
Formerly MGD 280 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 1015 - Typography & Layout

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly MGD 105 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 1043 - Motion Graphic Design I: (Software)

Credit(s): 3
Vocational Lab Hour(s): 4.5
Formerly MGD 143 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.

CNG 1024 - Networking I: Network +

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 124 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.

CWB 2009 - Web Content Management Systems

Credit(s): 3
Vocational Lab Hour(s): 4.50
Prerequisite(s): MGD 1041
Formerly CWB 209 Explores the use of open source Content Management Systems (CMS) to simplify the creation and maintenance of web sites.

MGD 1002 - Introduction to Multimedia

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly MGD 102 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 1011 - Adobe Photoshop I

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly MGD 111 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 1041 - Web Design I

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly MGD 141 Introduces website planning, design and creation using industry standards-based website development tools. Screen-based color theory, web aesthetics, use of graphics editors and intuitive interface design are explored.

MGD 2041 - Web Design II

Credit(s): 3
Vocational Lab Hour(s): 4.50
Prerequisite(s): MGD 1041, or department chair approval.
Formerly MGD 241 Expands on previously learned fundamentals of HTML introducing cascading style sheets, DHTML, Java Scripts and CGI forms. Color usage and interface design principles are emphasized in this course. In this

course we'll examine websites that employ more complex structures, optimal site architecture and navigation necessary for larger and more complex sites.

MGD 2068 - Business for Creatives

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021 or ENG 1031
Formerly MGD 268 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 2089 - Capstone

Credit(s): 3
Internship Hour(s): 9
Prerequisite(s): Department Chair Approval.
Formerly MGD 289 A demonstrated culmination of learning within a given program of study.

MGD 2042 - Web Architecture: Open Source Design

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly MGD 242 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. Topics may include current content management platforms such as WordPress and Drupal, how to identifying web scripting languages, and an overview of open source programming such as PHP and MySQL.

CWB 2006 - Server-Side Scripting: (Software)

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Prerequisite(s): MGD 1041
Formerly CWB 206 Explores the creation of dynamic web pages and applications using server-side scripting with database interactivity, server-based scripting languages, and database manipulation languages.

MGD 1064 - Digital Video Editing I

Credit(s): 3
Vocational Lab Hour(s): 4.5
Formerly MGD 164 Introduces to digital nonlinear 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.

CWB 2008 - Web Application Development: (Development Tool(s))

Credit(s): 3
Vocational Lab Hour(s): 4.5

Formerly CWB 208 Teaches students how to work in the server-side scripting environment. Students learn the basics of application development, and general principles that apply to most development environments. Students develop applications using two different server-side application development tools: PHP Hypertext Preprocessor (PHP), and Cold Fusion. Students also learn key application standards such as source and revision control, coding stndards, code optimization and data integrity.

CSC 1020 - Problem Solving with Java

Credit(s): 3
Lecture Hour(s): 3
Formerly CSC 120 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.

MGD 2027 - Marcomm Practices

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): JOU 1005, or Department Chair Approval
Formerly MGD 227 Explores techniques and approaches in the practice of marketing communications (marcomm), including advertising, branding, direct marketing, packaging, promotion, publicity, sponsorship, public relations, sales, online marketing, social media marketing and more. Focuses on understanding the relationships between the different components of marketing communications to achieve maximum message effect.

Welding, AAS

CIP 48.0508

See list of Department Chairs on the Personnel page.

Career Opportunities

The Welding program prepares you for a career in construction and manufacturing settings, small job shops, city and government welding centers and related sites. You may also work as a self-employed welder.

Program Description

The Welding AAS degree offers advanced instruction if you have finished the basic welding courses or if you are working at the trade and wish to upgrade your skills. We also give qualification tests if you wish to be become qualified in a welding process.

The Welding Certificate program provides training in the SMAW (Shielded Metal Arc Welding), GTAW (Gas Tungsten Arc Welding), GMAW (Gas Metal Arc Welding) and the Oxyacetylene cutting process. This training is also included in the degree program. This two-semester program stresses print reading and applied metal properties. It prepares you for employment in the industry in the shortest possible time.

Total Credits: 64

Degree Requirements

General Education Requirements (15 Credits)

ENG 1031 - Technical Writing I

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 131, then ENG 1020 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.

MAT 1150 - Technical Mathematics

Credit(s): 4
Lecture Hour(s): 4
Formerly MAT 108 Covers material designed for career technical or general studies students who need to study particular mathematical topics. Topics may include measurement, algebra, geometry, trigonometry, graphs and/or finance. These are presented at an introductory level and the emphasis is on applications.

- Art/Humanities, **or** Social/Behavioral Science, **or** Communications, **or** Physical/Life Science **Credit(s): 8**

Core Curriculum Requirements (41 Credits)

WEL 1000 - Safety for Welders

Credit(s): 1
Lecture Hour(s): 1
Formerly WEL 100 Covers the hazards of welding on health and safety.

WEL 1001 - Allied Cutting Processes

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Formerly WEL 101 Covers setting up equipment and performing cutting and gouging operations utilizing the oxyacetylene, air carbon arc, exothermic, and plasma arc cutting processes. This course will also provide an introduction to blueprint reading.

or

WEL 1002 - Oxy-fuel Joining Processes

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.5
Formerly WEL 102 Covers Oxy-fuel joining operations.

WEL 1003 - Basic Shielded Metal Arc I

Credit(s): 4
Lecture Hour(s): 1

Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1002.
Formerly WEL 103 Covers Shielded Metal Arc Welding (SMAW) operation utilizing E-XX10 electrodes.

WEL 1004 - Basic Shielded Metal Arc II

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1003.
Formerly WEL 104 Covers Shielded Metal Arc Welding (SMAW) operation utilizing E-XX18 electrodes.

WEL 1006 - Blueprint Reading for Welders and Fitters

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Prerequisite(s): WEL 1001 or WEL 1002
Formerly WEL 106 Covers interpretation and creation of weld symbols and blueprints used in metal fabrication.

WEL 1024 - Gas Tungsten Arc Welding I

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.5
Formerly WEL 124 Covers Gas Tungsten Arc Welding (GTAW) operations in various positions and joint designs.

WEL 1025 - Introduction to Gas Metal Arc Welding

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1024.
Formerly WEL 125 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 2024 - Gas Tungsten Arc Welding II

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.5
Prerequisite(s): WEL 1024, WEL 1025.
Formerly WEL 224 Covers Gas Tungsten Arc Welding (GTAW) operations utilizing a variety of base metals and advanced joint designs.

WEL 2025 - Advanced Gas Metal Arc Welding

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50

Prerequisite(s): WEL 1024, WEL 1025.
Formerly WEL 225 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 2033 - 2G-Horizontal Pipe A.P.I.

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1004 or equivalent.
Formerly WEL 233 Instruction in safety, theory and practical applications in joint fit-up, design and welding pipe in the 2-G horizontal position. Welding in accordance with the American Petroleum Institute Pipe Code using the SMAW process with E-XX10 type electrodes.

WEL 2050 - Layout and Fabrication

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1002.
Formerly WEL 250 Develops welding and associated skills in metal fabrication.

Related Requirements (8 Credits)

Option A (Orman Campus)

WEL 2051 - Design, Layout and Fabrication

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1002, WEL 1024, WEL 2050.
Formerly WEL 251 Develops advanced welding and associated skills in the use of drawings and blueprints in planning. Includes designing and layout projects.

WEL 2063 - Applied Metal Properties

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Formerly WEL 263 Introduces the study of metal properties, hardness testing, heat treatment, cold working microscopic examination and application of common commercial alloys in industry.

Option B (PCC Southwest Campus)

WEL 2034 - 5G-Vertical Down A.P.I.

Credit(s): 4
Lecture Hour(s): 1

Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 2033.
Formerly WEL 234 Instruction in safety, theory and practical applications in joint fit-up, design and welding pipe in the 5-G Vertical down position. Welding in accordance with the American Petroleum Institute Pipe Code using the SMAW process with E-XX10 type electrodes.

WEL 2035 - 6G-45 Down A.P.I.

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 2034.
Formerly WEL 235 Instruction in safety, theory and practical applications in joint fit-up, design and welding pipe in the 6-G 45 down position. Welding in accordance with the American Petroleum Institute Pipe Code using the SMAW process with E-XX10 type electrodes.

Associate of Science

Click here for the Associate of Science Degree Requirements

Biology, AS (with Designation)

CIP 24.0199

See list of Department Chairs on the Personnel page.

Career Opportunities

The Associate of Science (AS) Degree with Designation in Biology prepares the student to transfer as a junior to a four-year institution in Colorado in order to pursue a Bachelor of Science (BS) degree in Biology. Students who opt for the Bachelor of Science in Biology can choose to work in numerous occupational fields of science or medicine. Once a BS is completed, many students will pursue a higher or graduate degree in Biology.

Program Description

This program introduces the student to the discipline of Biology includes the course work to meet general education requirements that are common to all Colorado four-year institutions, as well a specific courses in various subfields of Biology. Upon transfer, students from Pueblo Community College who have earned the Associate of Science (AS) Degree with Designation in Biology will be ready to complete the last half of a BS in Biology at a four-year institution.

Program Requirements

Refer to the course descriptions listed below. Some courses may have prerequisites of lower level classes or assessment scores. Refer to the course descriptions for these prerequisites.

Total Credits: 60

** Refer to CCCS Guaranteed Transfer (GT) - Pathways Courses for a full list of all GT Pathway Courses*

General Education Core Requirements (36 Credits)

Written Communication (6 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

or

- ENG 1022 - English Composition II: GT-CP2 **Credit(s): 3 and** a GT Pathways Advanced Writing Course (GT--CO3) *

Mathematics (5 Credits)

MAT 2410 - Calculus I: GT-MA1

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): MAT 1420.
Formerly MAT 201 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. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

Natural and Physical Sciences (10 Credits)

BIO 1111 - General College Biology I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): ENG 1021
Formerly BIO 111 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.

CHE 1111 - General College Chemistry I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 1340, CHE 1011.
Corequisite(s): ENG 1021.
Formerly CHE 111 Focuses on basic chemistry and measurement, matter, chemical formulas, reactions and equations, stoichiometry. This course covers the development of atomic theory culminating in the use of quantum numbers to determine electron configurations of atoms, and the relationship of electron configuration to chemical bond theory. The course includes gases, liquids, and solids and problem-solving skills are emphasized through laboratory experiments.

Arts and Humanities (6 Credits)

- Select two GT Pathways Arts and Humanities courses from any category (GT-AH1, GT-AH2, GT-AH3, GT-AH4) *

Social and Behavioral Sciences (6 Credits)

- Select two GT Pathways Social and Behavioral courses from any category (GT-SS1, GT-SS2, GT-SS3) *

History (3 Credits)

- Select one GT Pathways History Course (GT-HI1) *

Additional Required Science Courses (20 Credits)

Note: If these credits are not required for the major at a receiving 4-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

BIO 1112 - General College Biology II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Corequisite(s): ENG 1021.
Formerly BIO 112 A continuation of Biology I. Includes ecology, evolution, classification, structure, and function in plants and animals. This course includes laboratory experience.

CHE 1112 - General College Chemistry II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): CHE 1111, ENG 1021.
Formerly CHE 112 Presents concepts in the areas of solution properties, chemical kinetics, chemical equilibrium, acid-base and ionic equilibrium, thermodynamics, and electrochemistry. This course emphasizes problem solving skills and

descriptive contents for these topics. Laboratory experiments demonstrate qualitative and quantitative analytical techniques.

PHY 1111 - Physics: Algebra-Based I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 0300.
Formerly PHY 111 Explores the physical world through reasoning, mathematics and experimentation. Examines kinematics, force, circular motion, energy, momentum, torque, rotational dynamics, simple harmonic motion, temperature, heat and thermodynamics. The concepts and theories presented are explored through demonstrations and hands-on experiments. It is a general physics course that is recommended for all of the health sciences and all other interested students. Students entering engineering or one of the advanced sciences should register for PHY 211. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 1112 - Physics: Algebra-Based II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 0300.
Formerly PHY 112 Expands upon PHY 1111and explores sound waves, electric fields, electric circuits, magnetic fields, light, optics and modern physics. Explores the concepts and theories presented in class through demonstrations and hands-on experiments. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

Electives (4 Credits)

Determined by transferring institution

Transfer Degrees

This degree transfers to the following Colorado Public Four-Year institutions of higher education:

- Adams State University (B.S. Biology, Cellular and Molecular Biology, Organismal Biology, and Wildlife Biology emphasis)
- Colorado Mesa University (B.S. Biological Sciences, Biology concentration)
- Colorado State University-Ft. Collins (B.S. Biological Sciences)
- Colorado State University-Pueblo (B.S. Biology)
- Fort Lewis College (B.S. Biology, General Biology option)
- Metropolitan State University of Denver (B.S. Biology)
- University of Colorado, Boulder (B.A. Ecology and Evolutionary Biology)
- University of Colorado, Colorado Springs (B.S. Biology)
- University of Colorado, Denver (B.S. Biology)
- University of Northern Colorado (B.S. Biological Sciences, Cell and Molecular Biology, Ecology and Evolutionary Biology, Pre-Health and Biomedical Sciences emphasis)
- Western State Colorado University (B.A. Biology, Cell Biology/Pre-medicine, Environmental Biology and Ecology, General Biology, Pre-allied Health emphasis)

Chemistry, AS (with Designation)

CIP 24.0199

See list of Department Chairs on the Personnel page.

Career Opportunities

The Associate of Science (AS) Degree with Designation in Chemistry prepares the student to transfer as a junior to a four-year institution in Colorado in order to pursue a Bachelor of Science (BS) degree in Chemistry. Students who opt for the Bachelor of Science in Chemistry can choose to work in numerous occupational fields of science or medicine. Once a BS is completed, many students will pursue a higher or graduate degree in Chemistry.

Program Description

This program introduces the student to the discipline of Chemistry includes the course work to meet general education requirements that are common to all Colorado four-year institutions, as well a specific courses in various subfields of Chemistry. Upon transfer, students from Pueblo Community College who have earned the Associate of Science (AS) Degree with Designation in Chemistry will be ready to complete the last half of a BS in Chemistry at a four-year institution.

Program Requirements

Refer to the course requirements listed below. Some courses may have prerequisites of lower level classes or assessment scores. Refer to the course descriptions for these prerequisites.

Total Credits: 60

** Refer to CCCS Guaranteed Transfer (GT) - Pathways Courses for a full list of all GT Pathway Courses*

General Education Core Requirements (30 Credits)

Written Communication (6 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

or

- ENG 1022 - English Composition II: GT-CP2 **Credit(s): 3 and** a GT Pathways Advanced Writing Course (GT-CO3) *

Mathematics (5 Credits)

MAT 2410 - Calculus I: GT-MA1

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): MAT 1420.
Formerly MAT 201 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. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

Natural and Physical Sciences (10 Credits)

CHE 1111 - General College Chemistry I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 1340, CHE 1011.
Corequisite(s): ENG 1021.
Formerly CHE 111 Focuses on basic chemistry and measurement, matter, chemical formulas, reactions and equations, stoichiometry. This course covers the development of atomic theory culminating in the use of quantum numbers to determine electron configurations of atoms, and the relationship of electron configuration to chemical bond theory. The course includes gases, liquids, and solids and problem-solving skills are emphasized through laboratory experiments.

CHE 1112 - General College Chemistry II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): CHE 1111, ENG 1021.
Formerly CHE 112 Presents concepts in the areas of solution properties, chemical kinetics, chemical equilibrium, acid-base and ionic equilibrium, thermodynamics, and electrochemistry. This course emphasizes problem solving skills and descriptive contents for these topics. Laboratory experiments demonstrate qualitative and quantitative analytical techniques.

Arts and Humanities (3 Credits)

(See note below)

- Select one GT Pathways Arts and Humanities course from any category (GT-AH1, GT-AH2, GT-AH3, GT-AH4) *

Social and Behavioral Sciences (3 Credits)

(See note below)

- Select one GT Pathways Social and Behavioral course from any category (GT-SS1, GT-SS2, GT-SS3) *

History (3 Credits)

- Select one GT Pathways History Course (GT-HI1) *

Additional Required Science and Mathematics Courses (29 Credits)

MAT 2420 - Calculus II: GT-MA1

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): MAT 2410.
Formerly MAT 202 Continues the study of single variable calculus which will include techniques of integration, polar coordinates, analytic geometry, improper integrals and infinite series. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2430 - Calculus III: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 2420.
Formerly MAT 203 Focuses the traditional subject matter of the Calculus. Topics include vectors, vector-valued functions, and multivariable calculus including partial derivatives, multiple integrals, line integrals and application. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

PHY 2111 - Physics: Calculus Based I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 2410, ENG 1021.
Formerly PHY 211 Explores the physical world through reasoning, mathematics and experimentation. Covers kinematics, force, gravity, energy, momentum, torque, rotational dynamics and fluids, and may include thermodynamics. The concepts and theories presented in class are explored through demonstrations and hands-on experiments. This first semester calculus-based physics course is recommended for students entering engineering or one of the advanced sciences. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 2112 - Physics: Calculus-Based II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4

Academic Lab Hour(s): 2
Prerequisite(s): MAT 2410, ENG 1021.
Formerly PHY 212 Expands upon PHY 2111and examines waves, electric fields, electric circuits, magnetic fields, light and optics, and modern physics. The concepts and theories presented in class are explored through demonstrations and hands-on experiments. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

CHE 2111 - Organic Chemistry I with Lab

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): Successful completion of CHE 1112 with a grace of "C" or better.
Formerly CHE 211 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, reaction mechanisms such as SN1, SN2, E1 and E2. Laboratory experiments demonstrate the above concepts plus the laboratory techniques associated with organic chemistry.

CHE 2112 - Organic Chemistry II with Lab

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): Successful completion of CHE 2111 with a grade of "C" or better.
Formerly CHE 212 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 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.

Elective (1 Credit)

Determined by transferring institution

Transfer Degrees

Note: This statewide transfer articulation agreement in Chemistry does not fulfill requirements for the GT Pathways general education curriculum or the Associate of Science degree prior to transfer; however, this agreement does guarantee a student, if admitted, junior standing and completion of the bachelor's degree within an additional 60 semester hours at the receiving institution.

Completion of the receiving institution's lower division general education requirements is fulfilled only under the condition that one GT Pathways-approved course in arts and humanities (AH1, AH2, AH3, or AH4) and one GT Pathways-approved course in social and behavioral sciences (SS1, SS2, or SS3) are successfully completed at the receiving institution within the first 30 hours or 12 calendar months.

Students transferring to a four-year college/university under this Chemistry agreement are encouraged to 'reverse' transfer the one GT Pathways course in arts and humanities and the one GT Pathways course in social and behavioral sciences back to PCC in order to complete the GT Pathways general education program and to earn their Associate of Science degree with a Chemistry designation.

Lecture and laboratory portions of organic chemistry, CHE 2111 and CHE 2112, must not be taken in an online delivery format.

This degree transfers to the following Colorado Public Four-Year institutions of higher education:

- Adams State University (B.S. Chemistry)
- Colorado Mesa University (B.S. Chemistry)
- Colorado State University-Ft. Collins (B.S. Chemistry)
- Colorado State University-Pueblo (B.S. Chemistry)
- Fort Lewis College (B.S. Chemistry, Chemistry option)
- Metropolitan State University of Denver (B.A./B.S. Chemistry)
- University of Colorado, Boulder (B.A. Chemistry)
- University of Colorado, Colorado Springs (B.A./B.S. Chemistry)
- University of Colorado, Denver (B.S. Chemistry)
- University of Northern Colorado (B.S. Chemistry, Biochemistry, Chemistry, Forensic Science, Industrial Chemistry, Pre-Health emphasis)
- Western State Colorado University (B.A. Chemistry, General Chemistry, Biochemistry emphasis)

Computer Science, DwD

See list of Department Chairs on the Personnel page.

Total Credits: 60

General Education Course Requirements (36 credits)

Written and Oral Communication (6 credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

Mathematics (5 Credits)

MAT 2410 - Calculus I: GT-MA1

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): MAT 1420.
Formerly MAT 201 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. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

Natural and Physical Sciences (10 credits)

- Choose a CCCS GT-SC1 (5 credits)
- Choose a CCCS GT-SC1 (5 credits)

Arts and Humanities (6 credits)

- Choose a CCCS GT-AH1, AH2, AH3, or AH4 (3 credits)
- Choose a CCCS GT-AH1, AH2, AH3, or AH4 (3 credits)

Social Sciences (6 credits)

- Choose a CCCS GT-SS1, SS2, SS3 (3 credits)
- Choose a CCCS GT-SS1, SS2, SS3 (3 credits)

History (3 credits)

- Choose a CCCS GT-HI1 (3 credits)

Select 24 Elective Credits from the Below (24 credits)

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

CSC 1019 - Introduction to Programming

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CSC 119 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 Java

Credit(s): 3
Lecture Hour(s): 3
Formerly CSC 120 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 1060 - Computer Science I: (Language)

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Prerequisite(s): CSC 1020.
Formerly CSC 160 Introduces students to the discipline of computer science. Covers algorithm development, data representation, logical expressions, sub-programs and input/output operations using a structured programming language. Requires intensive lab work outside of class time.

CSC 2030 - C Programming: Platform

Credit(s): 3
Lecture Hour(s): 3
Formerly CSC 230 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 2040 - Java Programming

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CSC 240 Introduces the Java programming language and covers basic graphics, events/procedures, user interface and libraries. Enables the student to write and execute a variety of Java programs. Incorporates Java Applets into HTML.

CSC 2041 - Advanced Java Programming

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Prerequisite(s): CSC 2040 or instructor approval.
Formerly CSC 241 Continues the study of the Java programming language. Covers advanced programming topics including multithreading, network/Internet programming, database programming and JavaBeans. Enables the student to write advanced, large and complex programs.

MAT 2420 - Calculus II: GT-MA1

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): MAT 2410.
Formerly MAT 202 Continues the study of single variable calculus which will include techniques of integration, polar coordinates, analytic geometry, improper integrals and infinite series. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2430 - Calculus III: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 2420.
Formerly MAT 203 Focuses the traditional subject matter of the Calculus. Topics include vectors, vector-valued functions, and multivariable calculus including partial derivatives, multiple integrals, line integrals and application. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2540 - Linear Algebra

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of MAT 2410 with a grade of C or better.
Formerly MAT 255 Explores vector spaces, matrices, linear transformations, matrix representation, eigenvalues and eigenvectors.

Choose one CCCS GT-SC1 (4 credits)

Geology, AS (with Designation)

CIP 24.0199

See list of Department Chairs on the Personnel page.

Career Opportunities

The Associate of Science (AS) Degree with Designation in Geology prepares the student to transfer as a junior to a four-year institution in Colorado in order to pursue a Bachelor of Science (BS) degree in Geology or Earth Sciences. Students who opt for the Bachelor of Science in Geology can choose to work in various occupational fields of science or engineering. Once a BS is completed, many students will pursue a higher or graduate degree in Geology.

Program Description

This program introduces the student to the discipline of Geology includes the course work to meet general education requirements that are common to all Colorado four-year institutions, as well a specific courses in various subfields of Geology. Upon transfer, students from Pueblo Community College who have earned the Associate of Science (AS) Degree with Designation in Geology will be ready to complete the last half of a BS in Geology at a four-year institution.

Program Requirements

Refer to the course requirements listed below. Some courses may have prerequisites of lower level classes or assessment scores. Refer to the course descriptions for these prerequisites.

Total Credits: 60

** Refer to CCCS Guaranteed Transfer (GT) - Pathways Courses for a full list of all GT Pathway Courses*

General Education Core Requirements (36 Credits)

Written Communication (6 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

or

- ENG 1022 - English Composition II: GT-CP2 **Credit(s): 3 and** a GT Pathways Course (GT-CO3) *

Mathematics (5 Credits)

MAT 2410 - Calculus I: GT-MA1

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): MAT 1420.
Formerly MAT 201 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. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

Natural and Physical Sciences (10 Credits)

CHE 1111 - General College Chemistry I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2

Prerequisite(s): MAT 1340, CHE 1011.
Corequisite(s): ENG 1021.
Formerly CHE 111 Focuses on basic chemistry and measurement, matter, chemical formulas, reactions and equations, stoichiometry. This course covers the development of atomic theory culminating in the use of quantum numbers to determine electron configurations of atoms, and the relationship of electron configuration to chemical bond theory. The course includes gases, liquids, and solids and problem-solving skills are emphasized through laboratory experiments.

CHE 1112 - General College Chemistry II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): CHE 1111, ENG 1021.
Formerly CHE 112 Presents concepts in the areas of solution properties, chemical kinetics, chemical equilibrium, acid-base and ionic equilibrium, thermodynamics, and electrochemistry. This course emphasizes problem solving skills and descriptive contents for these topics. Laboratory experiments demonstrate qualitative and quantitative analytical techniques.

Arts and Humanities (6 Credits)

- Select two GT Pathways Arts and Humanities courses from any category (GT-AH1, GT-AH2, GT-AH3, GT-AH4) *

Social and Behavioral Sciences (6 Credits)

- Select two GT Pathways Social and Behavioral courses from any category (GT-SS1, GT-SS2, GT-SS3) *

History (3 Credits)

- Select one GT Pathways History Course (GT-HI1) *

Additional Required Science and Mathematics Courses (23 Credits)

GEY 1111 - Physical Geology with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly GEY 111 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: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly GEY 112 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.

MAT 2420 - Calculus II: GT-MA1

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): MAT 2410.
Formerly MAT 202 Continues the study of single variable calculus which will include techniques of integration, polar coordinates, analytic geometry, improper integrals and infinite series. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

PHY 2111 - Physics: Calculus Based I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 2410, ENG 1021.
Formerly PHY 211 Explores the physical world through reasoning, mathematics and experimentation. Covers kinematics, force, gravity, energy, momentum, torque, rotational dynamics and fluids, and may include thermodynamics. The concepts and theories presented in class are explored through demonstrations and hands-on experiments. This first semester calculus-based physics course is recommended for students entering engineering or one of the advanced sciences. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 2112 - Physics: Calculus-Based II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 2410, ENG 1021.
Formerly PHY 212 Expands upon PHY 2111and examines waves, electric fields, electric circuits, magnetic fields, light and optics, and modern physics. The concepts and theories presented in class are explored through demonstrations and hands-on experiments. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

Elective (1 Credit)

Determined by transferring institution

Transfer Degrees

Note: In addition to meeting the requirements listed here, contact the department at the school to which you want to transfer for program-specific information.

This degree transfers to the following Colorado Public Four-Year institutions of higher education:

- Adams State University (B.A./B.S. Earth Sciences, Geology emphasis)
- Colorado Mesa University (B.S. Geosciences, Geology concentration)
- Colorado State University-Ft. Collins (B.S. Geology, Geology concentration)
- Fort Lewis College (B.S. Geology, Geology option)
- University of Colorado, Boulder (B.A. Geology)

- University of Northern Colorado (B.S. Earth Sciences, Geology emphasis)
- Western State Colorado University (B.A. Geology, Geology emphasis)

Mathematics, AS (with Designation)

CIP 24.0199

Career Opportunities

The Associate of Science Degree with Designation in Mathematics prepares students to transfer as a junior to a four-year institution in Colorado in order to pursue a bachelor's degree in mathematics. Bachelor degree curriculums allow students to prepare for graduate school, teaching careers, or employment in areas that require mathematics, such as actuarial science, computer science, engineering or statistics.

Program Description

The Associate of Science Degree with Designation in Mathematics is designed for students who want to transfer to a four-year college or university to pursue a bachelor's degree in mathematics. Completion of the AS degree completes the first two years of a mathematics bachelor's degree, and guarantees transfer at junior standing with no more than 60 remaining credits to meet the graduation requirements for a bachelor's degree in mathematics.

Program Requirements

In addition to the requirements listed below, you must:

a. Earn a minimum of 60 semester hours of course work
b. Earn a minimum of 15 graded semester hours at PCC
c. Earn a minimum of "C" in all coursework for the degree

Consult with a PCC Arts and Sciences advisor or transfer advisor to find out which Colorado Statewide Guaranteed Transfer Courses (GT Pathways) or elective courses meet the degree requirements of the four-year college to which you plan to transfer.

To earn an AS Degree with Designation in Mathematics, you must complete at least 60 college-level credits, as described below:

Total Credits: 60

** Refer to CCCS Guaranteed Transfer (GT) - Pathways Courses for a full list of all GT Pathway Courses*

General Education Requirements (39 Credits)

Written Communication (6 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

or

- ENG 1022 - English Composition II: GT-CP2 **Credit(s): 3 and** a GT Pathways Advanced Writing course (GT-CO3) *

Mathematics (5 Credits)

MAT 2410 - Calculus I: GT-MA1

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): MAT 1420.
Formerly MAT 201 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. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

Natural and Physical Sciences (10 Credits)

PHY 2111 - Physics: Calculus Based I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 2410, ENG 1021.
Formerly PHY 211 Explores the physical world through reasoning, mathematics and experimentation. Covers kinematics, force, gravity, energy, momentum, torque, rotational dynamics and fluids, and may include thermodynamics. The concepts and theories presented in class are explored through demonstrations and hands-on experiments. This first semester calculus-based physics course is recommended for students entering engineering or one of the advanced sciences. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 2112 - Physics: Calculus-Based II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 2410, ENG 1021.
Formerly PHY 212 Expands upon PHY 2111and examines waves, electric fields, electric circuits, magnetic fields, light

and optics, and modern physics. The concepts and theories presented in class are explored through demonstrations and hands-on experiments. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

Arts and Humanities (9 Credits)

- Select three GT Pathway courses from any category: (GT-AH1, GT-AH2, GT-AH3, **or** GT-AH4) *

Social and Behavioral Sciences (6 Credits)

- Select two GT Pathway courses from any category (GT-SS1, GT-SS2, **or** GT-SS3) *

History (3 Credits)

- Select one GT Pathways History course (GT-HI1) *

Additional Required Courses (16-17 Credits)

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

or

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

MAT 2420 - Calculus II: GT-MA1

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): MAT 2410.
Formerly MAT 202 Continues the study of single variable calculus which will include techniques of integration, polar coordinates, analytic geometry, improper integrals and infinite series. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2430 - Calculus III: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 2420.

Formerly MAT 203 Focuses the traditional subject matter of the Calculus. Topics include vectors, vector-valued functions, and multivariable calculus including partial derivatives, multiple integrals, line integrals and application. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

or

MAT 2431 - Calculus III with Engineering Applications: GT-MA1

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): Successful completion of MAT 2420 with a grade of C or better.
Formerly MAT 204 Focuses on the competencies established in MAT 2430 - Calculus III: GT-MA1with an additional emphasis on word problems and problem solving. This is the third course in the three-course calculus sequence. This course will additionally contain a thorough examination of multiple integration. This will include double and triple integrals, line integrals, Stokes' and Green's Theorems, and their applications. A graphing calculator is required for this course. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

CSC 1060 - Computer Science I: (Language)

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Prerequisite(s): CSC 1020.
Formerly CSC 160 Introduces students to the discipline of computer science. Covers algorithm development, data representation, logical expressions, sub-programs and input/output operations using a structured programming language. Requires intensive lab work outside of class time.

Electives (4-5 Credits)

Determined by transferring institution

Transfer Degrees

** CSU-Fort Collins requires a different computer science course than the community college course. Students should seek advising at CSU-Ft. Collins for information on the appropriate computer science course to take.

This degree transfers to the following Colorado public four-year institutions of higher education:

- Adams State University (B.A. Mathematics)
- Colorado Mesa University (B.S. Mathematics; Mathematics, Secondary Education or Statistics concentrations)
- Colorado State University-Ft. Collins (B.S. Mathematics)
- Colorado State University-Pueblo (B.A. Mathematics; B.S. Mathematics)
- Fort Lewis College (B.A. Mathematics; Mathematics option)
- Metropolitan State University of Denver (B.A. Mathematics)
- University of Colorado, Boulder (B.A. Mathematics)
- University of Colorado, Colorado Springs (B.A. Mathematics; B.S. Mathematics)
- University of Colorado, Denver (B.S. Mathematics)
- University of Northern Colorado (B.S. Mathematics; Applied Mathematical Sciences or Liberal Arts emphasis)
- Western State Colorado University (B.A. Mathematics)

Pre-Engineering, AS (with Designation)

CIP 24.0199

See list of Department Chairs on the Personnel page.

Career Opportunities

Engineers apply mathematical principles and those of many sciences to the solution of practical design problems. Most engineers specialize in a particular area. There are more than 25 major specialties, including aerospace, chemical, mining and metallurgical, mechanical, architectural, electrical and systems. The Pueblo Community College curriculum provides a transferable foundation for all the major branches of engineering.

Program Description

The pre-engineering program at Pueblo Community College is designed for students interested in studying for the engineering profession through the community college pathway. This pathway prepares students for the completion of a two-year Associate of Science (AS) degree which meets the requirements of the statewide engineering articulation agreement with Colorado's four-year engineering bachelor's degree programs. Classes taken at PCC for the pre-engineering program at Pueblo Community College are dependent on the University you choose to attend for your bachelor's. Please see an advisor for details.

Program Requirements

Refer to the general requirements for the Associate of Science degree listed above. Some pre-engineering courses have prerequisites of lower level classes or assessment scores. Refer to the course descriptions for specific course prerequisites.

Total Credits: 60

** Refer to CCCS Guaranteed Transfer (GT) - Pathways Courses for a full list of all GT Pathway Courses*

General Education Core Requirements (38 Credits)

Communication (9 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

Mathematics (4 Credits)

MAT 1340 - College Algebra: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 0300.
Formerly MAT 121 Explores topics including intermediate algebra, equations, and inequalities, functions and their graphs, exponential and logarithmic functions, linear and nonlinear systems, selection of topics from among graphing of the conic sections, introduction to sequences and series permutations and combinations, the binomial theorem and theory of equations. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

Natural and Physical Sciences (10 Credits)

PHY 2111 - Physics: Calculus Based I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 2410, ENG 1021.
Formerly PHY 211 Explores the physical world through reasoning, mathematics and experimentation. Covers kinematics, force, gravity, energy, momentum, torque, rotational dynamics and fluids, and may include thermodynamics. The concepts and theories presented in class are explored through demonstrations and hands-on experiments. This first semester calculus-based physics course is recommended for students entering engineering or one of the advanced sciences. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 2112 - Physics: Calculus-Based II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 2410, ENG 1021.
Formerly PHY 212 Expands upon PHY 2111and examines waves, electric fields, electric circuits, magnetic fields, light and optics, and modern physics. The concepts and theories presented in class are explored through demonstrations and hands-on experiments. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

Arts and Humanities (6 Credits)

(Select three courses, with no more than two courses from any one category):

- Arts and Expression: Select from a GT Pathways Arts and Expression course (GT-AH1) *
- Literature and Humanities: Select from a GT Pathways Literature and Humanities course (GT-AH2) *
- Ways of Thinking: Select from a GT Pathways Ways of Thinking course (GT-AH3) *
- Foreign Languages: Select from a GT Pathways Foreign Languages course (GT-AH4) *

Social and Behavioral Sciences (6 Credits)

(Select two courses from two different categories):

- Economics or Political Systems: Select from a GT Pathways Economics or Political Systems course (GT-SS1) *
- Geography: Select from a GT Pathways Geography course (GT-SS2) *
- Human Behavior, Culture, or Social Frameworks: Select from a GT Pathways Human Behavior, Culture, or Social Frameworks course (GT-SS3) *

History (3 Credits)

- Select one GT Pathways History course (GT-HI1) *

Guided Electives (22 Credits)

see an academic advisor

AAA 1009 - Advanced Academic Achievement

Credit(s): 3
Lecture Hour(s): 3
Formerly AAA 109 Examines theories and practices associated with successful learning to enhance college success. Recommended for new and returning students, this course study areas including education and career planning, effective communication, personal management, critical and creative thinking, development of community and awareness of diversity, leadership, and techniques for successful academic performance.

CAD 1101 - Computer Aided Drafting/2D I

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly CAD 101 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.

EGG 1020 - Engingeering Methodologies

Credit(s): 3
Lecture Hour(s): 2
Academic Lab Hour(s): 2
Prerequisite(s): MAT 1340
Formerly EGG 102 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.

HWE 1062 - Health and Fitness

Credit(s): 3
Lecture Hour(s): 3
Formerly HWE 111 Studies health and fitness in the US today. The course will look at personal health issues, managing stress, nutrition and health lifestyles.

MAT 1420 - College Trigonometry: GT-MA1

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): MAT 1340.
Formerly MAT 122 Covers topics including trigonometric functions (with graphs and inverse functions), identities and equations, solutions of triangles, complex numbers, and other topics as time permits. This is a traditional prerequisite course to the calculus sequence. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2410 - Calculus I: GT-MA1

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): MAT 1420.
Formerly MAT 201 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. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2420 - Calculus II: GT-MA1

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): MAT 2410.
Formerly MAT 202 Continues the study of single variable calculus which will include techniques of integration, polar coordinates, analytic geometry, improper integrals and infinite series. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

Psychology, AS (with Designation)

CIP 24.0199

See list of Department Chairs on the Personnel page.

Career Opportunities

The Associate of Science Degree with Designation in Psychology prepares students to transfer as a junior to a four-year institution in Colorado in order to pursue a Bachelor of Science degree (BS) in psychology. Much of the coursework for BA and BS degrees in psychology tends to overlap (for example, social science requirements and core courses), but BS degree graduates have a higher skill concentration in math, natural sciences and research methods. Students who opt for the Bachelor of Science in Psychology can find work with medical doctors, forensic psychologists, neuropsychologists and biologists. After a BS is completed, students may pursue a higher degree in psychology, if interested.

Program Description

This program introduces the student to the field of psychology and includes the coursework to meet general education requirements that are common to all Colorado four-year institutions, as well a specific courses in various subfields of psychology. Upon transfer, students from Pueblo Community College who have earned the Associate of Science (AS) Degree with Designation in Psychology will be ready to complete the last half of a BS in Psychology at a four-year institution.

Program Requirements

In addition to the requirements listed below, you must:

a. Earn a minimum of 60 semester hours of course work
b. Earn a minimum of 15 graded semester hours at PCC
c. Earn a minimum of "C" in all coursework for the degree

Consult with a PCC Arts and Sciences advisor or transfer advisor to find out which Colorado Statewide Guaranteed Transfer Courses (GT Pathways) or elective courses meet the degree requirements of the four-year college to which you plan to transfer.

To earn an AS degree with a designation in psychology, you must complete at least 60 college-level credits, as described below:

Total Credits: 60

** Refer to CCCS Guaranteed Transfer (GT) - Pathways Courses for a full list of all GT Pathway Courses*

General Education Core Requirements (38 Credits)

Written Communication (6 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

- ENG 1021 - English Composition I: GT-CO1 **Credit(s): 3**
  or
- ENG 1022 - English Composition II: GT-CP2 **Credit(s): 3 and** a GT Pathways Advanced Writing course (GT-CO3) *

Mathematics (4 Credits)

MAT 1340 - College Algebra: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 0300.
Formerly MAT 121 Explores topics including intermediate algebra, equations, and inequalities, functions and their graphs, exponential and logarithmic functions, linear and nonlinear systems, selection of topics from among graphing of the conic sections, introduction to sequences and series permutations and combinations, the binomial theorem and theory of equations. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

Natural and Physical Sciences (10 Credits)

BIO 1111 - General College Biology I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): ENG 1021
Formerly BIO 111 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.

CHE 1111 - General College Chemistry I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 1340, CHE 1011.
Corequisite(s): ENG 1021.
Formerly CHE 111 Focuses on basic chemistry and measurement, matter, chemical formulas, reactions and equations, stoichiometry. This course covers the development of atomic theory culminating in the use of quantum numbers to determine electron configurations of atoms, and the relationship of electron configuration to chemical bond theory. The course includes gases, liquids, and solids and problem-solving skills are emphasized through laboratory experiments.

Arts and Humanities (9 Credits)

PHI 1011 - Introduction to Philosophy: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 111 ompletion with a minimum C? grade guarantees transfer and application of credit in this GT Pathways category.

or

PHI 1012 - Ethics: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 112 Examines human life, experience and thought in order to discover and develop the principles and values for pursuing a more fulfilled existence. Theories designed to justify ethical judgments are applied to a selection of contemporary personal and social issues. This course is one of the statewide Guaranteed Transfer courses, GT-AH3.

- (Plus six (6) additional credits from at least two different categories of GT Pathways Arts & Humanities courses: (GT-AH1, GT-AH2, GT-AH3, GT-AH4) *

Social and Behavioral Sciences (6 Credits)

- Select two GT Pathway courses from any category (GT-SS1, GT-SS2, GT-SS3) *

History (3 Credits)

- Select one GT Pathways History course (GT-HI1) *

Additional Required Courses (9 Credits)

PSY 1001 - General Psychology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 101 Focuses on the scientific study of behavior including motivation, emotion, physiological psychology, stress and coping, research methods, consciousness, sensation, perception, learning and memory. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 1002 - General Psychology II: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 102 Focuses on the scientific study of behavior including cognition, language, intelligence, psychological assessment, personality, abnormal psychology, therapy, lifespan development and social psychology. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

or

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

Electives (13 Credits)

Determined by transferring institution

Transfer Degrees

Note: Students planning to transfer to University of Colorado Denver should complete both two-semester sequences of BIO 1111 & BIO 1112 and CHE 1111 & CHE 1112 at the community college; in addition, electives are restricted to non-Psychology courses.

This degree transfers to the following Colorado public four-year institutions of higher education:

- Colorado State University-Fort Collins (B.S. Psychology: General Psychology concentration)
- Colorado State University-Pueblo (B.S. Psychology)
- University of Colorado, Denver (B.S. Psychology)

Associate of General Studies

Click here for the Associate of General Studies Degree Requirements

Computer Information Systems, AGS (with Transfer Articulation Agreement)

CIP 11.0101

See list of Department Chairs on the Personnel page.

Career Opportunities

The AGS degree with an emphasis in Computer Information Systems prepares you to transfer to a university to continue studies in Computer Science or Computer Information Systems.

Program Description

The CIS program teaches you basic networking, programming and database technologies, as well as technical aspects of the Internet and data communications. The Associate of General Studies Degree with an emphasis in Computer

Information Systems prepares you to transfer to a university as a junior to pursue a bachelor's degree in Computer Science or Computer Information Systems. Please check with the university of your choice to assure transferability of all courses.

Total Credits: 60

General Education Course Requirements (30 Credits)

Written and Oral Communication (9 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

Mathematics (4 Credits)

MAT 1340 - College Algebra: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 0300.
Formerly MAT 121 Explores topics including intermediate algebra, equations, and inequalities, functions and their graphs, exponential and logarithmic functions, linear and nonlinear systems, selection of topics from among graphing of the conic sections, introduction to sequences and series permutations and combinations, the binomial theorem and theory of equations. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

Physical & Life Sciences (8 Credits)

Courses with Required Lab:

Choose two courses:

ANT 1001 - Cultural Anthropology: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly ANT 101 Studies human cultural patterns and learned behavior including linguistics, social and political organization, religion, culture and personality, culture change, and applied anthropology.

AST 1110 - Astronomy I With Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly AST 101 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 - Astronomy II with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): AST 1110.
Formerly AST 102 Emphasizes the structure and life cycle of the stars, the sun, galaxies, and the universe as a whole, including cosmology and relativity. Stellar phenomena including white dwarves, black holes will be explored. Incorporates laboratory experience.

BIO 1005 - Science of Biology with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly BIO 105 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 - as is the impact of biological science on society. Includes laboratory experiences. Designed for non-science majors.

BIO 1111 - General College Biology I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): ENG 1021
Formerly BIO 111 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 - General College Biology II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Corequisite(s): ENG 1021.
Formerly BIO 112 A continuation of Biology I. Includes ecology, evolution, classification, structure, and function in plants and animals. This course includes laboratory experience.

BIO 2101 - Human Anatomy and Physiology I with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 201 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, nervous and endocrine systems. Includes a mandatory hands-on laboratory experience covering experimentation, microscopy, observations and dissection. This is the first semester of a two-semester sequence.

BIO 2102 - Human Anatomy and Physiology II with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 202 Focuses on the integrated study of the human body and the histology, anatomy, and physiology of the following systems and topics: cardiovascular, hematology, lymphatic and immune, urinary, fluid and electrolyte control, digestive, nutrition, respiratory, reproductive and development. Includes a mandatory hands-on laboratory experience involving experimentation, microscopy, observations and dissection. This is the second semester of a two-semester sequence.

BIO 2104 - Microbiology with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 204 Designed for health science majors. Examines microorganisms with an emphasis on their structure, development, physiology, classification and identification. The laboratory experience includes culturing, identifying and controlling microorganisms with an emphasis on their role in infectious disease.

CHE 1011 - Introduction to Chemistry I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 0300.
Formerly CHE 101 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: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): CHE 1011.
Formerly CHE 102 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 1005 - Chemistry in Context with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Formerly CHE 105 Covers the study of measurements, matter, molecules, atoms, chemical bonding, nomenclature, energy, acids, bases, and nutrition. Course work examines chemistry in the modern world and surveys the current knowledge as well as the conceptual framework of the discipline. Chemistry as a science is explored, as is the impact of chemistry on society. This course includes laboratory experience and is designed for non-science majors.

CHE 1111 - General College Chemistry I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 1340, CHE 1011.
Corequisite(s): ENG 1021.
Formerly CHE 111 Focuses on basic chemistry and measurement, matter, chemical formulas, reactions and equations, stoichiometry. This course covers the development of atomic theory culminating in the use of quantum numbers to determine electron configurations of atoms, and the relationship of electron configuration to chemical bond theory. The course includes gases, liquids, and solids and problem-solving skills are emphasized through laboratory experiments.

CHE 1112 - General College Chemistry II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): CHE 1111, ENG 1021.
Formerly CHE 112 Presents concepts in the areas of solution properties, chemical kinetics, chemical equilibrium, acid-base and ionic equilibrium, thermodynamics, and electrochemistry. This course emphasizes problem solving skills and descriptive contents for these topics. Laboratory experiments demonstrate qualitative and quantitative analytical techniques.

ENV 1111 - Environmental Science with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly ENV 101 Provides an introduction to the basic concepts of ecology and the relationship between

environmental problems and biological systems. Includes interdisciplinary discussions on biology, chemistry, geology, energy, natural resources, pollution and environmental protection. Using a holistic approach, students will study how the foundations of natural sciences interconnect with the environment. This course includes laboratory experience.

GEO 1011 - Physical Geography: Landforms with Lab: GT-SCI

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly GEO 111 Introduces students to 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. The course incorporates an integrated process of lectures, discussion and laboratory assignments.

GEO 1012 - Physical Geography: Weather and Climate with Lab: GT-SCI

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly GEO 112 Introduces the principles of meteorology, climatology, world vegetation patterns and world regional climate classification. The course includes investigating the geographic factors which influence climate, such as topography, location, elevation, winds and latitude.

GEY 1111 - Physical Geology with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly GEY 111 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: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly GEY 112 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: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): MAT 0300 with a grade of S/C or better.
Formerly GEY 135 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.

MET 1050 - General Meteorology: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly MET 150 Provides an introduction to general meteorology and atmospheric sciences. It includes the composition and structure of the atmosphere and characteristics that affect the atmosphere, such as temperature, pressure and moisture. Additionally, the development of weather systems such as storm systems, hurricanes, weather fronts and cloud development will also be examined. Finally, concepts of climatology will be stressed. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 1105 - Conceptual Physics with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly PHY 105 Focuses on mechanics, heat, properties of matter, electricity and magnetism, light and modern physics. Incorporates laboratory experience. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 1107 - Energy Science & Technology with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): MAT 0300 with a grade of S/C or better.
Formerly PHY 107 Explores the science of energy and energy technologies, with a focus on renewable energy resources and clean technologies. It provides a background in the physics of energy, energy transfer and the current state of technology. Students will evaluate the future utilization of renewable technologies. Activities may include investigating conservation of energy, mechanical, electrical, heat and fluid power systems; energy transfer and loss; understanding energy audits; testing solar collectors and wind generators; and investigating hydrogen fuel cells. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 1111 - Physics: Algebra-Based I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 0300.
Formerly PHY 111 Explores the physical world through reasoning, mathematics and experimentation. Examines kinematics, force, circular motion, energy, momentum, torque, rotational dynamics, simple harmonic motion, temperature, heat and thermodynamics. The concepts and theories presented are explored through demonstrations and hands-on experiments. It is a general physics course that is recommended for all of the health sciences and all other interested students. Students entering engineering or one of the advanced sciences should register for PHY 211. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 1112 - Physics: Algebra-Based II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 0300.
Formerly PHY 112 Expands upon PHY 1111and explores sound waves, electric fields, electric circuits, magnetic fields, light, optics and modern physics. Explores the concepts and theories presented in class through demonstrations and hands-on experiments. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 2111 - Physics: Calculus Based I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 2410, ENG 1021.
Formerly PHY 211 Explores the physical world through reasoning, mathematics and experimentation. Covers kinematics, force, gravity, energy, momentum, torque, rotational dynamics and fluids, and may include thermodynamics. The concepts and theories presented in class are explored through demonstrations and hands-on experiments. This first semester calculus-based physics course is recommended for students entering engineering or one of the advanced sciences. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 2112 - Physics: Calculus-Based II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 2410, ENG 1021.
Formerly PHY 212 Expands upon PHY 2111and examines waves, electric fields, electric circuits, magnetic fields, light and optics, and modern physics. The concepts and theories presented in class are explored through demonstrations and hands-on experiments. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

SCI 1055 - Integrated Science I

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly SCI 155 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. Course is for elementary education majors only; both SCI 155 & SCI 1056required. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

SCI 1056 - Integrated Science II

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly SCI 156 Examines earth and biological systems, living and nonliving environments, through the application of fundamental energy and matter concepts. These systems and concepts will be explored in hands-on laboratory experiments. Course is for elementary education majors only; both SCI 1055& SCI 156 required. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

Social Sciences (6 Credits)

ECO 2001 - Principles of Macroeconomics: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly ECO 201 Focuses on the study of the American economy, stressing the interrelationships among household, business and government sectors. Explores saving and investment decisions, unemployment, inflation, national income accounting, taxing and spending policies, the limits of the market and government, public choice theory, the Federal Reserve System, money and banking, and international trade.

ECO 2002 - Principles of Microeconomics: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly ECO 202 Studies the firm, the nature of cost and how these relate to the economy as a whole. Analyzes economic models of the consumer, perfect competition, monopoly, oligopoly and monopolistic competition. Explores economic issues including market power, population growth, positive and negative externalities, income distribution, poverty and welfare, discrimination, and international economic interdependence.

Choose One Course from the Following (3 Credits)

Arts and Expression

ART 1110 - Art Appreciation: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly ART 110 Introduces the cultural significance of the visual arts, including media, processes, techniques, traditions, and terminology. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

ART 1111 - Art History Ancient to Medieval: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly ART 111 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

ART 1112 - Art History Renaissance to Modern: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly ART 112 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

ART 1113 - Art History

Credit(s): 3
Lecture Hour(s): 3
Formerly ART 207 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

MUS 1020 - Music Appreciation: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly MUS 120 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

MUS 1021 - Music History Medieval Thru Classical Period: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly MUS 121 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

MUS 1022 - Music History Early Romantic Period to the Present: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly MUS 122 Provides an 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

MUS 1025 - History of Jazz: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly MUS 125 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

THE 1005 - Theatre Appreciation: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly THE 105 Includes discussions, workshops and lectures designed to discover, analyze and evaluate all aspects of the theatre experience: scripts, acting, directing, staging, history, criticism and theory. This course is one of the statewide Guaranteed Transfer courses, GT-AH1.

THE 2011 - Development of Theatre Greek-Renaissance: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly THE 211 Surveys the history and evolution of drama from ancient Greece to the Renaissance, emphasizing all aspects of the art from period values to analysis of dramatic literature and performance. This course is one of the statewide Guaranteed Transfer courses, GT-AH1.

THE 2012 - Development of Theatre Restoration to Modern: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly THE 212 Surveys the history and evolution of drama from the Renaissance to the present, emphasizing all aspects of the art from period values to the analysis of dramatic literature and performance. This course is one of the statewide Guaranteed Transfer courses, GT-AH1.

THE 2015 - Playwriting: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly THE 215 Gives students the opportunity to learn and practice playwriting techniques, thereby improving creative writing skills. Elements of dramatic structure, dialogue, styles and theatrical practices are emphasized. This course is one of the statewide Guaranteed Transfer courses, GT-AH1.

Literature and Humanities

HUM 1003 - Introduction to Film Art: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Formerly HUM 103 Studies the relationships among film's stylistic systems, narrative systems and audience reception. Students view, discuss and critically analyze a variety of films which represent a variety of genres and themes. The course incorporates the vocabulary of stylistic systems (for instance, cinematography and editing) and narrative systems (for instance, story structure and character motivation) as both relate to the kinds of meanings a film conveys. This course is approved as part of the Colorado Statewide Guaranteed transfer curriculum: GT:AH2.

HUM 1015 - World Mythology: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Formerly HUM 115 Introduces students to a multidisciplinary approach to world mythology. Common themes are illustrated and connected to religion, philosophy, art, literature, music and contemporary culture. In addition, students will study various ways of interpreting myth. This course is one of the statewide Guaranteed Transfer courses. GT-AH2.

HUM 1021 - Humanities: Early Civilization: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Formerly HUM 121 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 prehistoric to the early medieval era. This course is one of the statewide Guaranteed Transfer courses. GT-AH2.

HUM 1022 - Humanities: Medieval - Modern: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Formerly HUM 122 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. This is a statewide Guaranteed Transfer course in the GT-AH2 category. GT-AH2

HUM 1023 - Humanities: Modern World: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Formerly HUM 123 Examines the cultures of the 17th through the 20th centuries by focusing on the interrelationships of the arts, ideas, and history. Considers the influences of industrialism, scientific development and non-European peoples. This course is one of the statewide Guaranteed Transfer courses. GT-AH2.

LIT 1015 - Introduction to Literature I: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly LIT 115 Introduces students to fiction, poetry and drama. Emphasizes active and responsive reading. This course is one of the statewide Guaranteed Transfer courses, GT-AH2.

LIT 2001 - World Literature to 1600: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): ENG 1021.
Formerly LIT 201 Examines significant writings in world literature from the ancients through the Renaissance. Emphasizes careful readings and understanding of the works and their cultural backgrounds. This course is one of the statewide Guaranteed Transfer courses, GT-AH2.

LIT 2002 - World Literature After 1600: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): ENG 1021.
Formerly LIT 202 Examines significant writings in world literature from the 17th century to the present. Emphasizes careful reading and understanding of the works and their cultural backgrounds. This course is one of the statewide Guaranteed Transfer courses, GT-AH2.

LIT 2005 - Race. Ethnicity, and Culture in U.S. Literature: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Formerly LIT 205 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. This is a statewide Guaranteed Transfer course in the GT-AH2 category. GT-AH2

LIT 2011 - American Literature to Civil War: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): ENG 1021.
Formerly LIT 211 Provides an overview of American literature from the Native American through the 19th-century Romantics. It explores ideas, historical and social contexts, themes and literary characteristics of works in various genres by major writers. This course is one of the statewide Guaranteed Transfer courses, GT-AH2.

LIT 2012 - American Literature After Civil War: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): ENG 1021.
Formerly LIT 212 Provides an overview of American literature from the mid-19th century to the present. It explores ideas, historical and social contexts, themes and literary characteristics of works in various genres by major writers. This course is one of the statewide Guaranteed Transfer courses, GT-AH2.

LIT 2025 - Introduction to Shakespeare: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at ENG 1021 level or consent of instructor.
Formerly LIT 225 Explores a selection of works by William Shakespeare. It focuses on careful reading and interpretation of the plays and poems, includes pertinent information about Elizabethan England, and examines formal as well as thematic elements of the selected works. This course is one of the statewide Guaranteed Transfer courses. GT-AH2.

LIT 2046 - Literature of Women: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Formerly LIT 246 Examines the techniques and themes in literature by and about women by examining women's issues from various genres. This course is one of the statewide Guaranteed Transfer courses, GT-AH2.

Ways of Thinking

PHI 1011 - Introduction to Philosophy: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 111 ompletion with a minimum C? grade guarantees transfer and application of credit in this GT Pathways category.

PHI 1012 - Ethics: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 112 Examines human life, experience and thought in order to discover and develop the principles and

values for pursuing a more fulfilled existence. Theories designed to justify ethical judgments are applied to a selection of contemporary personal and social issues. This course is one of the statewide Guaranteed Transfer courses, GT-AH3.

PHI 1013 - Logic: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 113 Studies effective thinking using language-oriented logic. Provides tools and develops skills for creative and critical thinking. Emphasizes the development of decision-making and problem-solving. This course is one of the statewide Guaranteed Transfer courses, GT-AH3.

PHI 1014 - Comparative Religions: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 114 Introduces students to the major world religions from both the Eastern and Western world such as Hinduism, Buddhism, Confucianism, Taoism, Zoroastrianism, Judaism, Christianity, Islam, Bahand influential preliterate traditions. Utilizes religious studies methods (historical, sociological, legal, psychological and phenomenological) 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. This course is one of the statewide Guaranteed Transfer courses, GT-AH3.

PHI 2014 - Philosophy of Religion: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 214 Focuses on the critical examination of the fundamental concepts, ideas and implications of religion. Includes the nature of God, the varieties of religious experience, argument concerning God`s existence, the problem of evil, faith and reason, religion and human destiny, and the connection between religion and ethics. This course is one of the statewide Guaranteed Transfer courses, GT-AH3.

PHI 2018 - Environmental Ethics: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 218 Critically analyzes theories of value of the natural world. Topics include the relation between scientific and moral principles; theories of the moral worth of persons, animals, plants and other natural objects; historical, religious and cultural influences on conceptions of nature; alternative accounts of human relationships and responsibilities to nature, including deep ecology and eco-feminism; and the connection between moral and political values and economic policies. This course is one of the statewide Guaranteed Transfer courses, GT-AH3.

PHI 2020 - Philosophy of-Death and Dying: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 220 Explores the major philosophical questions surrounding death and dying: the metaphysical arguments for and against the existence of a soul and life after bodily death; the epistemological assessment of arguments for the soul and life after death; the ethical justifications taken on positions such as rational suicide and

physician assisted suicide, as well as a focus on philosophy's existentialist contribution to questions about the meaning of life and the meaning of death. This course is one of the statewide Guaranteed Transfer courses. GT-AH3.

Core Curriculum Requirements (27 Credits)

CIS 1015 - Introduction to Computer Information Systems

Credit(s): 3
Lecture Hour(s): 3
Formerly CIS 115 Focuses on an overview of the needs for and roles of computer information systems. Emphasizes computer requirements in organizations, history, hardware functions, programming, systems development and computer operations. Introduces computer applications.

CIS 1018 - Intro to PC Applications

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 118 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.

CNG 1020 - A+ Certification Preparation

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Formerly CNG 120 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 1024 - Networking I: Network +

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 124 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.

CSC 1020 - Problem Solving with Java

Credit(s): 3
Lecture Hour(s): 3
Formerly CSC 120 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 1060 - Computer Science I: (Language)

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Prerequisite(s): CSC 1020.
Formerly CSC 160 Introduces students to the discipline of computer science. Covers algorithm development, data representation, logical expressions, sub-programs and input/output operations using a structured programming language. Requires intensive lab work outside of class time.

CSC 1061 - Computer Science II: (Language)

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Prerequisite(s): CSC 1060 or instructor approval.
Formerly CSC 161 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 2067 - Object-Oriented Analysis and Design

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): CSC 1060, Computer Science I
Formerly CSC 267 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.

Electives (3 Credits)

(Choose from List)

AAA 1009 - Advanced Academic Achievement

Credit(s): 3
Lecture Hour(s): 3
Formerly AAA 109 Examines theories and practices associated with successful learning to enhance college success. Recommended for new and returning students, this course study areas including education and career planning, effective communication, personal management, critical and creative thinking, development of community and awareness of diversity, leadership, and techniques for successful academic performance.

or

BUS 2017 - Business Communication & Report Writing

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 217 Emphasizes effective business writing and covers letters, memoranda, reports, application letters and resumes. Includes the fundamentals of business communication and an introduction to international communication.

or

BUS 2026 - Business Statistics

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 226 Focuses on statistical study, descriptive statistics, probability, and the binominal distribution, index numbers, time series, decision theory, confidence intervals, linear regression and correlation. Intended for the business major.

or

MAN 2026 - Principles of Management

Credit(s): 3
Lecture Hour(s): 3
Formerly MAN 226 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.

or

MAT 1400 - Survey of Calculus: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 1340 or see Basic Skills Assessment
Formerly MAT 125 Includes derivatives, integrals, and their applications, with attention restricted to algebraic, exponential, and logarithmic functions for business, life science and/or social science majors.. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

Mass Communications, AGS (with Transfer Articulation Agreement)

CIP 09.0702

See list of Department Chairs on the Personnel page.

Career Opportunities

The Associate of General Studies degree with an emphasis in Mass Communications prepares you for a career in journalism, radio/TV broadcasting, advertising, public relations or New Media Technology by providing a two-year foundation of courses designed to transfer to four-year colleges and universities.

Program Description

This program teaches you to think critically and develops your skills in news writing, television and radio production, advertising, videography and web design. Courses provide a solid foundation in these areas through a mixture of lecture and hands-on application. A fully equipped video control room and a mobile production truck provide you with multi-camera working classrooms. Several nonlinear editing suites offer you a diversity of experience in the changing field of communication. You will also gain experience in production and digital media through our media lab and the many volunteer opportunities we offer.

Transferability of courses depends upon the courses taken and the receiving institution. The PCC/CSU-Pueblo Transfer Agreement allows the AGS Media Communications graduate to transfer to the Colorado State University-Pueblo Mass Communications Department with a junior standing.

Please see the certificate option - Broadcasting & Production Technology Certificate.

Total Credits: 60

General Education Requirements (35 Credits)

Should be GTPathway courses

Communication (6 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

Mathematics (3 Credits)

MAT 1260 - Introduction to Statistics: GT-MA1

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 135 Explores and applies data presentation and summarization, introduction to probability concepts and distributions, statistical inference estimation, hypothesis testing, comparison of populations, correlation and regression. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

or

MAT 1240 - Mathematics for the Liberal Arts: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 1001 concurrency allowed, or see Basic Skills Assessment
Formerly MAT 120 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. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 1340 - College Algebra: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 0300.
Formerly MAT 121 Explores topics including intermediate algebra, equations, and inequalities, functions and their graphs, exponential and logarithmic functions, linear and nonlinear systems, selection of topics from among graphing of the conic sections, introduction to sequences and series permutations and combinations, the binomial theorem and theory of equations. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 1420 - College Trigonometry: GT-MA1

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): MAT 1340.
Formerly MAT 122 Covers topics including trigonometric functions (with graphs and inverse functions), identities and equations, solutions of triangles, complex numbers, and other topics as time permits. This is a traditional prerequisite course to the calculus sequence. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 1320 - Finite Mathematics: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 0300 or Equivalent Test Score.
Formerly MAT 123 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. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 1400 - Survey of Calculus: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 1340 or see Basic Skills Assessment
Formerly MAT 125 Includes derivatives, integrals, and their applications, with attention restricted to algebraic, exponential, and logarithmic functions for business, life science and/or social science majors.. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2420 - Calculus II: GT-MA1

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): MAT 2410.
Formerly MAT 202 Continues the study of single variable calculus which will include techniques of integration, polar coordinates, analytic geometry, improper integrals and infinite series. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2430 - Calculus III: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 2420.
Formerly MAT 203 Focuses the traditional subject matter of the Calculus. Topics include vectors, vector-valued functions, and multivariable calculus including partial derivatives, multiple integrals, line integrals and application. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2431 - Calculus III with Engineering Applications: GT-MA1

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): Successful completion of MAT 2420 with a grade of C or better.
Formerly MAT 204 Focuses on the competencies established in MAT 2430 - Calculus III: GT-MA1with an additional emphasis on word problems and problem solving. This is the third course in the three-course calculus sequence. This course will additionally contain a thorough examination of multiple integration. This will include double and triple integrals, line integrals, Stokes' and Green's Theorems, and their applications. A graphing calculator is required for this course. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2520 - Discrete Mathematics: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): Successful completion of MAT 2410 with a C or better.
Formerly MAT 215 Concentrates on formal logic, algorithms, induction proofs, equivalence relations and graphs. This course is designed for mathematics and computer science students.

MAT 2561 - Differential Equations with Engineering Applications: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): Successful completion of MAT 2420 with a grade of C or better.
Formerly MAT 261 This course introduces ordinary differential equations. The content of this course includes all the topics of MAT 2560 - Differential Equations: GT-MA1with an additional emphasis on applications and problem solving. A graphing calculator is required for this course. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2560 - Differential Equations: GT-MA1

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of MAT 2420 with a C or better.
Formerly MAT 265 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.

Physical & Life Sciences (Courses with Required Labs) (8 Credits)

Select two courses from:

ANT 1005 - Biological Anthropology with Laboratory: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly ANT 111 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. This is a statewide Guaranteed Transfer course in the GT-SC1 category. GT-SC1

AST 1110 - Astronomy I With Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly AST 101 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 - Astronomy II with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): AST 1110.
Formerly AST 102 Emphasizes the structure and life cycle of the stars, the sun, galaxies, and the universe as a whole, including cosmology and relativity. Stellar phenomena including white dwarves, black holes will be explored. Incorporates laboratory experience.

BIO 1005 - Science of Biology with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly BIO 105 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 - as is the impact of biological science on society. Includes laboratory experiences. Designed for non-science majors.

BIO 1111 - General College Biology I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): ENG 1021
Formerly BIO 111 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 - General College Biology II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Corequisite(s): ENG 1021.

Formerly BIO 112 A continuation of Biology I. Includes ecology, evolution, classification, structure, and function in plants and animals. This course includes laboratory experience.

BIO 2101 - Human Anatomy and Physiology I with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 201 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, nervous and endocrine systems. Includes a mandatory hands-on laboratory experience covering experimentation, microscopy, observations and dissection. This is the first semester of a two-semester sequence.

BIO 2102 - Human Anatomy and Physiology II with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 202 Focuses on the integrated study of the human body and the histology, anatomy, and physiology of the following systems and topics: cardiovascular, hematology, lymphatic and immune, urinary, fluid and electrolyte control, digestive, nutrition, respiratory, reproductive and development. Includes a mandatory hands-on laboratory experience involving experimentation, microscopy, observations and dissection. This is the second semester of a two-semester sequence.

BIO 2104 - Microbiology with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 204 Designed for health science majors. Examines microorganisms with an emphasis on their structure, development, physiology, classification and identification. The laboratory experience includes culturing, identifying and controlling microorganisms with an emphasis on their role in infectious disease.

CHE 1011 - Introduction to Chemistry I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 0300.
Formerly CHE 101 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: GT-SC1

Credit(s): 5
Lecture Hour(s): 4

Academic Lab Hour(s): 2
Prerequisite(s): CHE 1011.
Formerly CHE 102 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 1005 - Chemistry in Context with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Formerly CHE 105 Covers the study of measurements, matter, molecules, atoms, chemical bonding, nomenclature, energy, acids, bases, and nutrition. Course work examines chemistry in the modern world and surveys the current knowledge as well as the conceptual framework of the discipline. Chemistry as a science is explored, as is the impact of chemistry on society. This course includes laboratory experience and is designed for non-science majors.

CHE 1111 - General College Chemistry I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 1340, CHE 1011.
Corequisite(s): ENG 1021.
Formerly CHE 111 Focuses on basic chemistry and measurement, matter, chemical formulas, reactions and equations, stoichiometry. This course covers the development of atomic theory culminating in the use of quantum numbers to determine electron configurations of atoms, and the relationship of electron configuration to chemical bond theory. The course includes gases, liquids, and solids and problem-solving skills are emphasized through laboratory experiments.

CHE 1112 - General College Chemistry II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): CHE 1111, ENG 1021.
Formerly CHE 112 Presents concepts in the areas of solution properties, chemical kinetics, chemical equilibrium, acid-base and ionic equilibrium, thermodynamics, and electrochemistry. This course emphasizes problem solving skills and descriptive contents for these topics. Laboratory experiments demonstrate qualitative and quantitative analytical techniques.

ENV 1111 - Environmental Science with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly ENV 101 Provides an introduction to the basic concepts of ecology and the relationship between environmental problems and biological systems. Includes interdisciplinary discussions on biology, chemistry, geology, energy, natural resources, pollution and environmental protection. Using a holistic approach, students will study how the foundations of natural sciences interconnect with the environment. This course includes laboratory experience.

GEO 1011 - Physical Geography: Landforms with Lab: GT-SCI

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly GEO 111 Introduces students to 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. The course incorporates an integrated process of lectures, discussion and laboratory assignments.

GEO 1012 - Physical Geography: Weather and Climate with Lab: GT-SCI

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly GEO 112 Introduces the principles of meteorology, climatology, world vegetation patterns and world regional climate classification. The course includes investigating the geographic factors which influence climate, such as topography, location, elevation, winds and latitude.

GEY 1111 - Physical Geology with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly GEY 111 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: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly GEY 112 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: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): MAT 0300 with a grade of S/C or better.
Formerly GEY 135 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.

MET 1050 - General Meteorology: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly MET 150 Provides an introduction to general meteorology and atmospheric sciences. It includes the composition and structure of the atmosphere and characteristics that affect the atmosphere, such as temperature, pressure and moisture. Additionally, the development of weather systems such as storm systems, hurricanes, weather fronts and cloud development will also be examined. Finally, concepts of climatology will be stressed. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 1105 - Conceptual Physics with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly PHY 105 Focuses on mechanics, heat, properties of matter, electricity and magnetism, light and modern physics. Incorporates laboratory experience. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 1107 - Energy Science & Technology with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): MAT 0300 with a grade of S/C or better.
Formerly PHY 107 Explores the science of energy and energy technologies, with a focus on renewable energy resources and clean technologies. It provides a background in the physics of energy, energy transfer and the current state of technology. Students will evaluate the future utilization of renewable technologies. Activities may include investigating conservation of energy, mechanical, electrical, heat and fluid power systems; energy transfer and loss; understanding energy audits; testing solar collectors and wind generators; and investigating hydrogen fuel cells. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 1111 - Physics: Algebra-Based I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 0300.
Formerly PHY 111 Explores the physical world through reasoning, mathematics and experimentation. Examines kinematics, force, circular motion, energy, momentum, torque, rotational dynamics, simple harmonic motion, temperature, heat and thermodynamics. The concepts and theories presented are explored through demonstrations and hands-on experiments. It is a general physics course that is recommended for all of the health sciences and all other interested students. Students entering engineering or one of the advanced sciences should register for PHY 211. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 1112 - Physics: Algebra-Based II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 0300.
Formerly PHY 112 Expands upon PHY 1111and explores sound waves, electric fields, electric circuits, magnetic fields, light, optics and modern physics. Explores the concepts and theories presented in class through demonstrations and hands-on experiments. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 2111 - Physics: Calculus Based I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 2410, ENG 1021.
Formerly PHY 211 Explores the physical world through reasoning, mathematics and experimentation. Covers kinematics, force, gravity, energy, momentum, torque, rotational dynamics and fluids, and may include thermodynamics. The concepts and theories presented in class are explored through demonstrations and hands-on experiments. This first semester calculus-based physics course is recommended for students entering engineering or one of the advanced sciences. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 2112 - Physics: Calculus-Based II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 2410, ENG 1021.
Formerly PHY 212 Expands upon PHY 2111and examines waves, electric fields, electric circuits, magnetic fields, light and optics, and modern physics. The concepts and theories presented in class are explored through demonstrations and hands-on experiments. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

SCI 1055 - Integrated Science I

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly SCI 155 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. Course is for elementary education majors only; both SCI 155 & SCI 1056required. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

SCI 1056 - Integrated Science II

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly SCI 156 Examines earth and biological systems, living and nonliving environments, through the application of fundamental energy and matter concepts. These systems and concepts will be explored in hands-on laboratory experiments. Course is for elementary education majors only; both SCI 1055& SCI 156 required. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

Arts and Humanities (9 Credits)

Select three courses from any one category:

Arts and Expression

ART 1110 - Art Appreciation: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly ART 110 Introduces the cultural significance of the visual arts, including media, processes, techniques, traditions, and terminology. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

ART 1111 - Art History Ancient to Medieval: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly ART 111 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

ART 1112 - Art History Renaissance to Modern: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly ART 112 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

ART 1113 - Art History

Credit(s): 3
Lecture Hour(s): 3
Formerly ART 207 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

MUS 1020 - Music Appreciation: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly MUS 120 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

MUS 1021 - Music History Medieval Thru Classical Period: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly MUS 121 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

MUS 1022 - Music History Early Romantic Period to the Present: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly MUS 122 Provides an 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

MUS 1025 - History of Jazz: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly MUS 125 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

THE 1005 - Theatre Appreciation: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly THE 105 Includes discussions, workshops and lectures designed to discover, analyze and evaluate all aspects of the theatre experience: scripts, acting, directing, staging, history, criticism and theory. This course is one of the statewide Guaranteed Transfer courses, GT-AH1.

THE 2011 - Development of Theatre Greek-Renaissance: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly THE 211 Surveys the history and evolution of drama from ancient Greece to the Renaissance, emphasizing all aspects of the art from period values to analysis of dramatic literature and performance. This course is one of the statewide Guaranteed Transfer courses, GT-AH1.

THE 2012 - Development of Theatre Restoration to Modern: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly THE 212 Surveys the history and evolution of drama from the Renaissance to the present, emphasizing all aspects of the art from period values to the analysis of dramatic literature and performance. This course is one of the statewide Guaranteed Transfer courses, GT-AH1.

THE 2015 - Playwriting: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly THE 215 Gives students the opportunity to learn and practice playwriting techniques, thereby improving creative writing skills. Elements of dramatic structure, dialogue, styles and theatrical practices are emphasized. This course is one of the statewide Guaranteed Transfer courses, GT-AH1.

Literature and Humanities

HUM 1003 - Introduction to Film Art: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Formerly HUM 103 Studies the relationships among film's stylistic systems, narrative systems and audience reception. Students view, discuss and critically analyze a variety of films which represent a variety of genres and themes. The course incorporates the vocabulary of stylistic systems (for instance, cinematography and editing) and narrative systems (for instance, story structure and character motivation) as both relate to the kinds of meanings a film conveys. This course is approved as part of the Colorado Statewide Guaranteed transfer curriculum: GT:AH2.

HUM 1015 - World Mythology: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Formerly HUM 115 Introduces students to a multidisciplinary approach to world mythology. Common themes are illustrated and connected to religion, philosophy, art, literature, music and contemporary culture. In addition, students will study various ways of interpreting myth. This course is one of the statewide Guaranteed Transfer courses. GT-AH2.

HUM 1021 - Humanities: Early Civilization: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Formerly HUM 121 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 prehistoric to the early medieval era. This course is one of the statewide Guaranteed Transfer courses. GT-AH2.

HUM 1022 - Humanities: Medieval - Modern: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Formerly HUM 122 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. This is a statewide Guaranteed Transfer course in the GT-AH2 category. GT-AH2

HUM 1023 - Humanities: Modern World: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Formerly HUM 123 Examines the cultures of the 17th through the 20th centuries by focusing on the interrelationships of the arts, ideas, and history. Considers the influences of industrialism, scientific development and non-European peoples. This course is one of the statewide Guaranteed Transfer courses. GT-AH2.

LIT 1015 - Introduction to Literature I: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly LIT 115 Introduces students to fiction, poetry and drama. Emphasizes active and responsive reading. This course is one of the statewide Guaranteed Transfer courses, GT-AH2.

LIT 2001 - World Literature to 1600: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): ENG 1021.
Formerly LIT 201 Examines significant writings in world literature from the ancients through the Renaissance. Emphasizes careful readings and understanding of the works and their cultural backgrounds. This course is one of the statewide Guaranteed Transfer courses, GT-AH2.

LIT 2002 - World Literature After 1600: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): ENG 1021.
Formerly LIT 202 Examines significant writings in world literature from the 17th century to the present. Emphasizes careful reading and understanding of the works and their cultural backgrounds. This course is one of the statewide Guaranteed Transfer courses, GT-AH2.

LIT 2005 - Race. Ethnicity, and Culture in U.S. Literature: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Formerly LIT 205 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. This is a statewide Guaranteed Transfer course in the GT-AH2 category. GT-AH2

LIT 2011 - American Literature to Civil War: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): ENG 1021.
Formerly LIT 211 Provides an overview of American literature from the Native American through the 19th-century Romantics. It explores ideas, historical and social contexts, themes and literary characteristics of works in various genres by major writers. This course is one of the statewide Guaranteed Transfer courses, GT-AH2.

LIT 2012 - American Literature After Civil War: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): ENG 1021.
Formerly LIT 212 Provides an overview of American literature from the mid-19th century to the present. It explores ideas, historical and social contexts, themes and literary characteristics of works in various genres by major writers. This course is one of the statewide Guaranteed Transfer courses, GT-AH2.

LIT 2025 - Introduction to Shakespeare: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at ENG 1021 level or consent of instructor.
Formerly LIT 225 Explores a selection of works by William Shakespeare. It focuses on careful reading and interpretation of the plays and poems, includes pertinent information about Elizabethan England, and examines formal

as well as thematic elements of the selected works. This course is one of the statewide Guaranteed Transfer courses. GT-AH2.

LIT 2046 - Literature of Women: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Formerly LIT 246 Examines the techniques and themes in literature by and about women by examining women's issues from various genres. This course is one of the statewide Guaranteed Transfer courses, GT-AH2.

Ways of Thinking

PHI 1011 - Introduction to Philosophy: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 111 ompletion with a minimum C? grade guarantees transfer and application of credit in this GT Pathways category.

PHI 1012 - Ethics: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 112 Examines human life, experience and thought in order to discover and develop the principles and values for pursuing a more fulfilled existence. Theories designed to justify ethical judgments are applied to a selection of contemporary personal and social issues. This course is one of the statewide Guaranteed Transfer courses, GT-AH3.

PHI 1013 - Logic: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 113 Studies effective thinking using language-oriented logic. Provides tools and develops skills for creative and critical thinking. Emphasizes the development of decision-making and problem-solving. This course is one of the statewide Guaranteed Transfer courses, GT-AH3.

PHI 1014 - Comparative Religions: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 114 Introduces students to the major world religions from both the Eastern and Western world such as Hinduism, Buddhism, Confucianism, Taoism, Zoroastrianism, Judaism, Christianity, Islam, Bahand influential preliterate traditions. Utilizes religious studies methods (historical, sociological, legal, psychological and phenomenological) 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. This course is one of the statewide Guaranteed Transfer courses, GT-AH3.

PHI 2014 - Philosophy of Religion: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 214 Focuses on the critical examination of the fundamental concepts, ideas and implications of religion. Includes the nature of God, the varieties of religious experience, argument concerning God`s existence, the problem of evil, faith and reason, religion and human destiny, and the connection between religion and ethics. This course is one of the statewide Guaranteed Transfer courses, GT-AH3.

PHI 2018 - Environmental Ethics: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 218 Critically analyzes theories of value of the natural world. Topics include the relation between scientific and moral principles; theories of the moral worth of persons, animals, plants and other natural objects; historical, religious and cultural influences on conceptions of nature; alternative accounts of human relationships and responsibilities to nature, including deep ecology and eco-feminism; and the connection between moral and political values and economic policies. This course is one of the statewide Guaranteed Transfer courses, GT-AH3.

PHI 2020 - Philosophy of-Death and Dying: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 220 Explores the major philosophical questions surrounding death and dying: the metaphysical arguments for and against the existence of a soul and life after bodily death; the epistemological assessment of arguments for the soul and life after death; the ethical justifications taken on positions such as rational suicide and physician assisted suicide, as well as a focus on philosophy's existentialist contribution to questions about the meaning of life and the meaning of death. This course is one of the statewide Guaranteed Transfer courses. GT-AH3.

Foreign Languages

SPA 2011 - Spanish Language III: GT-AH4

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of SPA 1012 or Department Chair Approval.
Formerly SPA 211 Continues SPA 1011 - Spanish Language Iand SPA 1012 - Spanish Language IIin the development of increased functional proficiency in listening, speaking, reading and writing the Spanish Language. Note: The order of the topics and the methodology will vary according to individual texts and instructors. This course is one of statewide Guaranteed Transfer courses, GT-AH4.

SPA 2012 - Spanish Language IV: GT-AH4

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of SPA 2011 or Department Chair Approval.
Formerly SPA 212 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. This is a statewide Guaranteed Transfer course in the GT-AH4 category. This course is one of statewide Guaranteed Transfer courses, GT-AH4.

Social and Behavioral Science (9 Credits)

JOU 1005 - Introduction to Mass Media: GT SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly JOU 105 Places the mass media in a historical and cultural perspective, considering the validity, integrity and influence of the media in a democracy. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

Select Three Courses in at Least Two Categories

History

HIS 1310 - Western Civilization: Antiquity-1650: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 101 Explores a number of events, peoples, groups, ideas, institutions and trends that have shaped western civilization from the prehistoric era to 1650. Reflects the multiple perspectives of gender, class, religion and ethnic groups. Focuses on developing, practicing and strengthening the skills historians use while constructing knowledge in this discipline. This course is one of the statewide Guaranteed Transfer courses, GT-HI1.

HIS 1320 - Western Civ: 1650-present: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 102 Explores a number of events, peoples, groups, ideas, institutions and trends that have shaped western civilization from 1650 to the present. Reflects the multiple perspectives of gender, class, religion and ethnic groups. Focuses on developing, practicing and strengthening the skills historians use while constructing knowledge in this discipline. This course is one of the statewide Guaranteed Transfer courses, GT-HI1.

HIS 1110 - The World: Antiquity-1500: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 111 Explores a number of peoples, groups, ideas, institutions and trends that have shaped world history from the prehistoric era to 1500. Reflects the multiple perspectives of gender, class, religion and ethnic groups in a broad global sense. Focuses on the common denominators among all people. This approach goes beyond political borders to provide a better appreciation for different cultures. Focuses on developing, practicing and strengthening the skills historians use while constructing knowledge in this discipline. This course is one of the statewide Guaranteed Transfer courses, GT-HI1.

HIS 1120 - The World: 1500-present: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 112 Explores a number of peoples, groups, ideas, institutions and trends that have shaped world history from 1500 to the present. Reflects the multiple perspectives of gender, class, religion and ethnic groups in a broad global sense. Focuses on the common denominators among all people. This approach goes beyond political borders to provide a better appreciation for different cultures. Focuses on developing, practicing and strengthening the skills historians use while constructing knowledge in this discipline. This course is one of the statewide Guaranteed Transfer courses, GT-HI1.

HIS 1210 - U.S. History to Reconstruction: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 121 Explores events, trends, peoples, groups, cultures, ideas and institutions in North America and United States history, including the multiple perspectives of gender, class and ethnicity, between the period when Native American Indians were the sole inhabitants of North America and the American Civil War. Focuses on developing, practicing and strengthening the skills historians use while constructing knowledge in the discipline. This course is one of the statewide Guaranteed Transfer courses, GT-HI1

HIS 1220 - U.S. History Since the Civil War: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 122 Explores events, trends, peoples, groups, cultures, ideas and institutions in United States history, including the multiple perspectives of gender, class and ethnicity, between the period of the American Civil War and the present. Focuses on developing, practicing and strengthening the skills historians use while constructing knowledge in the discipline. This course is one of the statewide Guaranteed Transfer courses, GT-HI1.

HIS 2135 - Colorado History: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 225 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 and mountain men, the gold rush, railroad builders, the cattlemen and farmers, the silver boom, the tourists and the modern state. This course is one of the statewide Guaranteed Transfer courses, GT-HI1.

HIS 2015 - 20th Century World History: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 247 Investigates the major political, social and economic developments, international relationships, scientific breakthroughs, and cultural trends that have shaped the various global regions and nation-states from 1900 to the present. Emphasizes the interactions of global regions and nation-states. This course is one of the statewide Guaranteed Transfer courses, GT-HI1.

Economic or Political Systems

ECO 2001 - Principles of Macroeconomics: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly ECO 201 Focuses on the study of the American economy, stressing the interrelationships among household, business and government sectors. Explores saving and investment decisions, unemployment, inflation, national income accounting, taxing and spending policies, the limits of the market and government, public choice theory, the Federal Reserve System, money and banking, and international trade.

ECO 2002 - Principles of Microeconomics: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly ECO 202 Studies the firm, the nature of cost and how these relate to the economy as a whole. Analyzes economic models of the consumer, perfect competition, monopoly, oligopoly and monopolistic competition. Explores economic issues including market power, population growth, positive and negative externalities, income distribution, poverty and welfare, discrimination, and international economic interdependence.

ECO 2045 - Environmental Economics: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly ECO 245 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. This is a statewide Guaranteed Transfer course in the GT-SS1 category. GT-SS1

POS 2020 - Introduction to Political Science: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly POS 105 Focuses on a survey of the discipline of political science, including political philosophy and ideology, democratic and nondemocratic governments and processes, and international relations. This course is one of the statewide Guaranteed Transfer courses, GT-SS1.

POS 1011 - American Government: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly POS 111 Includes the background of the US Constitution, the philosophy of American government, general principles of the Constitution, federalism and civil liberties. Examines public opinion and citizen participation, political parties, interest groups and the electoral process, and the structure and functions of the national government. This course is one of the statewide Guaranteed Transfer courses, GT-SS1.

POS 1025 - American State and Local Government: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly POS 125 Emphasizes 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. This course is one of the statewide Guaranteed Transfer courses, GT-SS1.

Geography

GEO 1005 - World Regional Geography: GT-SS2

Credit(s): 3
Lecture Hour(s): 3
Formerly GEO 105 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. This is a statewide Guaranteed Transfer course in the GT-SS2 category.

GEO 1006 - Human Geography: GT-SS2

Credit(s): 3
Lecture Hour(s): 3
Formerly GEO 106 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. This is a statewide Guaranteed Transfer course in the GT-SS2 category. GT-SS2

Human Behavior, Culture, or Social Frameworks

ANT 1001 - Cultural Anthropology: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly ANT 101 Studies human cultural patterns and learned behavior including linguistics, social and political organization, religion, culture and personality, culture change, and applied anthropology.

ANT 1003 - Introduction to Archaeology: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly ANT 107 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. This is a statewide Guaranteed Transfer course in the GT-SS3 category. GT-SS3

COM 2300 - Intercultural Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 220 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. This is a statewide Guaranteed Transfer course in the GT-SS3 category.

CRJ 1010 - Intro to Criminal Justice: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): ENG 1021.
Formerly CRJ 110 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. This is a statewide Guaranteed Transfer course in the GT-SS3 category.

ETH 2000 - Introduction to Ethnic Studies: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly ETH 200 Introduces students to the issues of race and ethnicity. Emphasizes ethnic relations in the United States as it pertains to four major groups Americans of African, Asian, Latino and Native descent. Explores issues of racial and ethnic identity, racism and discrimination, stereotyping, prejudice, segregation, colonialism, integration and acculturation.

JOU 1005 - Introduction to Mass Media: GT SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly JOU 105 Places the mass media in a historical and cultural perspective, considering the validity, integrity and influence of the media in a democracy. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 1001 - General Psychology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 101 Focuses on the scientific study of behavior including motivation, emotion, physiological psychology, stress and coping, research methods, consciousness, sensation, perception, learning and memory. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 1002 - General Psychology II: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 102 Focuses on the scientific study of behavior including cognition, language, intelligence, psychological assessment, personality, abnormal psychology, therapy, lifespan development and social psychology. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2105 - Psychology of Gender: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 205 Examines gender comparisons in work, courtship, family life and sexual behavior throughout the lifespan. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2107 - Human Sexuality: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 217 Surveys physiological, psychological and psychosocial aspects of human sexuality. Topics include relationships, sexual identity and sexual health. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2221 - Social Psychology: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 226 Focuses on the behavior of humans in social settings, including attitudes, aggression, conformity, cooperation and competition, prejudice and interpersonal attraction. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2222 - Psychology of Death and Dying: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 227 Examines the philosophies of life and death, emphasizing dying, death, mourning and the consideration of one's own death. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2331 - Positive Psychology: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 231 explore strengths-based research, concepts of happiness, helpfulness and resiliency. The research and theories about human nature will go beyond simply not being mentally ill as a form of mental health, which will include optimism, post-traumatic growth, and how to increase emotional, psychological and social functioning. Overall, this course will be focused on understanding one's own sense of life satisfaction and how to further improve well-being. This course is approved as part of the Colorado statewide Guaranteed transfer curriculum: GT: SS3.

PSY 2440 - Human Growth and Development: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 235 Examines human development from conception through death, emphasizing physical, cognitive, emotional and psychosocial factors. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2441 - Child Development: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 238 Focuses on the growth and development of the individual from conception through childhood, emphasizing physical, cognitive, emotional and psychosocial factors. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2333 - Health Psychology: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 240 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. This is a statewide Guaranteed Transfer course in the GT-SS3 category. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2552 - Abnormal Psychology: GT-SS3

Credit(s): 3
Lecture Hour(s): 3

Corequisite(s): PSY 1001 or Department Chair Approval.
Formerly PSY 249 Examines abnormal behavior and its classification, causes, treatment and prevention. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2771 - Psychology of Personality: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 265 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 of psychology. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

SOC 1001 - Introduction to Sociology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 101 Examines the basic concepts, theories and principles of sociology as well as human culture, social groups, and the social issues of age, gender, class and race. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

SOC 1002 - Introduction to Sociology II: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 102 Examines social institutions and organizations from the macro perspective. Emphasizes issues of social change, demography, social movements, and conflicts and trends within education, religion, family, political and economic structures. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

SOC 2005 - Sociology of Family Dynamics: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 205 Develops an understanding of marriage, family and kinship. It examines the family as an institution and how social, cultural and personal factors influence family relations. The stability and diversity of the family will be explored, along with current trends and some alternative lifestyles. This course is one of statewide Guaranteed Transfer courses, GT-SS3.

SOC 2007 - Environmenetal Sociology: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 207 Examination of humans and the environment from an ecological perspective. Focuses on industrial and economic growth versus sustainability, natural resources development and management, environmental values and social movements, and comparative perspectives on people's relationship to the environment. Review of the Green movement and other environmental movements and their impacts upon social dynamics, the environment and the evolution of social movements.

SOC 2015 - Contemporary Social Problems: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 215 Explores current social issues that result in societal problems. It focuses on such issues as civil liberties, gender discrimination, substance abuse, crime, poverty and social change. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

SOC 2016 - Sociology of Gender: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 216 Gives students the theoretical and factual background necessary to understand the phenomenon of gender stratification in American and other cultures. Students will be exposed to a history of gender stratification in human societies, theoretical explanations for this and insights into the consequences of gender differentiation in our world today. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

SOC 2018 - Sociology of Diversity: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 218 Explores the variety of intergroup relations regarding race, nationality, ethnicity, gender, sexual orientation and other diversity issues. Patterns of prejudice, discrimination and possible solutions to these issues will be addressed. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

SOC 2031 - The Sociology of Deviant Behavior: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 231 Examines the nature, identification, and explanation of deviant categories. Theories and philosophies, as well as methods of treatment related to deviancy, will also be considered. The course will study society's attempts to control, change and institutionalize those acts, individuals or groups that a population may deem unacceptable. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

SOC 2037 - Sociology of Death and Dying: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 237 Provides an opportunity to familiarize students and professionals with the needs and issues surrounding dying and death. This course will provide sociological, psychological, religious, historical and anthropological perspectives for interpreting contemporary American customs dealing with dying, death and bereavement. We will examine the professions associated with death and dying, such as hospice, funeral and crematory institutions, and medical care. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

WST 2000 - Introduction to Women's Studies: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly WST 200 Examines the nature and function of women in society from an interdisciplinary perspective, focusing on the similarity and diversity of women`s experience over time and across cultures. The course will examine topics such as sex role, socialization, political and philosophical perspectives on women`s issues, and women`s accomplishments in history, art, literature, science, health issues and the family. Students will gain an awareness of the

limitations of traditional scholarship on women and gain a means of practical application of the new scholarship on women`s roles and nature. This course is one of the statewide Guaranteed Transfer Courses, GT-SS3.

Core Curriculum Requirements (25 Credits)

JOU 2006 - Intermediate Newswriting and Editing

Credit(s): 3
Vocational Lab Hour(s): 4.50
Prerequisite(s): JOU 1005, ENG 1021, or Department Chair Approval
Formerly JOU 206 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.

MGD 1002 - Introduction to Multimedia

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly MGD 102 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 2089 - Capstone

Credit(s): 3
Internship Hour(s): 9
Prerequisite(s): Department Chair Approval.
Formerly MGD 289 A demonstrated culmination of learning within a given program of study.

RTV 1000 - Introduction to Electronic Media

Credit(s): 3
Lecture Hour(s): 3
Formerly RTV 100 Focuses on the study of the market demands involving national, local and international uses of electronic media.

Choose 15 credits below

ART 1401 - Digital Photography I

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 139 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.

MAR 2020 - Principles of Advertising

Credit(s): 3
Lecture Hour(s): 3
Formerly MAR 220 Examines the principles and practices of advertising and its relationship to business in order to promote a business or organization. Areas of major emphasis include advertising principles, strategies, media, copy and layout, and ethical considerations.

MGD 1011 - Adobe Photoshop I

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly MGD 111 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 1013 - Adobe Indesign

Credit(s): 3
Vocational Lab Hour(s): 4.5
Formerly MGD 114 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 1041 - Web Design I

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly MGD 141 Introduces website planning, design and creation using industry standards-based website development tools. Screen-based color theory, web aesthetics, use of graphics editors and intuitive interface design are explored.

MGD 1064 - Digital Video Editing I

Credit(s): 3
Vocational Lab Hour(s): 4.5
Formerly MGD 164 Introduces to digital nonlinear 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.

RTV 1002 - Beginning Television

Credit(s): 3
Vocational Lab Hour(s): 4.5
Formerly RTV 102 Focuses on principles and techniques of television production in theory and the approach of studio and production. Emphasizes producing television programs, beginning with a concept through script to actual studio production, pre-production and post-production.

Bachelor Applied Science

Click here for the Bachelor Applied Science Degree Requirements

Advanced Paramedic Practitioner BAS

Program Description

See list of Department Chairs on the Personnel page.

PCC's Advanced Paramedic Practitioner Bachelor of Applied Science is designed for certified paramedics who have completed an Associate Degree in Emergency Medical Services or Paramedicine from an accredited college and wish to continue their education and obtain a Bachelor of Applied Science degree.

This program provides a student centered on-line learning environment meant to enhance career opportunities. Students will engage in self-directed learning activities and gain specialized knowledge in critical care, community and behavioral paramedicine.

Career Information

The Advanced Paramedic Practitioner degree opportunities may include working as a critical care paramedic, a community paramedic and in behavioral health in a variety of settings including mental health facilities, drug rehab, hospitals, clinics and in community paramedic programs.

The Advanced Paramedic Practitioner BAS program admission requirements and application are posted on Pueblo Community College EMS BAS webpage.

Total Program Credits -- 120

Students will receive 65 credits from AAS degree and earn 55 BAS credits. All program students must have a minimum of 30 PCC institutional credits.

Students may apply to start the program any semester.

Total Credits: 120

First (16 credits)

MAT 1260 - Introduction to Statistics: GT-MA1

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 135 Explores and applies data presentation and summarization, introduction to probability concepts and distributions, statistical inference estimation, hypothesis testing, comparison of populations, correlation and regression. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

BIO 2116 - Human Pathophysiology

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): BIO 2101, BIO 2102
Formerly BIO 216 Focuses on the alterations in physiological, cellular and biochemical processes, the associated homeostatic response, and the manifestations of disease. Prior knowledge of cellular biology, anatomy and physiology is essential for the study of pathophysiology.

SOC 2031 - The Sociology of Deviant Behavior: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 231 Examines the nature, identification, and explanation of deviant categories. Theories and philosophies, as well as methods of treatment related to deviancy, will also be considered. The course will study society's attempts to control, change and institutionalize those acts, individuals or groups that a population may deem unacceptable. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

HPR 3001 - Communications in Health Care

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to BAS program
Formerly HPR 301 Develops professional written and oral communication plans to ensure effective patient-centered outcomes between health care professionals, patients and caregivers.

HPR 4011 - Leadership and Management in Health Professions

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to BAS program
Formerly HPR 411 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.

OR

HPR 4038 - Pedagogy in Health Professions

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to BAS program
Formerly HPR 468 Provides a general overview of the concepts and theory relative to education in health professions. The course will introduce concepts in developing outcome centered objectives, syllabus, lesson planning, content delivery, test construction, and assessing student learning. The course explores various learning styles and technology available for delivery of course content.

Second (12 credits)

HPR 4003 - Critical Review of Healthcare Research

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to BAS program

Formerly HPR 403 Teaches how to evaluate and analyze published literature using a scientific approach to develop medical best practices, formulates and research clinical questions to effectively participate in medical discussions.

EMS 3012 - Trauma Informed Care and Assessment

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to the Advanced Paramedic Practitioner BAS program
SOC 2031
Formerly EMS 312 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 3011 - Motivational Interviewing for EMS

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s):
Admission to the Advanced Paramedic Practitioner BAS program

SOC 2031

Formerly EMS 311 Introduces the Motivational Interviewing (MI) concept as a client-centered and conversational method of communication designed to assist helping professionals to address clients' ambivalence to change.

EMS 3010 - Clinical Assessment and De-escalation Techniques

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to the Advanced Paramedic Practitioner BAS program
Formerly EMS 310 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.

Third (14 credits)

HPR 3010 - Quality Improvement in Health Care

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to BAS program
Formerly HPR 310 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.

EMS 4025 - Fundamentals of Advanced Paramedic Practice

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): Admission to the Advanced Paramedic Practitioner BAS program
Formerly EMS 425 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 4033 - Advanced Paramedic Medical Care

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): Admission to the Advanced Paramedic Practitioner BAS program
Formerly EMS 433 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

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to the Advanced Paramedic Practitioner BAS program
Formerly EMS 435 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.

Fourth (13 credits)

EMS 3030 - Community Advocacy and Outreach

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to the Advanced Paramedic Practitioner BAS program
Formerly EMS 330 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

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to the Advanced Paramedic Practitioner BAS program
Formerly EMS 331 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 4030 - Care and Prevention Development Strategies

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to the Advanced Paramedic Practitioner BAS program
Formerly EMS 430 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 4089 - Capstone

Credit(s): 4
Internship Hour(s): 12
Prerequisite(s): Admission to the Advanced Paramedic Practitioner BAS program
Formerly EMS 489 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.

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[1] Courses taught in the first 8 weeks of the semester

[2] Courses taught in the second 8 weeks of the semester

Bachelor of Science in Nursing

See list of Department Chairs on the Personnel page.

The PCC RN to BSN Program is designed for licensed Registered Nurses who have completed an Associate Degree in Nursing (ADN) in a nationally accredited nursing program and for students enrolled in an accredited ADN program who are in their final semester and on track to graduate. The RN to BSN provides a student centered online learning environment meant to enhance career opportunities for RNs who wish to continue their education and obtain a Bachelor of Science Degree in Nursing (BSN).

Career Information

The BSN program prepares RNs to navigate the competitive nursing work arena through the integration of current knowledge, research, and information literacy, application of information management technology, demonstration of leadership skills, and advocacy at local, state, national and global levels for patients and for the nursing profession with regard to healthcare policy. BSN prepared nurses are able to meet the increasing professional challenges of healthcare in all settings.

Application/Admission

- The BSN program may be started in the Fall or Spring semesters. The application is open year round, and can be found online at Pueblo Community College Nursing
- Students must have graduated from an accredited Associate Degree in Nursing program or be on track to complete the final semester of the ADN.
- Submission of unofficial ADN transcripts is required.

Program

- 120 credits comprise the PCC Bachelor of Science in Nursing degree.
- Block transfer accepted of up to 71.5 credits from accredited ADN Program
- Unencumbered RN License & Current BLS/CPR required for NUR 409 and NUR 410
- 18 General Education credits are required
- 30.5 credits of baccalaureate nursing coursework complete the program

Graduation

- Students may use a combination of transcribed credits and bachelor level course work to obtain the 120 required credits. Transferred BSN courses will be evaluated individually for applicability to the PCC RN to BSN Program.
- The granting of the BSN degree from PCC requires a minimum of 30 credits completed at the college.
- If electives are necessary to achieve the 30 graded credits at PCC they must be taken at the 300/400 level.

BSN applicants should arrange an advising appointment with the PCC Nursing Department.

Please call 719-549-3409.

Total Credits: 120

First (9 credits)

MAT 1260 - Introduction to Statistics: GT-MA1

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 135 Explores and applies data presentation and summarization, introduction to probability concepts and distributions, statistical inference estimation, hypothesis testing, comparison of populations, correlation and regression. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

GT-HI1 - History Course **Credit(s): 3**

Second (9 credits)

- GT-AH1, AH2, AH3, or AH4 - Arts & Humanities Courses **Credit(s): 6**
- GT-SS1, SS2, SS3 - Social Sciences **Credit(s): 3**

BSN Core Curriculum Fall Start

Fall (6 credits)

NUR 3001 - Integration into Baccalaureate Nursing Practice

Credit(s): 3
Lecture Hour(s): 3
Formerly NUR 301 Explores professional nursing practice at the baccalaureate level. Focus is on knowledge and understanding of the professional nursing standards and the nursing role at a baccalaureate level.

NUR 3002 - Trends in Nursing Practice

Credit(s): 3
Lecture Hour(s): 3
Formerly NUR 302 Examines current issues that nurses encounter in the health care environment including their roles and responsibilities within the nursing profession.

Spring (6 credits)

NUR 3003 - Nursing Research / Evidence Based Practice

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): NUR 3001, NUR 3002, MAT 1260
Formerly NUR 303 Analyzes concepts associated with nursing research, collection, and analysis of data with emphasis on integration of evidenced-based practice within nursing. The course develops the skills for critiquing published research.

AND

NUR 3004 - Informatics / Healthcare Technology

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): NUR 3001, NUR 3002
Formerly NUR 304 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

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): NUR 3001, NUR 3002
Formerly NUR 305 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

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): NUR 3001, NUR 3002
Formerly NUR 306 Focuses on optimizing health for the aging client within the framework of the nursing process. Emphasis is on supporting the unique needs of the aging population.

NUR 3007 - Behavioral Health

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): NUR 3001 , NUR 3002
Formerly NUR 307 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.

Summer (3 credits)

NUR 3004 - Informatics / Healthcare Technology

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): NUR 3001, NUR 3002
Formerly NUR 304 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

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): NUR 3001, NUR 3002
Formerly NUR 305 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

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): NUR 3001, NUR 3002
Formerly NUR 306 Focuses on optimizing health for the aging client within the framework of the nursing process. Emphasis is on supporting the unique needs of the aging population.

NUR 3007 - Behavioral Health

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): NUR 3001 , NUR 3002
Formerly NUR 307 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.

Fall Semester (6.5 credits)

NUR 4008 - Legal and Ethical Issues Related to Professional Nursing Practice

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): NUR 3001, NUR 3002
Formerly NUR 408 Emphasizes the ethical and legal obligations of professional nursing practice. The focus is on values clarification, ethical theory, and ethical decision making models. Additionally, legal issues related to healthcare will be explored.

NUR 4009 - Leadership in the Nursing Profession

Credit(s): 3.5
Lecture Hour(s): 2.75

Vocational Clinic Hour(s): 1.5

Prerequisite(s): NUR 3001, NUR 3002, RN license
Formerly NUR 409 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.

Spring (9 credits)

NUR 4010 - Community Health Nursing/Practicum

Credit(s): 6
Lecture Hour(s): 4.5
Vocational Clinic Hour(s): 3

Prerequisite(s): NUR 3001, NUR 3002, RN license
Formerly NUR 410 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

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): NUR 3001, NUR 3002, RN license
Formerly NUR 411 Integrates theory into practice by building on previous concepts and knowledge.

Notes

1 Prerequisites to all subsequent 300 & 400 level BSN courses

2 Unencumbered RN license required

3 Pre-requisite course MAT 135 required

Note: Accepted applicants are required to complete a background check and drug screen prior to registering for NUR 409 and NUR 410, as both courses have a required practicum at a clinical site.

A felony, loss of license, administrative disciplinary proceeding for negligence, malpractice, recklessness, or willful or intentional misconduct may prohibit entrance into or continuation with the program.

Computed Tomography, BAS

CIP 51.0911

See list of Department Chairs on the Personnel page.

Career Opportunities

The BAS in Radiologic Technology program prepares students for careers in Computed Tomography (CT) or Magnetic Resonance Imaging (MRI), Leadership and Teaching in Medical Imaging.

Program Description

The BAS in Radiologic Technology program teaches students to perform Computed Tomography (CT) exams or Magnetic Resonance Imaging (MRI) exams as well as how to lead or teach others in the Medical Imaging Department. It provides students with an additional imaging modality and prepares them to take on leadership roles in the imaging department in health care facilities.

Program Requirements

Entrance Requirements:

Applicants must hold an associate's degree and be a registered radiologic technologist with the American Registry of Radiologic Technologists (ARRT).

Graduation Requirements:

Must complete 120 credits including didactic and clinical components of the program.

Total Credits: 120

Curriculum Requirements (43 Credits)

First Year-Fall Semester

BIO 2101 - Human Anatomy and Physiology I with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 201 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, nervous and endocrine systems. Includes a mandatory hands-on laboratory experience covering experimentation, microscopy, observations and dissection. This is the first semester of a two-semester sequence.

BIO 2102 - Human Anatomy and Physiology II with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 202 Focuses on the integrated study of the human body and the histology, anatomy, and physiology of the following systems and topics: cardiovascular, hematology, lymphatic and immune, urinary, fluid and electrolyte control, digestive, nutrition, respiratory, reproductive and development. Includes a mandatory hands-on laboratory experience involving experimentation, microscopy, observations and dissection. This is the second semester of a two-semester sequence.

PHY 1105 - Conceptual Physics with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly PHY 105 Focuses on mechanics, heat, properties of matter, electricity and magnetism, light and modern physics. Incorporates laboratory experience. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

First Year-Spring Semester

ENG 1031 - Technical Writing I

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 131, then ENG 1020 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.

RTE 3011 - Sectional Anatomy for Medical Imaging

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): AAS in Radiologic Technology and ARRT Registered.
Formerly RTE 311 Identifies anatomy in various imaging planes of advanced modalities. Compares normal anatomy with gross pathology on advanced cross-sectional images. Evaluation of anatomy and pathology will include head, spine, thorax, abdomen/pelvis and extremities.

RTE 3012 - IV Certificate for Contrast Medium

Credit(s): 1
Lecture Hour(s): 0.50
Vocational Clinic Hour(s): 1

Prerequisite(s): AAS in Radiologic Technology and ARRT Registered.
Formerly RTE 312 Prepares the student to perform IV contrast administration including knowledge of arterial and venous anatomy, appropriate puncture sites, necessary equipment and supplies, understanding of different contrast media, injectors and administration safety.

RTE 3041 - Theory and Application of CT Imaging

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): AAS in Radiologic Technology and ARRT Registered.
Formerly RTE 341 Applies the fundamental and advanced principles of Computed Tomography (CT) in order to perform clinical CT examinations of the human body with special consideration to image production, quality control, terminology, basic procedural steps and MRI equipment and safety.

RTE 3051 - CT Protocols and Procedures

Credit(s): 2
Lecture Hour(s): 2

Prerequisite(s): AAS in Radiologic Technology and ARRT Registered.
Formerly RTE 351 Covers the skill and knowledge necessary to perform supplemental procedures for imaging various anatomical structures including the head, spine, chest, abdomen, pelvis and extremities utilizing Computed Tomography. It provides instruction on gross pathological conditions demonstrated on CT images.

Summer Semester

RTE 3082 - Internship: CT I

Credit(s): 4
Internship Hour(s): 12
Prerequisite(s): AAS in Radiologic Technology and ARRT Registered.
Formerly RTE 382 Provides supervised hands-on training in Computed Tomography exams. The Internship allows the student to gain clinical experience and develop proficiency in CT.

RTE 4051 - Advanced CT Protocols and Procedures

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): RTE 3051.
Formerly RTE 451 Provides the skill and knowledge necessary to perform advanced specialty procedures for imaging various anatomical structures utilizing Computed Tomography. It distinguishes vascular anatomy and incorporates contrast media injections and contraindication into complex imaging studies.

Second Year-Fall Semester

MAN 2025 - Managerial Finance

Credit(s): 3
Lecture Hour(s): 3
Formerly MAN 225 Examines the concepts and techniques used to analyze financial accounting information for managerial planning, decision making and control. The focus of the course is on decision-making relating to the areas of budgets, forecasts, cost volume production, ROI and financial statements.

RTE 4061 - Leadership in Medical Imaging

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): MRI or CT Program Admission.
Formerly RTE 461 Examines concepts and skills needed for leadership roles in Medical Imaging. It prepares the student with communication, time management, supervision, task delegation, conflict management and performance assessment skills.

or

RTE 4062 - Teaching Methodologies in Medical Imaging Education

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): MRI or CT Program Admission.
Formerly RTE 462 Provides a general overview of the concepts and theory of Medical Imaging education. It introduces

current theories of teaching adult learners in the Imaging Sciences, objective development of active learning activities, classroom assessment techniques and delivering course content through distance-learning formats.

RTE 4082 - Internship: CT II

Credit(s): 7
Internship Hour(s): 21
Prerequisite(s): RTE 3082.
Formerly RTE 482 Provides continued hands-on training for the student to perform supervised exams, gain clinical experience and develop proficiency in CT.

Dental Hygiene, BAS

CIP 51.0602

See list of Department Chairs on the Personnel page.

Career Opportunities

This program prepares the licensed dental hygienist to academically expand their knowledge and career opportunities in the professions of education, program administration, public health, research or sales.

Program Description

This Bachelor of Applied Science Degree Completion Program is designed for licensed dental hygienists who have completed an associate degree from a regionally accredited institution that is also accredited by the Commission on Dental Accreditation. The goal of the Registered Dental Hygienist (RDH) to BASDH program is to work with each student to enhance knowledge and provide expanded career opportunities. Obtaining a BAS degree may also provide the lifelong learner the knowledge base to prepare them academically should they wish to pursue a master's degree for additional career opportunities.

Program Requirements

Entrance Requirements:

Students must complete a current Dental Hygiene BAS program application and meet all minimum program requirements and application timelines. The application is available on the Dental Hygiene BAS website. Applicants should also seek advisement from the program director for assistance with meeting all admission requirements. In addition, students must meet the following admissions requirements:

1. Graduate from a regionally accredited dental hygiene program that is also accredited by the Commission on Dental Accreditation.
2. Pass the National Board Dental Hygiene Exam.
3. Hold a current dental hygiene license in a US state.

Total Credits: 27

General Education Requirements (3 Credits)

MAT 1260 - Introduction to Statistics: GT-MA1

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 135 Explores and applies data presentation and summarization, introduction to probability concepts and distributions, statistical inference estimation, hypothesis testing, comparison of populations, correlation and regression. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

Curriculum Requirements (24 Credits)

First Fall Semester

HPR 4003 - Critical Review of Healthcare Research

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to BAS program

Formerly HPR 403 Teaches how to evaluate and analyze published literature using a scientific approach to develop medical best practices, formulates and research clinical questions to effectively participate in medical discussions.

DEH 3001 - Advanced Careers in Dental Hygiene

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to the program.
Formerly DEH 301 Provides an overview of the career options available to the dental hygienist with an advanced degree. In depth analysis of alternative careers to include: public health systems, dental hygiene education, research, sales and marketing, oral health policy and oral health care delivery systems.

First Spring Semester

DEH 3041 - Clinical Teaching Methodologies

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to the program.
Formerly DEH 341 This course provides students the opportunity to compare and contrast practical experience as it relates to dental hygiene clinical instruction. Students will apply teaching methodologies, psychomotor learning theories, feedback techniques and motivational strategies to direct student learning.

DEH 4055 - Topics in Dental Public Health

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): Admission to the program.
Formerly DEH 455 Provides a comprehensive overview in public health as it relates to the field of dentistry. Surveys

and analyzes oral health services, community programs, disease prevention, policy, ethics and issues facing the profession today.

Second Fall Semester

DEH 3055 - Social and Behavioral Determinants of Oral Health

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission into the program.
Formerly DEH 355 Evaluate the complexity and interplay of social and physical environmental structures, economic systems and behavioral patterns that affect overall health with a focus on health services, health beliefs and their impact on health-related behavior choices.

HPR 4038 - Pedagogy in Health Professions

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to BAS program
Formerly HPR 468 Provides a general overview of the concepts and theory relative to education in health professions. The course will introduce concepts in developing outcome centered objectives, syllabus, lesson planning, content delivery, test construction, and assessing student learning. The course explores various learning styles and technology available for delivery of course content.

Second Spring Semester

DEH 4089 - Capstone: Dental Hygiene

Credit(s): 5
Seminar Hour(s): 5
Prerequisite(s): MAT 1260 and admission to the program.
Formerly DEH 489 Provides the student an opportunity to participate in a cumulative learning experience that integrates theory and applies previously learned knowledge and skill. The student will design, implement and evaluate a project related to their specific area of interest.

Electives if Needed for Institutional Credit

- Any 300 or 400 level HPR BAS course

Miscellaneous Information

[1] Course taught in the first eight weeks of the semester

[2] Course taught in the second eight weeks of the semester

Magnetic Resonance Imaging, BAS

CIP 51.0911

See list of Department Chairs on the Personnel page.

Career Opportunities

The BAS in Radiologic Technology program prepares students for careers in Computed Tomography (CT) or Magnetic Resonance Imaging (MRI), Leadership and Teaching in Medical Imaging.

Program Description

The BAS in Radiologic Technology program teaches students to perform Computed Tomography (CT) exams or Magnetic Resonance Imaging (MRI) exams as well as how to lead or teach others in the Medical Imaging Department. It provides students with an additional imaging modality and prepares them to take on leadership roles in the imaging department in health care facilities.

Program Requirements

Entrance Requirements:

Applicants must hold an associate's degree and be a registered radiologic technologist with the American Registry of Radiologic Technologists (ARRT).

Graduation Requirements:

Must complete 120 credits including didactic and clinical components of the program.

Total Credits: 120

Curriculum Requirements (43 Credits)

First Year-Fall Semester

BIO 2101 - Human Anatomy and Physiology I with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 201 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, nervous and endocrine systems. Includes a mandatory hands-on laboratory experience covering experimentation, microscopy, observations and dissection. This is the first semester of a two-semester sequence.

BIO 2102 - Human Anatomy and Physiology II with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 202 Focuses on the integrated study of the human body and the histology, anatomy, and physiology of the following systems and topics: cardiovascular, hematology, lymphatic and immune, urinary, fluid and electrolyte control, digestive, nutrition, respiratory, reproductive and development. Includes a mandatory hands-on laboratory experience involving experimentation, microscopy, observations and dissection. This is the second semester of a two-semester sequence.

PHY 1105 - Conceptual Physics with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly PHY 105 Focuses on mechanics, heat, properties of matter, electricity and magnetism, light and modern physics. Incorporates laboratory experience. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

First Year-Spring Semester

CIS 1018 - Intro to PC Applications

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 118 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.

ENG 1031 - Technical Writing I

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 131, then ENG 1020 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.

RTE 3011 - Sectional Anatomy for Medical Imaging

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): AAS in Radiologic Technology and ARRT Registered.
Formerly RTE 311 Identifies anatomy in various imaging planes of advanced modalities. Compares normal anatomy with gross pathology on advanced cross-sectional images. Evaluation of anatomy and pathology will include head, spine, thorax, abdomen/pelvis and extremities.

RTE 3012 - IV Certificate for Contrast Medium

Credit(s): 1
Lecture Hour(s): 0.50
Vocational Clinic Hour(s): 1

Prerequisite(s): AAS in Radiologic Technology and ARRT Registered.
Formerly RTE 312 Prepares the student to perform IV contrast administration including knowledge of arterial and venous anatomy, appropriate puncture sites, necessary equipment and supplies, understanding of different contrast media, injectors and administration safety.

RTE 3021 - Theory and Application of MR Imaging I

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): AAS in Radiologic Technology and ARRT Registered.
Formerly RTE 321 Applies the fundamental principles of MRI in order to perform clinical MRI examinations of the human body with special consideration to image production, quality control, terminology, basic procedural steps and MRI equipment and safety.

Summer Semester

RTE 3031 - MRI Protocols and Procedures

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): AAS in Radiologic Technology and ARRT Registered.
Formerly RTE 331 Develops the knowledge necessary to perform procedures for imaging various anatomical structures utilizing MRI. It provides instruction on routine parameter selection, patient positioning, coil selection and application and anatomy and pathologies demonstrated on MR images.

RTE 3081 - Internship: MRI I

Credit(s): 3
Internship Hour(s): 9
Prerequisite(s): AAS in Radiologic Technology and ARRT Registered.
Formerly RTE 381 Provides supervised hands-on training in MR imaging exams. The Internship allows the student to gain clinical experience and develop proficiency in MRI.

Second Year-Fall Semester

RTE 4021 - Theory and Application of MR Imaging II

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): RTE 3021.
Formerly RTE 421 Examines in-depth knowledge of designing MRI pulse sequences, data manipulation, artifacts and quality control and quality assurance procedures. Special consideration will be given to methods to shorten scan time, k-space filling and reconstruction, Fast Fourier Transform and image transfer and storage systems used in healthcare facilities.

RTE 4031 - Advanced MRI Protocols and Procedures

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): RTE 3031.

Formerly RTE 431 Examines specialized advancements in MRI. Emphasis will be placed on the heart and vasculature, functional imaging, contrast agents and their uses, enterography, pelvic run-off and breast imaging.

RTE 4061 - Leadership in Medical Imaging

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): MRI or CT Program Admission.
Formerly RTE 461 Examines concepts and skills needed for leadership roles in Medical Imaging. It prepares the student with communication, time management, supervision, task delegation, conflict management and performance assessment skills.

or

RTE 4062 - Teaching Methodologies in Medical Imaging Education

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): MRI or CT Program Admission.
Formerly RTE 462 Provides a general overview of the concepts and theory of Medical Imaging education. It introduces current theories of teaching adult learners in the Imaging Sciences, objective development of active learning activities, classroom assessment techniques and delivering course content through distance-learning formats.

RTE 4081 - Internship: MRI II

Credit(s): 7
Internship Hour(s): 21
Prerequisite(s): RTE 3081.
Formerly RTE 481 Provides continued hands-on training for the student to perform supervised exams, gain clinical experience and develop proficiency in MRI.

Radiologic Technology BAS

See list of Department Chairs on the Personnel page.

Applicants must meet the following criteria:

- AAS in Radiologic Technology from a regionally accredited institution in radiologic technology
- Registered Radiologic Technologists with American Registry of Radiologic Technologist (AART) in good standing
- Minimum cumulative GPA of 2.00 (C) for all course work completed
- College transfer courses accepted for program entry require a cumulative GPA of 2.00 (C) on a 4.00 scale in related course work
- Meet PCC admissions criteria

Program Requirements:

The Bachelor's in applied Science Degree consists of 120 credit hours with transfer of AAS and general education courses.

BAS general education credits need to total a minimum of 30 credits

RTE AAS transcripts will be evaluated—credit amount will vary depending on the awarding institution

Students can receive prior learning credits for current registries

Additional 300/400 level courses earned through PCC

Any remaining credit hour can be earned through electives if necessary

Graduation Requirements

Students can use a combination of transcripted credits, prior learning assessment, current registry/certificates and additional bachelor level course work at Pueblo Community College to obtain the 120 credits required.

A minimum of 30 credits must be completed at PCC.

Students must complete all courses in their chosen track (MRI or CT) and all general education courses with a grade of C or better.

Internship Requirements

Documentation of current license

Evidence of current CPR

Evidence of professional liability insurance

Documentation of immunizations

Successful background check

Meet requirements of receiving institution

Total Credits: 120

Fall Semester (12 credits)

BIO 2101 - Human Anatomy and Physiology I with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 201 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, nervous and endocrine systems. Includes a mandatory hands-on laboratory experience covering experimentation, microscopy, observations and dissection. This is the first semester of a two-semester sequence.

BIO 2102 - Human Anatomy and Physiology II with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 202 Focuses on the integrated study of the human body and the histology, anatomy, and physiology of the following systems and topics: cardiovascular, hematology, lymphatic and immune, urinary, fluid and electrolyte control, digestive, nutrition, respiratory, reproductive and development. Includes a mandatory hands-on laboratory experience involving experimentation, microscopy, observations and dissection. This is the second semester of a two-semester sequence.

PHY 1105 - Conceptual Physics with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly PHY 105 Focuses on mechanics, heat, properties of matter, electricity and magnetism, light and modern physics. Incorporates laboratory experience. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

Spring Semester (14 credits)

MRI Tract

ENG 1031 - Technical Writing I

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 131, then ENG 1020 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.

CIS 1018 - Intro to PC Applications

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 118 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.

RTE 3011 - Sectional Anatomy for Medical Imaging

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): AAS in Radiologic Technology and ARRT Registered.
Formerly RTE 311 Identifies anatomy in various imaging planes of advanced modalities. Compares normal anatomy with gross pathology on advanced cross-sectional images. Evaluation of anatomy and pathology will include head, spine, thorax, abdomen/pelvis and extremities.

RTE 3021 - Theory and Application of MR Imaging I

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): AAS in Radiologic Technology and ARRT Registered.
Formerly RTE 321 Applies the fundamental principles of MRI in order to perform clinical MRI examinations of the human body with special consideration to image production, quality control, terminology, basic procedural steps and MRI equipment and safety.

HPR 4011 - Leadership and Management in Health Professions

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to BAS program
Formerly HPR 411 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.

CT Tract

ENG 1031 - Technical Writing I

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 131, then ENG 1020 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.

RTE 3011 - Sectional Anatomy for Medical Imaging

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): AAS in Radiologic Technology and ARRT Registered.
Formerly RTE 311 Identifies anatomy in various imaging planes of advanced modalities. Compares normal anatomy with gross pathology on advanced cross-sectional images. Evaluation of anatomy and pathology will include head, spine, thorax, abdomen/pelvis and extremities.

RTE 3041 - Theory and Application of CT Imaging

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): AAS in Radiologic Technology and ARRT Registered.
Formerly RTE 341 Applies the fundamental and advanced principles of Computed Tomography (CT) in order to perform clinical CT examinations of the human body with special consideration to image production, quality control, terminology, basic procedural steps and MRI equipment and safety.

RTE 3051 - CT Protocols and Procedures

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): AAS in Radiologic Technology and ARRT Registered.
Formerly RTE 351 Covers the skill and knowledge necessary to perform supplemental procedures for imaging various

anatomical structures including the head, spine, chest, abdomen, pelvis and extremities utilizing Computed Tomography. It provides instruction on gross pathological conditions demonstrated on CT images.

HPR 4011 - Leadership and Management in Health Professions

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to BAS program
Formerly HPR 411 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.

Summer Semester (8 credits)

MRI Tract

RTE 4031 - Advanced MRI Protocols and Procedures

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): RTE 3031.
Formerly RTE 431 Examines specialized advancements in MRI. Emphasis will be placed on the heart and vasculature, functional imaging, contrast agents and their uses, enterography, pelvic run-off and breast imaging.

RTE 3081 - Internship: MRI I

Credit(s): 3
Internship Hour(s): 9
Prerequisite(s): AAS in Radiologic Technology and ARRT Registered.
Formerly RTE 381 Provides supervised hands-on training in MR imaging exams. The Internship allows the student to gain clinical experience and develop proficiency in MRI.

RTE 3012 - IV Certificate for Contrast Medium

Credit(s): 1
Lecture Hour(s): 0.50
Vocational Clinic Hour(s): 1

Prerequisite(s): AAS in Radiologic Technology and ARRT Registered.
Formerly RTE 312 Prepares the student to perform IV contrast administration including knowledge of arterial and venous anatomy, appropriate puncture sites, necessary equipment and supplies, understanding of different contrast media, injectors and administration safety.

CT Tract

RTE 4051 - Advanced CT Protocols and Procedures

Credit(s): 2
Lecture Hour(s): 2

Prerequisite(s): RTE 3051.
Formerly RTE 451 Provides the skill and knowledge necessary to perform advanced specialty procedures for imaging various anatomical structures utilizing Computed Tomography. It distinguishes vascular anatomy and incorporates contrast media injections and contraindication into complex imaging studies.

RTE 3012 - IV Certificate for Contrast Medium

Credit(s): 1
Lecture Hour(s): 0.50
Vocational Clinic Hour(s): 1

Prerequisite(s): AAS in Radiologic Technology and ARRT Registered.
Formerly RTE 312 Prepares the student to perform IV contrast administration including knowledge of arterial and venous anatomy, appropriate puncture sites, necessary equipment and supplies, understanding of different contrast media, injectors and administration safety.

RTE 3082 - Internship: CT I

Credit(s): 4
Internship Hour(s): 12
Prerequisite(s): AAS in Radiologic Technology and ARRT Registered.
Formerly RTE 382 Provides supervised hands-on training in Computed Tomography exams. The Internship allows the student to gain clinical experience and develop proficiency in CT.

Fall Semester (13 credits)

MRI Tract

RTE 4021 - Theory and Application of MR Imaging II

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): RTE 3021.
Formerly RTE 421 Examines in-depth knowledge of designing MRI pulse sequences, data manipulation, artifacts and quality control and quality assurance procedures. Special consideration will be given to methods to shorten scan time, k-space filling and reconstruction, Fast Fourier Transform and image transfer and storage systems used in healthcare facilities.

RTE 4031 - Advanced MRI Protocols and Procedures

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): RTE 3031.
Formerly RTE 431 Examines specialized advancements in MRI. Emphasis will be placed on the heart and vasculature, functional imaging, contrast agents and their uses, enterography, pelvic run-off and breast imaging.

HPR 4038 - Pedagogy in Health Professions

Credit(s): 3
Lecture Hour(s): 3

Prerequisite(s): Admission to BAS program
Formerly HPR 468 Provides a general overview of the concepts and theory relative to education in health professions. The course will introduce concepts in developing outcome centered objectives, syllabus, lesson planning, content delivery, test construction, and assessing student learning. The course explores various learning styles and technology available for delivery of course content.

RTE 4081 - Internship: MRI II

Credit(s): 7
Internship Hour(s): 21
Prerequisite(s): RTE 3081.
Formerly RTE 481 Provides continued hands-on training for the student to perform supervised exams, gain clinical experience and develop proficiency in MRI.

CT Tract

MAN 2025 - Managerial Finance

Credit(s): 3
Lecture Hour(s): 3
Formerly MAN 225 Examines the concepts and techniques used to analyze financial accounting information for managerial planning, decision making and control. The focus of the course is on decision-making relating to the areas of budgets, forecasts, cost volume production, ROI and financial statements.

OR

ECO 2001 - Principles of Macroeconomics: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly ECO 201 Focuses on the study of the American economy, stressing the interrelationships among household, business and government sectors. Explores saving and investment decisions, unemployment, inflation, national income accounting, taxing and spending policies, the limits of the market and government, public choice theory, the Federal Reserve System, money and banking, and international trade.

HPR 4038 - Pedagogy in Health Professions

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to BAS program
Formerly HPR 468 Provides a general overview of the concepts and theory relative to education in health professions. The course will introduce concepts in developing outcome centered objectives, syllabus, lesson planning, content delivery, test construction, and assessing student learning. The course explores various learning styles and technology available for delivery of course content.

RTE 4082 - Internship: CT II

Credit(s): 7
Internship Hour(s): 21
Prerequisite(s): RTE 3082.
Formerly RTE 482 Provides continued hands-on training for the student to perform supervised exams, gain clinical experience and develop proficiency in CT.

Miscellaneous Information

[1] One credit elective course to be used if additional course work is required for applicant

[2] Students are required to complete either HPR 411 Leadership & Management in Health Professions **OR** HPR 468 Pedagogy in Health Professions

[3] Offered in the first eight (8) weelks

[4] Offered in the second eight (8) weeks

Respiratory Therapy, BAS

See list of Department Chairs on the Personnel page.

This program is designed for licensed and registered respiratory therapists who have completed an Associate Degree in Respiratory Therapy from an accredited (Commission on Accreditation for Respiratory Care; CoARC) program and wish to continue their education and obtain a Bachelor of Applied Science degree. Students will receive 5 to 25 Prior Learning Assessment (PLA) credits for Registered Respiratory Therapy (RRT) and current state licensure. This program provides a student centered on-line learning environment meant to enhance career opportunities. The students will engage in self-directed learning activities and gain specialized knowledge utilizing critical thinking, personal inquiry and reflective practice.

Admission Requirements:

Applicants must meet the following criteria:

- Graduated from an accredited respiratory care program (Commission on Accreditation of Respiratory Care (CoARC)
- Hold a current respiratory therapy license in any state
- Hold a current credential from the National Board of Respiratory Care (NBRC) as a Registered Respiratory Therapist (RRT)
- Have a cumulative GPA of 2.5 for Respiratory Therapy degree and all other required pre-requisite courses must be completed at a "C" level or better.
- Meet PCC admissions criteria

Program Requirements

- The Bachelor's in Applied Science Degree consists of 120 credit hours with the transfer of AAS and general studies courses.
- General studies courses take as AAS: (19 credit hours)
- RCA specific coursework taken as part of AAS in Colorado (54.5 credit hours)
- Additional 300/400 level courses earned through PCC (BAS RT – 28 credit hours)
- A total of 30 credits in general education between the AAS and BAS degree with a minimum of 15 credits in GT pathway designation. Including possible block transfer/Prior Learning Assessment (PLA) for Respiratory Therapy AAS degree, NBRC Registered Respiratory Therapist and current state licensure.
- Any remaining credit hours can be earned through electives if necessary.
- Transferring students from outside the CCCS system will have transcripts evaluated for meeting admissions requirements

Total Credits: 120

Respiratory Therapy-Degree Transfer Credits

Respiratory Therapy, AAS

Fall -- 15

MAT 1260 - Introduction to Statistics: GT-MA1

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 135 Explores and applies data presentation and summarization, introduction to probability concepts and distributions, statistical inference estimation, hypothesis testing, comparison of populations, correlation and regression. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

OR

MAT 1340 - College Algebra: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 0300.
Formerly MAT 121 Explores topics including intermediate algebra, equations, and inequalities, functions and their graphs, exponential and logarithmic functions, linear and nonlinear systems, selection of topics from among graphing of the conic sections, introduction to sequences and series permutations and combinations, the binomial theorem and theory of equations. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

HPR 4003 - Critical Review of Healthcare Research

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to BAS program

Formerly HPR 403 Teaches how to evaluate and analyze published literature using a scientific approach to develop medical best practices, formulates and research clinical questions to effectively participate in medical discussions.

HPR 4038 - Pedagogy in Health Professions

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to BAS program
Formerly HPR 468 Provides a general overview of the concepts and theory relative to education in health professions. The course will introduce concepts in developing outcome centered objectives, syllabus, lesson planning, content delivery, test construction, and assessing student learning. The course explores various learning styles and technology available for delivery of course content.

RCA 4001 - Sleep Medicine

Credit(s): 3
Lecture Hour(s): 3
Formerly RCA 401 Develops a working knowledge in sleep medicine for health care professionals by reviewing and identifying diagnostic procedures, therapeutic interventions, and sleep disorders.

RCA 4000 - Current Topics in Pulmonary Disease

Credit(s): 3
Lecture Hour(s): 3
Formerly RCA 400 Analyze current issues related to respiratory disease, including pathophysiology, management, and outcomes.

Spring -- 18

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

SOC 1001 - Introduction to Sociology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 101 Examines the basic concepts, theories and principles of sociology as well as human culture, social groups, and the social issues of age, gender, class and race. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

HPR 4011 - Leadership and Management in Health Professions

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to BAS program
Formerly HPR 411 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.

HPR 3010 - Quality Improvement in Health Care

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to BAS program
Formerly HPR 310 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.

RCA 4002 - Advanced Concepts in Respiratory Therapy

Credit(s): 3
Lecture Hour(s): 3

Formerly RCA 402 Evaluates and analyzes current monitoring and diagnostic procedures for the cardiopulmonary patient in the acute and non-acute care settings with an emphasis on quality control, correlation of patient data, application of technology, and analysis of therapeutic protocols and procedures.

- Choose GT course in college catalog. **Credit(s): 3**[3]

Summer -- 7

HPR 3001 - Communications in Health Care

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to BAS program
Formerly HPR 301 Develops professional written and oral communication plans to ensure effective patient-centered outcomes between health care professionals, patients and caregivers.

RCA 4078 - Senior Seminar

Credit(s): 2
Lecture Hour(s): 2
Formerly RCA 478 Senior seminar for respiratory care creating a senior project that applies knowledge and concepts through the use of problem-based learning methods in the research and evaluation of industry best practices.

HPR 4089 - Inter-Professional Capstone

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Department approval required.
Formerly HPR 489 Provides a demonstrated culmination of learning within a given program of study.

Notes

[1] Courses taught in the first 8 weeks of the semester

[2] Courses taught in the second 8 weeks of the semester

[3] GT Pathway courses can be found in the College Catalog

[4] Also offered spring semester

[5] Also offered fall semester

Secure Software Development BAS

Computer Information Systems

See list of Department Chairs on the Personnel page.

Bachelor of Applied Science -- Secure Software Development

120 Credit Hours

Total Credits: 120

General Educaton (30 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

MAT 1340 - College Algebra: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 0300.
Formerly MAT 121 Explores topics including intermediate algebra, equations, and inequalities, functions and their graphs, exponential and logarithmic functions, linear and nonlinear systems, selection of topics from among graphing of the conic sections, introduction to sequences and series permutations and combinations, the binomial theorem and theory of equations. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

- Choose one CCCS GT-SC1 **Credit(s): 4**

ECO 2001 - Principles of Macroeconomics: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly ECO 201 Focuses on the study of the American economy, stressing the interrelationships among household, business and government sectors. Explores saving and investment decisions, unemployment, inflation, national income accounting, taxing and spending policies, the limits of the market and government, public choice theory, the Federal Reserve System, money and banking, and international trade.

- Choose General Education Electives **Credit(s): 13**

Lower Division (51 credits)

CIS 2020 - Fundamentals of Unix

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 220 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 2040 - Database Design and Development

Credit(s): 3
Lecture Hour(s): 3
Formerly CIS 240 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)

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Prerequisite(s): CIS 2040, Database Design and Development
Formerly CIS 243 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 2087 - Cooperative Education

Credit(s): 1-12
Internship Hour(s): 3-36
Formerly CIS 287 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 works with the student to select an appropriate work site, establish learning objectives and to coordinate learning activities with the employer work site supervisor.

CNG 1024 - Networking I: Network +

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 124 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 1031 - Principles of Information Assurance

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 131 Delivers a comprehensive overview of network security, including general security concepts. Communication Security is studied, including remote access, email, 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 1032 - Network Security Fundamentals

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 132 Examines the field of information security to prepare information systems students for their future roles as business decision-makers. The course presents a balance of the managerial and the technical aspects of information security. The concepts covered in this course should be helpful for students working towards the Certified Information Systems Security Professional (CISSP) certification.

CNG 2012 - Configuring Windows Server

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Formerly CNG 212 Provides students with the knowledge and skills that are required to install and configure a Microsoft Windows Server. This course helps prepare students for a MTA (Microsoft Technology Associate) and/or MCSA (Microsoft Certified Solutions Associate) exams.

CSC 1029 - Introduction to Secure Coding

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Prerequisite(s): CSC 1060 , Computer Science I
Formerly CSC 129 Focuses on introduction to secure coding. Emphasizes concepts, principles, and 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)

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Prerequisite(s): CSC 1020.
Formerly CSC 160 Introduces students to the discipline of computer science. Covers algorithm development, data representation, logical expressions, sub-programs and input/output operations using a structured programming language. Requires intensive lab work outside of class time.

CSC 1061 - Computer Science II: (Language)

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Prerequisite(s): CSC 1060 or instructor approval.
Formerly CSC 161 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 2041 - Advanced Java Programming

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Prerequisite(s): CSC 2040 or instructor approval.
Formerly CSC 241 Continues the study of the Java programming language. Covers advanced programming topics including multithreading, network/Internet programming, database programming and JavaBeans. Enables the student to write advanced, large and complex programs.

CSC 2045 - Secure Software Development: (Language)

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Prerequisite(s): CSC 1061 OR Co-Requisite
Corequisite(s): CSC 1061 or Pre-Requisite
Formerly CSC 245 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

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Prerequisite(s): CSC 1019.
Formerly CSC 246 Learn how to develop mobile apps using key features and frameworks. Students will learn application design and development using a mobile development platform software development kit (SDK) and corresponding programming language. Main features include: handling UI triggered and touch events, data management, simple and complex UI views, drawing, location and application settings.

CSC 2067 - Object-Oriented Analysis and Design

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): CSC 1060, Computer Science I
Formerly CSC 267 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.

CWB 2005 - Client-Side Scripting: (Software)

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Formerly CWB 205 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.

Upper Division (39 credits)

CSC 3000 - Advanced Computer Architecture

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.5
Prerequisite(s): Department Chair Approval
Formerly CSC 300 Covers the analysis of advanced concepts in the applications of computer architecture and programming capabilities with keyboard and display controllers within programs. This course investigates the impact of exceptions and interrupts within a simulator, examines the hazards associated with a pipelined datapath, and uses the analysis of floating-point instructions.

CSC 3020 - Software Engineering Fundamentals

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.5
Prerequisite(s): Department Chair Approval
Formerly CSC 320 Focuses on the skills necessary to analyze, design, and implement software engineering projects. The course includes software engineering standards and processes, qualitative aspects including maintainability, extensibility, reusability, and robustness in every stage of the software-engineering life-cycle.

CSC 3022 - Security Fundamentals and Databases

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.5
Prerequisite(s): Department Chair Approval
Formerly CSC 322 Examines the vulnerabilities of databases to attack. Functional requirements and security testing, focusing on the interaction between a software user and the application, are analyzed. This course will investigate database platforms and provide database developers with an understanding of database development best practices for optimum security.

CSC 3024 - Secure Coding Vulnerabilities I

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.5
Prerequisite(s): Department Chair Approval
Formerly CSC 324 Focuses on analyzing and implementing software vulnerabilities. This course explores vulnerabilities through code evaluation and implementation of language-specific solutions.

CSC 3026 - Secure Scripting of Operating Systems

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Prerequisite(s): Department Chair Approval
Formerly CSC 326 Focuses on analyzing and configuring an environment and assessing configuration variables in

multiple operating systems. Topics include using multiple utilities in order to assimilate information on a network, host and data communications, and creating scripts for evaluation.

CSC 3028 - Security Libraries in Programming Languages

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.5
Prerequisite(s): Department Chair Approval
Formerly CSC 328 Focuses on the issues surrounding security libraries within programming languages. This course analyzes static typing within a software program to assess integrity within a given programming library. The course will also explore what effect mutable resources have on security, along with encryption tools, and violation channels.

CSC 4022 - Secure Software Engineering

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.5
Prerequisite(s): Department Chair Approval
Formerly CSC 422 Focuses on the analysis and functionality of defective software and how to develop and implement secure software. The analysis performed by software engineers in order to detect, repair, and maintain safe systems will also be covered.

CSC 4024 - Secure Code Vulnerabilities II

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.5
Prerequisite(s): CSC 3024
Formerly CSC 424 Focuses on advanced implementation of software vulnerabilities. This course covers attack vectors frequently used by malicious actors such as email attachments, compromised "watering hole" websites, and other tools often relied on to take advantage of unpatched vulnerabilities found in widely-used software applications. Patching techniques will be deployed in order to repair vulnerabilities found in software components.

CSC 4026 - Secure Cloud Programming

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.5
Prerequisite(s): Department Chair Approval
Formerly CSC 426 Focuses on analyzing and implementing secure applications in the cloud. Topics covered will include designing and implementing applications via the cloud with a focus on security policies, analyzing computer models with recommendations to reduce the risks and security challenges surrounding programming, and data security within the cloud.

CSC 4028 - Software Security Testing

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.5
Prerequisite(s): Department Chair Approval

Formerly CSC 428 Focuses on testing software as it pertains to vulnerabilities within operating systems, libraries, and cloud applications. Topics covered include implementing testing environments through analytical assessments using tools that detect software inefficiencies and using reliable solutions in order to reduce security risks.

Certificate

PCC offers the following Certificates that are eligible for federal or state financial aid funds. For more information, please contact the appropriate department chairperson.

Barbering Certificate

CIP 12.0402

See list of Department Chairs on the Personnel page.

Career Opportunities

The Cosmetology program prepares students for careers in cosmetology, hairstyling, esthetics (facial care) and manicure (nail care). Students will receive the specialized training necessary to be prepared for a successful career with limitless opportunities for both men and women. Students learn the skills to keep pace with the fashion world and stand ready to meet the constantly changing demands of one of today's largest-growing service industries. Those opportunities can provide both part-time and full-time employment in specialty areas.

Program Description

The Cosmetology program teaches students job entry skills, customer communication and shop procedures. Instruction includes professional ethics, bacteriology, shampoo and rinses, color theory, hair coloring techniques, permanent waving, hairstyling, hair cutting, manicures, pedicures, facials, makeup, OSHA regulations, sanitation, safety and Colorado laws. Clinical practice involves working on the public under supervision and parallels, as close as possible, actual shop procedures in order to prepare students for working in the field.

Total Credits: 53

Certificate Requirements

General Education Requirement (3 Credits)

- Choose one Arts & Humanities **Credit(s): 3**

Core Requirements (50 Credits)

BAR 1003 - Introduction to Hair & Scalp

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly BAR 103 Introduces various types of hair, scalp treatments and shampoos. Focuses on recognition and treatment of disorders of hair and scalp, product knowledge and proper massage techniques to help control these disorders and cleanse the hair and scalp. Covers terminology dealing with hair structure scalp and hair disorders. Training is provided in a lab or classroom setting.

BAR 1007 - Introduction to Shaving, Honing & Stropping

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly BAR 107 Introduces the general principles of shaving to include hair texture, grain of the beard and analysis of the skin. Theory is combined with the practical application of proper shaving procedures and cutting strokes used on the face.

BAR 1008 - Intermediate Shaving, Honing & Stropping

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly BAR 108 Focuses on theory and practical training related to mustache and beard designing and trimming. Practical applications are incorporated in specialized classes or in a supervised salon.

BAR 1066 - Introduction to Facial Massages & Skin Care

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly BAR 166 Emphasizes basic understanding of facial massage manipulations and the study of skin in both practical and theory applications. Covers the benefits derived from proper facial massage and a good skin care routine.

BAR 1067 - Intermediate Facial Massage & Skin Care

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly BAR 167 Focuses on practical application dealing with anatomy, skin disorders, skin types and facial shapes. Students help patrons select proper skin care treatments

BAR 2007 - Advanced Shaving, Honing & Stropping

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly BAR 207 Focuses on advanced training in shaving, honing and stropping. Practical and theory application is completed in specialized classes or supervised clinical training. Student will be prepared for State Board license exam.

BAR 2066 - Advanced Facial Massage & Skin Care

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly BAR 266 Emphasizes anatomy, skin disorders, skin types and facial shapes. Students guide patrons on selection of proper skin care treatments. Covers student preparation for State Board licensing examination on theory and practical procedures.

COS 1050 - Laws, Rules and Regulations

Credit(s): 1
Lecture Hour(s): 1
Formerly COS 150 Provides instruction on the laws, rules and regulations and how they govern the cosmetology and barber industry, as well as the effects they have on the student, licensed individual, salons and school owners.

COS 1060 - Introduction to Disinfection, Sanitation & Safety

Credit(s): 2
Vocational Clinic Hour(s): 4

Formerly COS 160 Introduces the various methods of disinfection, sanitation and safety as used in the cosmetology industry. Includes classroom study of bacteriology and the terminology dealing with cosmetology.

COS 1061 - Intermediate I: Disinfection, Sanitation & Safety

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly COS 161 Focuses on the theory and daily practice of proper methods of disinfection, sanitation and safety procedures as related to all phases of cosmetology. Covers terminology and training of disinfection, sanitation and safety procedures. Also includes customer service in a supervised salon (clinical) setting or specialized class.

COS 2050 - Management, Ethics, Interpersonal Skills & Salesmanship

Credit(s): 1
Lecture Hour(s): 1
Formerly COS 250 Emphasizes the importance of salon management and the knowledge and skills necessary to build a successful business. Focuses on the importance of interpersonal skills and basic techniques in salesmanship and customer services. Integrates job readiness skills and professional ethics.

COS 2060 - Intermediate II: Disinfection, Sanitation & Safety

Credit(s): 2
Vocational Clinic Hour(s): 4

Formerly COS 260 Provides continued study of theory and practice of proper methods of sterilization, disinfection, sanitation and safety procedures as related to all phases of the industry. Covers terminology and training of disinfection, sanitation and safety procedures. The individual responsibility to provide a safe work environment is practiced.

COS 2061 - Advanced Disinfection, Sanitation & Safety

Credit(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): COS 1061.
Formerly COS 261 Provides advanced training on decontamination and safety practices in a supervised salon and/or classroom setting. Examines advanced techniques that prepare the student for employment. Includes student preparation for the State Board Licensing Examination in decontamination and safety for all aspects of the industry. Study of OSHA requirements for schools and salon are done in a theory or practical setting.

Basic Firefighter - Structural (Fire Academy)

Program Description

See list of Department Chairs on the Personnel page.

The Fire Science Technology is an Associate of Applied Science (AAS) degree designed to meet the needs of fire protection and safety personnel. The program will prepare you for a career in fire science or a related field. Courses are offered through traditional classroom instruction, independent study, and hands on training in conjunction with local fire departments.

Career Information

The Fire Science Technology program prepares students for entry level positions in the fire service industry.

Total Credits: Variable

Basic Fire Science (9 credits)

FST 1002 - Principles/Emergency Services

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 102 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

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 103 Explores the theories and fundamentals of how and why fires start, spread and are controlled.

FST 1009 - Occupational Safety & Health

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 109 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.

Fire Investigator I (9 credits)

FST 1003 - Fire Behavior & Combustion

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 103 Explores the theories and fundamentals of how and why fires start, spread and are controlled.

FST 2005 - Fire Investigation I

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 205 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 firesetter, and types of fire causes.

FST 2052 - Fire Investigation II

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 252 Provides the student with advanced technical knowledge on rule of law, fire scene analysis, fire behavior, evidence collection and preservation, scene documentation, case preparation, and testifying.

Firefighter I (12 credits)

FST 1000 - Firefighter I

Credit(s): 9
Lecture Hour(s): 6
Vocational Lab Hour(s): 4.50
Formerly FST 100 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 using IFSTA Essentials.

FST 1007 - Hazardous Materials Operations (Level I)

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 107 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.

Vehicle Extrication (3 credits)

FST 1026 - Vehicle Extrication Awareness Level

Credit(s): 1
Vocational Lab Hour(s): 1.50
Formerly FST 126 Provides the student with entry level knowledge and skills to safely operate at the scene of a vehicle/machinery extrication. Training in this course represents the minimum level of training needed to respond to a vehicle extrication incident.

FST 1027 - Vehicle Extrication Operations Level

Credit(s): 2
Lecture Hour(s): 0.50
Vocational Lab Hour(s): 2.25
Formerly FST 127 Expands and refines the objectives of FST 1026. Students shall be capable of hazard recognition, equipment use and techniques necessary to operate safely and effectively at incidents involving persons injured or entrapped in a vehicle or machinery.

Fire Officer I (12 credits)

FST 2001 - Instructional Methodology

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 201 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 2006 - Fire Co Superv and Leadership

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 206 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 2053 - NIMS

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): FST 2002.
Formerly FST 253 Focuses on the National Incident Management System, including fire ground management and resource management. Multiagency coordination systems are discussed; organization preparedness for large scale emergencies, communication and information are addressed. The course concludes with a review of the National Response Plan.

FST 2055 - Fire Service Management

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 255 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.

Basic Firefighter - Structural (Fire Academy) (16 credits)

FST 1008 - Firefighter Professional Preparation

Credit(s): 1
Lecture Hour(s): 1
Formerly FST 108 Articulates strategies for creating success in a career as a Firefighter. This course discusses requirements in professionalism, emergency response in a multicultural environment, the psychological rigors and stressors typical of the vocation, and use of potential resources to attain career goals and plans.

FST 1000 - Firefighter I

Credit(s): 9
Lecture Hour(s): 6
Vocational Lab Hour(s): 4.50
Formerly FST 100 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 using IFSTA Essentials.

FST 1007 - Hazardous Materials Operations (Level I)

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 107 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 1060 - Candidate Physical Abilities Test Prep

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly FST 160 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.

Fire Prevention & Public Education (14 credits)

FST 1006 - Fire Prevention

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 106 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 1050 - Introduction to Fire Prevention Education

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 150 Focuses on conducting prevention and education needs assessment, targeting audiences; development and delivery of prevention and education programs. Includes methods of conducting fire prevention and safety inspections.

FST 2004 - Principles of Code Enforcement

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 204 To provide the students with the fundamental knowledge of the role of code enforcement in a comprehensive fire prevention program.

FST 2008 - Fire Plans Review and Acceptance Testing

Credit(s): 2
Lecture Hour(s): 2
Formerly FST 208 Instructs the student on how to review building plans submitted to a fire department, acceptance testing procedures, implementation of a fire inspection program, and how to deal effectively with the public for fire prevention and education activities.

FST 2009 - Fire Protection Systems

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 209 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.

Bookkeeping Certificate

CIP 52.0302

Career Opportunities

The bookkeeping certificate prepares you for a career in entry-level accounting or upper- level bookkeeping positions.

Program Description

The Bookkeeping Certificate focuses on the role of accounting basics in business and management to prepare students for an entry-level position in Bookkeeping, Payroll, Accounting, and Auditing (clerks). Students will encounter real-world scenarios used in payroll, tax, and computerized accounting along with the use of bookkeeping software. Students will use accounting information resources and systems, and present conclusions based on accounting and business data. Additionally, students will use ledgers, journals, and worksheets to complete formal, informal, and quantitative accounting tasks.

Total Credits: 29

Certificate Requirements

General Requirement (3 Credits)

MAT 1160 - Financial Mathematics

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 112 Covers topics including pricing, taxes, insurance, interest, annuities, amortization, investments using financial calculators and spreadsheets.

Core Curriculum Requirements (26 credits)

ACC 1038 - Payroll and Sales Tax

Credit(s): 3
Lecture Hour(s): 3
Formerly ACC 138 Introduces laws pertaining to payroll and sales taxes including record keeping rules; preparation of various federal, state and local forms for reporting payroll and sales taxes; and computerized payroll procedures.

ACC 1021 - Accounting Principles I

Credit(s): 4
Lecture Hour(s): 4
Formerly ACC 121 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

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): ACC 1021
Formerly ACC 122 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

Credit(s): 3
Vocational Lab Hour(s): 4.50
Prerequisite(s): ACC 1022
Formerly ACC 125 Introduces the capabilities of computer applications in accounting. Includes solving accounting problems of a financial nature and hardware and software controls.

BUS 1015 - Introduction to Business

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 115 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.

ENP 1005 - Introduction to Entrepreneurship

Credit(s): 3
Lecture Hour(s): 3
Formerly ENP 105 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.

BUS 2016 - Legal Environment of Business

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 216 Emphasizes public law, regulation of business, ethical considerations, and various relationships existing within society, government, and business. Specific attention is devoted to economic regulation, social regulation, regulation and laws impacting labor-management issues and environmental concerns. Students develop an understanding of the role of law in social, political, and economic change.

CIS 1018 - Intro to PC Applications

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 118 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.

ACC 1035 - Spreadsheet Applications for Accounting

Credit(s): 3
Lecture Hour(s): 3
Formerly ACC 135 Introduces spreadsheets as an accounting tool in the application of fundamental accounting concepts, problem-solving, and decision-making skills.

Broadcasting & Production Technology Certificate

CIP 09.0702

See list of Department Chairs on the Personnel page.

Career Opportunities

Careers in Media Communications are in demand and PCC offers an affordable way for students to begin their education. Some of the exciting career options within this field include: Graphic Designers; Web Developers; Broadcast Technicians; Film Video Editors; and Advertising & Promotion Managers.

Program Description

The Media Communications program teaches students to think critically and develop skills in Web Design, Graphic Design, Advertising, Videography, News Writing, and TV-Radio Production. Courses provide a solid foundation in these areas through a combination of lecture and hands on applications. There are multiple labs with state of the art equipment and software for your area of emphasis. The Media Communications program provides a high technical skill attainment in this changing field of communication. Students have multiple options to pursue. The AAS degrees with emphases in Graphic Design and Web Design offer advanced technical skills in these areas. Certificates provide basic skill sets to enhance an existing degree or occupation. The AGS degree provides a transfer option to a four year university. If interested in this option, please refer to the Transferring Credits section of the catalog.

Total Credits: 27

Certificate Requirements

JOU 1005 - Introduction to Mass Media: GT SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly JOU 105 Places the mass media in a historical and cultural perspective, considering the validity, integrity and influence of the media in a democracy. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

MGD 1002 - Introduction to Multimedia

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly MGD 102 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 1011 - Adobe Photoshop I

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly MGD 111 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 1043 - Motion Graphic Design I: (Software)

Credit(s): 3
Vocational Lab Hour(s): 4.5
Formerly MGD 143 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 1064 - Digital Video Editing I

Credit(s): 3
Vocational Lab Hour(s): 4.5
Formerly MGD 164 Introduces to digital nonlinear 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 2064 - Digital Video Editing II

Credit(s): 3
Vocational Lab Hour(s): 4.5
Prerequisite(s): MGD 1064
Formerly MGD 264 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 1041 - Web Design I

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly MGD 141 Introduces website planning, design and creation using industry standards-based website development tools. Screen-based color theory, web aesthetics, use of graphics editors and intuitive interface design are explored.

RTV 1002 - Beginning Television

Credit(s): 3
Vocational Lab Hour(s): 4.5
Formerly RTV 102 Focuses on principles and techniques of television production in theory and the approach of studio and production. Emphasizes producing television programs, beginning with a concept through script to actual studio production, pre-production and post-production.

CNG 1024 - Networking I: Network +

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 124 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.

Business Fundamentals Certificate

CIP 52.0201

See list of Department Chairs on the Personnel page.

Career Opportunities

The AAS and Certificate programs prepare you for entry level positions in marketing, management or sales; they also give you the skills you need to open your own business.

Program Description

You will study management from three perspectives: marketing, management and economics. Marketing studies offer specific training in sales, advertising, promotion and marketing. Management studies offer a generalized perspective with broad applications in the business world. Economic studies give you a basic understanding of economics and its relationship to other disciplines.

The Business Fundamentals Certificate program prepares you for an entry-level position in business or for starting your own small business. You can apply all course work for this certificate to the AAS Degree in Business Management.

Total Credits: 25

Certificate Requirements

ACC 1015 - Payroll Accounting

Credit(s): 3
Lecture Hour(s): 3
Formerly ACC 115 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.

OR

ACC 1031 - Income Tax

Credit(s): 3
Lecture Hour(s): 3
Formerly ACC 131 Introduces basic concepts of federal income taxation and tax administration with emphasis on taxation of individuals and sole proprietorships.

OR

ACC 1038 - Payroll and Sales Tax

Credit(s): 3
Lecture Hour(s): 3
Formerly ACC 138 Introduces laws pertaining to payroll and sales taxes including record keeping rules; preparation of various federal, state and local forms for reporting payroll and sales taxes; and computerized payroll procedures.

ACC 1021 - Accounting Principles I

Credit(s): 4
Lecture Hour(s): 4
Formerly ACC 121 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.

BUS 2016 - Legal Environment of Business

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 216 Emphasizes public law, regulation of business, ethical considerations, and various relationships existing within society, government, and business. Specific attention is devoted to economic regulation, social regulation, regulation and laws impacting labor-management issues and environmental concerns. Students develop an understanding of the role of law in social, political, and economic change.

BUS 2017 - Business Communication & Report Writing

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 217 Emphasizes effective business writing and covers letters, memoranda, reports, application letters and resumes. Includes the fundamentals of business communication and an introduction to international communication.

CHOOSE 4 COURSES BELOW (12 Credits)

BUS 1002 - Entrepreneurial Operations

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 102 Explores the essential requirements for starting and operating a business. This course covers basic concepts of business law, marketing, finance and operations. It guides the development of an effective business plan and prepares students to launch and sustain their own businesses.

BUS 1015 - Introduction to Business

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 115 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.

CIS 1018 - Intro to PC Applications

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 118 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.

ENP 1005 - Introduction to Entrepreneurship

Credit(s): 3
Lecture Hour(s): 3
Formerly ENP 105 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.

MAN 1028 - Human Relations in Organizations

Credit(s): 3
Lecture Hour(s): 3
Formerly MAN 128 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

Credit(s): 3
Lecture Hour(s): 3
Formerly MAN 200 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

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): MAT 1140
Formerly MAN 216 Examines the elements necessary for the successful formation of a new small business. It is also designed 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

Credit(s): 3
Lecture Hour(s): 3
Formerly MAN 226 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.

Business Management Certificate

CIP 52.0201

See list of Department Chairs on the Personnel page.

Program Description

The AAS and Certificate programs prepare you for entry level positions in marketing, management or sales; they also give you the skills you need to open your own business.

Total Credits: 31

Semester 1 (15 credits)

CIS 1018 - Intro to PC Applications

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 118 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.

ACC 1035 - Spreadsheet Applications for Accounting

Credit(s): 3
Lecture Hour(s): 3
Formerly ACC 135 Introduces spreadsheets as an accounting tool in the application of fundamental accounting concepts, problem-solving, and decision-making skills.

BUS 1015 - Introduction to Business

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 115 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.

ENP 1005 - Introduction to Entrepreneurship

Credit(s): 3
Lecture Hour(s): 3
Formerly ENP 105 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.

ACC 1031 - Income Tax

Credit(s): 3
Lecture Hour(s): 3
Formerly ACC 131 Introduces basic concepts of federal income taxation and tax administration with emphasis on taxation of individuals and sole proprietorships.

ACC 1038 - Payroll and Sales Tax

Credit(s): 3
Lecture Hour(s): 3
Formerly ACC 138 Introduces laws pertaining to payroll and sales taxes including record keeping rules; preparation of various federal, state and local forms for reporting payroll and sales taxes; and computerized payroll procedures.

MAR 2016 - Principles of Marketing

Credit(s): 3
Lecture Hour(s): 3
Formerly MAR 216 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.

MAT 1160 - Financial Mathematics

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 112 Covers topics including pricing, taxes, insurance, interest, annuities, amortization, investments using financial calculators and spreadsheets.

Semester 2 (16 credits)

ACC 1021 - Accounting Principles I

Credit(s): 4
Lecture Hour(s): 4
Formerly ACC 121 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.

BUS 2016 - Legal Environment of Business

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 216 Emphasizes public law, regulation of business, ethical considerations, and various relationships existing within society, government, and business. Specific attention is devoted to economic regulation, social regulation, regulation and laws impacting labor-management issues and environmental concerns. Students develop an understanding of the role of law in social, political, and economic change.

ECO 2001 - Principles of Macroeconomics: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly ECO 201 Focuses on the study of the American economy, stressing the interrelationships among household, business and government sectors. Explores saving and investment decisions, unemployment, inflation, national income accounting, taxing and spending policies, the limits of the market and government, public choice theory, the Federal Reserve System, money and banking, and international trade.

BUS 1016 - Personal Finance

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 116 Surveys the basic personal financial needs of most individuals. Emphasizes the basics of budgeting and buying, saving and borrowing money, the intricacies of home ownership, income tax and investments, and the wise use of insurance, wills and trusts.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

MAN 2026 - Principles of Management

Credit(s): 3
Lecture Hour(s): 3
Formerly MAN 226 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.

Business Office Professional

See list of Department Chairs on the Personnel page.

Program Description

Prepares students for a career as an office professional in a variety of fields and industries. You will learn state-of-the-art technology, develop computerized or payroll skills, learn top-notch interpersonal (or group) communication skills and/or human resource management skills, develop a strong business understanding and report writing skills, and learn to solve problems creatively. As a student preparing to enter the workforce, there is the opportunity to gain relevant experience through internships or enhance your knowledge of personal finance.

Total Credits: 24

Certificate Requirements

ACC 1025 - Computerized Accounting

Credit(s): 3
Vocational Lab Hour(s): 4.50
Prerequisite(s): ACC 1022
Formerly ACC 125 Introduces the capabilities of computer applications in accounting. Includes solving accounting problems of a financial nature and hardware and software controls.

OR

ACC 1038 - Payroll and Sales Tax

Credit(s): 3
Lecture Hour(s): 3
Formerly ACC 138 Introduces laws pertaining to payroll and sales taxes including record keeping rules; preparation of various federal, state and local forms for reporting payroll and sales taxes; and computerized payroll procedures.

ACC 1035 - Spreadsheet Applications for Accounting

Credit(s): 3
Lecture Hour(s): 3
Formerly ACC 135 Introduces spreadsheets as an accounting tool in the application of fundamental accounting concepts, problem-solving, and decision-making skills.

BUS 1015 - Introduction to Business

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 115 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 2017 - Business Communication & Report Writing

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 217 Emphasizes effective business writing and covers letters, memoranda, reports, application letters and resumes. Includes the fundamentals of business communication and an introduction to international communication.

CIS 1018 - Intro to PC Applications

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 118 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.

BTE 2087 - Cooperative Education/Internship

Credit(s): 0.50-6
Cooperative Education Hour(s): 0.75-9
Prerequisite(s): Department Chair Approval.
Formerly BTE 287 Provides students with the opportunity to supplement course work with practical work experience related to their educational program and occupational objectives. Students are placed at approved work sites that are related to their program of study. They work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor/coordinator.

OR

BUS 1016 - Personal Finance

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 116 Surveys the basic personal financial needs of most individuals. Emphasizes the basics of budgeting and buying, saving and borrowing money, the intricacies of home ownership, income tax and investments, and the wise use of insurance, wills and trusts.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

MAN 1028 - Human Relations in Organizations

Credit(s): 3
Lecture Hour(s): 3
Formerly MAN 128 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.

OR

MAN 2000 - Human Resource Management I

Credit(s): 3
Lecture Hour(s): 3
Formerly MAN 200 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.

COM 2220 - Group Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 217 Examines group communication theories with an emphasis on leadership and group behaviors. The course provides opportunities for group participation. GT-SS3

OR

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

Business Ownership Certificate

See list of Department Chairs on the Personnel page.

Program Description

The Business Management program (AAS Degree and Certificates) prepares students for entry level positions in Marketing, Management, Sales, and Entrepreneurship. These offerings also provide opportunities for individuals working within the industry to up-skill and advance their careers. The (AA) in Business Management prepares students to transfer to bachelor's degree programs in Business Management. Per the statewide articulation agreement, students can complete fundamental courses at PCC and transfer to complete a Bachelor's Degree with a specific emphasis.

Total Credits: 18

Certificate Requirements (18 credits)

ENP 1005 - Introduction to Entrepreneurship

Credit(s): 3
Lecture Hour(s): 3
Formerly ENP 105 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.

ENP 1006 - Entrepreneurship Opportunity Analysis/Feasibility Study

Credit(s): 3
Lecture Hour(s): 3
Formerly ENP 106 Determines if a business venture is feasible based on personal, professional, and financial goals. This course will help to identify and analyze the present climate for business ideas through an industry analysis, target market analysis, competitive analysis, and financial analysis.

ENP 2005 - Marketing for the Entrepreneur

Credit(s): 3
Lecture Hour(s): 3
Formerly ENP 205 Covers marketing strategies to launch and sustain an entrepreneurial venture. This course will include topics on marketing entrepreneurial ventures utilizing innovative and financially responsible marketing strategies. This course will help students to develop an understanding of entrepreneurial marketing goals and objectives. The course covers marketing principles and electronic marketing.

ENP 2006 - Entrepreneurship Legal Issues

Credit(s): 3
Lecture Hour(s): 3
Formerly ENP 206 Explores legal issues related to business entities including sole proprietorship, general partnerships, limited partnerships, and corporations. This course reviews articles of incorporation and the filing process, employment law, property, landlord tenant rights and duties, and business insurance.

ENP 2007 - Entrepreneurship Financial Topics

Credit(s): 3
Lecture Hour(s): 3
Formerly ENP 207 Will cover topics such as financial planning for entrepreneurs, understanding tax considerations, understanding financial documents, financial ratio analysis, cash flow management, cost of capital and budgeting, raising capital, valuation, risk assessment, and venture exits.

ENP 2009 - Entrepreneurship Business Plan

Credit(s): 3
Lecture Hour(s): 3
Formerly ENP 209 Guides students through the evaluation of a business concept. This course will include writing a comprehensive business plan. This course explores both traditional and lean business planning as a means to establish strategic vision and direction for a business. This course assesses the strengths and weaknesses of a business concept. This course will include identifying external and environmental factors related to business ownership and evaluating various resources available for funding small businesses.

Cosmetology Certificate

CIP 12.0401

See list of Department Chairs on the Personnel page.

Career Opportunities

The Cosmetology program prepares students for careers in cosmetology, hairstyling, esthetics (facial care) and manicure (nail care). Students will receive the specialized training necessary to be prepared for a successful career with limitless opportunities for both men and women. Students learn the skills to keep pace with the fashion world and stand ready to meet the constantly changing demands of one of today's largest-growing service industries. Those opportunities can provide both part-time and full-time employment in specialty areas.

Program Description

The Cosmetology program teaches students job entry skills, customer communication and shop procedures. Instruction includes professional ethics, bacteriology, shampoo and rinses, color theory, hair coloring techniques, permanent waving, hairstyling, hair cutting, manicures, pedicures, facials, makeup, OSHA regulations, sanitation, safety and Colorado laws. Clinical practice involves working on the public under supervision and parallels, as close as possible, actual shop procedures in order to prepare students for working in the field.

- Cosmetology degree or certificate – This program provides training in hair, skin and nail care services. Instruction is provided in hair cutting, hair styling, hair coloring, chemical texture services, skin care, waxing services, make-up application and nail care needs.

Total Credits: 56

Certificate Requirements

Core Requirements (53 Credits)

COS 1003 - Shampoo/Rinses/Conditioners I

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly COS 103 Introduces various types of scalp treatments and shampoos. Enables student to recognize and treat disorders of hair and scalp. Covers product knowledge and proper massage techniques to help control disorders and to cleanse the hair and scalp. Includes terminology dealing with hair structure, scalp and hair disorders. Provides training in a lab or classroom setting.

COS 1010 - Introduction to Hair Coloring

Credit(s): 2
Vocational Clinic Hour(s): 4

Formerly COS 110 Provides theory pertaining to the law of color, theory of color, chemistry of color, product knowledge and analysis of hair and scalp. Covers basic techniques and procedures for the application of hair coloring.

COS 1011 - Intermediate: Hair Coloring

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 1010.
Formerly COS 111 Focuses on theory and practical application of color products, formulations of color, level and shades of color. Examines techniques in a specialized class or in a supervised salon setting.

COS 1020 - Introduction to Hair Cutting

Credit(s): 2
Vocational Clinic Hour(s): 4

Formerly COS 120 Introduction to the theory relevant to patron protection, angles, elevations and the analysis of hair textures as related to hair cutting. Covers the proper use and care of hair-cutting implements. Focuses on basic hair-cutting techniques using all cutting implements, disinfection and sanitation procedures as they relate to haircutting.

COS 1021 - Intermediate I: Haircutting

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 120.
Formerly COS 121 Focuses on theory related to facial shapes, head and body forms to determine the clients appropriate haircut. Incorporates practical applications of hair cutting techniques in specialized classes or in the supervised salon (clinical setting).

COS 1030 - Introduction to Hair Styling

Credit(s): 2
Vocational Clinic Hour(s): 4

Formerly COS 130 Combines theory with the practical application of roller placement, shaping, pin curls, finger waves, air forming iron curling, soft pressing and hard pressing.

COS 1031 - Intermediate I: Hair Styling

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 1030.
Formerly COS 131 Focuses on the accepted methods of styling hair, air forming roller sets, finger waves pin curls braiding and hair pressing.

COS 1040 - Introduction to Chemical Texture

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly COS 140 Introduces a combination of theory and practice focusing on the analysis of hair and scalp, proper equipment and product knowledge. Includes basic techniques in permanent waving and chemical relaxing. Provides training in a classroom or lab setting on mannequins or live models.

COS 1041 - Intermediate I: Chemical Texture

Credit(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): COS 1040.
Formerly COS 141 Emphasizes theory and practical application of permanent waves and chemical relaxers in specialized classes or a supervised salon setting. Enables the student to practice different wrapping techniques required by trend styles.

COS 1050 - Laws, Rules and Regulations

Credit(s): 1
Lecture Hour(s): 1
Formerly COS 150 Provides instruction on the laws, rules and regulations and how they govern the cosmetology and barber industry, as well as the effects they have on the student, licensed individual, salons and school owners.

COS 2003 - Shampoo/Rinses/Conditioners II

Credit(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): COS 1003.
Formerly COS 203 Provides theory and practical training in shampoos, rinses and conditioners. Examines advanced techniques to prepare the student for employment. Includes preparation for the State Board Licensing Examination in shampoos, rinses and conditioners.

COS 2010 - Intermediate II: Hair Coloring

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 1010.
Formerly COS 210 Provides continued instruction in the theory and practical application of color products, formulations of color, level and shades of color. Enables students to practice techniques in a specialized class or in a supervised salon setting.

COS 2011 - Advanced Hair Coloring

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 1011.
Formerly COS 211 Provides continued instruction on advanced theory and practical techniques in hair coloring. Focuses on the recognition of color problems and color correction procedures. Covers advanced techniques and product knowledge to prepare the student for employment. Prepares the student for the State Board Licensing Examination pertaining to hair coloring.

COS 2020 - Intermediate II: Haircutting

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 1020.
Formerly COS 220 Provides continued instruction in the theory related to facial shapes, head and body forms to determine the client's appropriate haircut. Incorporates practical applications of haircutting techniques.

COS 2021 - Advanced Hair Cutting

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 1021.
Formerly COS 221 Focuses on advanced cutting techniques using all the cutting tools. Emphasizes current fashion trends. Includes student preparation for the State Licensure examination.

COS 2030 - Intermediate II: Hair Styling

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 1030.
Formerly COS 230 Provides continued instruction on accepted methods of styling hair, air forming, roll set, finger waves and hair pressing. Examines techniques in specialized classes or in a supervised salon setting.

COS 2031 - Advanced Hair Styling

Credit(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): COS 1031.
Formerly COS 231 Focuses on theory and advanced techniques in all phases of hair styling to prepare the student for employment. Training is a combination of supervised salon (clinical) work and specialized classes. Includes student preparation for the State Board Licensing Examination relating to hairstyling.

COS 2040 - Intermediate II: Chemical Texture

Credit(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): COS 1040.
Formerly COS 240 Provides continued instruction in the theory and practical application of permanent waves and chemical relaxers in specialized classes or a supervised salon setting. Enables students to practice different wrapping techniques required by trend styles.

COS 2041 - Advanced Chemical Texture

Credit(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): COS 1041.
Formerly COS 241 Focuses on advanced techniques to prepare the student for employment and the changes in current industry standards. Instruction is provided in specialized classes or supervised salon (clinical) setting. Includes student preparation for the State Board Licensing Examination pertaining to permanent waves and chemical relaxers.

COS 2050 - Management, Ethics, Interpersonal Skills & Salesmanship

Credit(s): 1
Lecture Hour(s): 1
Formerly COS 250 Emphasizes the importance of salon management and the knowledge and skills necessary to build a successful business. Focuses on the importance of interpersonal skills and basic techniques in salesmanship and customer services. Integrates job readiness skills and professional ethics.

EST 1010 - Introduction to Facials and Skin Care

Credit(s): 3
Vocational Clinic Hour(s): 6

Formerly EST 110 Provides a basic understanding of massage manipulations when providing facials, the study of skin in both theory and practical applications, and benefits derived from proper facial and good skin care routines. Training is conducted in a classroom or lab setting using mannequins or models.

EST 1011 - Intermediate Facials & Skin Care

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): EST 1010.

Formerly EST 111 Covers theory and practical application pertaining to anatomy, skin disorders, skin types and facial shapes. Students help patrons to select the proper skin care treatment. Practical and theory application can be done in specialized classes or supervised salon (clinical) setting using models or customer service.

EST 2010 - Advanced Massage & Skin Care

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): EST 1011.
Formerly EST 210 Provides the student with advanced techniques in massage, skin care and lash/brow tinting. Theory and practical procedures ready the student for employment. Instruction is provided in specialized classes or in a supervised salon (clinical) setting. Student preparation for State Board Licensing Examination.

EST 2011 - Facial Make-up

Credit(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): EST 1010.
Formerly EST 211 Provides instruction on cosmetics and their functions. The importance of color theory, facial types and skin tones as they relate to facial makeup. Instruction from the basic makeup application to the corrective makeup procedure is taught. Disinfection and sanitation is taught as it pertains to all aspects of makeup.

EST 2012 - Hair Removal

Credit(s): 3
Vocational Clinic Hour(s): 6

Prerequisite(s): EST 1010.
Formerly EST 212 Provides in-depth study and practice of hair removal and the practice of patron protection and safety. Training for general waxing and body waxing procedures are provided. Demonstration of disinfection and sanitation as it pertains to Colorado rules and regulations will be practiced.

NAT 1008 - Introduction of Manicuring/Pedicures/Artificial Nails

Credit(s): 3
Vocational Clinic Hour(s): 6

Formerly NAT 108 Provides a basic introduction into the proper use of implements used in manicures, pedicures and artificial nails. Theory and practical application of proper set-up, safety, sanitation, nail shapes, anatomy, product knowledge and terminology dealing with manicures, pedicures and artificial nails is covered. Training is done in a classroom or lab setting using models or other techniques.

NAT 1058 - Intermediate Manicuring/Pedicures/Artificial Nails

Credit(s): 2
Vocational Clinic Hour(s): 4

Formerly NAT 158 Presents theory and practical application dealing with different types of manicures, pedicures and massage techniques. Theory and practical application of procedures, products, nail shapes and maintenance of artificial

nails is covered. Students learn to recognize different nail disorders and their proper treatment. Training is done in a specialized class or in supervised salon (clinical) setting, using models or customer service.

NAT 1059 - Intermediate Manicuring/Pedicures/Artificial Nails II

Credit(s): 2
Vocational Clinic Hour(s): 4

Formerly NAT 159 Presents theory and practical application dealing with different types of manicures, pedicures and massage techniques. Theory and practical application of procedures, products, nail shapes and maintenance of artificial nails is covered. Students learn to recognize different nail disorders and their proper treatment. Training is done in a specialized class or in supervised salon (clinical) setting, using models or customer service.

NAT 2008 - Advanced Manicuring/Pedicures/Artificial Nails

Credit(s): 4
Vocational Clinic Hour(s): 8

Formerly NAT 208 Provides advanced theory and practical application of manicures, pedicures and nail art techniques. Theory and advanced practical techniques of silk wraps, tip overlays, acrylics and product knowledge to ready the student for employment is presented. Instruction is provided in specialized classes or in supervised salon (clinical) setting using models or customer service. Student preparation for state board licensing examination pertaining to manicures and pedicures is covered.

Elective

Art and Humanities (3 Credits)

Recommended:

ART 1110 - Art Appreciation: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly ART 110 Introduces the cultural significance of the visual arts, including media, processes, techniques, traditions, and terminology. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

ART 1205 - Drawing for the Graphic Novel

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 122 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 1002 - Visual Concepts 2-D Design

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 131 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

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 132 Introduces the fundamentals of three-dimensional design, form, and space. The course applies the elements and principles of design to three-dimensional problems.

ART 1604 - Jewelry and Metalwork I

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 133 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 1401 - Digital Photography I

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 139 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.

or

ART 1703 - Ceramics I

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 161 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.

Cyber Defense Certificate

CIP 11.0101

See list of Department Chairs on the Personnel page.

Career Opportunities

The CIS program prepares you for careers in computer science, computer networking and electronic commerce. The AAS Degree with an emphasis in local area networking prepares you to work as a network technician on small and large networks. You may also administer smaller networks as a System Administrator. The AGS Degree with an

emphasis in Computer Information Systems prepares you to transfer to a university to continue studies in Computer Science or Computer Information Systems.

Program Description

The CIS program provides training in basic technical computer and networking skills. You will study computer networking, programming and database technologies along with classes that teach the technical aspects of the Internet and data communications. Note: Students interested in transferring to a baccalaureate program in Computer Information Systems should refer to the Transfer Degree section.

Total Credits: 28

Certificate Requirements

CSC 1020 - Problem Solving with Java

Credit(s): 3
Lecture Hour(s): 3
Formerly CSC 120 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 1019 - Introduction to Programming

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CSC 119 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.

CNG 1020 - A+ Certification Preparation

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Formerly CNG 120 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 1024 - Networking I: Network +

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 124 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 1031 - Principles of Information Assurance

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 131 Delivers a comprehensive overview of network security, including general security concepts. Communication Security is studied, including remote access, email, 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

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 133 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 1032 - Network Security Fundamentals

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 132 Examines the field of information security to prepare information systems students for their future roles as business decision-makers. The course presents a balance of the managerial and the technical aspects of information security. The concepts covered in this course should be helpful for students working towards the Certified Information Systems Security Professional (CISSP) certification.

CNG 1036 - Guide to Disaster Recovery

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Department Chair Approval.
Formerly CNG 136 Presents methods to identify vulnerabilities and take appropriate countermeasures to prevent and mitigate failure risks for an organization. It will take an enterprise-wide approach to developing a disaster recovery plan.

CIS 2020 - Fundamentals of Unix

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 220 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

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly CIS 223 Introduces students to the concepts of installing, configuring, and managing the Linux operating system. Topics covered include working with various desktops, use of filesystem commands, and management of user and group permissions.

CNG 2024 - Microsoft Windows Wireless Network

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Prerequisite(s): CNG 1004 or instructor approval.
Formerly CNG 224 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 2056 - Vulnerability Assessment I

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Prerequisite(s): CIS 2020, CNG 1024, and CNG 1032.
Formerly CNG 256 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.

Digital Video Editing Certificate

CIP 09.0702

See list of Department Chairs on the Personnel page.

Career Opportunities

Careers in Media Communications are in demand and PCC offers an affordable way for students to begin their education. Some of the exciting career options within this field include: Graphic Designers; Web Developers; Broadcast Technicians; Film Video Editors; and Advertising & Promotion Managers.

Program Description

The Media Communications program teaches students to think critically and develop skills in Web Design, Graphic Design, Advertising, Videography, News Writing, and TV-Radio Production. Courses provide a solid foundation in these areas through a combination of lecture and hands on applications. There are multiple labs with state of the art equipment and software for your area of emphasis. The Media Communications program provides a high technical skill attainment in this changing field of communication. Students have multiple options to pursue. The AAS degrees with emphases in Graphic Design and Web Design offer advanced technical skills in these areas. Certificates provide basic

skill sets to enhance an existing degree or occupation. The AGS degree provides a transfer option to a four year university. If interested in this option, please refer to the Transferring Credits section of the catalog.

Total Credits: 18

Certificate Requirements

MGD 1002 - Introduction to Multimedia

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly MGD 102 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 1043 - Motion Graphic Design I: (Software)

Credit(s): 3
Vocational Lab Hour(s): 4.5
Formerly MGD 143 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 1064 - Digital Video Editing I

Credit(s): 3
Vocational Lab Hour(s): 4.5
Formerly MGD 164 Introduces to digital nonlinear 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 2064 - Digital Video Editing II

Credit(s): 3
Vocational Lab Hour(s): 4.5
Prerequisite(s): MGD 1064
Formerly MGD 264 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.

RTV 1002 - Beginning Television

Credit(s): 3
Vocational Lab Hour(s): 4.5
Formerly RTV 102 Focuses on principles and techniques of television production in theory and the approach of studio and production. Emphasizes producing television programs, beginning with a concept through script to actual studio production, pre-production and post-production.

RTV 1005 - Basic Video Production

Credit(s): 3
Vocational Lab Hour(s): 4.5
Prerequisite(s): RTV 1002.
Formerly RTV 208 Introduces basic videotape production and editing on linear and nonlinear 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 nonlinear editors.

Early Childhood Director Certificate

CIP 13.1210

See list of Department Chairs on the Personnel page.

Career Opportunities

The ECE program prepares you for a career in teaching children (birth to age 5). The program can also prepare you to become an Early Childhood Teacher or director in the field of Early Childhood Education.

Program Description

This program prepares you to become a productive, caring and responsible teacher. Classes emphasize child development skills in the areas of language, social, emotional, cognitive and physical development. Classes also focus on cultural diversity among children. You will become familiar with theories concerning child development and ECE, and you will participate in many group discussions and hands-on activities that you can apply in the preschool classroom. You will learn from qualified faculty members who believe in the success of each ECE student.

Program Requirements

Entrance Requirements:

You should demonstrate an interest in the care and well-being of young children. You must also be free from evidence of illness – mental and physical – and free from personal conduct which may be injurious to children as stated in the Colorado Rules and Regulations for Child Care Centers, section 7.702.51.

You must meet with an ECE faculty advisor before registering for ECE courses.

Note: Students interested in transferring to a baccalaureate program in Early Childhood Education or Elementary Education should refer to the Transfer Degree section.

Total Credits: 30

Certificate Requirements

ECE 1011 - Introduction to Early Childhood Education

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 101 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 1045 - Introduction to Early Childhood Techniques

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly ECE 102 Focuses on a classroom Seminar and placement in a child care setting. The supervised placement provides the student with the opportunity to observe children, practice appropriate interactions and develop effective guidance and management techniques. Addresses ages birth through 8 years.

ECE 1031 - Guidance Strategies for Young Children

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 103 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 1111 - Infant and Toddler Theory and Practice

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 111 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. Focuses on birth through age 3.

ECE 2051 - Nutrition, Health and Safety

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 205 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 2621 - ECE Curriculum Development: Methods and Techniques

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of ECE 1011, ECE 1045, and ECE 1031.
Formerly ECE 220 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 2381 - Ece Child Growth and Development

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of ECE 1011 and ECE 1045.
Formerly ECE 238 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 and Education Programs

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of ECE 1011, ECE 1045, ECE 1031, ECE 2621, and ECE 2381.
Formerly ECE 240 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

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of ECE 1011, ECE 1045, ECE 1031, ECE 2621, and ECE 2381.
Formerly ECE 241 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

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 260 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.

Early Childhood Teacher Certificate

CIP 13.1210

See list of Department Chairs on the Personnel page.

Career Opportunities

The ECE program prepares you for a career in teaching children (birth to age 5). The program can also prepare you to become an Early Childhood Teacher or director in the field of Early Childhood Education.

Program Description

This program prepares you to become a productive, caring and responsible teacher. Classes emphasize child development skills in the areas of language, social, emotional, cognitive and physical development. Classes also focus on cultural diversity among children. You will become familiar with theories concerning child development and ECE, and you will participate in many group discussions and hands-on activities that you can apply in the preschool classroom. You will learn from qualified faculty members who believe in the success of each ECE student.

Program Requirements

Entrance Requirements:

You should demonstrate an interest in the care and well-being of young children. You must also be free from evidence of illness – mental and physical – and free from personal conduct which may be injurious to children as stated in the Colorado Rules and Regulations for Child Care Centers, section 7.702.51.

You must meet with an ECE faculty advisor before registering for ECE courses.

Note: Students interested in transferring to a baccalaureate program in Early Childhood Education or Elementary Education should refer to the Transfer Degree section.

Total Credits: 18

Certificate Requirements

ECE 1011 - Introduction to Early Childhood Education

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 101 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 1045 - Introduction to Early Childhood Techniques

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly ECE 102 Focuses on a classroom Seminar and placement in a child care setting. The supervised placement provides the student with the opportunity to observe children, practice appropriate interactions and develop effective guidance and management techniques. Addresses ages birth through 8 years.

ECE 1031 - Guidance Strategies for Young Children

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 103 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 1111 - Infant and Toddler Theory and Practice

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 111 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. Focuses on birth through age 3.

ECE 2621 - ECE Curriculum Development: Methods and Techniques

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of ECE 1011, ECE 1045, and ECE 1031.
Formerly ECE 220 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 2381 - Ece Child Growth and Development

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of ECE 1011 and ECE 1045.
Formerly ECE 238 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.

Electromechanical Technology Certificate

CIP 15.0303

See list of Department Chairs on the Personnel page.

Career Opportunities

The AAS degree in Industrial Electronics Technology prepares you for a career as an electronics technician, an electromechanical technician, a semiconductor manufacturing technician or an electromechanical field service technician.

Program Description

This program develops essential skills for maintaining the complex electromechanical systems found in modern automated manufacturing facilities. After completing a core of courses in math, physics, fundamental analog and digital electronics, robotics and programmable logic controllers, you will branch off into one of two optional tracks. The electromechanical option emphasizes a broader range of skills, including print reading, motors and controls, and mechanical components. In addition to the two AAS degree options, several certificate options are also available.

Program Requirements

Entrance Requirements:

You should have good basic reading, language and math competencies. High school algebra and physics are recommended but not required. Refresher classes are available.

Total Credits: 29

Certificate Requirements

ELT 1206 - Fundamentals of DC/AC

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Corequisite(s): ELT 1207.
Formerly ELT 106 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 - Industrial Electronics

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Corequisite(s): ELT 1206.
Formerly ELT 107 Provides a basic knowledge of generators, motors and the solid state devices and digital techniques used for industrial control applications.

ELT 2252 - Motors and Controls

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly ELT 252 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. 68 contact hours.

ELT 2357 - Sensors and Transducers

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Prerequisite(s): ELT 1001 , ELT 1206.
Formerly ELT 257 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. 68 contact hours.

ELT 2358 - Programmable Logic Controllers

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly ELT 258 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 2089 - Capstone: Automated Systems

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly ELT 289 Enables the student to plan, construct and evaluate a modified flexible manufacturing system using a programmable logic controller, industrial computer, robot and work cell peripherals. Addresses safety and emergency control procedures throughout this course.

MAC 2056 - Industrial Components

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly MAC 256 Covers common mechanical components used on industrial equipment. It is designed to assist maintenance staff in removal, installation and maintenance of plant equipment. It includes safety, fits, threads, bearings, fasteners, and hardware, lubrication, assembly and the use of hand tools.

MTE 2320 - Fluid Power Control

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly MTE 238 Introduces fluid power application in industry and various types of industrial control devices used in modern manufacturing equipment and machinery. Enables the student to produce the graphics required to incorporate these items into a mechanical design.

WEL 1002 - Oxy-fuel Joining Processes

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.5
Formerly WEL 102 Covers Oxy-fuel joining operations.

or

WEL 1024 - Gas Tungsten Arc Welding I

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.5
Formerly WEL 124 Covers Gas Tungsten Arc Welding (GTAW) operations in various positions and joint designs.

EMT Enhanced Certificate

See list of Department Chairs on the Personnel page.

Career Opportunities

The EMS program prepares you for a career in the pre-hospital health care field as an emergency medical care provider at the EMT, EMT-Intermediate or Paramedic level. Career opportunities include providing patient care while working for an ambulance agency, fire service or hospital emergency room. Additional opportunities are in such areas as tactical EMS, critical care transport and ski patrol. If you graduate with an AAS degree you have additional opportunities in administration and management in the pre-hospital field.

Program Requirements

Entrance Requirements:

To enroll in all EMS programs, you msut be at least 18 years of age, have all current immunizations, pass a background check and a drug screen and be able to meet the requirements of the Functional EMS Job Description.

Total Credits: 18

Prerequisite Courses for Program Admission Credits: 18

Student must have a current Health Care Professional CPR card, successful completions of CCR 092, qualfiying assessment scores

Certificate Requirements

First Semester (12 credits)

EMS 1021 - EMT Fundamentals

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly EMS 121 Introduces the Emergency Medical Technician (EMT) student to prehospital 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

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Prerequisite(s): EMS 1021. EMS 1070.
Formerly EMS 122 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

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): EMS 1021.
Formerly EMS 123 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

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): EMS 1021.
Formerly EMS 124 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 1070 - EMT Clinical

Credit(s): 1
Vocational Lab Hour(s): 1.50
Formerly EMS 170 Provides the EMT student with the clinical experience required for initial certification and some renewal processes.

Second Semester (6 credits)

HPR 1050 - Basic EKG Interpretation

Credit(s): 2
Lecture Hour(s): 2
Formerly HPR 190 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.

EMS 1132 - EMS Intravenous / Intraosseous Therapy

Credit(s): 2
Lecture Hour(s): .25
Vocational Lab Hour(s): 1.9
Vocational Clinic Hour(s): 1

Prerequisite(s): Current Colorado Certification as EMT or Department Chair Approval
Formerly EMS 132 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 1080 - EMT Clinical Internship

Credit(s): 2
Internship Hour(s): 6
Formerly EMS 180 Provides the Emergency Medical Technician (EMT) with a supervised clinical learning experience that goes beyond the initial EMT requirements for the State of Colorado Department of Health. Enables the student to work with an assigned preceptor for 90 hours of clinical experience to develop an understanding of the role and responsibilities of the EMT-Basic.

Esthetician Certificate

CIP 12.0409

See list of Department Chairs on the Personnel page.

Career Opportunities

The Cosmetology program prepares students for careers in cosmetology, hairstyling, esthetics (facial care) and manicure (nail care). Students will receive the specialized training necessary to be prepared for a successful career with limitless opportunities for both men and women. Students learn the skills to keep pace with the fashion world and stand ready to meet the constantly changing demands of one of today's largest-growing service industries. Those opportunities can provide both part-time and full-time employment in specialty areas.

Program Description

The Cosmetology program teaches students job entry skills, customer communication and shop procedures. Instruction includes professional ethics, bacteriology, shampoo and rinses, color theory, hair coloring techniques, permanent waving, hairstyling, hair cutting, manicures, pedicures, facials, makeup, OSHA regulations, sanitation, safety and Colorado laws. Clinical practice involves working on the public under supervision and parallels, as close as possible, actual shop procedures in order to prepare students for working in the field.

- Esthetician certificate – This certificate program provides training in facial care.

Total Credits: 20

Certificate Requirements

Core Requirements (20 Credits)

COS 1050 - Laws, Rules and Regulations

Credit(s): 1
Lecture Hour(s): 1
Formerly COS 150 Provides instruction on the laws, rules and regulations and how they govern the cosmetology and barber industry, as well as the effects they have on the student, licensed individual, salons and school owners.

COS 2050 - Management, Ethics, Interpersonal Skills & Salesmanship

Credit(s): 1
Lecture Hour(s): 1
Formerly COS 250 Emphasizes the importance of salon management and the knowledge and skills necessary to build a successful business. Focuses on the importance of interpersonal skills and basic techniques in salesmanship and customer services. Integrates job readiness skills and professional ethics.

EST 1001 - Introduction to Sterilization, Sanitation & Safety

Credit(s): 2
Vocational Clinic Hour(s): 4

Formerly EST 101 Introduces the various methods of sterilization, sanitation and safety as used today in the industry. Classroom study of bacteriology and the terminology dealing with sterilization and sanitation.

EST 1060 - Introduction to Disinfection, Sanitation & Safety

Credit(s): 2
Vocational Clinic Hour(s): 4

Formerly EST 160 Introduces the various methods of disinfection, sanitation and safety as used today in the industry. Classroom study of bacteriology and the terminology dealing with disinfection, sanitation and safety.

EST 1061 - Intermediate Disinfection, Sanitation & Safety

Credit(s): 3
Vocational Clinic Hour(s): 6

Formerly EST 161 Presents theory and the daily utilization and practice of the proper methods of disinfection, sanitation, and safety. Procedures as related to all phases of the industry. Training is provided in a supervised (clinical) setting.

EST 1010 - Introduction to Facials and Skin Care

Credit(s): 3
Vocational Clinic Hour(s): 6

Formerly EST 110 Provides a basic understanding of massage manipulations when providing facials, the study of skin in both theory and practical applications, and benefits derived from proper facial and good skin care routines. Training is conducted in a classroom or lab setting using mannequins or models.

EST 1011 - Intermediate Facials & Skin Care

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): EST 1010.
Formerly EST 111 Covers theory and practical application pertaining to anatomy, skin disorders, skin types and facial shapes. Students help patrons to select the proper skin care treatment. Practical and theory application can be done in specialized classes or supervised salon (clinical) setting using models or customer service.

EST 2010 - Advanced Massage & Skin Care

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): EST 1011.
Formerly EST 210 Provides the student with advanced techniques in massage, skin care and lash/brow tinting. Theory and practical procedures ready the student for employment. Instruction is provided in specialized classes or in a supervised salon (clinical) setting. Student preparation for State Board Licensing Examination.

EST 2011 - Facial Make-up

Credit(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): EST 1010.
Formerly EST 211 Provides instruction on cosmetics and their functions. The importance of color theory, facial types and skin tones as they relate to facial makeup. Instruction from the basic makeup application to the corrective makeup procedure is taught. Disinfection and sanitation is taught as it pertains to all aspects of makeup.

EST 2012 - Hair Removal

Credit(s): 3
Vocational Clinic Hour(s): 6

Prerequisite(s): EST 1010.
Formerly EST 212 Provides in-depth study and practice of hair removal and the practice of patron protection and safety. Training for general waxing and body waxing procedures are provided. Demonstration of disinfection and sanitation as it pertains to Colorado rules and regulations will be practiced.

First Year Nursing - PN Certificate Option

CIP 51.3801

See list of Department Chairs on the Personnel page.

Total Credits: 54

Certificate Requirements

General Education Requirements (18 Credits)

AAA 1009 - Advanced Academic Achievement

Credit(s): 3
Lecture Hour(s): 3
Formerly AAA 109 Examines theories and practices associated with successful learning to enhance college success. Recommended for new and returning students, this course study areas including education and career planning, effective communication, personal management, critical and creative thinking, development of community and awareness of diversity, leadership, and techniques for successful academic performance.

BIO 1111 - General College Biology I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): ENG 1021
Formerly BIO 111 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.

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

PSY 2440 - Human Growth and Development: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 235 Examines human development from conception through death, emphasizing physical, cognitive, emotional and psychosocial factors. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

BIO 2101 - Human Anatomy and Physiology I with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 201 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, nervous and endocrine systems. Includes a mandatory hands-on laboratory experience covering experimentation, microscopy, observations and dissection. This is the first semester of a two-semester sequence.

BIO 2102 - Human Anatomy and Physiology II with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.

Formerly BIO 202 Focuses on the integrated study of the human body and the histology, anatomy, and physiology of the following systems and topics: cardiovascular, hematology, lymphatic and immune, urinary, fluid and electrolyte control, digestive, nutrition, respiratory, reproductive and development. Includes a mandatory hands-on laboratory experience involving experimentation, microscopy, observations and dissection. This is the second semester of a two-semester sequence.

BIO 2116 - Human Pathophysiology

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): BIO 2101, BIO 2102
Formerly BIO 216 Focuses on the alterations in physiological, cellular and biochemical processes, the associated homeostatic response, and the manifestations of disease. Prior knowledge of cellular biology, anatomy and physiology is essential for the study of pathophysiology.

Core Curriculum Requirements – 1st year (33 Credits)

Semester 1 – Fall

NUR 1009 - Fundamentals of Nursing

Credit(s): 6
Lecture Hour(s): 2
Vocational Lab Hour(s): 6
Vocational Clinic Hour(s): 6

Prerequisite(s): Admission to Nursing or Psychiatric Technician programs.
Corequisite(s): Nursing: NUR 1012, HPR 1010, MAT 1120. Psych Tech: NUR 1012.
Formerly NUR 109 Introduces the fundamental concepts necessary for safe, patient-centered nursing care to a diverse patient population while integrating legal and ethical responsibilities of the nurse. Introduces caring, critical thinking, the nursing process, quality improvement and communication used when interacting with patients and members of the interdisciplinary team, and relates evidence-based nursing practice. Application of knowledge and skills occurs in the nursing skills laboratory and a variety of clinical settings providing care to stable patients with common health alterations.

NUR 1012 - Basic Concepts of Pharmacology

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Admission to Nursing or Psychiatric Technician programs.
Corequisite(s): Nursing: NUR 1009, HPR 1010, MAT 1120; Psych Tech: NUR 1009.
Formerly NUR 112 Overview of the basic principles of pharmacology including major drug classifications and prototypes of commonly used medications. Principles of medication administration include aspects of best practice for safe, quality, patient-centered care. Central points include safety, quality improvement factors in the administration of medications, patient teaching and variations encountered when administering medications to diverse patient populations across the lifespan.

- NUR 175 - ST - Introduction to Nursing **Credit(s): 3**

Semester 2 – Spring

NUR 1006 - Med-Surg Nursing Concepts

Credit(s): 7
Lecture Hour(s): 3.40
Vocational Lab Hour(s): 0.90
Vocational Clinic Hour(s): 9.90

Prerequisite(s): Admission to Nursing Program and completion of preceding required program course work or permission of the program director.
Corequisite(s): NUR 1050 or permission of the program director.
Formerly NUR 106 NUR106 is the first medical/surgical nursing course. Building on NUR 1009, this course provides for the acquisition of basic medical/surgical nursing theory, as well as application of mental health concepts, communication, collaboration, caring, and critical thinking/clinical reasoning necessary for safe, patient-centered care to a developmentally and culturally diverse adult patient population experiencing various medical/surgical interventions. Incorporates evidence-based practice, quality improvement, professional standards, and legal and ethical responsibilities of the nurse. Application of knowledge and skills occurs in the nursing skills laboratory and a variety of clinical settings.

NUR 1050 - Maternal-Child Nursing

Credit(s): 6
Lecture Hour(s): 3.30
Vocational Lab Hour(s): 2.10
Vocational Clinic Hour(s): 6

Prerequisite(s): Admission to Nursing program and completion of preceding required program course work or permission of the program director.
Corequisite(s): NUR 1006 or permission of the program director.
Formerly NUR 150 Nursing 150 provides for the acquisition of maternal/child nursing theory, as well as application of mental health concepts, communication, collaboration, caring, and critical thinking/clinical reasoning necessary for safe, family-centered nursing care to childbearing families and children that is developmentally and culturally appropriate. Incorporates evidence-based practice, standards of practice, quality improvement, and legal and ethical responsibilities of the nurse. Application of knowledge and skills occurs in the nursing skills laboratory and in a variety of maternal/child and pediatric clinical settings.

Semester Summer (Optional for Certificate)

NUR 1069 - Transition into Practical Nursing

Credit(s): 4
Lecture Hour(s): 2
Vocational Clinic Hour(s): 6

Prerequisite(s): Admission to Nursing program and completion of preceding required program course work or program director permission.
Formerly NUR 169 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.

Fitter or Combination Welder Certificate

CIP 48.0508

See list of Department Chairs on the Personnel page.

Program Description

Welders must be highly skilled and knowledgeable in a variety of welding processes to meet the challenges of advanced technology and new materials. Welding is not just a trade; it's a tool for many trades requiring a high level of training and technical knowledge. The Welding Technology program helps students develop skills through classroom studies and hands-on experience under close supervised instruction. Students learn about structural steel fabrication, layout work and pipe welding following detailed blueprints.

Total Credits: 20

Certificate Requirements

Core Requirements (20 Credits)

WEL 1024 - Gas Tungsten Arc Welding I

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.5
Formerly WEL 124 Covers Gas Tungsten Arc Welding (GTAW) operations in various positions and joint designs.

WEL 1025 - Introduction to Gas Metal Arc Welding

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1024.
Formerly WEL 125 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 2024 - Gas Tungsten Arc Welding II

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.5
Prerequisite(s): WEL 1024, WEL 1025.
Formerly WEL 224 Covers Gas Tungsten Arc Welding (GTAW) operations utilizing a variety of base metals and advanced joint designs.

WEL 2025 - Advanced Gas Metal Arc Welding

Credit(s): 4
Lecture Hour(s): 1

Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1024, WEL 1025.
Formerly WEL 225 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 2050 - Layout and Fabrication

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1002.
Formerly WEL 250 Develops welding and associated skills in metal fabrication.

Forensic Computing Certificate

CIP 11.0101

See list of Department Chairs on the Personnel page.

Career Opportunities

The CIS program prepares you for careers in computer science, computer networking and electronic commerce. The AAS Degree with an emphasis in local area networking prepares you to work as a network technician on small and large networks. You may also administer smaller networks as a System Administrator. The AGS Degree with an emphasis in Computer Information Systems prepares you to transfer to a university to continue studies in Computer Science or Computer Information Systems.

Program Description

The CIS program provides training in basic technical computer and networking skills. You will study computer networking, programming and database technologies along with classes that teach the technical aspects of the Internet and data communications. Note: Students interested in transferring to a baccalaureate program in Computer Information Systems should refer to the Transfer Degree section.

Total Credits: 23

Certificate Requirements

CNG 1024 - Networking I: Network +

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 124 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 1032 - Network Security Fundamentals

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 132 Examines the field of information security to prepare information systems students for their future roles as business decision-makers. The course presents a balance of the managerial and the technical aspects of information security. The concepts covered in this course should be helpful for students working towards the Certified Information Systems Security Professional (CISSP) certification.

CNG 1033 - Network Security: Fire Walls and Intrusion Detection and Network Security

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 133 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 Disaster Recovery

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Department Chair Approval.
Formerly CNG 136 Presents methods to identify vulnerabilities and take appropriate countermeasures to prevent and mitigate failure risks for an organization. It will take an enterprise-wide approach to developing a disaster recovery plan.

CNG 2012 - Configuring Windows Server

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Formerly CNG 212 Provides students with the knowledge and skills that are required to install and configure a Microsoft Windows Server. This course helps prepare students for a MTA (Microsoft Technology Associate) and/or MCSA (Microsoft Certified Solutions Associate) exams.

CNG 2024 - Microsoft Windows Wireless Network

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Prerequisite(s): CNG 1004 or instructor approval.
Formerly CNG 224 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 2058 - Digital Forensics

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): CNG 1024.
Corequisite(s): CIS 2020.
Formerly CNG 258 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.

General Machining Technology Certificate

CIP 48.0503

See list of Department Chairs on the Personnel page.

This is a NIMS Accredited program

Program Description

Students will start their career in Machining Technology by building a strong foundation in machining by learning to use various tools, such as hand tools, manual machines and grinding tools. Students develop introductory skills in print reading. They are also taught how to use CAD CAM software, which enables students to create two-dimensional drawings and gain experience with computer-aided manufacturer software. Learning G&M Code for manual CNC (Computer Numerical Control) programming is a focus, as well as setup and operations of CNC equipment.

Work experience may be converted to college credit through credit-by-portfolio or credit-by-challenge.

Total Credits: 35

Certificate Requirements

MAC 1000 - Machine Shop Safety

Credit(s): 1
Lecture Hour(s): 1
Formerly MAC 100 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 1002 - Print Reading for Machinists

Credit(s): 3
Lecture Hour(s): 3
Formerly MAC 102 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 2043 - Mastercam

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Formerly MAC 243 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 1005 - Introduction to Machining Technology

Credit(s): 4
Lecture Hour(s): 1.50
Vocational Lab Hour(s): 3.75
Formerly MAC 105 Introduces the student to the changing era of machining technology, emphasizing terminology, referencing and applications related to manufacturing environments. The fundamental use of bench tools, layout procedures, materials, precision measuring tools, machining processes, drilling and cut-off machines and other machining/manufacturing processes will be stressed. Skill competencies and standards will be identified. Use of the Machinery's Handbook will be strictly required and particular competencies may require performance evaluations.

MAC 1030 - Conventional Lathe Operations

Credit(s): 4
Lecture Hour(s): 1.50
Vocational Lab Hour(s): 3.75
Formerly MAC 130 Includes calculation of speeds and feeds on various materials, identification and application of various work holding techniques, tool forming, advanced machining practices and applications, and spindle tooling. Students will learn how to calculate and turn tapers using the compound slide or taper attachment, offset work on a four jaw chuck, turning between centers, boring, grooving, finishing, single point threading, knurling, tool grinding, drilling operations, and reaming.

MAC 1031 - Milling Machines & Operations

Credit(s): 4
Lecture Hour(s): 1.50
Vocational Lab Hour(s): 3.75
Formerly MAC 131 Introduces vertical milling machines. The operations and applications will consist of using the machine controls, speeds and feeds, spindles, arbors and adapters cutting tools, tool holders, conventional and climb milling applications simple indexing, fixture alignments, work holding methods. Students will become familiar with set-up applications considering offset boring operations, face milling, plain milling, and precision drilling applications. Students will be required to produce parts to a tolerance of +/- .004in. and perform competencies set by manufacturing standards.

MAC 2050 - Advanced Inspection Techniques

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly MAC 250 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.

MAC 2003 - Introduction to CNC Operations

Credit(s): 6
Lecture Hour(s): 2
Vocational Lab Hour(s): 6
Formerly MAC 203 Introduces basic writing and editing of CNC programs. G&M codes, math, speeds feeds, production processes including basic process controls, simple fixturing, and documentation associated with manufacturing will be covered.

MAC 2008 - CNC Operations II

Credit(s): 6
Lecture Hour(s): 2
Vocational Lab Hour(s): 6
Formerly MAC 208 Further develops skills in writing and editing advanced CNC programs. G&M codes, math, speeds deeds, production processes including multi-part, process controls, fixturing, and documentation associated with manufacturing will be covered.

Hairstylist Certificate

CIP 12.0407

See list of Department Chairs on the Personnel page.

Career Opportunities

The Cosmetology program prepares students for careers in cosmetology, hairstyling, esthetics (facial care) and manicure (nail care). Students will receive the specialized training necessary to be prepared for a successful career with limitless opportunities for both men and women. Students learn the skills to keep pace with the fashion world and stand ready to meet the constantly changing demands of one of today's largest-growing service industries. Those opportunities can provide both part-time and full-time employment in specialty areas.

Program Description

The Cosmetology program teaches students job entry skills, customer communication and shop procedures. Instruction includes professional ethics, bacteriology, shampoo and rinses, color theory, hair coloring techniques, permanent waving, hairstyling, hair cutting, manicures, pedicures, facials, makeup, OSHA regulations, sanitation, safety and Colorado laws. Clinical practice involves working on the public under supervision and parallels, as close as possible, actual shop procedures in order to prepare students for working in the field.

- Hairstylist certificate – This certificate program provides training in hair care. Instruction is provided in hair cutting, hair styling, hair coloring and chemical textures services.

Total Credits: 40

Certificate Requirements

Core Requirements (40 Credits)

COS 1003 - Shampoo/Rinses/Conditioners I

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly COS 103 Introduces various types of scalp treatments and shampoos. Enables student to recognize and treat disorders of hair and scalp. Covers product knowledge and proper massage techniques to help control disorders and to cleanse the hair and scalp. Includes terminology dealing with hair structure, scalp and hair disorders. Provides training in a lab or classroom setting.

COS 1010 - Introduction to Hair Coloring

Credit(s): 2
Vocational Clinic Hour(s): 4

Formerly COS 110 Provides theory pertaining to the law of color, theory of color, chemistry of color, product knowledge and analysis of hair and scalp. Covers basic techniques and procedures for the application of hair coloring.

COS 1011 - Intermediate: Hair Coloring

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 1010.
Formerly COS 111 Focuses on theory and practical application of color products, formulations of color, level and shades of color. Examines techniques in a specialized class or in a supervised salon setting.

COS 1020 - Introduction to Hair Cutting

Credit(s): 2
Vocational Clinic Hour(s): 4

Formerly COS 120 Introduction to the theory relevant to patron protection, angles, elevations and the analysis of hair textures as related to hair cutting. Covers the proper use and care of hair-cutting implements. Focuses on basic hair-cutting techniques using all cutting implements, disinfection and sanitation procedures as they relate to haircutting.

COS 1021 - Intermediate I: Haircutting

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 120.
Formerly COS 121 Focuses on theory related to facial shapes, head and body forms to determine the clients appropriate haircut. Incorporates practical applications of hair cutting techniques in specialized classes or in the supervised salon (clinical setting).

COS 1030 - Introduction to Hair Styling

Credit(s): 2
Vocational Clinic Hour(s): 4

Formerly COS 130 Combines theory with the practical application of roller placement, shaping, pin curls, finger waves, air forming iron curling, soft pressing and hard pressing.

COS 1031 - Intermediate I: Hair Styling

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 1030.
Formerly COS 131 Focuses on the accepted methods of styling hair, air forming roller sets, finger waves pin curls braiding and hair pressing.

COS 1040 - Introduction to Chemical Texture

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly COS 140 Introduces a combination of theory and practice focusing on the analysis of hair and scalp, proper equipment and product knowledge. Includes basic techniques in permanent waving and chemical relaxing. Provides training in a classroom or lab setting on mannequins or live models.

COS 1041 - Intermediate I: Chemical Texture

Credit(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): COS 1040.
Formerly COS 141 Emphasizes theory and practical application of permanent waves and chemical relaxers in specialized classes or a supervised salon setting. Enables the student to practice different wrapping techniques required by trend styles.

COS 1050 - Laws, Rules and Regulations

Credit(s): 1
Lecture Hour(s): 1
Formerly COS 150 Provides instruction on the laws, rules and regulations and how they govern the cosmetology and barber industry, as well as the effects they have on the student, licensed individual, salons and school owners.

COS 1060 - Introduction to Disinfection, Sanitation & Safety

Credit(s): 2
Vocational Clinic Hour(s): 4

Formerly COS 160 Introduces the various methods of disinfection, sanitation and safety as used in the cosmetology industry. Includes classroom study of bacteriology and the terminology dealing with cosmetology.

COS 1061 - Intermediate I: Disinfection, Sanitation & Safety

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly COS 161 Focuses on the theory and daily practice of proper methods of disinfection, sanitation and safety procedures as related to all phases of cosmetology. Covers terminology and training of disinfection, sanitation and safety procedures. Also includes customer service in a supervised salon (clinical) setting or specialized class.

COS 2003 - Shampoo/Rinses/Conditioners II

Credit(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): COS 1003.
Formerly COS 203 Provides theory and practical training in shampoos, rinses and conditioners. Examines advanced techniques to prepare the student for employment. Includes preparation for the State Board Licensing Examination in shampoos, rinses and conditioners.

COS 2010 - Intermediate II: Hair Coloring

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 1010.
Formerly COS 210 Provides continued instruction in the theory and practical application of color products, formulations of color, level and shades of color. Enables students to practice techniques in a specialized class or in a supervised salon setting.

COS 2011 - Advanced Hair Coloring

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 1011.
Formerly COS 211 Provides continued instruction on advanced theory and practical techniques in hair coloring. Focuses on the recognition of color problems and color correction procedures. Covers advanced techniques and product knowledge to prepare the student for employment. Prepares the student for the State Board Licensing Examination pertaining to hair coloring.

COS 2020 - Intermediate II: Haircutting

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 1020.
Formerly COS 220 Provides continued instruction in the theory related to facial shapes, head and body forms to determine the client's appropriate haircut. Incorporates practical applications of haircutting techniques.

COS 2021 - Advanced Hair Cutting

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 1021.
Formerly COS 221 Focuses on advanced cutting techniques using all the cutting tools. Emphasizes current fashion trends. Includes student preparation for the State Licensure examination.

COS 2030 - Intermediate II: Hair Styling

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 1030.
Formerly COS 230 Provides continued instruction on accepted methods of styling hair, air forming, roll set, finger waves and hair pressing. Examines techniques in specialized classes or in a supervised salon setting.

COS 2031 - Advanced Hair Styling

Credit(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): COS 1031.
Formerly COS 231 Focuses on theory and advanced techniques in all phases of hair styling to prepare the student for employment. Training is a combination of supervised salon (clinical) work and specialized classes. Includes student preparation for the State Board Licensing Examination relating to hairstyling.

COS 2040 - Intermediate II: Chemical Texture

Credit(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): COS 1040.
Formerly COS 240 Provides continued instruction in the theory and practical application of permanent waves and chemical relaxers in specialized classes or a supervised salon setting. Enables students to practice different wrapping techniques required by trend styles.

COS 2041 - Advanced Chemical Texture

Credit(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): COS 1041.
Formerly COS 241 Focuses on advanced techniques to prepare the student for employment and the changes in current industry standards. Instruction is provided in specialized classes or supervised salon (clinical) setting. Includes student preparation for the State Board Licensing Examination pertaining to permanent waves and chemical relaxers.

COS 2050 - Management, Ethics, Interpersonal Skills & Salesmanship

Credit(s): 1
Lecture Hour(s): 1
Formerly COS 250 Emphasizes the importance of salon management and the knowledge and skills necessary to build a

successful business. Focuses on the importance of interpersonal skills and basic techniques in salesmanship and customer services. Integrates job readiness skills and professional ethics.

COS 2060 - Intermediate II: Disinfection, Sanitation & Safety

Credit(s): 2
Vocational Clinic Hour(s): 4

Formerly COS 260 Provides continued study of theory and practice of proper methods of sterilization, disinfection, sanitation and safety procedures as related to all phases of the industry. Covers terminology and training of disinfection, sanitation and safety procedures. The individual responsibility to provide a safe work environment is practiced.

COS 2061 - Advanced Disinfection, Sanitation & Safety

Credit(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): COS 1061.
Formerly COS 261 Provides advanced training on decontamination and safety practices in a supervised salon and/or classroom setting. Examines advanced techniques that prepare the student for employment. Includes student preparation for the State Board Licensing Examination in decontamination and safety for all aspects of the industry. Study of OSHA requirements for schools and salon are done in a theory or practical setting.

COS 2062 - Advanced II: Disinfection, Sanitation & Safety

Credit(s): 3
Vocational Clinic Hour(s): 6

Prerequisite(s): COS 2060.
Formerly COS 262 This course is the extra hours/credits required for the hairstylist program, per State Board of Colorado Barber/Cosmetology Board. Provides advanced training on decontamination and safety practices in a supervised salon and/or classroom setting. Examines advanced techniques that prepare the student for employment. Includes student preparation for the State Board Licensing Examination in decontamination and safety for all aspects of the industry. Study of OSHA requirements for schools and salon are done in a theory or practical setting.

HIT Medical Coding Certificate

See list of Department Chairs on the Personnel page.

Health Information Technology (HIT) is the combination study of healthcare and information technology. The Medical Coding student has the option to complete the HIT Medical Coding Certificate and test for the Certified Coding Associate (CCA) or Certified Coding Specialist (CCS) exam. This will make the student immediately employable for an entry-level or mid-level position as a certified coder in an acute-care hospital, ambulatory, long-term or skilled-care nursing facility, physician office, insurance company, and any other setting using medical coding.

Specialization is growing in all areas of coding and coding management, allowing the coding professional to narrow or broaden their scope of practice through new and innovative roles within the healthcare field (e.g., clinical data specialist, medical records reviewer, medical records field technician, remote medical coder, reimbursement specialist, various registries, and coding auditor).

PCC's HIT programs, staff, and students are affiliated with the American Health Information Management Association (AHIMA), the premier national association of health information management (HIM) professionals and the leading source of HIM knowledge. PCC also completed a very stringent process through the American Health Information Management Association to be identified with the AHIMA Professional Certificate Approval Program (PCAP).

Total Credits: 42

HIT Medical Coding - AHIMA Accredited Certified Coding Associate (42 credits)

BIO 1006 - Basic Anatomy and Physiology

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly BIO 106 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, Paramedic Program, and the Medical Office Technology Program.

HIT 1002 - Medical Vocabulary for Documentation

Credit(s): 3
Lecture Hour(s): 3
Formerly HIT 102 Introduces medical vocabulary through the study of word structures and phrases with reinforcement in writing narratives and the study of medical records. Anatomy and physiology of all body systems are reviewed with discussion of related diseases, diagnostic procedures, treatments and drugs. Emphasis on learning to read, pronounce and interpret medical documentation prepares the student for document review in HIT fields. Illustrates the importance of HIPAA in both physical and electronic dissemination of medical records.

CIS 1018 - Intro to PC Applications

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 118 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.

HIT 1011 - Health Data Management and Information Systems

Credit(s): 3
Lecture Hour(s): 3
Formerly HIT 111 Introduces the electronic health record (EHR)/components and health informatics including infrastructure, privacy, security and legal implications. Federal involvement and its impact on information technology regarding health data will be discussed. Students will study the roles and relationships, in the transformation of data into meaningful information, through research, vital statistics and epidemiology. Data quality, integrity, collection, access and retention will also be emphasized.

HIT 2020 - ICD Coding I

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): HPR 1032
Formerly HIT 220 Introduces the ICD coding classification system and provides a basic understanding of ICD structure, conventions and principles utilized in code assignment. The student will be introduced to the official coding guidelines. They will apply knowledge of anatomy, physiology, pathophysiology and pharmacology in the assignment of diagnostic and procedural codes.

HIT 2041 - CPT Coding Basic Principles

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): HPR 1032.
Formerly HIT 241 Provides the student with skill sets to apply the current procedural terminology (CPT) and HCPCS code set principles and guidelines for application in reporting/communicating information and data about clinical services provided to patients by healthcare providers. Includes understanding what the CPT nomenclature is, how and why it is used, and guidelines for each code category and how it is applied to represent services within each code category.

HIT 1050 - Healthcare Delivery Systems

Credit(s): 3
Lecture Hour(s): 3
Formerly HIT 150 Provides an overview of the healthcare delivery system at the national, state and local level. The course provides healthcare education, including applicable regulations and standards, reimbursement methods, and evolution and current trends in healthcare delivery.

HPR 1032 - Disease Process and Treatment

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): BIO 1006
Formerly HPR 232 Covers disease processes and drug therapy used to treat commonly found pathological conditions. Normal anatomy and physiology of each body system is reviewed. Conditions that disrupt homeostasis are examined. Conditions considered are both acquired and congenital. Diagnostic methods, management, treatment modalities and prognosis are discussed. Classifications of drugs are introduced. A general understanding of the actions; absorption, metabolism and excretion; and reasons for use of various groups of pharmacologic agents are introduced.

HIT 2061 - Healthcare Software

Credit(s): 3
Lecture Hour(s): 3
Formerly HIT 261 This course covers basic computer system architecture, file structure and design for healthcare settings. Topics include system analysis, design, security and selection for a variety of hardware environments. This course provides students with a review of computer fundamentals and the fundamentals of the electronic health record and an introduction to the information systems life cycle with software application. Security and confidentiality issues, concerns and implications in relation to the electronic health record will be addressed.

HIT 2052 - Coding II for Certification

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): HIT 2020, HIT 2041
Formerly HIT 252 Covers medical necessity and coding issues using ICD and CPT coding principles. Students should already possess a fundamental understanding of the CPT, ICD and HCPCS coding principle. Intensive coding application will be achieved through the use of medical records, case studies and scenarios. DRGs, APCs, RUGs, RBRVs and the Correct Coding Initiative (CCI) will also be covered in this class.

HIT 1005 - Principles of Healthcare Reimbursement

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): HIT 2020, HIT 2041
Formerly HIT 105 Provides students with the knowledge needed to perform necessary tasks involved in healthcare reimbursement systems, including payment methodologies, use of clinical data and compliance.

HIT 1088 - Health Information Practicum I

Credit(s): 2
Practicum Hour(s): 4
Prerequisite(s): HIT 2052 or Department Chair Approval.
Formerly HIT 188 Provides a directed clinical experience which focuses on the practice of skills related to the application of legal principles, record analysis and abstraction and record retention and retrieval.

HIT 2068 - Certification Test Preparation

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): Department Chair Approval.
Formerly HIT 268 Prepares students who have made the decision to obtain a national health information technology credential by completing national credentialing exams.

HIT 2089 - HIT Capstone Course

Credit(s): 3
Internship Hour(s): 9
Prerequisite(s): Department approval required
Formerly HIT 289 Provides a demonstrated culmination of learning within a given program of study.

Industrial Technology Maintenance Level I Certificate

CIP 15.0303

See list of Department Chairs on the Personnel page.

Career Opportunities

The Industrial Technology Maintenance Level one Certificate provides foundational skills. Students may start as an entry level operator and are encouraged to obtain the Level Two Certificate and the degree to pursue careers as an

electronics technician, an electro-mechanical technician, a semiconductor manufacturing technician, or an electro-mechanical field service technician.

Total Credits: 31

Certificate Requirements

Fall Semester (15 Credits)

ELT 1206 - Fundamentals of DC/AC

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Corequisite(s): ELT 1207.
Formerly ELT 106 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 - Industrial Electronics

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Corequisite(s): ELT 1206.
Formerly ELT 107 Provides a basic knowledge of generators, motors and the solid state devices and digital techniques used for industrial control applications.

MAC 1000 - Machine Shop Safety

Credit(s): 1
Lecture Hour(s): 1
Formerly MAC 100 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.

MAT 1150 - Technical Mathematics

Credit(s): 4
Lecture Hour(s): 4
Formerly MAT 108 Covers material designed for career technical or general studies students who need to study particular mathematical topics. Topics may include measurement, algebra, geometry, trigonometry, graphs and/or finance. These are presented at an introductory level and the emphasis is on applications.

MAC 2056 - Industrial Components

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50

Formerly MAC 256 Covers common mechanical components used on industrial equipment. It is designed to assist maintenance staff in removal, installation and maintenance of plant equipment. It includes safety, fits, threads, bearings, fasteners, and hardware, lubrication, assembly and the use of hand tools.

Spring Semester (16 Credits)

ELT 2252 - Motors and Controls

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly ELT 252 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. 68 contact hours.

ELT 2254 - Industrial Wiring

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly ELT 254 Focuses on the required and recommended practice for industrial wiring. The National Electrical Code is applied to industrial power and control wiring. Covers specification and installation of wiring, conduit, enclosures and termination components in lecture and applied during lab.

ELT 2358 - Programmable Logic Controllers

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly ELT 258 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.

MAC 1005 - Introduction to Machining Technology

Credit(s): 4
Lecture Hour(s): 1.50
Vocational Lab Hour(s): 3.75
Formerly MAC 105 Introduces the student to the changing era of machining technology, emphasizing terminology, referencing and applications related to manufacturing environments. The fundamental use of bench tools, layout procedures, materials, precision measuring tools, machining processes, drilling and cut-off machines and other machining/manufacturing processes will be stressed. Skill competencies and standards will be identified. Use of the Machinery's Handbook will be strictly required and particular competencies may require performance evaluations.

MAC 2065 - Mechanical Component II

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly MAC 265 Covers common mechanical components used on industrial equipment. It is designed to assist

maintenance staff in removal, installation and maintenance of plant equipment. It includes coupling, vibration, shafting, keys and keyways, belts and chain drives, gears and gear drive, and seals.

Industry Certification Prep Certificate

CIP 11.0101

See list of Department Chairs on the Personnel page.

Career Opportunities

The CIS IT Industry Certification Preparation Program provids the theory and technical training so that students are prepared to sit for examination to earn A+, Network+, and Security+ industry credentials, from CompTIA.

Program Description

The CIS program provides training in basic technical computer and networking skills. You will study computer networking, programming and database technologies along with classes that teach the technical aspects of the Internet and data communications. Note: Students interested in transferring to a baccalaureate program in Computer Information Systems should refer to the Transfer Degree section.

Total Credits: 16

Certificate Requirements

CIS 1015 - Introduction to Computer Information Systems

Credit(s): 3
Lecture Hour(s): 3
Formerly CIS 115 Focuses on an overview of the needs for and roles of computer information systems. Emphasizes computer requirements in organizations, history, hardware functions, programming, systems development and computer operations. Introduces computer applications.

CNG 1020 - A+ Certification Preparation

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Formerly CNG 120 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 1024 - Networking I: Network +

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 124 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 1032 - Network Security Fundamentals

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 132 Examines the field of information security to prepare information systems students for their future roles as business decision-makers. The course presents a balance of the managerial and the technical aspects of information security. The concepts covered in this course should be helpful for students working towards the Certified Information Systems Security Professional (CISSP) certification.

Certificate Electives

Choose two elective courses from the list below

CNG 1021 - Computer Technician I: A+

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Formerly CNG 121 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+

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Prerequisite(s): CNG 1021 or Department Chair Approval.
Formerly CNG 122 Provides students with an in-depth look at desktop and mobile Operating System support, maintenance and troubleshooting, and an overview of 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 current operating systems, including using common GUI and command line tools, registry editing, system backup and recovery, and advanced troubleshooting. This course helps prepare you for the second CompTIA A+ Exam.

CNG 1025 - Networking II: Network +

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Prerequisite(s): CNG 1024
Formerly CNG 125 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 1042 - Introduction to Cloud Computing Concepts

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Formerly CNG 142 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.

Information Assurance Certificate

CIP 11.0101

See list of Department Chairs on the Personnel page.

Career Opportunities

The CIS program prepares you for careers in computer science, computer networking and electronic commerce. The AAS Degree with an emphasis in local area networking prepares you to work as a network technician on small and large networks. You may also administer smaller networks as a System Administrator. The AGS Degree with an emphasis in Computer Information Systems prepares you to transfer to a university to continue studies in Computer Science or Computer Information Systems.

Program Description

The CIS program provides training in basic technical computer and networking skills. You will study computer networking, programming and database technologies along with classes that teach the technical aspects of the Internet and data communications. Note: Students interested in transferring to a baccalaureate program in Computer Information Systems should refer to the Transfer Degree section.

Total Credits: 19

Certificate Requirements

CNG 1024 - Networking I: Network +

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 124 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 1031 - Principles of Information Assurance

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 131 Delivers a comprehensive overview of network security, including general security concepts. Communication Security is studied, including remote access, email, 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.

or

CNG 1033 - Network Security: Fire Walls and Intrusion Detection and Network Security

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 133 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 1032 - Network Security Fundamentals

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 132 Examines the field of information security to prepare information systems students for their future roles as business decision-makers. The course presents a balance of the managerial and the technical aspects of information security. The concepts covered in this course should be helpful for students working towards the Certified Information Systems Security Professional (CISSP) certification.

CNG 1036 - Guide to Disaster Recovery

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Department Chair Approval.
Formerly CNG 136 Presents methods to identify vulnerabilities and take appropriate countermeasures to prevent and mitigate failure risks for an organization. It will take an enterprise-wide approach to developing a disaster recovery plan.

CNG 2012 - Configuring Windows Server

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Formerly CNG 212 Provides students with the knowledge and skills that are required to install and configure a Microsoft Windows Server. This course helps prepare students for a MTA (Microsoft Technology Associate) and/or MCSA (Microsoft Certified Solutions Associate) exams.

CNG 2024 - Microsoft Windows Wireless Network

Credit(s): 3
Lecture Hour(s): 2

Vocational Lab Hour(s): 1.50
Prerequisite(s): CNG 1004 or instructor approval.
Formerly CNG 224 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.

Introduction to Agriculture

A general program that focuses on modern business and economic principles involved in the organization, operation, and management of agricultural enterprises.

Total Credits: 9

Core Curriculum Requirements (9 credits)

AGB 1002 - Foundations of Agri-Business

Credit(s): 3
Lecture Hour(s): 3
Formerly AGB 102 Focuses on the foundational aspects of the primary agriculture business areas including economics, management, marketing, sales, and finance in an applied manner. Current events in agriculture are discussed with emphasis on application to agribusiness.

ASC 1100 - Animal Sciences

Credit(s): 3
Lecture Hour(s): 3
Formerly ASC 100 Covers the basic fundamentals of livestock production including the principles of nutrition, reproduction, breeding, genetics, health, and physiology of cattle, sheep, swine, horses, and other farm species. Trends and issues in animal science and animal agriculture are also discussed in this course.

CIS 1018 - Intro to PC Applications

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 118 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.

Introduction to Health Information Technology

See list of Department Chairs on the Personnel page.

Program Description

Few professions offer the level of diversity in positions and tasks, as well as job security, as Health Information Technology (HIT). HIT is positioned at the intersection of healthcare, technology, and business. This certificate prepares individuals from other degree programs and professions to successfully transition their skills and credentials to the healthcare sector.

Skills, duties, and tasks within healthcare span business, accounting, counseling, IT, data analytics, management, laws and regulations, marketing, human resources, network security, project management, and beyond. Professionals with insight and understanding into the unique business environment of serving patients empower clinical partners in health care to provide high-quality, efficient, financially prudent, and life-saving care.

PCC's HIT programs, staff, and students are affiliated, approved, and credentialed with the American Health Information Management Association (AHIMA) – the premier national association of health information management (HIM) professionals and the leading source of HIM knowledge – as well as the global Health information Management Systems Society (HIMSS), the premier international association whose mission is to "reform the global health ecosystem through the power of information and technology."

Total Credits: 18

Core Curriculum Requirements

HIT 1002 - Medical Vocabulary for Documentation

Credit(s): 3
Lecture Hour(s): 3
Formerly HIT 102 Introduces medical vocabulary through the study of word structures and phrases with reinforcement in writing narratives and the study of medical records. Anatomy and physiology of all body systems are reviewed with discussion of related diseases, diagnostic procedures, treatments and drugs. Emphasis on learning to read, pronounce and interpret medical documentation prepares the student for document review in HIT fields. Illustrates the importance of HIPAA in both physical and electronic dissemination of medical records.

HIT 1011 - Health Data Management and Information Systems

Credit(s): 3
Lecture Hour(s): 3
Formerly HIT 111 Introduces the electronic health record (EHR)/components and health informatics including infrastructure, privacy, security and legal implications. Federal involvement and its impact on information technology regarding health data will be discussed. Students will study the roles and relationships, in the transformation of data into meaningful information, through research, vital statistics and epidemiology. Data quality, integrity, collection, access and retention will also be emphasized.

HIT 1012 - Legal Aspects for Health Records

Credit(s): 2
Lecture Hour(s): 2
Formerly HIT 112 Introduces the student to the legal system and defines the role of the healthcare professionals. Specific federal and state laws are identified and discussed as they relate to release of medical information.

HIT 1020 - Working with Health IT Systems

Credit(s): 4
Lecture Hour(s): 4

Formerly HIT 120 Provides hands-on experience with a computerized HIT system/electronic health record, utilizing contemporary online systems with simulated data. The course will include additional lecture, project work and practice in the use of HIT systems. Students will play the role of practitioners using these systems and experience threats to security and gain an appreciation of the need for standards and high levels of usability. Students will also learn how errors can occur and ways to minimize them.

HIT 1050 - Healthcare Delivery Systems

Credit(s): 3
Lecture Hour(s): 3
Formerly HIT 150 Provides an overview of the healthcare delivery system at the national, state and local level. The course provides healthcare education, including applicable regulations and standards, reimbursement methods, and evolution and current trends in healthcare delivery.

HIT 2022 - Quality Management

Credit(s): 3
Lecture Hour(s): 3
Formerly HIT 222 Introduces the student to the basic concepts of quality management in the healthcare environment. Requirements by regulatory agencies regarding quality documentation, utilization and risk management are discussed. Data collection, verification, analysis, descriptive statistics and presentation techniques will be studied. The course emphasizes the ongoing use of objective data and feedback to improve processes, systems and patient outcomes. Analysis of documentation for various purposes is also covered.

Law Enforcement Academy Certificate

CIP 43.0107

See list of Department Chairs on the Personnel page.

Career Opportunities

The Law Enforcement program prepares students for careers in law enforcement as a police officers, desk officer, bailiff or corrections officer. Additionally, students could work as criminal investigators, detectives, police agencies, or in correction and judicial facilities.

Program Description

The Law Enforcement program teaches students an in-depth analysis of the three (3) components of the criminal justice system (law enforcement, the judicial system and corrections) with special emphasis on criminology, substantive criminal law, procedural criminal law and constitutional law. It places a strong emphasis on reading and comprehension skills, written and verbal communication skills and empathetic awareness of cultural diversity.

Program Requirements

Entrance Requirements:

Successful completion of any CCR course or qualifying placement score or exemption to complete the Criminal Justice courses. Admission into the Law Enforcement Academy courses requires a student to file an application with the PLEA Department Chair and meet specific guidelines prior to admission into the program (such as state statutory requirements for background checks). You may enroll in PLEA courses only if you are admitted into the program.

Graduation Requirements:

In addition to program requirements for this program, you must complete ENG 1021, COM 1150, MAT 1140 and six (6) credits of social and behavioral science courses.

Total Credits: 37

Certificate Requirements

LEA 1001 - Basic Police Academy I

Credit(s): 6
Lecture Hour(s): 6
Formerly LEA 101 Conforms to POST standards and state certification requirements as well as the basic skills and knowledge necessary to perform the entry-level duties of a peace officer. Emphasis will be on simulating actual situations utilizing a lecture and laboratory mode of learning.

LEA 1002 - Basic Police Academy II

Credit(s): 12
Lecture Hour(s): 12
Formerly LEA 102 Conforms to POST standards and state certification requirements as well as the basic skills and knowledge to perform the entry-level duties of a peace officer. Emphasis will be on simulating actual situations utilizing a lecture and laboratory mode of learning.

LEA 1003 - Basic Law Enforcement Academy III

Credit(s): 2
Lecture Hour(s): 0.50
Vocational Lab Hour(s): 2.25
Formerly LEA 103 Enhances the standards established by the POST 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 POST curriculum to create a unique learning experience.

LEA 1005 - Basic Law

Credit(s): 8
Lecture Hour(s): 8
Formerly LEA 105 Conforms to POST standards and state certification requirements as well as the basic skills and knowledge necessary to perform the entry-level duties of a peace officer. Emphasis will be on United States Constitution, arrest, search and seizure, interrogation and confessions, rules of evidence, Colorado Criminal Code, Colorado Traffic Code, Colorado Children's Code, Liquor Code and controlled substances.

LEA 1006 - Arrest Control Techniques

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly LEA 106 Covers the skills, knowledge and abilities necessary to effectively maintain control of a suspect when making an arrest. Emphasizes the continuum of force and de-escalation of force.

LEA 1007 - Law Enforcement Driving

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly LEA 107 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

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly LEA 108 Discusses the skills, knowledge and abilities necessary to safely use police firearms. Students will demonstrate skills by firing weapons on a firing range. The student will demonstrate basic safety techniques and will explain the firearms role within the continuum of force.

Library Technician Certificate

CIP 25.0301

See list of Department Chairs on the Personnel page.

Career Opportunities

The LTN program prepares you for a career in a variety of information environments including academic libraries, public libraries, school media centers, special libraries – corporate, correctional, law and medical – and other information services. In rural settings, the Library/Media Technician manages the library/media center and is the person responsible for providing additional library services, such as maintaining the computerized catalog and library webpage, conducting patron orientation and directing library programs.

Program Description

This program offers instruction in a variety of library functions including collection management (selecting and acquiring materials); cataloging; processing and repair of library materials; circulating and shelving materials; helping patrons with reference, readers' advisory and resource sharing services; and managing a small library or media center. We also train you in the nontechnical skills you need to be a successful library technician: customer service, listening, speaking, writing, attention to detail and working as a member of a team.

Program Requirements

Entrance Requirements:

The LTN program is designed for the student who, because of time or distance constraints, is looking for an online degree. The courses use the Desire2Learn platform.

If you plan to transfer to a bachelor's level program, consult with your advisor to determine the transferability of courses.

Total Credits: 30

Certificate Requirements

General Education Requirements (12 Credits)

- Social and Behavioral Sciences OR Humanities **Credit(s): 3**

Communications (6 Credits)

Select one:

- (ENG 1021 and COM 1150) or COM 1250

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

or

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

Mathematics (3 Credits)

MAT 1140 - Career Math

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 107 Covers material designed for career technical or general studies students who need to study particular mathematical topics. Topics may include measurement, algebra, geometry, trigonometry, graphs and/or finance. These are presented on an introductory level and the emphasis is on applications.

Core Curriculum Requirements (18 Credits)

LTN 1001 - Introduction to Library Services

Credit(s): 3
Lecture Hour(s): 3
Formerly LTN 101 Introduces libraries and their procedures through research, vocabulary, readings and assignments. Identifies current tools such as wikis, blogs, podcasting, interactive web pages and other online services. Presents resources for library technicians.

LTN 1010 - Selection and Acquisitions

Credit(s): 3
Lecture Hour(s): 3
Formerly LTN 110 Introduces the student to the tools, vendors, jobbers and approval plans that comprise the selection process. In addition, the student is introduced to acquisitions policy. The student engages in a course project whereby he/she applies a collection evaluation methodology to a section of a library collection and locates and recommends replacement titles.

LTN 1015 - Library Circulation

Credit(s): 3
Lecture Hour(s): 3
Formerly LTN 115 Discusses customer service and circulation issues and procedures. Students will learn the role of customer service and the effects that automation has had on the circulation function of the library.

LTN 2005 - Introduction to Cataloging & Classification

Credit(s): 3
Lecture Hour(s): 3
Formerly LTN 205 Introduces the library organization, how to use Dewey and Sears subject headings, elements of cataloging, practice in the use of Dewey and the Library of Congress classification systems, use of cutter tables, subject classification, accession numbers, and bar codes. Basic philosophy, procedures, tools and techniques for library routines are emphasized.

LTN 2010 - Reference Materials

Credit(s): 3
Lecture Hour(s): 3
Formerly LTN 210 Teaches how to select reference materials, how to use at least 100 reference resources, the reference interview, and the role of resource sharing (interlibrary loan) in reference. Students will prepare a bibliography of the 100 titles they would want in their reference collection and 10 online sources they find useful.

LTN 2020 - Library/Media Center Management & Public Relations

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of LTN 1001.
Formerly LTN 220 Includes budget preparation, how to work with staff, the public, and administrators, and the use of statistics.

Machining Technology, Inspection Certificate

See list of Department Chairs on the Personnel page.

Total Credits: 9

Certificate Requirements

MAC 2050 - Advanced Inspection Techniques

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly MAC 250 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.

MAC 1002 - Print Reading for Machinists

Credit(s): 3
Lecture Hour(s): 3
Formerly MAC 102 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.

EGT 2305 - Geometric Dimension & Tolerance

Credit(s): 3
Lecture Hour(s): 3
Formerly EGT 205 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.

Manicurist Certificate

CIP 12.0410

See list of Department Chairs on the Personnel page.

Career Opportunities

The Cosmetology program prepares students for careers in cosmetology, hairstyling, esthetics (facial care) and manicure (nail care). Students will receive the specialized training necessary to be prepared for a successful career with limitless opportunities for both men and women. Students learn the skills to keep pace with the fashion world and stand ready to meet the constantly changing demands of one of today's largest-growing service industries. Those opportunities can provide both part-time and full-time employment in specialty areas.

Program Description

The Cosmetology program teaches students job entry skills, customer communication and shop procedures. Instruction includes professional ethics, bacteriology, shampoo and rinses, color theory, hair coloring techniques, permanent waving, hairstyling, hair cutting, manicures, pedicures, facials, makeup, OSHA regulations, sanitation, safety and Colorado laws. Clinical practice involves working on the public under supervision and parallels, as close as possible, actual shop procedures in order to prepare students for working in the field.

- Manicurist certificate – This certificate program provides training in nail care. Instruction is provided in manicuring, pedicure, nail design extensions and nail artistry.

Total Credits: 20

Certificate Requirements

Core Requirements (20 Credits)

COS 1050 - Laws, Rules and Regulations

Credit(s): 1
Lecture Hour(s): 1
Formerly COS 150 Provides instruction on the laws, rules and regulations and how they govern the cosmetology and barber industry, as well as the effects they have on the student, licensed individual, salons and school owners.

COS 2050 - Management, Ethics, Interpersonal Skills & Salesmanship

Credit(s): 1
Lecture Hour(s): 1
Formerly COS 250 Emphasizes the importance of salon management and the knowledge and skills necessary to build a successful business. Focuses on the importance of interpersonal skills and basic techniques in salesmanship and customer services. Integrates job readiness skills and professional ethics.

NAT 1008 - Introduction of Manicuring/Pedicures/Artificial Nails

Credit(s): 3
Vocational Clinic Hour(s): 6

Formerly NAT 108 Provides a basic introduction into the proper use of implements used in manicures, pedicures and artificial nails. Theory and practical application of proper set-up, safety, sanitation, nail shapes, anatomy, product knowledge and terminology dealing with manicures, pedicures and artificial nails is covered. Training is done in a classroom or lab setting using models or other techniques.

NAT 1010 - Introduction to Manicures & Pedicures

Credit(s): 3
Vocational Clinic Hour(s): 6

Formerly NAT 110 Provides a basic introduction in the proper use of implements used in manicures and pedicures. Theory and practical application of proper set-up, safety, sanitation, nail shapes, anatomy, product knowledge and terminology dealing with manicures and pedicures is covered. Training is done in a classroom or lab setting using models or other techniques.

NAT 1011 - Intermediate Manicures & Pedicures

Credit(s): 2
Vocational Clinic Hour(s): 4

Formerly NAT 111 Presents theory and practical application dealing with different types of manicures, pedicures, nail art and massage techniques. Theory and practical application of procedures, products, nail shapes and maintenance of natural nails is covered. Students learn to recognize different nail disorders and their proper treatment. Training is done in a specialized class or in supervised salon (clinical) setting, using models or customer service. Proper sanitation and sterilization as it pertains to all aspect of manicures, pedicures and nail art is taught.

NAT 1058 - Intermediate Manicuring/Pedicures/Artificial Nails

Credit(s): 2
Vocational Clinic Hour(s): 4

Formerly NAT 158 Presents theory and practical application dealing with different types of manicures, pedicures and massage techniques. Theory and practical application of procedures, products, nail shapes and maintenance of artificial nails is covered. Students learn to recognize different nail disorders and their proper treatment. Training is done in a specialized class or in supervised salon (clinical) setting, using models or customer service.

NAT 1059 - Intermediate Manicuring/Pedicures/Artificial Nails II

Credit(s): 2
Vocational Clinic Hour(s): 4

Formerly NAT 159 Presents theory and practical application dealing with different types of manicures, pedicures and massage techniques. Theory and practical application of procedures, products, nail shapes and maintenance of artificial nails is covered. Students learn to recognize different nail disorders and their proper treatment. Training is done in a specialized class or in supervised salon (clinical) setting, using models or customer service.

NAT 2008 - Advanced Manicuring/Pedicures/Artificial Nails

Credit(s): 4
Vocational Clinic Hour(s): 8

Formerly NAT 208 Provides advanced theory and practical application of manicures, pedicures and nail art techniques. Theory and advanced practical techniques of silk wraps, tip overlays, acrylics and product knowledge to ready the student for employment is presented. Instruction is provided in specialized classes or in supervised salon (clinical) setting using models or customer service. Student preparation for state board licensing examination pertaining to manicures and pedicures is covered.

NAT 2010 - Advanced Manicures & Pedicures

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): NAT 2011.
Formerly NAT 210 Presents theory and practical application dealing with different types of manicures, pedicures massage techniques and nail art. Theory and practical application of procedures, products, nail shapes and maintenance of the natural nails is covered. Students learn to recognize different nail disorders and their proper treatment. Training is done in a specialized class or in supervised salon (clinical) setting, using models or customer service.

Manual Machining Certificate

CIP 48.0503

See list of Department Chairs on the Personnel page.

This is a NIMS Accredited program

Program Description

Students will start their career in Machining Technology by building a strong foundation in machining by learning to use various tools, such as hand tools, manual machines and grinding tools. Students develop introductory skills in print reading. They are also taught how to use CAD CAM software, which enables students to create two-dimensional drawings and gain experience with computer-aided manufacturer software. Learning G&M Code for manual CNC (Computer Numerical Control) programming is a focus, as well as setup and operations of CNC equipment.

Work experience may be converted to college credit through credit-by-portfolio or credit-by-challenge.

Total Credits: 16

Certificate Requirements

MAC 1005 - Introduction to Machining Technology

Credit(s): 4
Lecture Hour(s): 1.50
Vocational Lab Hour(s): 3.75
Formerly MAC 105 Introduces the student to the changing era of machining technology, emphasizing terminology, referencing and applications related to manufacturing environments. The fundamental use of bench tools, layout procedures, materials, precision measuring tools, machining processes, drilling and cut-off machines and other machining/manufacturing processes will be stressed. Skill competencies and standards will be identified. Use of the Machinery's Handbook will be strictly required and particular competencies may require performance evaluations.

MAC 1030 - Conventional Lathe Operations

Credit(s): 4
Lecture Hour(s): 1.50
Vocational Lab Hour(s): 3.75
Formerly MAC 130 Includes calculation of speeds and feeds on various materials, identification and application of various work holding techniques, tool forming, advanced machining practices and applications, and spindle tooling. Students will learn how to calculate and turn tapers using the compound slide or taper attachment, offset work on a four jaw chuck, turning between centers, boring, grooving, finishing, single point threading, knurling, tool grinding, drilling operations, and reaming.

MAC 1031 - Milling Machines & Operations

Credit(s): 4
Lecture Hour(s): 1.50
Vocational Lab Hour(s): 3.75
Formerly MAC 131 Introduces vertical milling machines. The operations and applications will consist of using the machine controls, speeds and feeds, spindles, arbors and adapters cutting tools, tool holders, conventional and climb milling applications simple indexing, fixture alignments, work holding methods. Students will become familiar with set-up applications considering offset boring operations, face milling, plain milling, and precision drilling applications. Students will be required to produce parts to a tolerance of +/- .004in. and perform competencies set by manufacturing standards.

MAC 1041 - Advanced Machining Operations

Credit(s): 4
Lecture Hour(s): 1.50
Vocational Lab Hour(s): 3.75
Formerly MAC 141 Provides the student the use of various conventional machine tools used in a machine shop environment. The use of engine lathes, horizontal and vertical milling machines, surface grinders, drill presses, pedestal grinders, power cut-off saws and other machine tools commonly used to produce quality machined parts in today 's manufacturing environments. Machining competencies will be stressed and students will be required to produce parts manufactured by local manufacturing companies with the consideration of ISO quality standards.

Medical Assistant Certificate

CIP 51.0801

See list of Department Chairs on the Personnel page.

Career Opportunities

The Medical Assistant Program will prepare the student for a career in medical assisting. Medical assistants can work in a variety of settings – physician offices, outpatient facilities, urgent care centers and other ambulatory health care services. Medical assistants play a vital role in the success of a medical practice and play the role of a liaison between the physician and the patients.

Program Description

The Medical Assistant program will prepare the student to primarily work in the back office of a medical practice, along with teaching some basic front office duties. Students will be taught the clinical tasks of drawing blood, giving injections, performing lab tests, taking patient histories and measuring vital signs. The administrative tasks include scheduling appointments, coding medical information and bookkeeping. Students will serve an internship and prepare for a national certification exam to become a Registered Medical Assistant.

Program Requirements

Entrance Requirements:

Successful completion of any CCR course or qualifying placement score or exemption.

Enrollment in the program is limited. Students must apply for admission to the program prior to the deadline. Students will be notified in writing of conditional acceptance. Clinical sites used during the program require that you successfully complete a background check and drug screen. These need to be completed before final acceptance into the program. Students must also obtain CPR certification and immunization series within the first semester of the program.

Graduation Requirements:

Students must complete all credits and courses listed in the curriculum with a "C" grade or higher.

Total Credits: 40

Certificate Requirements

Semester 1 - Fall

HPR 1007 - Computers in Healthcare

Credit(s): 2
Lecture Hour(s): 2
Formerly HPR 119 Introduces basic computer technology, file management, and PC system components as used in Health Care settings. Provides an overview of word processing, spreadsheets, and personal information management software. Introduces the Electronic Health Record (EHR), its content, EHR software, EHR management, patient management and scheduling, and privacy and security of the EHR.

HPR 1039 - Medical Terminology

Credit(s): 2
Lecture Hour(s): 2
Formerly HPR 139 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.

MAP 1010 - Medical Office Administration

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): Department Chair Approval.
Formerly MAP 110 Introduces the administrative duties specifically used in medical offices.

MOT 1025 - Basic Medical Sciences I

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Department Approval Required.
Formerly MOT 125 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

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Department Approval Required
Formerly MOT 133 Introduces the anatomy, physiology, pathophysiology, and drug therapy of the cardiovascular, respiratory, integumentary, and senses systems. The scope of the material is limited for the medical office technology personnel.

MOT 1027 - Basic Medical Sciences III

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Department Approval Required
Formerly MOT 135 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.

Semester 2 - Spring

HPR 1008 - Law & Ethics for Health Professions

Credit(s): 2
Lecture Hour(s): 2
Formerly HPR 106 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.

MAP 1020 - Medical Office Financial Management

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): Department Chair Approval.
Formerly MAP 120 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 2038 - Medical Assisting Laboratory

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 4
Prerequisite(s): Department Chair Approval.
Formerly MAP 138 Introduces the student to 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

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 4
Prerequisite(s): Department Chair Approval.
Formerly MAP 140 Provides hands-on experience with clinical skills required in medical offices. Delivers theory and skills presentations allowing for students to properly demonstrate techniques for a variety of medical needs.

MAP 1050 - Pharmacology for Medical Assistants

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Department Chair Approval.
Formerly MAP 150 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.

Semester 3 - Summer

HPR 1010 - Dietary Nutrition

Credit(s): 1
Lecture Hour(s): 1
Formerly HPR 108 Studies the basic nutritional principles in clinical practice in health care. The course will cover factors which influence the nutritional status of individuals, methods of nutritional assessment and support, and diet modification for specific disease states.

MAP 1083 - Medical Assistant Internship

Credit(s): 4
Internship Hour(s): 12
Prerequisite(s): Department Chair Approval.
Formerly MAP 183 Provides supervised placement in contracted facility for guided experience in application of knowledge and skill acquired in the classroom. The student assists with a variety of business and clinical procedures. Positions are nonpaid. Student must have permission by program coordinator to begin Internship.

MAP 2069 - Review for Medical Assistant National Exam

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): Department Chair Approval.
Formerly MAP 189 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, supporting quality care in the office or clinic.

Paramedic Option Certificate

CIP 51.0904

See list of Department Chairs on the Personnel page.

Career Opportunities

The EMS program prepares you for a career in the pre-hospital health care field as an emergency medical care provider at the EMT, Advanced EMT or Paramedic level. Career opportunities include providing patient care while working for an ambulance agency, fire service, hospital or other health care facility. Additional opportunities are in such areas as tactical EMS, critical care transport and ski patrol. If you graduate with an AAS degree you have additional opportunities in administration and management in the pre-hospital field. PCC also offers a Bachelor's degree in Advanced Paramedic Practice to advance your scope into critical care and community paramedic.

Program Description

This program teaches you the knowledge and skills needed for scene management, emergency patient care and transport. This includes scene safety, patient assessment and treatment, medication administration, documentation and patient transport. Upon successful completion of the program, you may take the National Registry exam and, upon passing the exam, you may apply for Colorado State Certification at your level of training.

Program Requirements

Entrance Requirements:

To enroll in the EMT, AEMT or Paramedic programs, you must be at least 18 years of age, have all current immunizations and be able to meet the requirements of the PCC EMS Common Functional Abilities Standard. For enrollment into the Paramedic programs, you must have a current Colorado EMT certification, an EMT IV endorsement, successfully complete all prescreening examinations and prerequisites, and obtain department approval for enrollment into these programs.

The EMS Department is offering an EMT-Intermediate to Paramedic Bridge course for those who are EMT-Intermediates. To qualify for this program you must be an EMT-I99, be eligible for state certification, and pass an EMT-I prescreening exam. For more information on prerequisites and classes, please call the EMS Department.

Total Credits: 49

Certificate Requirements

General Education Requirements (4 Credits)

BIO 2101 - Human Anatomy and Physiology I with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 201 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, nervous and endocrine systems. Includes a mandatory hands-on laboratory experience covering experimentation, microscopy, observations and dissection. This is the first semester of a two-semester sequence.

Core Curriculum Requirements

EMS 2025 - Fundamentals of Paramedic Practice

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Prerequisite(s): BIO 2101, current Colorado Certification as an EMT with IV endorsement or higher and acceptance into the Paramedic Education Program.
Corequisite(s): EMS 2026.
Formerly EMS 225 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

Credit(s): 2
Vocational Lab Hour(s): 1.50
Vocational Clinic Hour(s): 2

Prerequisite(s): Currently enrolled in EMS 2025, or have successfully completed EMS 2025.
Formerly EMS 226 Complete all pre-course screening requirements, including drug test and criminal background check. Instructor approval. Serves as the lab experience to coincide with EMS 2025topics.

EMS 2027 - Paramedic Special Considerations

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): BIO 2101, current Colorado Certification as an EMT with IV endorsement or higher and acceptance into the Paramedic Education Program.
Formerly EMS 227 Introduces the paramedic student to concepts in assessing and meeting the emergency care needs of the neonate, pediatric, geriatric and special needs patient. This course focuses on epidemiology, pathophysiology, assessment and treatment of these patient groups. Common medical and traumatic presentations are addressed. Relevant psychosocial and ethno cultural concepts and legal and ethical implications are integrated throughout.

EMS 2028 - Paramedic Special Considerations Lab

Credit(s): 2
Vocational Lab Hour(s): 1.50
Vocational Clinic Hour(s): 2

Prerequisite(s): Completion of pre-course screening including drug screen and criminal background check.
Corequisite(s): EMS 2027.
Formerly EMS 228 Teaches the skills necessary for the paramedic to effectively assess and treat neonatal, pediatric, geriatric and special needs patients utilizing skills and simulation scenarios. Serves as the companion course to Paramedic Special Considerations.

EMS 2029 - Paramedic Pharmacology

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Prerequisite(s): BIO 2101, current Colorado Certification as an EMT with IV endorsement or higher and acceptance into the Paramedic Education Program.
Corequisite(s): EMS 2030.
Formerly EMS 229 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

Credit(s): 2
Vocational Lab Hour(s): 1.50
Vocational Clinic Hour(s): 2

Prerequisite(s): Currently enrolled in EMS 2029, or have successfully completed EMS 2029.
Formerly EMS 230 Teaches the skills necessary for the paramedic to safely and effectively administer emergency medications. Serves as the companion course to Paramedic Pharmacology.

EMS 2031 - Paramedic Cardiology

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): BIO 2101, current Colorado Certification as an EMT with IV endorsement or higher and acceptance into the Paramedic Education Program.
Formerly EMS 231 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

Credit(s): 1
Vocational Lab Hour(s): 0.75
Vocational Clinic Hour(s): 1

Prerequisite(s): Completion of pre-course screening including drug screen and criminal background check.
Corequisite(s): EMS 2031.
Formerly EMS 232 Teaches the skills necessary for the paramedic to effectively assess and treat patients presenting with cardiovascular emergencies utilizing skills and simulation scenarios. Serves as the companion course to Paramedic Cardiology.

EMS 2033 - Paramedic Medical Emergencies

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Prerequisite(s): BIO 2101, current Colorado Certification as an EMT with IV endorsement or higher and acceptance into the Paramedic Education Program.
Corequisite(s): EMS 2034.
Formerly EMS 233 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, nontraumatic musculoskeletal disorders and diseases of the eyes, ears, nose and throat.

EMS 2034 - Paramedic Medical Emergencies Lab

Credit(s): 1
Vocational Lab Hour(s): 0.75
Vocational Clinic Hour(s): 1

Prerequisite(s): Completion of pre-course screening including drug screen and criminal background check.
Corequisite(s): EMS 2033.
Formerly EMS 234 Teaches the skills necessary for the paramedic to effectively assess and treat patients with a variety of medical emergencies utilizing skills and simulation scenarios. Serves as the companion course to Paramedic Medical Emergencies.

EMS 2035 - Paramedic Trauma Emergencies

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): BIO 2101, current Colorado Certification as an EMT with IV endorsement or higher and acceptance into the Paramedic Education Program.
Formerly EMS 235 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

Credit(s): 1
Vocational Lab Hour(s): 0.75
Vocational Clinic Hour(s): 1

Prerequisite(s): Completion of pre-course screening including drug screen and criminal background check.
Corequisite(s): EMS 2035.
Formerly EMS 236 Teaches the skills necessary for the paramedic to effectively assess and treat patients with a variety of traumatic emergencies utilizing skills and simulation scenarios. Serves as the companion lab course for Paramedic Trauma Emergencies.

EMS 2037 - Paramedic Internship Preparatory

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Prerequisite(s): EMS 2025, EMS 2027, EMS 2029, EMS 2031, EMS 2033, EMS 2035
Formerly EMS 237 Reviews concepts and techniques used in the prehospital setting.

EMS 2080 - Paramedic Internship I

Credit(s): 6
Internship Hour(s): 18
Prerequisite(s): EMS 2037.
Formerly EMS 280 Provides the first course of a proctored Internship to develop paramedic skills in a field setting. The student will gain experience in scene management as a member of an ALS team. The student will also apply advanced life support patient care knowledge to the assessment and treatment of patients.

EMS 2081 - Paramedic Internship II

Credit(s): 6
Internship Hour(s): 18
Prerequisite(s): EMS 2080.
Formerly EMS 281 Provides the second course of a proctored Internship to develop paramedic skills in a field setting. The student will gain experience in scene management as a leader of the ALS team. The student will also apply advanced life support patient care knowledge to the assessment and treatment of patients.

Paramedic Prep

See list of Department Chairs on the Personnel page.

This program prepares students with the knowledge and skills needed for scene management, emergency patient care and transport. This includes scene safety, patient assessment and treatment, medication administration, documentation and patient transport. Upon successful completion of the program, students take the National Registry exam, and upon passing the exam, you may apply for Colorado State Certification at your level of training.

The Emergency Medical Services (EMS) program has a selective admissions process. The program application and requirements are available in the Health & Public Safety office or at Pueblo Community College EMT. All Health & Public Safety programs have essential functions you must be able to perform for you to be successful in the program and career.

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 certification exams.

Prerequisites for Program Admissions

Student must hold a current EMT certification in Colorado. Student must have a Health Care Professional CPR card and successfully completed CCR 092 or qualifying assessment scores. If you hold a current state EMT certification the BIO 111 prerequisite to BIO 201/202 can be waived.

Total Credits: 18

General Education Courses (8 credits)

BIO 2101 - Human Anatomy and Physiology I with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 201 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, nervous and endocrine systems. Includes a mandatory hands-on laboratory experience covering experimentation, microscopy, observations and dissection. This is the first semester of a two-semester sequence.

BIO 2102 - Human Anatomy and Physiology II with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 202 Focuses on the integrated study of the human body and the histology, anatomy, and physiology of the following systems and topics: cardiovascular, hematology, lymphatic and immune, urinary, fluid and electrolyte control, digestive, nutrition, respiratory, reproductive and development. Includes a mandatory hands-on laboratory experience involving experimentation, microscopy, observations and dissection. This is the second semester of a two-semester sequence.

Program Schedule (10 credits)

EMS 1125 - AEMT Fundamentals

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): Acceptance into the AEMT Program.
Formerly EMS 131 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 1129 - AEMT Pharmacology

Credit(s): 1
Lecture Hour(s): 0.50
Vocational Lab Hour(s): 0.75
Prerequisite(s): Acceptance into the AEMT Program.
Formerly EMS 129 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 1127 - AEMT Special Considerations

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Prerequisite(s): Acceptance into the AEMT Program.
Formerly EMS 127 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 1133 - AEMT Medical Emergencies

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): Acceptance into the AEMT Program.
Formerly EMS 133 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 - AEMT Trauma Emergencies

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): Acceptance into the AEMT Program.
Formerly EMS 135 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 1071 - AEMT Clinical Internship

Credit(s): 2
Internship Hour(s): 6
Prerequisite(s): Acceptance into the AEMT Program.
Formerly EMS 171 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.

Pharmacy Technician Certificate

CIP 51.0805

See list of Department Chairs on the Personnel page.

Career Opportunities

This program prepares you to work in a pharmacy setting under the supervision of a licensed pharmacist, performing activities that do not require the professional judgment of a pharmacist. The Colorado Department of Labor and employment estimates pharmacy technicians earn from $28,301 to $40,222, with a mean annual salary of $36,248.

Program Description

This certificate program is 34 credits and is completed in three semesters. It provides instruction in basic pharmacy theories and is an important step toward national certification as a pharmacy technician and state licensure. Learning experiences include lecture, lab and clinical exposure in local pharmacies. To ensure success in this class, you should have a good knowledge of basic algebra and math formulas.

Program Requirements

Entrance Requirements:

Students must apply for admission to the program (through the program coordinator or the administrative assistant for the Health and Public Safety Division). Students are conditionally accepted into the program on a first-come, first-served basis. Students must pass a background check and drug screen to be admitted into the program. Additional requirements must be met prior to placement in a clinical setting. Applications are available January 10 with a deadline for submission of July 15 for the following fall semester. Pharmacy technician certificate will not be offered during the spring semester.

Total Credits: 34

Fall (15 credits)

AAA 1009 - Advanced Academic Achievement

Credit(s): 3
Lecture Hour(s): 3
Formerly AAA 109 Examines theories and practices associated with successful learning to enhance college success. Recommended for new and returning students, this course study areas including education and career planning,

effective communication, personal management, critical and creative thinking, development of community and awareness of diversity, leadership, and techniques for successful academic performance.

MAT 1120 - Math for Clinical Calculations

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 103 Provides a review of general mathematics, introductory algebra and an opportunity to learn systems of measurement and methods of solving problems related to drug dosage and intravenous fluid administration. It is designed for students in the health disciplines. Topics may include algebra, graphs, measurement and conversion between various systems of measurement.

CIS 1018 - Intro to PC Applications

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 118 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.

PHT 1011 - Introduction to Pharmacy

Credit(s): 3
Lecture Hour(s): 1.5
Vocational Lab Hour(s): 2.25
Prerequisite(s): Program admission
Formerly PHT 111 Introduces 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 1015 - Pharmacology I

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to program
Formerly PHT 115 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.

Spring (13 credits)

PHT 1013 - Communication and Professionalism for Pharmacy Technicians

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): Admission to program
Formerly PHT 113 Provides fundamental components of theoretical and applied aspects of personal and interpersonal communication related to pharmacy practice. Theoretical aspects include such topics as communication perceptions and barriers, listening, responding, assertiveness and non-verbal communication. Applied aspects include such

techniques as role-playing, group discussion and interviewing. This course also examines the methods and practice of interviewing with respect to the roles and functions of both interviewee and interviewer.

PHT 1035 - Pharmaceutical Calculations and Compounding Techniques

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): Program admission required.
Formerly PHT 235 Develops the skills necessary for performing calculations in pharmacy practice and the compounding of sterile and nonsterile products. Includes a review of basic mathematical skills. Enables the student to solve problems involving calculations pertinent to the preparations of pharmaceuticals. These skills are put to practical use in the compounding portion of this course. Preparation of sterile products, parenteral admixtures, TPN solutions and chemotherapeutics, using proper aseptic techniques is taught. The safe handling of antineoplastics and other hazardous drug products, as well as special drug storage requirements, is learned. Emphasizes the importance of accuracy, quality and infection control. Use and maintenance of equipment such as laminar flow hoods, auto injectors and pumps is discussed.

PHT 1014 - Computer Skills for Pharmacy Technicians

Credit(s): 1
Vocational Lab Hour(s): 1.5
Prerequisite(s): Admission to program.
Formerly PHT 114 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 to allow hands-on technical experience.

PHT 1016 - Pharmacology II

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to program
Formerly PHT 118 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.

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

HPR 1038 - Intro to Medical Terminology

Credit(s): 1
Lecture Hour(s): 1
Formerly HPR 138 Introduces the student to the structure of medical terms with emphasis on using and combining the most common prefixes, roots and suffixes. Includes terms related to major body systems, oncology and psychiatry, as

well as clinical laboratory and diagnostic procedures and imaging. Class structure provides accepted pronunciation of terms and relative use in the healthcare setting.

Summer (6 credits)

PHT 1012 - Pharmacy Law and Ethics

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Admission to program.
Formerly PHT 112 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 1070 - Clinical:

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): Admission to program
Formerly PHT 170 Offers the clinical practicum required for the program.

PHT 1071 - Clinical:

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): Program admission
Formerly PHT 171 Offers the clinical practicum required for the program.

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[1] First 8 weeks

[2] Second 8 weeks

[3] May be substituted with a GT general education course

Photovoltaic Panel Installation CER

Program Description

See list of Department Chairs on the Personnel page.

The Industrial Technology Maintenance (ITM) Program prepares students for entry level employment into career paths that include electronics technicians, electrical technicians, semiconductor manufacturing technicians, and field service technicians. The program provides the student with knowledge and essential skills in the complex electro-mechanical systems found in production facilities. The curriculum addresses digital electronics, print reading, motors and controls, programmable logic controllers, and mechanical components. The ITM Program also offers certificates in Solar installation and Green Energy Technologies associated with Industrial Installation and Maintenance.

Total Credits: 17

Core Curriculum Requirements

MAC 1000 - Machine Shop Safety

Credit(s): 1
Lecture Hour(s): 1
Formerly MAC 100 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.

ELT 1206 - Fundamentals of DC/AC

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Corequisite(s): ELT 1207.
Formerly ELT 106 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.

ENY 1621 - Solar Photovoltaic Components

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Corequisite(s): ELT 1206
Formerly ENY 121 Reinforces basic safety principles and provides detailed knowledge of photovoltaic components. Also covered is an overview of site analysis and special purpose tools. Upon successful conclusion of this course the student will be able to select proper components for a photovoltaic system based on regulatory codes and standards and individual component specifications.

ELT 1207 - Industrial Electronics

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Corequisite(s): ELT 1206.
Formerly ELT 107 Provides a basic knowledge of generators, motors and the solid state devices and digital techniques used for industrial control applications.

ENY 1655 - Solar Photovoltaic Field Lab Experience

Credit(s): 2
Vocational Lab Hour(s): 3
Prerequisite(s): Department approval required
Formerly ENY 165 Onsite / hands-on training experience for students. Experiences include on-site installations, inspection tours, mock-roof training installations, industry association meetings, field experience workshops.

ELT 2080 - Internship

Credit(s): 1-12
Internship Hour(s): 3-36
Formerly ELT 280 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.

ENY 1632 - NABCEP Entry Level Prep Class

Credit(s): 1
Vocational Lab Hour(s): 1.5
Prerequisite(s): Department approval required
Formerly ENY 132 Reviews the knowledge needed by the student to permit passing the NABCEP Entry level test. This is an overview class only and is not meant to be a replacement for the actual class.

PN Opt-out Certificate

See list of Department Chairs on the Personnel page.

Program Description

The LPN program teaches you skills of direct patient care that you can apply in any healthcare setting. It offers theoretical and applied instruction in classrooms, simulated laboratories, and clinical settings. It integrates education in adult, gerontological, obstetric, pediatric, and psychiatric-mental health nursing. Your clinical learning will take place in diverse types of institutions.

The Nursing program has a selective and limited admission policy. The application is available online at **Pueblo Community College Nursing** from **April 1 to May 21, 2022 for Fall of 2022 admission.** All Health & Public Safety programs have essential functions to help you be successful in the program and career. **In progress grades will be accepted, however course must show in progress at time of application and be completed in Spring semester.** It is the applicant's responsibility to submit final spring semester course grade(s) as soon as possible to the admission committee for consideration.

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.

Career Information

The LPN program prepares you to provide safe, therapeutic, and competent nursing care in hospitals and other healthcare settings. You may also work as an entry-level patient care manager.

Total Credits: 54

General Education and Program Prerequisites

First (12 credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

BIO 1111 - General College Biology I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): ENG 1021
Formerly BIO 111 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.

HPR 1010 - Dietary Nutrition

Credit(s): 1
Lecture Hour(s): 1
Formerly HPR 108 Studies the basic nutritional principles in clinical practice in health care. The course will cover factors which influence the nutritional status of individuals, methods of nutritional assessment and support, and diet modification for specific disease states.

PSY 2440 - Human Growth and Development: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 235 Examines human development from conception through death, emphasizing physical, cognitive, emotional and psychosocial factors. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

Second (12 credits)

BIO 2101 - Human Anatomy and Physiology I with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 201 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, nervous and endocrine systems. Includes a mandatory hands-on laboratory experience covering experimentation, microscopy, observations and dissection. This is the first semester of a two-semester sequence.

BIO 2102 - Human Anatomy and Physiology II with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3

Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 202 Focuses on the integrated study of the human body and the histology, anatomy, and physiology of the following systems and topics: cardiovascular, hematology, lymphatic and immune, urinary, fluid and electrolyte control, digestive, nutrition, respiratory, reproductive and development. Includes a mandatory hands-on laboratory experience involving experimentation, microscopy, observations and dissection. This is the second semester of a two-semester sequence.

BIO 2104 - Microbiology with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 204 Designed for health science majors. Examines microorganisms with an emphasis on their structure, development, physiology, classification and identification. The laboratory experience includes culturing, identifying and controlling microorganisms with an emphasis on their role in infectious disease.

1 Course must be completed or in progress (Spring Semester) to apply to the program

2 Course must be completed within 10 years of entrance into the program

Program Course Schedule

Application Admission Requirements

Complete NUA 101 Certified Nurse Aide Health Care Skills, or the Nurse Aide coursework within the Colorado Community College System (CCCS), or have an Active Colorado CNA Certificate. (If Nursing Assistant Certificate is obtained through a private company or an out-of-state institution, student must obtain an Active Colorado CNA Certificate). Nurse Aide certificate must be in good standing without stipulation. Nurse Aide courses must be completed within seven (7) years of entry into PCC Nursing program. If the applicant is a current Colorado Certified Nurse Aide, in good standing, there is no time limit.

Apply to the program -- April 1 to May 20, 2022

Application is online at Pueblo Community College Nursing

First (13 credits)

NUR 1009 - Fundamentals of Nursing

Credit(s): 6
Lecture Hour(s): 2
Vocational Lab Hour(s): 6
Vocational Clinic Hour(s): 6

Prerequisite(s): Admission to Nursing or Psychiatric Technician programs.
Corequisite(s): Nursing: NUR 1012, HPR 1010, MAT 1120. Psych Tech: NUR 1012.
Formerly NUR 109 Introduces the fundamental concepts necessary for safe, patient-centered nursing care to a diverse patient population while integrating legal and ethical responsibilities of the nurse. Introduces caring, critical thinking, the nursing process, quality improvement and communication used when interacting with patients and members of the interdisciplinary team, and relates evidence-based nursing practice. Application of knowledge and skills occurs in the

nursing skills laboratory and a variety of clinical settings providing care to stable patients with common health alterations.

NUR 1012 - Basic Concepts of Pharmacology

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Admission to Nursing or Psychiatric Technician programs.
Corequisite(s): Nursing: NUR 1009, HPR 1010, MAT 1120; Psych Tech: NUR 1009.
Formerly NUR 112 Overview of the basic principles of pharmacology including major drug classifications and prototypes of commonly used medications. Principles of medication administration include aspects of best practice for safe, quality, patient-centered care. Central points include safety, quality improvement factors in the administration of medications, patient teaching and variations encountered when administering medications to diverse patient populations across the lifespan.

NUR 1001 - Pharmacology Calculations

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): Admission to Practical Nurse Program.
Formerly NUR 101 Prepares nurse to provide safe, patient-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.

BIO 2116 - Human Pathophysiology

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): BIO 2101, BIO 2102
Formerly BIO 216 Focuses on the alterations in physiological, cellular and biochemical processes, the associated homeostatic response, and the manifestations of disease. Prior knowledge of cellular biology, anatomy and physiology is essential for the study of pathophysiology.

Second (13 credits)

NUR 1006 - Med-Surg Nursing Concepts

Credit(s): 7
Lecture Hour(s): 3.40
Vocational Lab Hour(s): 0.90
Vocational Clinic Hour(s): 9.90

Prerequisite(s): Admission to Nursing Program and completion of preceding required program course work or permission of the program director.
Corequisite(s): NUR 1050 or permission of the program director.
Formerly NUR 106 NUR106 is the first medical/surgical nursing course. Building on NUR 1009, this course provides for the acquisition of basic medical/surgical nursing theory, as well as application of mental health concepts, communication, collaboration, caring, and critical thinking/clinical reasoning necessary for safe, patient-centered care to a developmentally and culturally diverse adult patient population experiencing various medical/surgical

interventions. Incorporates evidence-based practice, quality improvement, professional standards, and legal and ethical responsibilities of the nurse. Application of knowledge and skills occurs in the nursing skills laboratory and a variety of clinical settings.

NUR 1050 - Maternal-Child Nursing

Credit(s): 6
Lecture Hour(s): 3.30
Vocational Lab Hour(s): 2.10
Vocational Clinic Hour(s): 6

Prerequisite(s): Admission to Nursing program and completion of preceding required program course work or permission of the program director.
Corequisite(s): NUR 1006 or permission of the program director.
Formerly NUR 150 Nursing 150 provides for the acquisition of maternal/child nursing theory, as well as application of mental health concepts, communication, collaboration, caring, and critical thinking/clinical reasoning necessary for safe, family-centered nursing care to childbearing families and children that is developmentally and culturally appropriate. Incorporates evidence-based practice, standards of practice, quality improvement, and legal and ethical responsibilities of the nurse. Application of knowledge and skills occurs in the nursing skills laboratory and in a variety of maternal/child and pediatric clinical settings.

Summer (4 credits)

NUR 1069 - Transition into Practical Nursing

Credit(s): 4
Lecture Hour(s): 2
Vocational Clinic Hour(s): 6

Prerequisite(s): Admission to Nursing program and completion of preceding required program course work or program director permission.
Formerly NUR 169 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.

Police Science Certificate

CIP 43.0107

See list of Department Chairs on the Personnel page.

Career Opportunities

The Law Enforcement program prepares students for careers in law enforcement as a police officers, desk officer, bailiff or corrections officer. Additionally, students could work as criminal investigators, detectives, police agencies, or in correction and judicial facilities.

Program Description

The Law Enforcement program teaches students an in-depth analysis of the three (3) components of the criminal justice system (law enforcement, the judicial system and corrections) with special emphasis on criminology, substantive criminal law, procedural criminal law and constitutional law. It places a strong emphasis on reading and comprehension skills, written and verbal communication skills and empathetic awareness of cultural diversity.

Program Requirements

Entrance requirements:

Successful completion of any CCR course or qualifying placement score or exemption to complete the Criminal Justice courses. Admission into the Law Enforcement Academy courses requires a student to file an application with the PLEA Department Chair and meet specific guidelines prior to admission into the program (such as state statutory requirements for background checks). You may enroll in PLEA courses only if you are admitted into the program.

Graduation requirements:

In addition to program requirements for this program, you must complete ENG 1021, COM 1150, MAT 1140 and six (6) credits of social and behavioral science courses.

Total Credits: 37

Certificate Requirements

LEA 1001 - Basic Police Academy I

Credit(s): 6
Lecture Hour(s): 6
Formerly LEA 101 Conforms to POST standards and state certification requirements as well as the basic skills and knowledge necessary to perform the entry-level duties of a peace officer. Emphasis will be on simulating actual situations utilizing a lecture and laboratory mode of learning.

LEA 1002 - Basic Police Academy II

Credit(s): 12
Lecture Hour(s): 12
Formerly LEA 102 Conforms to POST standards and state certification requirements as well as the basic skills and knowledge to perform the entry-level duties of a peace officer. Emphasis will be on simulating actual situations utilizing a lecture and laboratory mode of learning.

LEA 1003 - Basic Law Enforcement Academy III

Credit(s): 2
Lecture Hour(s): 0.50
Vocational Lab Hour(s): 2.25
Formerly LEA 103 Enhances the standards established by the POST 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 POST curriculum to create a unique learning experience.

LEA 1005 - Basic Law

Credit(s): 8
Lecture Hour(s): 8
Formerly LEA 105 Conforms to POST standards and state certification requirements as well as the basic skills and knowledge necessary to perform the entry-level duties of a peace officer. Emphasis will be on United States Constitution, arrest, search and seizure, interrogation and confessions, rules of evidence, Colorado Criminal Code, Colorado Traffic Code, Colorado Children's Code, Liquor Code and controlled substances.

LEA 1006 - Arrest Control Techniques

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly LEA 106 Covers the skills, knowledge and abilities necessary to effectively maintain control of a suspect when making an arrest. Emphasizes the continuum of force and de-escalation of force.

LEA 1007 - Law Enforcement Driving

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly LEA 107 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

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly LEA 108 Discusses the skills, knowledge and abilities necessary to safely use police firearms. Students will demonstrate skills by firing weapons on a firing range. The student will demonstrate basic safety techniques and will explain the firearms role within the continuum of force.

Practical Nursing Certificate

Offered only at PCC's Southwest Campus, Mancos

See list of Department Chairs on the Personnel page.

This is a limited-entry program. You must meet specific program entrance requirements in addition to the PCC admission requirements. Students must complete general education requirements with a "C" or higher (minimum GPA 2.5) to be admitted to the Practical Nurse program. Students who complete the departmental application process will have their qualifications reviewed by the program's admission committee.

Total Credits: 43

General Education (7 credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

BIO 1006 - Basic Anatomy and Physiology

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly BIO 106 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, Paramedic Program, and the Medical Office Technology Program.

Core Requirements (36 credits)

Semester 1 - Spring (18 credits)

NUR 1001 - Pharmacology Calculations

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): Admission to Practical Nurse Program.
Formerly NUR 101 Prepares nurse to provide safe, patient-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

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): Admission to Practical Nurse Program.
Formerly NUR 102 Provides acquisition of basic nursing theory, communication, collaboration, and critical thinking necessary for safe, patient-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.

NUR 1005 - Practical Nursing Arts and Skills

Credit(s): 6
Lecture Hour(s): 3
Vocational Lab Hour(s): 9
Prerequisite(s): Admission to Practical Nurse Program.
Formerly NUR 105 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, patient-centered nursing care are applied to the care of patients across the lifespan with stable and predictable outcomes. The course applies guidelines related to the professional, legal, and ethical scope of practice of the Practical Nurse, including demonstrating safe performance of all psychomotor skills.

NUR 1010 - Pharmacology Practical Nursing

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to Practical Nurse Program.
Formerly NUR 110 Categorizes basic principles of pharmacology, including major drug classifications using prototype drugs, principles of medication administration including best practices for safe, quality, and patient-centered care. Discusses the legal and ethical responsibilities of the Practical Nurse related to medication administration. Application of this content is used throughout the program nursing courses.

NUR 1070 - Clinical I

Credit(s): 2
Vocational Clinic Hour(s): 6

Prerequisite(s): Admission to Practical Nursing Program.
Formerly NUR 170 Offers the clinical practicum to apply the related nursing theory.

NUR 1071 - Clinical II

Credit(s): 2
Vocational Clinic Hour(s): 6

Prerequisite(s): Admission to Nursing Program.
Formerly NUR 171 Offers the clinical practicum to apply the related nursing theory.

Semester 2 - Fall (18 credits)

NUR 1004 - Alterations in Adult Health II

Credit(s): 5
Lecture Hour(s): 4.50
Vocational Lab Hour(s): 1.50
Prerequisite(s): NUR 1001, NUR 1002, NUR 1003, NUR 1005, NUR 1016, NUR 1070, NUR 1071.
Formerly NUR 104 Apply and expand the knowledge and skills learned in Adult Health I to provide acquisition of basic nursing theory, communication, collaboration and critical thinking necessary for safe, patient-centered nursing care for diverse adult patients with conditions that are stable and predictable. The 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 in the care of adults.

NUR 1003 - Basic Assessment for the Pn

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): Admission to Practical Nurse Program.
Formerly NUR 103 Provides the theoretical knowledge and psychomotor skills used by the Practical Nurse performing

a basic assessment of health status of stable adult patients with predictable outcomes, including collecting, reporting, and recording objective/subjective data, observing conditions or changes in condition, and differentiating normal from abnormal findings. Principles of therapeutic communication and patient teaching are included. Includes practice collecting basic assessment data in the nursing skills laboratory.

NUR 1015 - Basic Concepts of Mental Health Nursing

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): NUR 1001, NUR 1002, NUR 1003, NUR 1005, NUR 1016, NUR 1070, NUR 1071.
Formerly NUR 115 Applies knowledge of basic nursing theory, communication, collaboration, and critical thinking necessary for safe, patient-centered nursing care to diverse patients at various levels of mental health promotion and mental illness management. The course incorporates the legal and ethical responsibilities of the Practical Nurse in the care of patients with mental health issues.

NUR 1011 - Advancement into Practical Nursing

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): NUR 1001, NUR 1002, NUR 1003, NUR 1005, NUR 1016, NUR 1070, NUR 1071.
Formerly NUR 111 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 1013 - Basic Concepts of Maternal-Newborn Nursing

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): NUR 1001, NUR 1002, NUR 1003, NUR 1005, NUR 1016, NUR 1070, NUR 1071.
Formerly NUR 113 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, patient-centered nursing care to childbearing families. The course incorporates the legal and ethical responsibilities of the Practical Nurse in the care of childbearing families.

NUR 1014 - Basic Concepts of Pediatric Nursing

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): NUR 1001, NUR 1002, NUR 1003, NUR 1005, NUR 1016, NUR 1070, NUR 1071.
Formerly NUR 114 Applies and expands on 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, patient-centered nursing care to children and their families. The course incorporates the legal and ethical responsibilities of the Practical Nurse in the care of children.

NUR 1016 - Basic Concepts of Geriatric Nursing

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): Admission to Practical Nurse Program.
Formerly NUR 116 Applies and expands 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, patient-centered nursing care to older adults. The course incorporates the legal and ethical responsibilities of the Practical Nurse in the care of older adults.

NUR 1072 - Clinical III

Credit(s): 3
Vocational Clinic Hour(s): 9

Prerequisite(s): NUR 1001, NUR 1002, NUR 1003, NUR 1005, NUR 1016, NUR 1070, NUR 1071.
Formerly NUR 172 Offers the clinical practicum to apply the related nursing theory.

NUR 1073 - Clinical III

Credit(s): 2
Vocational Clinic Hour(s): 6

Prerequisite(s): NUR 1001, NUR 1002, NUR 1003, NUR 1005, NUR 1016, NUR 1070, NUR 1071.
Formerly NUR 173 Offers the clinical practicum to apply the related nursing theory.

Production Technician Certificate

CIP 48.0503

See list of Department Chairs on the Personnel page.

CERTIFICATE IS UNDER REVIEW

Total Credits: 20

Certificate Requirements

MAC 1002 - Print Reading for Machinists

Credit(s): 3
Lecture Hour(s): 3
Formerly MAC 102 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.

MAT 1150 - Technical Mathematics

Credit(s): 4
Lecture Hour(s): 4
Formerly MAT 108 Covers material designed for career technical or general studies students who need to study particular mathematical topics. Topics may include measurement, algebra, geometry, trigonometry, graphs and/or finance. These are presented at an introductory level and the emphasis is on applications.

MTE 1102 - Safety Manufacturing Environment

Credit(s): 1
Lecture Hour(s): 1
Formerly MTE 105 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 1110 - Applied Communication and Teamwork in Industry

Credit(s): 3
Lecture Hour(s): 3
Formerly MTE 110 Provides the student with an in-depth focus on the fundamental concepts and approaches required by industry to establish strong comprehensive and recognized skills in the areas of critical thinking, emotional intelligence, team dynamics, leadership roles, conflict resolution and results-oriented communication skills. This course is taught from a contextualized format.

MTE 1200 - Manufacturing Processes

Credit(s): 3
Lecture Hour(s): 3
Formerly MTE 120 Provides an overview of the different methods, tools, and machines which are used to manufacture industrial and consumer products.

MTE 1075-1077 - Special Topics

Credit(s): 0-12
Formerly MTE 175-177 Provides student with a vehicle to pursue in-depth exploration of a special topic of interest.

Professional Communication Certificate

Dr. Young Kim, Dean of Arts and Sciences

See list of Department Chairs on the Personnel page.

Career Opportunities

The Certificate of Professional Communication program prepares students for careers in management, human resources, nonprofit organizations, marketing, public relations and recruitment, as well as workplace advancement.

Program Description

The Certificate of Professional Communication program teaches students to write and speak to diverse publics, engage in critical thinking and problem-solving, work as part of a team and employ one-on-one conflict resolution strategies. The curriculum is designed to sharpen students' verbal and written communication abilities for the best practices of being part of a 21st-century workplace.

Disclaimer

The Certificate of Professional Communication will not appear as a certificate on official college transcripts. Courses taken toward the Certificate may apply to other programs on a degree-by-degree basis.

Program Requirements

Entrance Requirements:

Placement into ENG 1021 **or** successful completion of any CCR course with a grade of "C"/"S" **or** higher.

Graduation Requirements:

Successful completion of COM 2089 - Capstone.

Total Credits: 17

Certificate Requirements

Core Requirements (17 Credits)

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

or

COM 2062 - Communicating with Impossible People

Credit(s): 1
Lecture Hour(s): 1
Formerly COM 262 Introduces participants to the concepts regarding communication with "impossible" people and techniques to deal with them more effectively. Emphasizes active participation in skill-building activities.

COM 2063 - Conflict Resolution

Credit(s): 1
Lecture Hour(s): 1
Formerly COM 263 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 2068 - Problem Solving

Credit(s): 1
Lecture Hour(s): 1
Formerly COM 268 Focuses on solving problems in our personal and professional lives and developing the ability to think and act creatively in responding to a variety of situations. Introduces several different perspectives for group and individual problem solving and explores real situations and simulations.

COM 2300 - Intercultural Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 220 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. This is a statewide Guaranteed Transfer course in the GT-SS3 category.

COM 2089 - Capstone

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Must Have nine credits completed with a grade of "C" or higher towards the Certificate of Professional Communication or approval of the English & communication Department Chair.
Formerly COM 289 Provides a demonstrated culmination of learning within a given program of study.

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

or

ENG 1031 - Technical Writing I

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 131, then ENG 1020 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.

Psychiatric Technician Certificate

CIP 51.1502

See list of Department Chairs on the Personnel page.

Program Description

This program teaches you to use basic patient care and psychiatric principles to interact with and care for clients in a therapeutic manner and monitor treatment modalities. You will learn to perform basic nursing skills, administer medications, conduct one-to-one relationship development, and participate in group therapy.

The Psychiatric Technician program has a selective admissions process. The program application and requirements are available in the Nursing office or at Pueblo Community College Psych Tech from March 1—July 30. All Medical & Behavior Health Division programs have essential functions to help you be successful in the program and career.

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.

Career Information

The Psychiatric Technician Certificate Program provides you with knowledge and skills for employment as a psychiatric caregiver in health care settings.

Total Credits: 37

Spring (9 credits)

BIO 1006 - Basic Anatomy and Physiology

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly BIO 106 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, Paramedic Program, and the Medical Office Technology Program.

NUA 1001 - Nurse Aide Health Care Skills

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3

Formerly NUA 101 Prepares the student to perform the fundamental skills of the nurse aide. Basic nursing skills, communication 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 Aid Clinical Experience

Credit(s): 1
Vocational Clinic Hour(s): 1.5

Formerly NUA 170 Applies knowledge and skill gained in NUA 101 to patient care. Pass/fail grading (F).

Fall (14 credits)

PTE 1010 - Intro to Behavioral Health Care and Wellness

Credit(s): 3
Lecture Hour(s): 3
Formerly PTE 110 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.

NUR 1001 - Pharmacology Calculations

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): Admission to Practical Nurse Program.
Formerly NUR 101 Prepares nurse to provide safe, patient-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 1003 - Basic Assessment for the Pn

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): Admission to Practical Nurse Program.
Formerly NUR 103 Provides the theoretical knowledge and psychomotor skills used by the Practical Nurse performing a basic assessment of health status of stable adult patients with predictable outcomes, including collecting, reporting, and recording objective/subjective data, observing conditions or changes in condition, and differentiating normal from abnormal findings. Principles of therapeutic communication and patient teaching are included. Includes practice collecting basic assessment data in the nursing skills laboratory.

NUR 1005 - Practical Nursing Arts and Skills

Credit(s): 6
Lecture Hour(s): 3
Vocational Lab Hour(s): 9
Prerequisite(s): Admission to Practical Nurse Program.
Formerly NUR 105 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,

patient-centered nursing care are applied to the care of patients across the lifespan with stable and predictable outcomes. The course applies guidelines related to the professional, legal, and ethical scope of practice of the Practical Nurse, including demonstrating safe performance of all psychomotor skills.

NUR 1010 - Pharmacology Practical Nursing

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to Practical Nurse Program.
Formerly NUR 110 Categorizes basic principles of pharmacology, including major drug classifications using prototype drugs, principles of medication administration including best practices for safe, quality, and patient-centered care. Discusses the legal and ethical responsibilities of the Practical Nurse related to medication administration. Application of this content is used throughout the program nursing courses.

Spring (14 credits)

PTE 1017 - Theoretical Concepts of Psychiatric Care II

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): PTE 1010
Formerly PTE 117 Explores psychiatric problems common to four (4) special populations: children/adolescents, developmentally disabled individuals, aging persons and forensic clients. The student will learn how to recognize and intervene with problems common to these four groups.

PTE 1018 - Psychiatric Management Principles

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): Admission into the Psychiatric Technician program, PTE 1017, PTE 1071.
Corequisite(s): PTE 1072.
Formerly PTE 118 Capstone: Explores principles of psychiatric unit management and professional behaviors in psychiatric care. Self-care issues and job-seeking skills are also discussed.

PTE 1020 - Application of Behavioral Health Care & Wellness

Credit(s): 5
Lecture Hour(s): 3
Vocational Lab Hour(s): 3
Prerequisite(s): PTE 1010
Formerly PTE 120 Explores basic etiology, symptoms, and interventions for common behavioral and mental health disorders. Provides the opportunity for students to experience the mileu of a behavioral health care setting while providing basic care to clients experiencing common behavioral and mental health issues.

PTE 1070 - Clinical Concepts of Psychiatric Care I

Credit(s): 2
Vocational Lab Hour(s): 3
Prerequisite(s): Program admission
Formerly PTE 170 Provides clinical application of theory and principles presented in PTE 116 through supervised clinical practice in a psychiatric care setting.

PTE 1071 - Clinical Concepts of Psychiatric Care II

Credit(s): 3
Vocational Lab Hour(s): 4.50
Prerequisite(s): Admission into the Psychiatric Technician program, PTE 1016 , PTE 1070, or permission of instructor.
Corequisite(s): PTE 1017.
Formerly PTE 171 Provides clinical application of theory and principles presented in PTE 1017through supervised clinical practice in a psychiatric care setting.

PTE 1072 - Psychiatric Management Clinical

Credit(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): Admission into the Psychiatric Technician program, PTE 1070, PTE 1071.
Corequisite(s): PTE 1018.
Formerly PTE 172 Synthesizes knowledge from prerequisite courses and provides clinical application of theory presented in PTE 1018.

1 Courses must be successfully completed to continue with the program
2 Course must be completed within 7 years of a possible start

Software Development Certificate

See list of Department Chairs on the Personnel page.

Career Opportunities

The CIS program prepares you for careers in computers cience, computer networking, and electronic commerce. The AAS Degree with an emphasis in local area networking prepares you to work as a network technician on small and large networks. You may also administer smaller networks as a System Administrator. The AGS Degree with an emphasis in Computer Information Systems prepares you to transfer to a university to continue studies in Computer Science or Computer Information Systems.

Program Description

The CIS program provides training in basic technical computer and networking skills. You will study computer networking, programming and database technologies along with classes that teach the technical aspects of the Internet and data communications. Note: Students interested in transferring to a baccalaureate program in Computer Information Systems should refer to the Transfer Degree Section.

Total Credits: 30

Certificate Requirements

CSC 1020 - Problem Solving with Java

Credit(s): 3
Lecture Hour(s): 3
Formerly CSC 120 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 1019 - Introduction to Programming

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CSC 119 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 1060 - Computer Science I: (Language)

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Prerequisite(s): CSC 1020.
Formerly CSC 160 Introduces students to the discipline of computer science. Covers algorithm development, data representation, logical expressions, sub-programs and input/output operations using a structured programming language. Requires intensive lab work outside of class time.

CSC 1061 - Computer Science II: (Language)

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Prerequisite(s): CSC 1060 or instructor approval.
Formerly CSC 161 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 1029 - Introduction to Secure Coding

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Prerequisite(s): CSC 1060 , Computer Science I
Formerly CSC 129 Focuses on introduction to secure coding. Emphasizes concepts, principles, and 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 2017 - Advanced Python Programming

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Prerequisite(s): CSC 1020
Formerly CSC 217 Continues program development and problem solving not covered in CSC119: Introduction to Programming. Students will create larger programs in the areas of advanced expression, iterator objects, parsing, and GUI applications.

CSC 2025 - Computer Architecture/Assembly Language Programming

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.5
Prerequisite(s): CIS 2023, Linux, and CSC 1060, Computer Science I
Formerly CSC 225 Introduces concepts of computer architecture, functional logic, design and computer arithmetic. Focuses on the mechanics of information transfer and control within a computer system. Includes symbolic programming techniques, implementing high level control structures, addressing modes and their relation to arrays, subprograms, parameters, linkage to high level languages and the assembly process.

CIS 2040 - Database Design and Development

Credit(s): 3
Lecture Hour(s): 3
Formerly CIS 240 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)

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Prerequisite(s): CIS 2040, Database Design and Development
Formerly CIS 243 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.

CWB 2005 - Client-Side Scripting: (Software)

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Formerly CWB 205 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.

Structural Welder Certificate

CIP 48.0508

See list of Department Chairs on the Personnel page.

Program Description

Welders must be highly skilled and knowledgeable in a variety of welding processes to meet the challenges of advanced technology and new materials. Welding is not just a trade; it's a tool for many trades requiring a high level of training and technical knowledge. The Welding Technology program helps students develop skills through classroom studies and hands-on experience under close supervised instruction. Students learn about structural steel fabrication, layout work and pipe welding following detailed blueprints.

Total Credits: 21

Certificate Requirements

Core Requirements (21 Credits)

WEL 1000 - Safety for Welders

Credit(s): 1
Lecture Hour(s): 1
Formerly WEL 100 Covers the hazards of welding on health and safety.

WEL 1001 - Allied Cutting Processes

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Formerly WEL 101 Covers setting up equipment and performing cutting and gouging operations utilizing the oxyacetylene, air carbon arc, exothermic, and plasma arc cutting processes. This course will also provide an introduction to blueprint reading.

WEL 1002 - Oxy-fuel Joining Processes

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.5
Formerly WEL 102 Covers Oxy-fuel joining operations.

WEL 1003 - Basic Shielded Metal Arc I

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1002.
Formerly WEL 103 Covers Shielded Metal Arc Welding (SMAW) operation utilizing E-XX10 electrodes.

WEL 1004 - Basic Shielded Metal Arc II

Credit(s): 4
Lecture Hour(s): 1

Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1003.
Formerly WEL 104 Covers Shielded Metal Arc Welding (SMAW) operation utilizing E-XX18 electrodes.

WEL 1006 - Blueprint Reading for Welders and Fitters

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Prerequisite(s): WEL 1001 or WEL 1002
Formerly WEL 106 Covers interpretation and creation of weld symbols and blueprints used in metal fabrication.

Web Design Certificate

CIP 09.0702

See list of Department Chairs on the Personnel page.

Career Opportunities

Careers in Media Communications are in demand and PCC offers an affordable way for students to begin their education. Some of the exciting career options within this field include: Graphic Designers; Web Developers; Broadcast Technicians; Film Video Editors; and Advertising & Promotion Managers.

Program Description

The Media Communications program teaches students to think critically and develop skills in Web Design, Graphic Design, Advertising, Videography, News Writing, and TV-Radio Production. Courses provide a solid foundation in these areas through a combination of lecture and hands on applications. There are multiple labs with state of the art equipment and software for your area of emphasis. The Media Communications program provides a high technical skill attainment in this changing field of communication. Students have multiple options to pursue. The AAS degrees with emphases in Graphic Design and Web Design offer advanced technical skills in these areas. Certificates provide basic skill sets to enhance an existing degree or occupation. The AGS degree provides a transfer option to a four year university. If interested in this option, please refer to the Transferring Credits section of the catalog.

Total Credits: 18

Certificate Requirements

MGD 1002 - Introduction to Multimedia

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly MGD 102 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 1011 - Adobe Photoshop I

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly MGD 111 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 1041 - Web Design I

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly MGD 141 Introduces website planning, design and creation using industry standards-based website development tools. Screen-based color theory, web aesthetics, use of graphics editors and intuitive interface design are explored.

MGD 1043 - Motion Graphic Design I: (Software)

Credit(s): 3
Vocational Lab Hour(s): 4.5
Formerly MGD 143 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 1064 - Digital Video Editing I

Credit(s): 3
Vocational Lab Hour(s): 4.5
Formerly MGD 164 Introduces to digital nonlinear 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 2041 - Web Design II

Credit(s): 3
Vocational Lab Hour(s): 4.50
Prerequisite(s): MGD 1041, or department chair approval.
Formerly MGD 241 Expands on previously learned fundamentals of HTML introducing cascading style sheets, DHTML, Java Scripts and CGI forms. Color usage and interface design principles are emphasized in this course. In this course we'll examine websites that employ more complex structures, optimal site architecture and navigation necessary for larger and more complex sites.

Welding Certificate

CIP 48.0508

See list of Department Chairs on the Personnel page.

Career Opportunities

The Welding program prepares you for a career in construction and manufacturing settings, small job shops, city and government welding centers and related sites. You may also work as a self-employed welder.

Program Description

The Welding AAS degree offers advanced instruction if you have finished the basic welding courses or if you are working at the trade and wish to upgrade your skills. We also give qualification tests if you wish to be become qualified in a welding process.

The Welding Certificate program provides training in the SMAW (Shielded Metal Arc Welding), GTAW (Gas Tungsten Arc Welding), GMAW (Gas Metal Arc Welding) and the Oxyacetylene cutting process. This training is also included in the degree program. This two-semester program stresses print reading and applied metal properties. It prepares you for employment in the industry in the shortest possible time.

Total Credits: 34

Certificate Requirements

MAT 1150 - Technical Mathematics

Credit(s): 4
Lecture Hour(s): 4
Formerly MAT 108 Covers material designed for career technical or general studies students who need to study particular mathematical topics. Topics may include measurement, algebra, geometry, trigonometry, graphs and/or finance. These are presented at an introductory level and the emphasis is on applications.

WEL 1000 - Safety for Welders

Credit(s): 1
Lecture Hour(s): 1
Formerly WEL 100 Covers the hazards of welding on health and safety.

WEL 1001 - Allied Cutting Processes

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Formerly WEL 101 Covers setting up equipment and performing cutting and gouging operations utilizing the oxyacetylene, air carbon arc, exothermic, and plasma arc cutting processes. This course will also provide an introduction to blueprint reading.

WEL 1002 - Oxy-fuel Joining Processes

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.5
Formerly WEL 102 Covers Oxy-fuel joining operations.

WEL 1024 - Gas Tungsten Arc Welding I

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.5
Formerly WEL 124 Covers Gas Tungsten Arc Welding (GTAW) operations in various positions and joint designs.

WEL 1003 - Basic Shielded Metal Arc I

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1002.
Formerly WEL 103 Covers Shielded Metal Arc Welding (SMAW) operation utilizing E-XX10 electrodes.

WEL 1006 - Blueprint Reading for Welders and Fitters

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Prerequisite(s): WEL 1001 or WEL 1002
Formerly WEL 106 Covers interpretation and creation of weld symbols and blueprints used in metal fabrication.

WEL 2063 - Applied Metal Properties

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Formerly WEL 263 Introduces the study of metal properties, hardness testing, heat treatment, cold working microscopic examination and application of common commercial alloys in industry.

WEL 2050 - Layout and Fabrication

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1002.
Formerly WEL 250 Develops welding and associated skills in metal fabrication.

WEL 1004 - Basic Shielded Metal Arc II

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1003.
Formerly WEL 104 Covers Shielded Metal Arc Welding (SMAW) operation utilizing E-XX18 electrodes.

WEL 1050 - AWS Qualification Testing

Credit(s): 1
Lecture Hour(s): 1
Formerly WEL 150 Provides students with the opportunity to complete a welding qualification test in accordance with an American Welding Society code or specification.

Welding Multi-Process Certficiate

See list of Department Chairs on the Personnel page.

This Welding certificate offers training in Shielded Metal Arc and Gas Tungsten Arc Welding. Become familiar with cutting processes used in the field. Students can taking qualification exams at the end of the semester in various welding processes. This certificate is a fast track option. It can be completed in one semester. It is offered in the fall and spring semesters (and sometimes the summer semester).

Total Credits: 18

WEL 1000 - Safety for Welders

Credit(s): 1
Lecture Hour(s): 1
Formerly WEL 100 Covers the hazards of welding on health and safety.

WEL 1041 - Introduction to Multi Process Welding

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Formerly WEL 141 Covers welding in the 1F and 1G positions on various joint configurations using the SMAW (stick), GMAW (mig), GTAW (tig) and the FCAW (flux core) welding process on carbon steel; adjusting parameters and operating equipment, utilizing the various filler materials for each process. Layout procedures will be introduced and practiced, along with welding safety, industry standard soft skills and AWS filler metal classification and selection. Basic math, measuring, computer skills and blueprint reading will be introduced.

WEL 1042 - Basic Multi Process Welding

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1041.
Formerly WEL 142 Covers welding in the 2F and 2G positions on various joint configurations using the SMAW (stick), GMAW (mig), GTAW (tig) and the FCAW (flux core) welding process on carbon steel, adjusting parameters and operating equipment utilizing the various filler materials for each process. Layout procedures, safety, blueprint reading skills and weld symbol identification will be practiced during this course.

WEL 1043 - Intermediate Multi Process Welding

Credit(s): 4
Lecture Hour(s): 1

Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1042.
Formerly WEL 143 Covers welding in the 3FU and 3GU positions on various joint configurations using the SMAW (stick), GMAW (mig), GTAW (tig) and the FCAW (flux core) welding process on carbon steel, adjusting operating parameters and operating equipment utilizing the various filler materials for each process. Basic metallurgy will be presented.

WEL 1044 - Advanced Multi Process Welding

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1043.
Formerly WEL 144 Covers welding in the 4F and 4G positions on various joint configurations using the SMAW (stick), GMAW (mig), GTAW (tig) and the FCAW (flux core) welding process on carbon steel, adjusting operating parameters and operating equipment utilizing the various filler materials for each process. Resume writing and interview skills will be presented and practiced. Advanced blueprint reading will be focused on including study of complex print reading and weld symbols.

WEL 1050 - AWS Qualification Testing

Credit(s): 1
Lecture Hour(s): 1
Formerly WEL 150 Provides students with the opportunity to complete a welding qualification test in accordance with an American Welding Society code or specification.

Mini-Certificate

PCC offers the following Certificates that are NOT eligible for federal or state financial aid funds. For more information, please contact the appropriate department chairperson.

Advanced Emergency Medical Technician

See list of Department Chairs on the Personnel page.

Career Opportunities

The EMS program prepares you for a career in the pre-hospital health care field as an Emergency Medical Technician at either the Basic, Intermediate, or Paramedic level. Career opportunities include ambulance service, fire service, tactical EMS, critical care transport, and emergency department technician. If you graduate with an AAS degree, you have additional career opportunities in administration and management in the pre-hospital field.

Program Requirements

Entrance Requirements

To enroll in the EMT, EMT-Intermediate, or Paramedic programs, you must be at least 18 years of age, have all current immunizations, and be able to meet the requirements of the Colorado Department of Public Health and Environment EMTS Division Functional EMT Job Description. For enrollment into the AEMT program you must be a current EMT in Colorado. For the Paramedic program, you must have a current Colorado EMT certification, an EMT IV endorsement, successfully complete all pre-screening examinations, and prerequisites, and obtain department approval.

Total Credits: 10

AEMT Option Requirements

Prerequisite Courses for Program Admission **Credit(s): 10**

EMS 1125 - AEMT Fundamentals

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): Acceptance into the AEMT Program.
Formerly EMS 131 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 1129 - AEMT Pharmacology

Credit(s): 1
Lecture Hour(s): 0.50
Vocational Lab Hour(s): 0.75
Prerequisite(s): Acceptance into the AEMT Program.
Formerly EMS 129 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 1127 - AEMT Special Considerations

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Prerequisite(s): Acceptance into the AEMT Program.
Formerly EMS 127 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 1133 - AEMT Medical Emergencies

Credit(s): 2
Lecture Hour(s): 1

Vocational Lab Hour(s): 1.50
Prerequisite(s): Acceptance into the AEMT Program.
Formerly EMS 133 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 - AEMT Trauma Emergencies

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): Acceptance into the AEMT Program.
Formerly EMS 135 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 1071 - AEMT Clinical Internship

Credit(s): 2
Internship Hour(s): 6
Prerequisite(s): Acceptance into the AEMT Program.
Formerly EMS 171 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.

Air Conditioning Mini-Certificate

CIP 47.0604

See list of Department Chairs on the Personnel page.

To enter the automotive collision or automotive service program, you must successfully complete any CCR course or qualifying placement score or exemption.

Entrance into the program involves a screening and selection process. You can obtain an application and information by calling the Automotive Department at 719.549.3354.

Career Opportunities

The Automotive Service Technology program prepares you for a range of careers in automotive maintenance and repair.

Program Description

This program teaches you to perform general maintenance, as well as to diagnose and repair electrical, engine, transmission, suspension, brake and air conditioning systems. The program has met the National Institute for Automotive Technicians Education Foundation (NATEF) accreditation in the areas of Automatic Transmissions & Transaxles, Brakes, Electrical/Electronic Systems, Engine Performance, Engine Repair, Heating & Air Conditioning and Suspension & Steering. We also offer Automotive Services courses for students in the Concurrent Enrollment Program at Pueblo Community College, Cañon City High School, and PCC Southwest Campus in Mancos. We encourage you to take the Automotive Service Excellence (ASE) certification tests while enrolled at PCC. We offer a paid apprenticeship for high school students through the Automotive Youth Education System (AYES).

As a student in the program, you will become a member of the Skills USA club and participate in a number of leadership activities and competitions.

Program Requirements

Entrance Requirements:
Admissions to the Automotive Service Technology program is by application only. For admission requirements, please go to MT-129 and see the department chair.

Total Credits: 6

Certificate Requirements

ASE 2064 - Introduction Automotive Heating and Air Conditioning

Credit(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 264 Covers basic operation of heating and air conditioning components. This course meets MLR/AST/MAST requirements.

ASE 2065 - Heating and Air Conditioning Systems

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Formerly ASE 265 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)

Credit(s): 1
Internship Hour(s): 3
Formerly ASE 282 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 (FAST) Fundamental Automotive Systems Training (Chrysler) or others as required by the program track.

Automatic Transmissions Mini-Certificate

CIP 47.0604

See list of Department Chairs on the Personnel page.

To enter the automotive collision or automotive service program, you must successfully complete any CCR course or qualifying placement score or exemption.

Entrance into the program involves a screening and selection process. You can obtain an application and information by calling the Automotive Department at 719.549.3354.

Career Opportunities

The Automotive Service Technology program prepares you for a range of careers in automotive maintenance and repair.

Program Description

This program teaches you to perform general maintenance, as well as to diagnose and repair electrical, engine, transmission, suspension, brake and air conditioning systems. The program has met the National Institute for Automotive Technicians Education Foundation (NATEF) accreditation in the areas of Automatic Transmissions & Transaxles, Brakes, Electrical/Electronic Systems, Engine Performance, Engine Repair, Heating & Air Conditioning and Suspension & Steering. We also offer Automotive Services courses for students in the Concurrent Enrollment Program at Pueblo Community College, Cañon City High School, and PCC Southwest Campus in Mancos. We encourage you to take the Automotive Service Excellence (ASE) certification tests while enrolled at PCC. We offer a paid apprenticeship for high school students through the Automotive Youth Education System (AYES).

As a student in the program, you will become a member of the Skills USA club and participate in a number of leadership activities and competitions.

Program Requirements

Entrance Requirements:
Admissions to the Automotive Service Technology program is by application only. For admission requirements, please go to MT-129 and see the department chair.

Total Credits: 6

Certificate Requirements

ASE 2050 - Automatic Transmission/Transaxle Service

Credit(s): 1
Lecture Hour(s): 1
Formerly ASE 250 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 and Transaxle Repair

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly ASE 251 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 2052 - Advanced Automatic Transmissions/Transaxles

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 252 Covers the diagnosis, repair, and rebuild of automatic transmissions and transaxles including the hydraulic, electronic, and mechanical components. This course meets MAST requirements.

Basic Fire Science Mini-Certificate

CIP 43.0203

See list of Department Chairs on the Personnel page.

Career Opportunities

The Fire Science Technology program prepares students for entry-level positions in the fire service industry.

Certificate Program Description

The Fire Science Technology Certificate Programs vary in semester hours. These programs are designed to prepare individuals who have little or no firefighting experience for entry-level positions in the fire service industry, as well as special training for advancement for those already in the fire service. Most of the classes in the certificates related to structural firefighting can be applied to the Fire Science Associate of Applied Science Degree offered by Pueblo Community College.

Program Requirements

Entrance Requirements:

Successful completion of any CCR course or qualifying placement score or exemption.

Graduation Requirements:

The Fire Science Technology Certificate Program requires 21 credits for completion.

A grade of "C" or higher is required in each course

Total Credits: 9

Certificate Requirements

ALSO SEE WILDLAND FIREFIGHTER

FST 1002 - Principles/Emergency Services

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 102 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

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 103 Explores the theories and fundamentals of how and why fires start, spread and are controlled.

FST 1009 - Occupational Safety & Health

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 109 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.

Basic Wildland Firefighter Mini-Certificate

CIP 43.0299

See list of Department Chairs on the Personnel page.

Career Opportunities

The Wildland Firefighter Certificate will prepare students for a career with local and state fire departments and federal land management agencies (US Forest Service, etc.). Additionally, this certificate is designed for individuals with a general interest in wildland fire suppression; volunteer firefighters who would like to expand their knowledge and career opportunities; and currently enrolled students with an interest in supplementing their degrees.

Program Description

The Wildland Firefighter Program will provide students with a solid foundation in theory and application of wildland fire suppression concepts. This certificate will also provide training that exceeds the minimum requirements for prospective wildland firefighters as established by the National Fire Protection Association and the National Wildfire Coordinating Group.

Program Requirements

Entrance Requirements:

Successful completion of any CCR course or qualifying placement score or exemption.

Graduation Requirements:

Successful completion of all course work with a grade of "C" or better.

Total Credits: 3

FSW 1000 - S-190 Introduction to Wildland Fire Behavior

Credit(s): 1
Lecture Hour(s): 1
Formerly FSW 100 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 FSW 1001 - S-130 Firefighting Training.

FSW 1001 - S-130 Firefighting Training

Credit(s): 2
Lecture Hour(s): 0.50
Vocational Lab Hour(s): 2.25
Formerly FSW 101 Provides entry-level firefighter skills. A version of the L-180, Human Factors on the Fire line, is included as part of the course. Credit should be issued for S-130.

CAD/CAM Mini-Certificate

CIP 48.0503

See list of Department Chairs on the Personnel page.

This is a NIMS Accredited program

Program Description

Students will start their career in Machining Technology by building a strong foundation in machining by learning to use various tools, such as hand tools, manual machines and grinding tools. Students develop introductory skills in print reading. They are also taught how to use CAD CAM software, which enables students to create two-dimensional

drawings and gain experience with computer-aided manufacturer software. Learning G&M Code for manual CNC (Computer Numerical Control) programming is a focus, as well as setup and operations of CNC equipment.

Work experience may be converted to college credit through credit-by-portfolio or credit-by-challenge.

Total Credits: 10

Certificate Requirements

MAC 2043 - Mastercam

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Formerly MAC 243 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 2041 - CAD CAM 2D Lab

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly MAC 241 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 remachining operations. Coursework will primarily focus on 2D geometry projects.

CAD 2455 - Solidworks/Mechanical

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly CAD 255 Introduces parametric feature-based solid modeling 3D concepts to build confidence in 3D thinking and progresses to three-dimensional parameters. The student learns to construct, modify, and manage complex parts in 3D space as well as to produce 2D drawings from the 3D models.

CNC Mini-Certificate

CIP 48.0503

See list of Department Chairs on the Personnel page.

This is a NIMS Accredited program

Program Description

Students will start their career in Machining Technology by building a strong foundation in machining by learning to use various tools, such as hand tools, manual machines and grinding tools. Students develop introductory skills in print reading. They are also taught how to use CAD CAM software, which enables students to create two-dimensional drawings and gain experience with computer-aided manufacturer software. Learning G&M Code for manual CNC (Computer Numerical Control) programming is a focus, as well as setup and operations of CNC equipment.

Work experience may be converted to college credit through credit-by-portfolio or credit-by-challenge.

Total Credits: 12

Certificate Requirements

MAC 2003 - Introduction to CNC Operations

Credit(s): 6
Lecture Hour(s): 2
Vocational Lab Hour(s): 6
Formerly MAC 203 Introduces basic writing and editing of CNC programs. G&M codes, math, speeds feeds, production processes including basic process controls, simple fixturing, and documentation associated with manufacturing will be covered.

MAC 2008 - CNC Operations II

Credit(s): 6
Lecture Hour(s): 2
Vocational Lab Hour(s): 6
Formerly MAC 208 Further develops skills in writing and editing advanced CNC programs. G&M codes, math, speeds deeds, production processes including multi-part, process controls, fixturing, and documentation associated with manufacturing will be covered.

Construction Technician Basic Mini-Certificate

CIP 46.0000

See list of Department Chairs on the Personnel page.

Career Opportunities

The Construction Technology program prepares students for entry-level careers in construction, including carpentry, roofing, concrete work, painting, drywall, and insulation.

Program Description

The Construction Technology Program prepares students to apply basic, technical knowledge and skills in building trades and construction. This includes building, inspecting, and the maintenance of structures and related properties. Training involves using construction equipment safely; blueprint reading; building codes; construction mathematical skills (such as measurements); framing; and other related applications. Students have opportunities to visit construction

sites and meet professionals working within the industry. Students gain exposure to multiple career options within the industry.

Total Credits: 15

Certificate Requirements

CAR 1000 - Introduction to Carpentry

Credit(s): 1
Lecture Hour(s): 1
Formerly CAR 100 Provides a basic introduction to construction work for all crafts. This course specifically applies to construction sites.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

CAR 1001 - Basic Safety

Credit(s): 1
Lecture Hour(s): 1
Formerly CAR 101 An overview of safety concerns and procedures in the construction field.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

CAR 1002 - Hand and Power Tools

Credit(s): 1
Lecture Hour(s): .25
Vocational Lab Hour(s): 1.12
Formerly CAR 102 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 1005 - Job Site Layout and Blueprint Reading

Credit(s): 1
Lecture Hour(s): 0.50
Vocational Lab Hour(s): 0.75
Formerly CAR 105 Introduces blueprint reading and how they apply to the construction site. Includes in-depth introduction to site layout (materials and methods).

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

CAR 1021 - Floor Framing

Credit(s): 1
Lecture Hour(s): 0.25

Vocational Lab Hour(s): 1.12
Formerly CAR 121 Covers framing basics as well as the procedures for laying out and constructing a wood floor using common lumber as well as engineered building materials.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

CAR 1022 - Wall Framing

Credit(s): 1
Lecture Hour(s): 0.25
Vocational Lab Hour(s): 1.12
Formerly CAR 122 Focuses on the procedures for laying out and framing walls and ceilings, including roughing-in door and window openings, construction corners and partition Ts, bracing walls and ceilings, and applying sheathing.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

CAR 1023 - Roof Framing

Credit(s): 1
Lecture Hour(s): 0.25
Vocational Lab Hour(s): 1.12
Formerly CAR 123 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.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

CAR 1070 - Clinical: Construction Lab I

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly CAR 170 Continues to build upon the principles that are expected to be understood by students in the construction discipline.

CAR 1071 - Clinical: Construction Lab I

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly CAR 171 Continues to build upon the principles that are expected to be understood by students in the construction discipline.

CAR 1075-1077 - Special Topics

Credit(s): 0-12
Formerly CAR 175-177 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

Elective Courses (3 Credits)

(Select 3 credit hours)

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

or

COM 2063 - Conflict Resolution

Credit(s): 1
Lecture Hour(s): 1
Formerly COM 263 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

Credit(s): 1
Lecture Hour(s): 1
Formerly COM 264 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

Credit(s): 1
Lecture Hour(s): 1
Formerly COM 269 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.

Cosmetology Barber Crossover

See list of Department Chairs on the Personnel page.

The Barbering Crossover Certificate is designed for Licensed Cosmetologists to learn the remaining skills that Barbers know they can carry a dual license in the State of Colorado. The program includes techniques in men's hair cutting, men's facials, shaving, OSHA regulations, sanitation, safety and Colorado laws. Clinical practice involves working on manikins and the public under supervision and parallels, as close as possible, actual shop procedures in order to prepare students for working in the field.

Total Credits: 3

COS

Students wnting to obtain a Barbering License by completing the Barbering Crossover Certificate will have to have their Cosmetology License.

Core Curriculum Summer Semester (3 credits)

BAR 1007 - Introduction to Shaving, Honing & Stropping

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly BAR 107 Introduces the general principles of shaving to include hair texture, grain of the beard and analysis of the skin. Theory is combined with the practical application of proper shaving procedures and cutting strokes used on the face.

BAR 1008 - Intermediate Shaving, Honing & Stropping

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly BAR 108 Focuses on theory and practical training related to mustache and beard designing and trimming. Practical applications are incorporated in specialized classes or in a supervised salon.

BAR 2007 - Advanced Shaving, Honing & Stropping

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly BAR 207 Focuses on advanced training in shaving, honing and stropping. Practical and theory application is completed in specialized classes or supervised clinical training. Student will be prepared for State Board license exam.

Early Childhood Assistant Teacher Certificate

CIP 13.1210

See list of Department Chairs on the Personnel page.

Career Opportunities

The ECE program prepares you for a career in teaching children (birth to age 5). The program can also prepare you to become an Early Childhood Teacher or director in the field of Early Childhood Education.

Program Description

This program prepares you to become a productive, caring and responsible teacher. Classes emphasize child development skills in the areas of language, social, emotional, cognitive and physical development. Classes also focus on cultural diversity among children. You will become familiar with theories concerning child development and ECE, and you will participate in many group discussions and hands-on activities that you can apply in the preschool classroom. You will learn from qualified faculty members who believe in the success of each ECE student.

Program Requirements

Entrance Requirements:

You should demonstrate an interest in the care and well-being of young children. You must also be free from evidence of illness – mental and physical – and free from personal conduct which may be injurious to children as stated in the Colorado Rules and Regulations for Child Care Centers, section 7.702.51.

You must meet with an ECE faculty advisor before registering for ECE courses.

Note: Students interested in transferring to a baccalaureate program in Early Childhood Education or Elementary Education should refer to the Transfer Degree section.

Total Credits: 6

Certificate Requirements

ECE 1011 - Introduction to Early Childhood Education

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 101 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.

or

ECE 1031 - Guidance Strategies for Young Children

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 103 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.

Choose One Course Listed Below (3 Credits)

ECE 1111 - Infant and Toddler Theory and Practice

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 111 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. Focuses on birth through age 3.

ECE 1125 - Intro to Infant/Toddler Lab Techniques

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3

Formerly ECE 112 Includes a classroom Seminar and placement in an infant and/or toddler setting. The supervised placement provides the student with the opportunity to observe, practice appropriate interactions and develop effective guidance and nurturing techniques with infants and/or toddlers. Addresses ages prenatal through age 2.

ECE 2661 - Science/Math and the Young Child

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 125 Examines theories of cognitive development as a framework for conceptualizing the way young children acquire scientific and mathematical skills, concepts and abilities. Enables students to research and develop appropriate individual and group scientific/mathematical activities for young children.

ECE 2051 - Nutrition, Health and Safety

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 205 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 2621 - ECE Curriculum Development: Methods and Techniques

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of ECE 1011, ECE 1045, and ECE 1031.
Formerly ECE 220 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 and Cognition for the Young Child

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 225 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 8 years.

ECE 2641 - Creativity and the Young Child

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 226 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 8 years.

ECE 2381 - Ece Child Growth and Development

Credit(s): 3
Lecture Hour(s): 3

Prerequisite(s): Successful completion of ECE 1011 and ECE 1045.
Formerly ECE 238 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 2101 - Working with Parents, Families, and Community Systems

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 256 Examines personal attitudes regarding families, family values systems, and how personal attitudes affect parent-professional partnerships in the early childhood education program. This course covers communication, problem-solving and conflict resolution strategies. Effective activities and resources to support family involvement in the classroom will be created. This course addresses children ages birth through 8 years.

or

ECE 2601 - The Exceptional Child

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 260 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.

Emergency Medical Technician Mini-Certificate

CIP 51.0904

See list of Department Chairs on the Personnel page.

Career Opportunities

The EMS program prepares you for a career in the pre-hospital health care field as an emergency medical care provider at the EMT, EMT-Intermediate or Paramedic level. Career opportunities include providing patient care while working for an ambulance agency, fire service or hospital emergency room. Additional opportunities are in such areas as tactical EMS, critical care transport and ski patrol. If you graduate with an AAS degree you have additional opportunities in administration and management in the pre-hospital field.

Program Description

This program teaches you the knowledge and skills needed for scene management, emergency patient care and transport. This includes scene safety, patient assessment and treatment, medication administration, documentation and patient transport. Upon successful completion of the program, you may take the National Registry exam and, upon passing the exam, you may apply for Colorado State Certification at your level of training.

Program Requirements

Entrance Requirements:

To enroll in the EMT, EMT-Intermediate or Paramedic programs, you must be at least 18 years of age, have all current immunizations and be able to meet the requirements of the PCC EMS Common Functional Abilities Standard. For enrollment into the EMT-Intermediate or Paramedic programs, you must have a current Colorado EMT certification, an EMT IV endorsement, successfully complete all prescreening examinations and prerequisites, and obtain department approval for enrollment into these programs.

The EMS Department is offering an EMT-Intermediate to Paramedic Bridge course for those who are EMT-Intermediates. To qualify for this program you must be an EMT-I99, be eligible for state certification, and pass an EMT-I prescreening exam or be nationally registered as an EMT-I99. For more information on prerequisites and classes, please call the EMS Department.

Note: Clinical agencies used during the program require that you successfully complete a background check and a drug screen, immunization series and CPR training. Please check with a program advisor for any changes to admission requirements.

Total Credits: 11-12

Emergency Medical Technician

Total Credits: 12

Certificate Requirements

EMS 1021 - EMT Fundamentals

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly EMS 121 Introduces the Emergency Medical Technician (EMT) student to prehospital 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

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Prerequisite(s): EMS 1021. EMS 1070.
Formerly EMS 122 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

Credit(s): 2
Lecture Hour(s): 1

Vocational Lab Hour(s): 1.50
Prerequisite(s): EMS 1021.
Formerly EMS 123 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

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): EMS 1021.
Formerly EMS 124 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 1070 - EMT Clinical

Credit(s): 1
Vocational Lab Hour(s): 1.50
Formerly EMS 170 Provides the EMT student with the clinical experience required for initial certification and some renewal processes.

Advanced Emergency Medical Technician

Total Credits: 11

Certificate Requirements

EMS 1127 - AEMT Special Considerations

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Prerequisite(s): Acceptance into the AEMT Program.
Formerly EMS 127 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 - AEMT Pharmacology

Credit(s): 1
Lecture Hour(s): 0.50
Vocational Lab Hour(s): 0.75
Prerequisite(s): Acceptance into the AEMT Program.
Formerly EMS 129 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 1125 - AEMT Fundamentals

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): Acceptance into the AEMT Program.
Formerly EMS 131 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 1133 - AEMT Medical Emergencies

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): Acceptance into the AEMT Program.
Formerly EMS 133 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 - AEMT Trauma Emergencies

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): Acceptance into the AEMT Program.
Formerly EMS 135 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 1071 - AEMT Clinical Internship

Credit(s): 2
Internship Hour(s): 6
Prerequisite(s): Acceptance into the AEMT Program.
Formerly EMS 171 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.

Engine and Electrical Mini-Certificate

CIP 47.0604

See list of Department Chairs on the Personnel page.

To enter the automotive collision or automotive service program, you must successfully complete any CCR course or qualifying placement score or exemption.

Entrance into the program involves a screening and selection process. You can obtain an application and information by calling the Automotive Department at 719.549.3354.

Career Opportunities

The Automotive Service Technology program prepares you for a range of careers in automotive maintenance and repair.

Program Description

This program teaches you to perform general maintenance, as well as to diagnose and repair electrical, engine, transmission, suspension, brake and air conditioning systems. The program has met the National Institute for Automotive Technicians Education Foundation (NATEF) accreditation in the areas of Automatic Transmissions & Transaxles, Brakes, Electrical/Electronic Systems, Engine Performance, Engine Repair, Heating & Air Conditioning and Suspension & Steering. We also offer Automotive Services courses for students in the Concurrent Enrollment Program at Pueblo Community College, Cañon City High School, and PCC Southwest Campus in Mancos. We encourage you to take the Automotive Service Excellence (ASE) certification tests while enrolled at PCC. We offer a paid apprenticeship for high school students through the Automotive Youth Education System (AYES).

As a student in the program, you will become a member of the Skills USA club and participate in a number of leadership activities and competitions.

Program Requirements

Entrance Requirements:
Admissions to the Automotive Service Technology program is by application only. For admission requirements, please go to MT-129 and see the department chair.

Total Credits: 16

Certificate Requirements

ASE 1020 - Basic Auto Electricity

Credit(s): 2
Lecture Hour(s): 1.5
Vocational Lab Hour(s): 0.75
Formerly ASE 120 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 and Charging System

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 123 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

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 130 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 and Repair

Credit(s): 2
Lecture Hour(s): 1.50
Vocational Lab Hour(s): 0.75
Formerly ASE 132 Focuses on lecture and related laboratory experiences in the diagnosis, service, adjustments and repair of various automotive ignition systems.

ASE 1061 - Engine Repair & Rebuild

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly ASE 161 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 1062 - Automotive Engine Repair

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 162 Covers engine sealing requirements and repair procedures including engine fasteners, bolt torque, repair of fasteners, cooling system, and basic engine maintenance. This course meets AST/MAST requirements.

ASE 2060 - Advanced Engine Diagnosis

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50

Formerly ASE 260 Focuses on lecture and related laboratory experiences in the diagnosis and necessary corrective actions of automotive engine performance factors related to customer vehicles.

ASE 2182 - Internship: General (Summer)

Credit(s): 1
Internship Hour(s): 3
Formerly ASE 282 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 (FAST) Fundamental Automotive Systems Training (Chrysler) or others as required by the program track.

Fire Investigator I Mini-Certificate

CIP 43.0203

See list of Department Chairs on the Personnel page.

Career Opportunities

The Fire Science Technology program prepares students for entry-level positions in the fire service industry.

Certificate Program Description

The Fire Science Technology Certificate Programs vary in semester hours. These programs are designed to prepare individuals who have little or no firefighting experience for entry-level positions in the fire service industry, as well as special training for advancement for those already in the fire service. Most of the classes in the certificates related to structural firefighting can be applied to the Fire Science Associate of Applied Science Degree offered by Pueblo Community College.

Program Requirements

Entrance Requirements:

Successful completion of any CCR course or qualifying placement score or exemption.

Graduation Requirements:

The Fire Science Technology Certificate Program requires 21 credits for completion.

A grade of "C" or higher is required in each course

Total Credits: 9

Certificate Requirements

ALSO SEE WILDLAND FIREFIGHTER

FST 2005 - Fire Investigation I

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 205 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 firesetter, and types of fire causes.

FST 2051 - Legal Aspects of Fire Service

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 251 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 2052 - Fire Investigation II

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 252 Provides the student with advanced technical knowledge on rule of law, fire scene analysis, fire behavior, evidence collection and preservation, scene documentation, case preparation, and testifying.

Fire Officer I Mini-Certificate

CIP 43.0203

See list of Department Chairs on the Personnel page.

Career Opportunities

The Fire Science Technology program prepares students for entry-level positions in the fire service industry.

Certificate Program Description

The Fire Science Technology Certificate Programs vary in semester hours. These programs are designed to prepare individuals who have little or no firefighting experience for entry-level positions in the fire service industry, as well as special training for advancement for those already in the fire service. Most of the classes in the certificates related to structural firefighting can be applied to the Fire Science Associate of Applied Science Degree offered by Pueblo Community College.

Program Requirements

Entrance Requirements:

Successful completion of any CCR course or qualifying placement score or exemption.

Graduation Requirements:

The Fire Science Technology Certificate Program requires 21 credits for completion.

A grade of "C" or higher is required in each course.

Total Credits: 12

Certificate Requirements

ALSO SEE WILDLAND FIREFIGHTER

FST 2001 - Instructional Methodology

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 201 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 2006 - Fire Co Superv and Leadership

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 206 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 2053 - NIMS

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): FST 2002.
Formerly FST 253 Focuses on the National Incident Management System, including fire ground management and resource management. Multiagency coordination systems are discussed; organization preparedness for large scale emergencies, communication and information are addressed. The course concludes with a review of the National Response Plan.

FST 2055 - Fire Service Management

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 255 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.

Fire Prevention & Public Education Mini-Certificate

CIP 43.0203

Career Opportunities

The Fire Science Technology program prepares students for entry-level positions in the fire service industry.

Certificate Program Description

The Fire Science Technology Certificate Programs vary in semester hours. These programs are designed to prepare individuals who have little or no firefighting experience for entry-level positions in the fire service industry, as well as special training for advancement for those already in the fire service. Most of the classes in the certificates related to structural firefighting can be applied to the Fire Science Associate of Applied Science Degree offered by Pueblo Community College.

Program Requirements

Entrance Requirements:

Successful completion of any CCR course or qualifying placement score or exemption.

Graduation Requirements:

The Fire Science Technology Certificate Program requires 21 credits for completion.

A grade of "C" or higher is required in each course.

Total Credits: 14

Certificate Requirements

ALSO SEE WILDLAND FIREFIGHTER

FST 1006 - Fire Prevention

Credit(s): 3
Lecture Hour(s): 3

Formerly FST 106 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 1050 - Introduction to Fire Prevention Education

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 150 Focuses on conducting prevention and education needs assessment, targeting audiences; development and delivery of prevention and education programs. Includes methods of conducting fire prevention and safety inspections.

FST 2004 - Principles of Code Enforcement

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 204 To provide the students with the fundamental knowledge of the role of code enforcement in a comprehensive fire prevention program.

FST 2008 - Fire Plans Review and Acceptance Testing

Credit(s): 2
Lecture Hour(s): 2
Formerly FST 208 Instructs the student on how to review building plans submitted to a fire department, acceptance testing procedures, implementation of a fire inspection program, and how to deal effectively with the public for fire prevention and education activities.

FST 2009 - Fire Protection Systems

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 209 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.

Firefighter Academy Structural Mini-Certificate

CIP 43.0203

See list of Department Chairs on the Personnel page.

Career Opportunities

The Fire Science Technology program prepares students for entry-level positions in the fire service industry.

Certificate Program Description

The Fire Science Technology Certificate Programs vary in semester hours. These programs are designed to prepare individuals who have little or no firefighting experience for entry-level positions in the fire service industry, as well as special training for advancement for those already in the fire service. Most of the classes in the certificates related to structural firefighting can be applied to the Fire Science Associate of Applied Science Degree offered by Pueblo Community College.

Program Requirements

Entrance Requirements:

Successful completion of any CCR course or qualifying placement score or exemption.

Graduation Requirements:

The Fire Science Technology Certificate Program requires 21 credits for completion.

A grade of "C" or higher is required in each course

Total Credits: 16

Certificate Requirements

ALSO SEE WILDLAND FIREFIGHTER

FST 1000 - Firefighter I

Credit(s): 9
Lecture Hour(s): 6
Vocational Lab Hour(s): 4.50
Formerly FST 100 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 using IFSTA Essentials.

FST 1007 - Hazardous Materials Operations (Level I)

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 107 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 1060 - Candidate Physical Abilities Test Prep

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly FST 160 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 1075 - Special Topics

Credit(s): 0-12
Formerly FST 175 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

Firefighter I Mini-Certificate

CIP 43.0203

See list of Department Chairs on the Personnel page.

Career Opportunities

The Fire Science Technology program prepares students for entry-level positions in the fire service industry.

Certificate Program Description

The Fire Science Technology Certificate Programs vary in semester hours. These programs are designed to prepare individuals who have little or no firefighting experience for entry-level positions in the fire service industry, as well as special training for advancement for those already in the fire service. Most of the classes in the certificates related to structural firefighting can be applied to the Fire Science Associate of Applied Science Degree offered by Pueblo Community College.

Program Requirements

Entrance Requirements:

Successful completion of any CCR course or qualifying placement score or exemption.

Graduation Requirements:

The Fire Science Technology Certificate Program requires 21 credits for completion.

A grade of "C" or higher is required in each course

Total Credits: 12

Certificate Requirements

ALSO SEE WILDLAND FIREFIGHTER

FST 1000 - Firefighter I

Credit(s): 9
Lecture Hour(s): 6
Vocational Lab Hour(s): 4.50
Formerly FST 100 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 using IFSTA Essentials.

FST 1007 - Hazardous Materials Operations (Level I)

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 107 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.

Fuels and Emissions Mini-Certificate

CIP 47.0604

See list of Department Chairs on the Personnel page.

To enter the automotive collision or automotive service program, you must successfully complete any CCR course or qualifying placement score or exemption.

Entrance into the program involves a screening and selection process. You can obtain an application and information by calling the Automotive Department at 719.549.3354.

Career Opportunities

The Automotive Service Technology program prepares you for a range of careers in automotive maintenance and repair.

Program Description

This program teaches you to perform general maintenance, as well as to diagnose and repair electrical, engine, transmission, suspension, brake and air conditioning systems. The program has met the National Institute for Automotive Technicians Education Foundation (NATEF) accreditation in the areas of Automatic Transmissions & Transaxles, Brakes, Electrical/Electronic Systems, Engine Performance, Engine Repair, Heating & Air Conditioning and Suspension & Steering. We also offer Automotive Services courses for students in the Concurrent Enrollment Program at Pueblo Community College, Cañon City High School, and PCC Southwest Campus in Mancos. We encourage you to take the Automotive Service Excellence (ASE) certification tests while enrolled at PCC. We offer a paid apprenticeship for high school students through the Automotive Youth Education System (AYES).

As a student in the program, you will become a member of the Skills USA club and participate in a number of leadership activities and competitions.

Program Requirements

Entrance Requirements:
Admissions to the Automotive Service Technology program is by application only. For admission requirements, please go to MT-129 and see the department chair.

Total Credits: 14

Certificate Requirements

ASE 1034 - Automotive Fuel and Emissions Systems I

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 134 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 2021 - Auto/Diesel Body Electrical

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Formerly ASE 221 Provides a comprehensive study of the theory, operation, diagnosis, and repair of vehicle accessories.

ASE 2033 - Auto Fuel Injection and Emissions Systems II

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Formerly ASE 233 Focuses on lecture and related laboratory experiences in the diagnosis and repair of electronic fuel injection systems and modern exhaust systems.

ASE 2036 - Advanced Drivability Diagnosis/Repair

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Formerly ASE 236 Focuses on lecture and laboratory experiences in the inspection, testing and repair of typical computerized engine control systems on customer vehicles.

Hairstylist Barber Crossover

See list of Department Chairs on the Personnel page.

The Barbering Crossover Certificate is designed for Licensed Hairstylists to learn the remaining skills that Barbers know they can carry a dual license in the State of Colorado. The program includes techniques in men's hair cutting,

men's facials, shaving, OSHA regulations, sanitation, safety and Colorado laws. Clinical practice involves working on manikins and the public under supervision and parallels, as close as possible, actual shop procedures in order to prepare students for working in the field.

Total Credits: 6

HST

Students wanting to obtain a Barbering License by completing the Barbering Crossover Certificate will have to have already obtained their Hairstylist License.

Core Curriculum Summer Semester (6 credits)

BAR 1007 - Introduction to Shaving, Honing & Stropping

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly BAR 107 Introduces the general principles of shaving to include hair texture, grain of the beard and analysis of the skin. Theory is combined with the practical application of proper shaving procedures and cutting strokes used on the face.

BAR 1008 - Intermediate Shaving, Honing & Stropping

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly BAR 108 Focuses on theory and practical training related to mustache and beard designing and trimming. Practical applications are incorporated in specialized classes or in a supervised salon.

BAR 2007 - Advanced Shaving, Honing & Stropping

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly BAR 207 Focuses on advanced training in shaving, honing and stropping. Practical and theory application is completed in specialized classes or supervised clinical training. Student will be prepared for State Board license exam.

BAR 1066 - Introduction to Facial Massages & Skin Care

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly BAR 166 Emphasizes basic understanding of facial massage manipulations and the study of skin in both practical and theory applications. Covers the benefits derived from proper facial massage and a good skin care routine.

BAR 1067 - Intermediate Facial Massage & Skin Care

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly BAR 167 Focuses on practical application dealing with anatomy, skin disorders, skin types and facial shapes. Students help patrons select proper skin care treatments

BAR 2066 - Advanced Facial Massage & Skin Care

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly BAR 266 Emphasizes anatomy, skin disorders, skin types and facial shapes. Students guide patrons on selection of proper skin care treatments. Covers student preparation for State Board licensing examination on theory and practical procedures.

High Pressure Pipe Welder Mini-Certificate

CIP 48.0508

See list of Department Chairs on the Personnel page.

Program Description

Welders must be highly skilled and knowledgeable in a variety of welding processes to meet the challenges of advanced technology and new materials. Welding is not just a trade; it's a tool for many trades requiring a high level of training and technical knowledge. The Welding Technology program helps students develop skills through classroom studies and hands-on experience under close supervised instruction. Students learn about structural steel fabrication, layout work and pipe welding following detailed blueprints.

Total Credits: 16

Certificate Requirements

Core Requirements (16 Credits)

WEL 2039 - 2G-Horizontal Pipe A.S.M.E.

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 2033.
Formerly WEL 239 Instruction in safety, theory and practical applications in joint fit-up, design and welding pipe in the 2-G Horizontal position. Welding in accordance with the American Society of Mechanical Engineers Pipe Code using the GTAW process and SMAW process with E-XX18 and E-XX10 type electrodes.

WEL 2041 - 5G-Verticial Up A.S.M.E.

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 2039.
Formerly WEL 241 Instruction in safety, theory and practical applications in joint fit-up, design and welding pipe in the 5-G Vertical up position. Welding in accordance with the American Society of Mechanical Engineers Pipe Code using the GTAW process and SMAW process with E-XX18 and E-XX10 type electrodes.

WEL 2042 - 6G-45 All Sizes Pipe

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 2041.
Formerly WEL 242 Instruction in safety, theory and practical applications in joint fit-up, design and welding pipe in the 6-G 45 Uphill position. Welding in accordance with the American Society of Mechanical Engineers Pipe Code using the GTAW process and SMAW process with E-XX18 and E-XX10 type electrodes.

WEL 2043 - Testing All Sizes Pipe

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Formerly WEL 243 Testing with different sizes of pipe to the American Petroleum Institute Pipe Code and American Society of Mechanical Engineers codes in all positions 2G, 5G, 6G with 2 3/8-inch pipe and 2-inch pipe.

Industrial Technology Maintenance Level II Mini-Certificate

CIP 15.0303

See list of Department Chairs on the Personnel page.

Career Opportunities

The Industrial Technology Maintenance Level Two Certificate provides advanced technical skills as students pursue careers as an electronics technician, an electro-mechanical technician, a semiconductor manufacturing technician, or an electro-mechanical field services technician. Students are encouraged to obtain an AAS degree for supervisory positions.

Total Credits: 16

Certificate Requirements

Fall Semester

ELT 2357 - Sensors and Transducers

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Prerequisite(s): ELT 1001 , ELT 1206.
Formerly ELT 257 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. 68 contact hours.

ELT 2359 - Advanced Programmable Logic Controllers

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Prerequisite(s): ELT 2358.
Formerly ELT 259 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 2089 - Capstone: Automated Systems

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly ELT 289 Enables the student to plan, construct and evaluate a modified flexible manufacturing system using a programmable logic controller, industrial computer, robot and work cell peripherals. Addresses safety and emergency control procedures throughout this course.

MTE 2320 - Fluid Power Control

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly MTE 238 Introduces fluid power application in industry and various types of industrial control devices used in modern manufacturing equipment and machinery. Enables the student to produce the graphics required to incorporate these items into a mechanical design.

WEL 1024 - Gas Tungsten Arc Welding I

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.5
Formerly WEL 124 Covers Gas Tungsten Arc Welding (GTAW) operations in various positions and joint designs.

Infant Toddler Supervisor Mini-Certificate

CIP 13.1210

See list of Department Chairs on the Personnel page.

Career Opportunities

The ECE program prepares you for a career in teaching children (birth to age 5). The program can also prepare you to become an Early Childhood Teacher or director in the field of Early Childhood Education.

Program Description

This program prepares you to become a productive, caring and responsible teacher. Classes emphasize child development skills in the areas of language, social, emotional, cognitive and physical development. Classes also focus on cultural diversity among children. You will become familiar with theories concerning child development and ECE, and you will participate in many group discussions and hands-on activities that you can apply in the preschool classroom. You will learn from qualified faculty members who believe in the success of each ECE student.

Program Requirements

Entrance Requirements:

You should demonstrate an interest in the care and well-being of young children. You must also be free from evidence of illness – mental and physical – and free from personal conduct which may be injurious to children as stated in the Colorado Rules and Regulations for Child Care Centers, section 7.702.51.

You must meet with an ECE faculty advisor before registering for ECE courses.

Note: Students interested in transferring to a baccalaureate program in Early Childhood Education or Elementary Education should refer to the Transfer Degree section.

Total Credits: 12

Certificate Requirements

ECE 1011 - Introduction to Early Childhood Education

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 101 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

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 103 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 1111 - Infant and Toddler Theory and Practice

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 111 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. Focuses on birth through age 3.

ECE 1125 - Intro to Infant/Toddler Lab Techniques

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly ECE 112 Includes a classroom Seminar and placement in an infant and/or toddler setting. The supervised placement provides the student with the opportunity to observe, practice appropriate interactions and develop effective guidance and nurturing techniques with infants and/or toddlers. Addresses ages prenatal through age 2.

Intermediate Structural Certificate

CIP 48.0508

See list of Department Chairs on the Personnel page.

Career Opportunities

The Welding program prepares you for a career in construction and manufacturing settings, small job shops, city and government welding centers and related sites. You may also work as a self-employed welder.

Program Description

The Welding AAS degree offers advanced instruction if you have finished the basic welding courses or if you are working at the trade and wish to upgrade your skills. We also give qualification tests if you wish to be become qualified in a welding process.

The Welding Certificate program provides training in the SMAW (Shielded Metal Arc Welding), GTAW (Gas Tungsten Arc Welding), GMAW (Gas Metal Arc Welding) and the Oxyacetylene cutting process. This training is also included in the degree program. This two-semester program stresses print reading and applied metal properties. It prepares you for employment in the industry in the shortest possible time.

Total Credits: 12

Certificate Requirements

WEL 1006 - Blueprint Reading for Welders and Fitters

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Prerequisite(s): WEL 1001 or WEL 1002
Formerly WEL 106 Covers interpretation and creation of weld symbols and blueprints used in metal fabrication.

WEL 1024 - Gas Tungsten Arc Welding I

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.5
Formerly WEL 124 Covers Gas Tungsten Arc Welding (GTAW) operations in various positions and joint designs.

WEL 1025 - Introduction to Gas Metal Arc Welding

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1024.
Formerly WEL 125 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 2050 - Layout and Fabrication

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1002.
Formerly WEL 250 Develops welding and associated skills in metal fabrication.

Introduction to Media Communications Mini-Certificate

CIP 09.0702

See list of Department Chairs on the Personnel page.

Career Opportunities

Careers in Media Communications are in demand and PCC offers an affordable way for students to begin their education. Some of the exciting career options within this field include: Graphic Designers; Web Developers; Broadcast Technicians; Film Video Editors; and Advertising & Promotion Managers.

Program Description

The Media Communications program teaches students to think critically and develop skills in Web Design, Graphic Design, Advertising, Videography, News Writing, and TV-Radio Production. Courses provide a solid foundation in these areas through a combination of lecture and hands on applications. There are multiple labs with state of the art

equipment and software for your area of emphasis. The Media Communications program provides a high technical skill attainment in this changing field of communication. Students have multiple options to pursue. The AAS degrees with emphases in Graphic Design and Web Design offer advanced technical skills in these areas. Certificates provide basic skill sets to enhance an existing degree or occupation. The AGS degree provides a transfer option to a four year university. If interested in this option, please refer to the Transferring Credits section of the catalog.

Total Credits: 15

Certificate Requirements

MGD 1011 - Adobe Photoshop I

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly MGD 111 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

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly MGD 112 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 - Quark Xpress

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly MGD 114 Introduces students to QuarkXPress, a digital page layout tool. Students learn how to assemble, organize, manipulate and manage text and graphics to produce a high-quality publication. Class discussions and independent projects supplement hands-on classroom work.

MGD 1041 - Web Design I

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly MGD 141 Introduces website planning, design and creation using industry standards-based website development tools. Screen-based color theory, web aesthetics, use of graphics editors and intuitive interface design are explored.

MGD 2041 - Web Design II

Credit(s): 3
Vocational Lab Hour(s): 4.50
Prerequisite(s): MGD 1041, or department chair approval.
Formerly MGD 241 Expands on previously learned fundamentals of HTML introducing cascading style sheets,

DHTML, Java Scripts and CGI forms. Color usage and interface design principles are emphasized in this course. In this course we'll examine websites that employ more complex structures, optimal site architecture and navigation necessary for larger and more complex sites.

Introductory Structural Certificate

CIP 48.0508

See list of Department Chairs on the Personnel page.

Career Opportunities

The Welding program prepares you for a career in construction and manufacturing settings, small job shops, city and government welding centers and related sites. You may also work as a self-employed welder.

Program Description

The Welding AAS degree offers advanced instruction if you have finished the basic welding courses or if you are working at the trade and wish to upgrade your skills. We also give qualification tests if you wish to be become qualified in a welding process.

The Welding Certificate program provides training in the SMAW (Shielded Metal Arc Welding), GTAW (Gas Tungsten Arc Welding), GMAW (Gas Metal Arc Welding) and the Oxyacetylene cutting process. This training is also included in the degree program. This two-semester program stresses print reading and applied metal properties. It prepares you for employment in the industry in the shortest possible time.

Total Credits: 13

Certificate Requirements

WEL 1000 - Safety for Welders

Credit(s): 1
Lecture Hour(s): 1
Formerly WEL 100 Covers the hazards of welding on health and safety.

WEL 1002 - Oxy-fuel Joining Processes

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.5
Formerly WEL 102 Covers Oxy-fuel joining operations.

WEL 1003 - Basic Shielded Metal Arc I

Credit(s): 4
Lecture Hour(s): 1

Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1002.
Formerly WEL 103 Covers Shielded Metal Arc Welding (SMAW) operation utilizing E-XX10 electrodes.

WEL 1004 - Basic Shielded Metal Arc II

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1003.
Formerly WEL 104 Covers Shielded Metal Arc Welding (SMAW) operation utilizing E-XX18 electrodes.

Leadership Studies Mini-Certificate

CIP 52.0201

See list of Department Chairs on the Personnel page.

Career Opportunities

The AAS and Certificate programs prepare you for entry level positions in marketing, management or sales; they also give you the skills you need to open your own business.

Program Description

Prepares students for lives of learning, leadership, and service; and designed to enhance and explore leadership potential through curricular design that includes academic courses, seminars, and community service opportunities. The Leadership certificate will verify student's leadership education and training for potential transfer colleges and employers. By obtaining a PCC leadership certificate, students should be able to demonstrate the following: 1.) Personal leadership development. 2.) Leadership skills (communication, motivation, team building, etc.). 3.) Critical thinking. 4). Leadership theory. 5). Civic engagement. 6). Appreciation for diversity.

Total Credits: 12

Certificate Requirements

Leadership Certificate Requirements (9 Credits)

BUS 2017 - Business Communication & Report Writing

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 217 Emphasizes effective business writing and covers letters, memoranda, reports, application letters and resumes. Includes the fundamentals of business communication and an introduction to international communication.

MAN 2024 - Leadership

Credit(s): 3
Lecture Hour(s): 3
Formerly MAN 224 Focuses on the leadership skills for contemporary organizations. Covers development and communication a shared vision to motivate and empower employees to manage conflict, to negotiate, and to develop teams.

PSV 2030 - Introduction to Civic Leadership

Credit(s): 3
Lecture Hour(s): 3
Formerly PSV 230 Enables the student to develop a critical understanding of public leadership through the study of pertinent models, theories and research.

Elective Courses (3 Credits)

(Select 3 credit hours)

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

COM 2300 - Intercultural Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 220 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. This is a statewide Guaranteed Transfer course in the GT-SS3 category.

MAN 2026 - Principles of Management

Credit(s): 3
Lecture Hour(s): 3
Formerly MAN 226 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.

PHI 1011 - Introduction to Philosophy: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 111 ompletion with a minimum C? grade guarantees transfer and application of credit in this GT Pathways category.

PHI 1012 - Ethics: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 112 Examines human life, experience and thought in order to discover and develop the principles and values for pursuing a more fulfilled existence. Theories designed to justify ethical judgments are applied to a selection of contemporary personal and social issues. This course is one of the statewide Guaranteed Transfer courses, GT-AH3.

PSY 1001 - General Psychology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 101 Focuses on the scientific study of behavior including motivation, emotion, physiological psychology, stress and coping, research methods, consciousness, sensation, perception, learning and memory. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 1002 - General Psychology II: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 102 Focuses on the scientific study of behavior including cognition, language, intelligence, psychological assessment, personality, abnormal psychology, therapy, lifespan development and social psychology. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2221 - Social Psychology: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 226 Focuses on the behavior of humans in social settings, including attitudes, aggression, conformity, cooperation and competition, prejudice and interpersonal attraction. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2771 - Psychology of Personality: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 265 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 of psychology. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2773 - Organizational Psychology

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 268 Provides a comprehensive study of psychological principles and theories as applied to organizational behavior. Topics include motivation, job satisfaction, conflict supervision, human relations and stress management.

SOC 1001 - Introduction to Sociology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 101 Examines the basic concepts, theories and principles of sociology as well as human culture, social groups, and the social issues of age, gender, class and race. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

SOC 1002 - Introduction to Sociology II: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 102 Examines social institutions and organizations from the macro perspective. Emphasizes issues of social change, demography, social movements, and conflicts and trends within education, religion, family, political and economic structures. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

Local Anesthesia and Nitrous Oxide/Oxygen Sedation Mini-Certificate

CIP 51.0602

See list of Department Chairs on the Personnel page.

Career Opportunities

The Dental Hygiene program prepares you for a career in a variety of professional settings. The most familiar setting is the private dental office, where hygienists perform critical services to detect and prevent diseases of the mouth. Beyond the private dental office, you can find employment in nursing homes and long-term care facilities, hospitals, corporate health facilities, school systems and public health clinics. You may also work as an educator or researcher.

Program Description

The AAS Degree prepares you to provide dental hygiene services to patients and educate them in aspects of preventive dentistry. In our on-campus clinic, you will provide preventive and therapeutic services for patients under the supervision of Dental Hygiene faculty.

In the traditional role of dental hygienist, training includes prophylaxis, patient data gathering for dental hygiene diagnosis and treatment planning, fluoride treatment, sealant application, radiographic examination and nutritional counseling. In the expanded role of the dental hygienist, training includes treatment of periodontally-involved patients

and treatment of handicapped, institutionalized and other medically compromised patients. You also learn to perform local anesthesia and administer nitrous oxide.

Because of the high level of personal and professional responsibility required of a dental hygienist, you must have integrity, maturity, individual motivation, good interpersonal skills, excellent manual dexterity and a solid science and general studies academic background to be successful in this program. We are firmly committed to fostering your intellectual growth and to developing well-qualified dental hygienists with high professional standards and ethics.

The Mini-Certificate in Local Anesthesia and Nitrous Oxide/Oxygen Sedation provides you with knowledge of the theory and practice of local anesthesia and nitrous oxide/oxygen sedation. This program teaches you to administer local anesthetics and nitrous oxide proficiently and safely. The administration of local anesthesia and nitrous oxide/oxygen sedation may be performed by licensed dental hygienists under the Colorado State Dental Practice Act. You must be currently enrolled in the Dental Hygiene program to enter this program.

Program Requirements

Entrance Requirements:

You must complete a current Dental Hygiene program application and meet all minimum requirements and application timelines. The application is available through the Dental Hygiene program, at the PCC Dental Hygiene website or in Admissions & Records. You should seek advisement from program faculty for assistance with applications, minimum requirements and required general education courses for admissions. In addition, all students entering the program will need a current CPR card good for 2 years.

If you are an AAS Dental Hygiene student, you must complete all General Education/Related Requirements.

Note: All students are accepted provisionally pending completion of a criminal background check. Disclaimer: The Colorado Board of Dental Examiners requires a dental hygienist applying for licensure to answer questions concerning felony history, excessive use or abuse of controlled substances/alcoholic beverages (within the last five years) and any physical or mental condition that may affect the ability to practice dental hygiene. Other questions asked by the State Board pertain to an applicant's history of malpractice judgment and any disciplinary action by any government or private agency. The PCC Department of Dental Hygiene assumes no responsibility for the denial of licensure by the Colorado State Board of Dental Examiners.

Total Credits: 3

Certificate Requirements

DEH 1033 - Local Anesthesia

Credit(s): 2
Lecture Hour(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): DEH 1011, DEH 1023, current enrollment in Dental Hygiene program.
Formerly DEH 133 Provides a working knowledge of the theory and practice of local anesthesia as applied to the practice of dentistry/dental hygiene. Emphasizes mastery of the armamentarium and techniques of regional anesthesia. Covers the knowledge and skills necessary to administer local anesthetics proficiently and safely.

DEH 1038 - Nitrous Oxide/Oxygen Sedation

Credit(s): 1
Lecture Hour(s): 0.80
Vocational Clinic Hour(s): 0.40

Prerequisite(s): BIO 2101, BIO 2102, current enrollment in Dental Hygiene program.
Formerly DEH 138 Provides a working knowledge of the latest equipment and methods of nitrous oxide/oxygen sedation administration in the dental office.

Low Pressure Pipe Welder Mini-Certificate

CIP 48.0508

See list of Department Chairs on the Personnel page.

Program Description

Welders must be highly skilled and knowledgeable in a variety of welding processes to meet the challenges of advanced technology and new materials. Welding is not just a trade; it's a tool for many trades requiring a high level of training and technical knowledge. The Welding Technology program helps students develop skills through classroom studies and hands-on experience under close supervised instruction. Students learn about structural steel fabrication, layout work and pipe welding following detailed blueprints.

Total Credits: 16

Certificate Requirements

Core Requirements (16 Credits)

WEL 2033 - 2G-Horizontal Pipe A.P.I.

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1004 or equivalent.
Formerly WEL 233 Instruction in safety, theory and practical applications in joint fit-up, design and welding pipe in the 2-G horizontal position. Welding in accordance with the American Petroleum Institute Pipe Code using the SMAW process with E-XX10 type electrodes.

WEL 2034 - 5G-Vertical Down A.P.I.

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 2033.
Formerly WEL 234 Instruction in safety, theory and practical applications in joint fit-up, design and welding pipe in the 5-G Vertical down position. Welding in accordance with the American Petroleum Institute Pipe Code using the SMAW process with E-XX10 type electrodes.

WEL 2035 - 6G-45 Down A.P.I.

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 2034.
Formerly WEL 235 Instruction in safety, theory and practical applications in joint fit-up, design and welding pipe in the 6-G 45 down position. Welding in accordance with the American Petroleum Institute Pipe Code using the SMAW process with E-XX10 type electrodes.

WEL 2048 - Pipe Layout

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Formerly WEL 248 Using pipe template layout procedures and drawing procedures, perform cutting on pipe. Performs layout such as Y-fittings, laterals, full size tees, elbows, orange peel, bull plug, reducers, reducing tees and branch pipe.

Manual Transmissions Mini-Certificate

CIP 47.0604

See list of Department Chairs on the Personnel page.

To enter the automotive collision or automotive service program, you must successfully complete any CCR course or qualifying placement score or exemption.

Entrance into the program involves a screening and selection process. You can obtain an application and information by calling the Automotive Department at 719.549.3354.

Career Opportunities

The Automotive Service Technology program prepares you for a range of careers in automotive maintenance and repair.

Program Description

This program teaches you to perform general maintenance, as well as to diagnose and repair electrical, engine, transmission, suspension, brake and air conditioning systems. The program has met the National Institute for Automotive Technicians Education Foundation (NATEF) accreditation in the areas of Automatic Transmissions & Transaxles, Brakes, Electrical/Electronic Systems, Engine Performance, Engine Repair, Heating & Air Conditioning and Suspension & Steering. We also offer Automotive Services courses for students in the Concurrent Enrollment Program at Pueblo Community College, Cañon City High School, and PCC Southwest Campus in Mancos. We encourage you to take the Automotive Service Excellence (ASE) certification tests while enrolled at PCC. We offer a paid apprenticeship for high school students through the Automotive Youth Education System (AYES).

As a student in the program, you will become a member of the Skills USA club and participate in a number of leadership activities and competitions.

Program Requirements

Entrance Requirements:
Admissions to the Automotive Service Technology program is by application only. For admission requirements, please go to MT-129 and see the department chair.

Total Credits: 7

Certificate Requirements

ASE 1051 - Automotive Manual Transmission/Transaxles & Clutches

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 151 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 and Clutches II

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 152 Focuses on lecture and related laboratory experiences in the diagnosis and repair of automotive differentials, four wheel and all-wheel drive units.

ASE 2053 - Advanced Manual Transmission/Transaxles

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Formerly ASE 253 Focuses on lecture and laboratory experiences in the diagnosis and repair of automotive manual transmissions, transaxles, clutches and their related components on customer vehicles.

ASE 2181 - Internship: Basic Heavy Duty and Power Train

Credit(s): 1
Internship Hour(s): 3
Formerly ASE 281 Focuses on 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 (FAST) Fundamental Automotive Systems Training (Chrysler) or others as required by the program track.

Med Prep for Nursing Assistant Mini-Certificate

CIP 51.9999

See list of Department Chairs on the Personnel page.

Program Description

The Med Prep program provides students with the opportunity to develop skills and knowledge for health occupations. This program is nine months in length; however, students have the option of taking either one or both semesters.

During the fall semester, students will pursue a common core of instruction. This course is structured to provide the students with a broad academic and vocational foundation in the health care professions. An introduction to the health care professions is provided through field trips, speakers, classroom activities and laboratory experiences. Students will have presentations by medical professionals who are currently working in the field to offer insight into the medical careers available. Students will receive instruction in nurse assisting and will be eligible to take the State Certification test.

The second semester will provide students with career development skills such as resume writing, portfolio building, interviewing techniques and basic knowledge about how to be successful in the professions of health care. Students will also obtain job exploration experience (job shadowing) at several health care agencies in the area. At the end of the semester, students will receive a certificate for Clinical Medical Assistant/Pharmacy Aid.

Total Credits: 14.5

Certificate Requirements

HPR 1000 - Introduction to Health

Credit(s): 3
Lecture Hour(s): 3
Formerly HPR 100 Provides an exploratory course for students interested in a health career. Basic health skills such as vital signs and CPR will be included.

NUA 1001 - Nurse Aide Health Care Skills

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Formerly NUA 101 Prepares the student to perform the fundamental skills of the nurse aide. Basic nursing skills, communication 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 Aid Clinical Experience

Credit(s): 1
Vocational Clinic Hour(s): 1.5

Formerly NUA 170 Applies knowledge and skill gained in NUA 101 to patient care. Pass/fail grading (F).

Microsoft Office Applications

CIP 11.0101

See list of Department Chairs on the Personnel page.

Career Opportunities

The CIS program prepares you for careers in computer science, computer networking and electronic commerce. The AAS Degree with an emphasis in local area networking prepares you to work as a network technician on small and large networks. You may also administer smaller networks as a System Administrator. The AGS Degree with an emphasis in Computer Information Systems prepares you to transfer to a university to continue studies in Computer Science or Computer Information Systems.

Program Description

The CIS program provides training in basic technical computer and networking skills. You will study computer networking, programming and database technologies along with classes that teach the technical aspects of the Internet and data communications. Note: Students interested in transferring to a baccalaureate program in Computer Information Systems should refer to the Transfer Degree section.

Total Credits: 6

Certificate Requirements

CIS 1018 - Intro to PC Applications

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 118 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 2018 - Advanced PC Applications

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Prerequisite(s): CIS 1018 or Instructor approval.
Formerly CIS 218 Covers the advanced capabilities of a PC software applications suite. Emphasizes solving business problems by integrating data from all of the software applications that facilitate the production of useful information. Printed documents, reports, slides and forms are produced to communicate information.

CIS 1055 - PC Spreadsheet Concepts: (Software Package)

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 155 Exposes the student to a wide range of uses of the electronic spreadsheet with special emphasis on using it as a business tool. Includes fundamentals and terms, creating and saving workbooks, entering and using

formulas, formatting, printing, multiple-page workbooks, creating charts, entering and using functions, managing lists, and simple macros.

ACC 1035 - Spreadsheet Applications for Accounting

Credit(s): 3
Lecture Hour(s): 3
Formerly ACC 135 Introduces spreadsheets as an accounting tool in the application of fundamental accounting concepts, problem-solving, and decision-making skills.

Networking Mini-Certificate

CIP 11.0101

See list of Department Chairs on the Personnel page.

Career Opportunities

The CIS program prepares you for careers in computer science, computer networking and electronic commerce. The AAS Degree with an emphasis in local area networking prepares you to work as a network technician on small and large networks. You may also administer smaller networks as a System Administrator. The AGS Degree with an emphasis in Computer Information Systems prepares you to transfer to a university to continue studies in Computer Science or Computer Information Systems.

Program Description

The CIS program provides training in basic technical computer and networking skills. You will study computer networking, programming and database technologies along with classes that teach the technical aspects of the Internet and data communications. Note: Students interested in transferring to a baccalaureate program in Computer Information Systems should refer to the Transfer Degree section.

Total Credits: 13

Certificate Requirements

CIS 2020 - Fundamentals of Unix

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 220 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.

CNG 1004 - Intro to TCP/IP

Credit(s): 3
Lecture Hour(s): 3

Formerly CNG 104 Covers the basic elements of the Transmission Control Protocol and the Internet Protocol, the basic technologies that implement the Internet and computer networking. In addition to TCP and IP the course covers networking media, link layer, network layer and transport layer protocols. Also included are routing, broadcast, multicast and network address translation. IP version 4 and IP version 6 are both covered.

CNG 1024 - Networking I: Network +

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 124 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 2012 - Configuring Windows Server

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Formerly CNG 212 Provides students with the knowledge and skills that are required to install and configure a Microsoft Windows Server. This course helps prepare students for a MTA (Microsoft Technology Associate) and/or MCSA (Microsoft Certified Solutions Associate) exams.

Nurse Aide

CIP 51.3902

See list of Department Chairs on the Personnel page.

Program Description

The Nurse Aide (NUA) program teaches students the basic skills and methods needed to help hospital clients.

Students will also learn skills to help long-term care residents, and home health care clients with their daily living activities.

The NUA program has a selective admissions process. The program application and requirements are available in the Nursing Department front office or at Pueblo Community College NUA at any time. All Nursing and Health & Public Safety programs have essential functions to help you be successful in the program and career.

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.

Career Information

Nurse Aides work in Hospitals, Skilled Nursing Facilities, Assisted Living and home health care.

Total Credits: 5

Certificate Requirements

NUA 1001 - Nurse Aide Health Care Skills

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Formerly NUA 101 Prepares the student to perform the fundamental skills of the nurse aide. Basic nursing skills, communication 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 Aid Clinical Experience

Credit(s): 1
Vocational Clinic Hour(s): 1.5

Formerly NUA 170 Applies knowledge and skill gained in NUA 101 to patient care. Pass/fail grading (F).

Phlebotomy Technician Mini-Certificate

CIP 51.1009

See list of Department Chairs on the Personnel page.

Program Description

Phlebotomy Technician (PHL) is a one-semester (three course) certificate program. Courses cover venipuncture, capillary puncture, quality control, infection control, safety procedures, and laboratory computer systems. You will participate in laboratory and clinical experiences to perfect blood drawing skills and prepare you for the workforce as a qualified phlebotomist. When you successfully complete this program, you are eligible to sit for the National Phlebotomy Registry Exam.

The PHL program has a selective admissions process. The program application and requirements are available in the Health & Public Safety office or at Pueblo Community College PHL April 1 to July 15 for Fall Semester start and October 1 to December 15 for Spring Semester start.

Note: You must undergo a background check and drug screen before we can officially admit you to 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.

Career Information

Phlebotomy Technician work in doctor's offices, hospital and outpatient labs.

Total Credits: 10

Certificate Requirements

HPR 1020 - Phlebotomy

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Prerequisite(s): Program admission required.
Formerly HPR 112 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 2020 - Advanced Phlebotomy

Credit(s): 4
Lecture Hour(s): 2.50
Vocational Lab Hour(s): 2.25
Prerequisite(s): Program admission required.
Formerly HPR 113 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 1080 - Internship

Credit(s): 2
Internship Hour(s): 6
Prerequisite(s): Program admission and HPR 1020
Formerly HPR 180 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.

Programming Mini-Certificate

CIP 11.0101

See list of Department Chairs on the Personnel page.

Career Opportunities

The CIS program prepares you for careers in computer science, computer networking and electronic commerce. The AAS Degree with an emphasis in local area networking prepares you to work as a network technician on small and large networks. You may also administer smaller networks as a System Administrator. The AGS Degree with an emphasis in Computer Information Systems prepares you to transfer to a university to continue studies in Computer Science or Computer Information Systems.

Program Description

The CIS program provides training in basic technical computer and networking skills. You will study computer networking, programming and database technologies along with classes that teach the technical aspects of the Internet and data communications. Note: Students interested in transferring to a baccalaureate program in Computer Information Systems should refer to the Transfer Degree section.

Total Credits: 11

Certificate Requirements

CSC 1019 - Introduction to Programming

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CSC 119 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 1060 - Computer Science I: (Language)

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Prerequisite(s): CSC 1020.
Formerly CSC 160 Introduces students to the discipline of computer science. Covers algorithm development, data representation, logical expressions, sub-programs and input/output operations using a structured programming language. Requires intensive lab work outside of class time.

CSC 1061 - Computer Science II: (Language)

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Prerequisite(s): CSC 1060 or instructor approval.
Formerly CSC 161 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.

Security Mini-Certificate

CIP 11.0101

See list of Department Chairs on the Personnel page.

Career Opportunities

The CIS program prepares you for careers in computer science, computer networking and electronic commerce. The AAS Degree with an emphasis in local area networking prepares you to work as a network technician on small and large networks. You may also administer smaller networks as a System Administrator. The AGS Degree with an emphasis in Computer Information Systems prepares you to transfer to a university to continue studies in Computer Science or Computer Information Systems.

Program Description

The CIS program provides training in basic technical computer and networking skills. You will study computer networking, programming and database technologies along with classes that teach the technical aspects of the Internet and data communications. Note: Students interested in transferring to a baccalaureate program in Computer Information Systems should refer to the Transfer Degree section.

Total Credits: 15

Certificate Requirements

CNG 1004 - Intro to TCP/IP

Credit(s): 3
Lecture Hour(s): 3
Formerly CNG 104 Covers the basic elements of the Transmission Control Protocol and the Internet Protocol, the basic technologies that implement the Internet and computer networking. In addition to TCP and IP the course covers networking media, link layer, network layer and transport layer protocols. Also included are routing, broadcast, multicast and network address translation. IP version 4 and IP version 6 are both covered.

CNG 1024 - Networking I: Network +

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 124 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 1031 - Principles of Information Assurance

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 131 Delivers a comprehensive overview of network security, including general security concepts. Communication Security is studied, including remote access, email, 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.

or

CNG 1033 - Network Security: Fire Walls and Intrusion Detection and Network Security

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 133 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 1032 - Network Security Fundamentals

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 132 Examines the field of information security to prepare information systems students for their future roles as business decision-makers. The course presents a balance of the managerial and the technical aspects of information security. The concepts covered in this course should be helpful for students working towards the Certified Information Systems Security Professional (CISSP) certification.

CNG 2024 - Microsoft Windows Wireless Network

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Prerequisite(s): CNG 1004 or instructor approval.
Formerly CNG 224 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.

SQL Coding Certificate

See list of Department Chairs on the Personnel page.

The Structured Query Language (SQL) is the programming language that is used with most database applications. Knowledge of SQL gives the student opportunities in both database and programming jobs. Most modern businesses manage their data using a database and databases are found inalmost every industry. This two course certificate introduces the student to the basics of both SQL and database design.

Total Credits: 6

Courses

CIS 2043 - Introduction to Structured Query Language (SQL)

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Prerequisite(s): CIS 2040, Database Design and Development
Formerly CIS 243 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 2040 - Database Design and Development

Credit(s): 3
Lecture Hour(s): 3
Formerly CIS 240 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.

Steering and Suspension/Brakes Mini-Certificate

CIP 47.0604

See list of Department Chairs on the Personnel page.

To enter the automotive collision or automotive service program, you must successfully complete any CCR course or qualifying placement score or exemption.

Entrance into the program involves a screening and selection process. You can obtain an application and information by calling the Automotive Department at 719.549.3354.

Career Opportunities

The Automotive Service Technology program prepares you for a range of careers in automotive maintenance and repair.

Program Description

This program teaches you to perform general maintenance, as well as to diagnose and repair electrical, engine, transmission, suspension, brake and air conditioning systems. The program has met the National Institute for Automotive Technicians Education Foundation (NATEF) accreditation in the areas of Automatic Transmissions & Transaxles, Brakes, Electrical/Electronic Systems, Engine Performance, Engine Repair, Heating & Air Conditioning and Suspension & Steering. We also offer Automotive Services courses for students in the Concurrent Enrollment Program at Pueblo Community College, Cañon City High School, and PCC Southwest Campus in Mancos. We encourage you to take the Automotive Service Excellence (ASE) certification tests while enrolled at PCC. We offer a paid apprenticeship for high school students through the Automotive Youth Education System (AYES).

As a student in the program, you will become a member of the Skills USA club and participate in a number of leadership activities and competitions.

Program Requirements

Entrance Requirements:
Admissions to the Automotive Service Technology program is by application only. For admission requirements, please go to MT-129 and see the department chair.

Total Credits: 13

Certificate Requirements

ASE 1010 - Brakes I

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 110 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

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Prerequisite(s): ASE 1010.
Formerly ASE 111 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 1040 - Suspension and Steering I

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 140 Focuses on diagnosis and service of suspension and steering systems and components. This course meets MLR/AST/MAST requirements.

ASE 1041 - Suspension and Steering II

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 141 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 2010 - Automotive Power and ABS Brake Systems

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 210 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 2040 - Suspension and Steering III

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Formerly ASE 240 Covers operation of steering and power steering systems. It will also include different alignment types and procedures.

ASE 2182 - Internship: General (Summer)

Credit(s): 1
Internship Hour(s): 3
Formerly ASE 282 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 (FAST) Fundamental Automotive Systems Training (Chrysler) or others as required by the program track.

Vehicle Extrication Mini-Certificate

CIP 43.0203

See list of Department Chairs on the Personnel page.

Career Opportunities

The Fire Science Technology program prepares students for entry-level positions in the fire service industry.

Certificate Program Description

The Fire Science Technology Certificate Programs vary in semester hours. These programs are designed to prepare individuals who have little or no firefighting experience for entry-level positions in the fire service industry, as well as special training for advancement for those already in the fire service. Most of the classes in the certificates related to structural firefighting can be applied to the Fire Science Associate of Applied Science Degree offered by Pueblo Community College.

Program Requirements

Entrance Requirements:

Successful completion of any CCR course or qualifying placement score or exemption.

Graduation Requirements:

The Fire Science Technology Certificate Program requires 21 credits for completion.

A grade of "C" or higher is required in each course.

Total Credits: 3

Certificate Requirements

ALSO SEE WILDLAND FIREFIGHTER

FST 1026 - Vehicle Extrication Awareness Level

Credit(s): 1
Vocational Lab Hour(s): 1.50
Formerly FST 126 Provides the student with entry level knowledge and skills to safely operate at the scene of a vehicle/machinery extrication. Training in this course represents the minimum level of training needed to respond to a vehicle extrication incident.

FST 1027 - Vehicle Extrication Operations Level

Credit(s): 2
Lecture Hour(s): 0.50
Vocational Lab Hour(s): 2.25
Formerly FST 127 Expands and refines the objectives of FST 1026. Students shall be capable of hazard recognition, equipment use and techniques necessary to operate safely and effectively at incidents involving persons injured or entrapped in a vehicle or machinery.

Wildland Firefighter Mini-Certificate

CIP 43.0299

See list of Department Chairs on the Personnel page.

Career Opportunities

The Wildland Firefighter Certificate will prepare students for a career with local and state fire departments and federal land management agencies (US Forest Service, etc.). Additionally, this certificate is designed for individuals with a general interest in wildland fire suppression; volunteer firefighters who would like to expand their knowledge and career opportunities; and currently enrolled students with an interest in supplementing their degrees.

Program Description

The Wildland Firefighter Program will provide students with a solid foundation in theory and application of wildland fire suppression concepts. This certificate will also provide training that exceeds the minimum requirements for prospective wildland firefighters as established by the National Fire Protection Association and the National Wildfire Coordinating Group.

Program Requirements

Entrance Requirements:

Successful completion of any CCR course or qualifying placement score or exemption.

Graduation Requirements:

Successful completion of all course work with a grade of "C" or better.

Total Credits: 12.75

Certificate Requirements

FSW 1000 - S-190 Introduction to Wildland Fire Behavior

Credit(s): 1
Lecture Hour(s): 1
Formerly FSW 100 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 FSW 1001 - S-130 Firefighting Training.

FSW 1001 - S-130 Firefighting Training

Credit(s): 2
Lecture Hour(s): 0.50
Vocational Lab Hour(s): 2.25
Formerly FSW 101 Provides entry-level firefighter skills. A version of the L-180, Human Factors on the Fire line, is included as part of the course. Credit should be issued for S-130.

FSW 1002 - S-131 Firefighter Type I

Credit(s): 0.50
Lecture Hour(s): 0.50
Formerly FSW 102 Designed to meet the training needs of the Firefighter Type 1. It contains several tactical decision modules designed to facilitate learning the objectives and class discussion. This course is designed to be interactive in nature. Topics include fire line reference materials, communications and tactical decision making.

FSW 1003 - D-110 Dispatch Recorder with Introduction to Ross

Credit(s): 1
Lecture Hour(s): 1
Formerly FSW 103 Trains potential dispatch recorders on the structure of an expanded dispatch organization and how to effectively perform within that organization. Course will provide the student with a working knowledge of the purpose and process of completing the resource order and other dispatch forms. It will also provide instruction on established dispatch procedures.

FSW 1004 - I-100 Introduction to ICS

Credit(s): 0.25
Lecture Hour(s): 0.25
Formerly FSW 104 Address the ICS organization basic terminology and common responsibilities. It provides a

foundation upon which to enable entry-level personnel to function appropriately in the performance of incident-related duties. For students continuing through more complex ICS modules, this course may be used as pre-course work.

- FSW 140 - S-200 Initial Attack Incident Commander **Credit(s): 1**
- FSW 141 - S-203 Introduction to Incident **Credit(s): 2**
- FSW 142 - S-211 Portable Pumps and Water Use **Credit(s): 1.5**

FSW 1043 - S-212 Wildfire Chain Saws

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Formerly FSW 143 Provides introduction to the function, maintenance and use of internal combustion, engine-powered chain saws and their tactical wildland fire application. Modules support entry-level training for firefighters with little or no previous experience in operating a chain saw and provide hands-on cutting in surroundings similar to fire line situations.

- FSW 155 - I-200, IS-200, Q-436 Basic ICS: ICS for Single Resources and Initial Action Incidents **Credit(s): 1.5**

Course Descriptions

Click here for a Legend of the Course Descriptions

Accounting

ACC 1001 - Fundamentals of Accounting

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Department chair/advisor approval.
Corequisite(s): ACC 1003, BTE 1056 highly recommended.
Formerly ACC 101 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 1002 - Fundamentals of Accounting Hands-on Lab

Credit(s): 2
Vocational Lab Hour(s): 3
Corequisite(s): ACC 1001.
Formerly ACC 102 Covers the practical lab portion of the Fundamentals of Accounting course providing hands-on activities using software provided by the publisher or Open Educational Resources (OER) content. The lab demonstrates the recording of accounting information discussed in ACC 1001 with emphasis on the procedures and practices used in business organizations.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessmentpage.

ACC 1003 - Fundamentals of Accounting Lab

Credit(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): Department Chair Approval.
Corequisite(s): ACC 1001.
Formerly ACC 103 Designed as the practical lab portion of the Fundamentals of Accounting course. Emphasizes the demonstration of recording accounting information discussed in each chapter of ACC 1001.

ACC 1015 - Payroll Accounting

Credit(s): 3
Lecture Hour(s): 3
Formerly ACC 115 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

Credit(s): 4
Lecture Hour(s): 4
Formerly ACC 121 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

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): ACC 1021
Formerly ACC 122 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

Credit(s): 3
Vocational Lab Hour(s): 4.50
Prerequisite(s): ACC 1022
Formerly ACC 125 Introduces the capabilities of computer applications in accounting. Includes solving accounting problems of a financial nature and hardware and software controls.

ACC 1031 - Income Tax

Credit(s): 3
Lecture Hour(s): 3
Formerly ACC 131 Introduces basic concepts of federal income taxation and tax administration with emphasis on taxation of individuals and sole proprietorships.

ACC 1032 - Tax Help Colorado

Credit(s): 2
Lecture Hour(s): 2
Formerly ACC 132 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. Emphasis is placed on form preparation with the use of tax software.

ACC 1033 - Tax Help Colorado Practicum

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): Volunteer IRS Tax Preparer Certificate at Intermediate Level.
Formerly ACC 133 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

Credit(s): 3
Lecture Hour(s): 3
Formerly ACC 135 Introduces spreadsheets as an accounting tool in the application of fundamental accounting concepts, problem-solving, and decision-making skills.

ACC 1038 - Payroll and Sales Tax

Credit(s): 3
Lecture Hour(s): 3
Formerly ACC 138 Introduces laws pertaining to payroll and sales taxes including record keeping rules; preparation of various federal, state and local forms for reporting payroll and sales taxes; and computerized payroll procedures.

ACC 1075-1077 - Special Topics

Credit(s): 0-12
Formerly ACC 175-177 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

ACC 2011 - Intermediate Accounting I

Credit(s): 4
Lecture Hour(s): 4
Formerly ACC 211 Focuses on comprehensive analysis of generally accepted accounting principles (GAAP), accounting theory, concepts and financial reporting principles for public corporations. It is the first of a two-course sequence in financial accounting and is designed primarily for accounting and finance majors. Focuses on the preparation and analysis of business information relevant and useful to external users of financial reports. Explores the theories, principles and practices surveyed in Accounting Principles and critically examines real-world financial analysis and reporting issues.

ACC 2012 - Intermediate Accounting II

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): ACC 2011
Formerly ACC 212 Focuses on the theoretical and practical aspects of accounting for long-term liabilities,

stockholders' equity, investments, pensions and leases. Includes income tax allocation, financial statement analysis, cash flow statements and accounting methods changes.

ACC 2016 - Governmental and Not-for-Profit Accounting

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1031, ACC 1022, or ENG 1021
Formerly ACC 216 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

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ACC 1022,ENG 1021
Formerly ACC 226 Course covers cost accumulation methods and reports including job order, process, standards, and activity-based cost systems associated with budgeting, planning, and control of costs.

ACC 2035 - Computerized Accounting for Small Businesses

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ACC 1021,ENG 1021
Formerly ACC 235 Introduces an electronic accounting application for use in a small business. This course will focus on installing and launching the application, converting a manual accounting system to an electronic system, recording daily transactions, and summarizing records in reports for a complete financial picture.

ACC 2075-2077 - Special Topics

Credit(s): 0-12
Formerly ACC 275-277 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

ACC 2087 - Cooperative Education

Credit(s): 3
Internship Hour(s): 9
Formerly ACC 287 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.

Advanced Academic Achievement

AAA 0050 - Semester Survival

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Instructor or academic advisor approval.

Formerly AAA 050 Emphasizes basic study skills in order to bolster their chances of completing the current semester successfully.

AAA 0070-0077 - Special Topics

Credit(s): 0-12
Formerly AAA 070-077 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

AAA 0090 - Academic Achievement Strategies

Credit(s): 3
Lecture Hour(s): 3
Formerly AAA 090 Develops personalized approaches to learn and succeed for easier transition into college. Topics include goal-setting, time management, textbook reading strategies, note-taking, test-taking, listening techniques, concentration and memory devices, and critical thinking for student success.

AAA 0098 - S.T.E.P.S for College Success

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Formerly AAA 098 Introduces students to the college culture and to campus resources that support academic success. Students will access and use tools in the college portal and learning management system throughout the course. The student's role in achieving academic success will be emphasized through course content that includes practice in goal setting, effective communication, team building, critical and creative thinking techniques, academic and personal management, and application of active learning strategies.

AAA 1001 - College 101: The Student Experience

Credit(s): 1
Lecture Hour(s): 1
Formerly AAA 101 Introduces students to college culture and prepares them for challenges they will face in higher education. Through a series of interactive Seminars, students discover learning in a multicultural environment and the use of college and community resources to attain education and career goals.

AAA 1009 - Advanced Academic Achievement

Credit(s): 3
Lecture Hour(s): 3
Formerly AAA 109 Examines theories and practices associated with successful learning to enhance college success. Recommended for new and returning students, this course study areas including education and career planning, effective communication, personal management, critical and creative thinking, development of community and awareness of diversity, leadership, and techniques for successful academic performance.

AAA 1075-1077 - Special Topics

Credit(s): 0-12
Formerly AAA 175-177 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

AAA 2075-2077 - Special Topics

Credit(s): 0-12
Formerly AAA 275-277 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

Agriculture

AGE 1102 - Agriculture Economics: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly AGE 102 Focuses on economic principles and decision-making by consumers, firms, and government with emphasis on their application to the food, fiber, and natural resource sectors of the economy. This is a statewide Guaranteed Transfer course in the GT-SS1 GT-SS1

AGE 2105 - Farm and Ranch Management

Credit(s): 3
Lecture Hour(s): 3
Formerly AGE 205 Provide students with practical experience in applying principles of economics, business, marketing and finance to the management of a farm/ranch operation.

AGP 1007 - Practical Irrigation Management

Credit(s): 2
Lecture Hour(s): 2
Formerly AGP 107 Introduces the student to irrigation methods, scheduling, limited irrigation concepts, hydrology, safety, water quality, chemigation, and interrelationships between irrigation, soil fertility, and crops. A limited amount of water law is also covered.

AGR 2160 - World Interdependence - Population and Food: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly AGR 260 then AGR 2106 Covers concepts and issues related to world population, food, and agriculture. This is a statewide Guaranteed Transfer course in the GT-SS3 category. GT-SS3

AGY 1100 - General Crop Production

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.5
Formerly AGY 100 Focuses on production and adaptation of cultivated crops, principles affecting growth, development, management, and utilization.

AGY 2140 - Introductory Soil Science: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.5
Formerly AGY 240 Focuses on formation, physical properties, chemical properties and management of soils

emphasizing conditions that affect plant growth. This course is one of the Statewide Guaranteed Transfer courses. GT-SC1.

ASC 1100 - Animal Sciences

Credit(s): 3
Lecture Hour(s): 3
Formerly ASC 100 Covers the basic fundamentals of livestock production including the principles of nutrition, reproduction, breeding, genetics, health, and physiology of cattle, sheep, swine, horses, and other farm species. Trends and issues in animal science and animal agriculture are also discussed in this course.

Agriculture Business

AGB 1002 - Foundations of Agri-Business

Credit(s): 3
Lecture Hour(s): 3
Formerly AGB 102 Focuses on the foundational aspects of the primary agriculture business areas including economics, management, marketing, sales, and finance in an applied manner. Current events in agriculture are discussed with emphasis on application to agribusiness.

American Sign Language

ASL 1075-1077 - Special Topics

Credit(s): 0-12
Formerly ASL 175-177 Exploration of current topics, issues and activities related to one or more aspects of the named discipline.

ASL 1101 - Basic Sign Language I

Credit(s): 3
Lecture Hour(s): 3
Formerly ASL 101 Provides students with the basic knowledge of communicating with the deaf community. Students will develop basic vocabulary and conversational skills and will be introduced to aspects of the deaf culture and community.

ASL 1102 - Basic Sign Language II

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of ASL 1101 or instructor approval.
Formerly ASL 102 Continues the sequence for students who want to learn basic conversational patterns to communicate with the Deaf community. The material covers basic vocabulary and conversational skills, and aspects of the Deaf culture and community.

ASL 1125 - Fingerspelling

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of ASL 1101, or Instructor approval.
Formerly ASL 125 Provides the student an opportunity to develop expressive and receptive fingerspelling through various class activities.

ASL 1135 - Conversational ASL

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Successful completion of ASL 1102, or Instructor approval.
Formerly ASL 135 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.

ASL 2075-2077 - Special Topics

Credit(s): 0-12
Formerly ASL 275-277 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

Anthropology

ANT 1001 - Cultural Anthropology: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly ANT 101 Studies human cultural patterns and learned behavior including linguistics, social and political organization, religion, culture and personality, culture change, and applied anthropology.

ANT 1003 - Introduction to Archaeology: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly ANT 107 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. This is a statewide Guaranteed Transfer course in the GT-SS3 category. GT-SS3

ANT 1005 - Biological Anthropology with Laboratory: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly ANT 111 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. This is a statewide Guaranteed Transfer course in the GT-SC1 category. GT-SC1

ANT 1075-1077 - Special Topics

Credit(s): 0-12
Formerly ANT 175-177 Studies human cultural patterns and learned behavior. Includes linguistics, social and political organization, religion, culture and personality, culture change, and applied anthropology.

ANT 1101 - Exploring Other Cultures I

Credit(s): 3
Lecture Hour(s): 3
Formerly ANT 221 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 1131 - Cultures of the Southwest

Credit(s): 3
Lecture Hour(s): 3
Formerly ANT 121 Includes the major prehistoric cultures (Paleoindian, Desert Culture, Anasazi, Hohokam, Mogollon) and ethnographic views of the historic cultures (Pueblos, Navajo, Apache, Pima, Papago, Spanish-American and Anglo-American). The purpose of the study is to trace the stages through which these cultures have passed in order to evaluate environmental influences on human activities and to perceive human influences on the environment.

ANT 2075-2077 - Special Topics

Credit(s): 0-12
Formerly ANT 275-277 Provides opportunity for off-campus field experience or study of a special topic in anthropology. Field study may occur at archaeological sites, museums, host educational institutions, within ethnographic situations, or other anthropologically appropriate places. Study of a special topic may include that derived from physical anthropology, cultural anthropology, archaeology, or other anthropological discipline.

ANT 2115 - Native Peoples of North America: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of ANT 1001, or Department Chair Approval.
Formerly ANT 215 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. This is a statewide Guaranteed Transfer course in the GT-SS3 category. GT-SS3

ANT 2230 - Southwest US Archaeology

Credit(s): 3
Lecture Hour(s): 3
Formerly ANT 137 Identifies the complex regional population centers and cultural traditions of prehistoric peoples of the 4-Corners (Colorado, Arizona, New Mexico, Utah) and analyses evidence of cultural interaction with peoples of Meso-America and with the ecology of the region.

ANT 2550 - Medical Anthropology: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly ANT 250 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 medical systems between cultures. This course is one of the Statewide Guaranteed Transfer courses. GT-SS3. GT-SS3

Art

ART 1002 - Visual Concepts 2-D Design

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 131 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

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 132 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

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 150 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 1075-1077 - Special Topics

Credit(s): 0-12
Formerly ART 175-177 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

ART 1110 - Art Appreciation: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly ART 110 Introduces the cultural significance of the visual arts, including media, processes, techniques, traditions, and terminology. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

ART 1111 - Art History Ancient to Medieval: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly ART 111 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

ART 1112 - Art History Renaissance to Modern: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly ART 112 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

ART 1113 - Art History

Credit(s): 3
Lecture Hour(s): 3
Formerly ART 207 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

ART 1118 - Art Education Methods

Credit(s): 3
Lecture Hour(s): 3
Formerly ART 107 Focuses on a multimedia approach to teaching art. Emphasizes strong creative presence, philosophy and techniques in drawing, painting, printmaking, and other media.

ART 1201 - Drawing I

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 121 Investigates the various approaches and media that students need to develop drawing skills and visual perception.

ART 1202 - Drawing II

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 221 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

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 128 Introduces the basic techniques of drawing the human figure.

ART 1205 - Drawing for the Graphic Novel

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 122 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

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 151 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

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 251 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

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 124 Provides on 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

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 224 Continues the study of watercolor techniques, emphasizing original compositions and experimentation with materials. Color theory is included.

ART 1401 - Digital Photography I

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 139 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 1403 - Digital Darkroom

Credit(s): 3
Art Studio Hour(s): 6
Prerequisite(s): ART 1401 or permission of the department chair.
Formerly ART 145 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.

ART 1501 - Printmaking I

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 129 Introduces the basic techniques and skills of printmaking as a fine art media. Instruction includes an understanding of visual concepts as they relate to prints. May include introduction to relief, intaglio, lithography and screen printing techniques.

ART 1601 - Sculpture I

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 165 Introduces the fundamentals of sculpture such as modeling, casting, carving, and the processes of assemblage.

ART 1602 - Sculpture II

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 265 Develops an understanding and focus on manipulation of three-dimensional form, with greater concentration on individual creativity and style.

ART 1604 - Jewelry and Metalwork I

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 133 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 and Metalwork II

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 233 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 1701 - Handbuilt Clay I

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 162 Provides instruction in several methods of hand building and the study of functional and decorative design elements.

ART 1702 - Handbuilt Clay II

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 163 Provides continued instruction in various methods of hand building.

ART 1703 - Ceramics I

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 161 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

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 261 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 2001 - Art Sampler

Credit(s): 1
Art Studio Hour(s): 2
Formerly ART 114 Introduces students to basic skills through various art media. This course may be repeated under a different subtitle for a maximum of six credit hours. Encompasses a multitude of one-credit art experiences that expose students to an art form that they may wish to explore further.

ART 2003 - Advanced 3-D Design

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 232 Provides continued study of the principles and elements of three-dimensional design with an emphasis on visual communication for further application in fine art, commercial art, and/or applied arts.

ART 2075-2077 - Special Topics

Credit(s): 0-12
Formerly ART 275-277 Provides the students with a vehicle to pursue in-depth exploration of Special Topics of interest.

ART 2080 - Internship

Credit(s): 1-12
Internship Hour(s): 1-12
Prerequisite(s): Approval of the department chair.
Formerly ART 280 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 2081 - Capstone: Studio Art II

Credit(s): 3
Art Studio Hour(s): 6
Prerequisite(s): Approval of the department chair.
Formerly ART 281 This course is a continuation of Studio Art for advanced students to pursue individual advanced work in any area such as Drawing, Ceramics, Sculpture, Painting and Watercolor for a combination of any two areas with the purpose of enhancing their portfolio.

ART 2089 - Capstone: Studio Art

Credit(s): 2
Art Studio Hour(s): 4
Prerequisite(s): Approval of Art department chair.
Formerly ART 289 Provides a demonstrated culmination of learning within a given program of study.

ART 2201 - Drawing III

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 222 Offers a continued study of expressive drawing techniques and development of individual style, with an emphasis on composition and technique variation.

ART 2203 - Advanced Figure Drawing

Credit(s): 3
Art Studio Hour(s): 6
Prerequisite(s): ART 1203
Formerly ART 228 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

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 252 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 2401 - Digital Photography II

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 239 Expands upon the beginning digital photography class. Focuses on digital photography in terms of design and communication factors including color, visual design, lighting, graphics and aesthetics.

ART 2405 - Portrait Photography

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 144 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

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 142 Focuses on traditional and contemporary approaches to landscape photography. This course examines historic, technical, and aesthetic aspects of landscape photography.

ART 2408 - Studio Photography

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 141 Explores the creative uses of studio lighting from the perspective of fine art photography with an emphasis on portraiture, three-dimensional object photography and two-dimensional collage photography.

ART 2603 - Jewelry and Metalwork III

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 234 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 repouss 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 and Metalwork Iv

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 235 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 2702 - Ceramic Sculpture

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 264 Explores a variety of processes to create three-dimensional images in clay. Focuses on hand-built sculptures, without using a potter's wheel and relying on very basic tools. Encourages creative experimentation and engaging in the process.

ART 2703 - Ceramics III

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 262 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 2901 - Business of Visual Art

Credit(s): 3
Lecture Hour(s): 3
Formerly ART 211 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

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of any 12 credits of Art courses or Department Chair Approval.
Formerly ART 210 Provides students with the framework, tools and professional materials necessary for the practicing visual artist. Guidelines for writing proposals, artist's statements and resumes are discussed and practiced. Explores theoretical and practical considerations related to portfolio presentation and exhibiting artwork through hands-on activities, readings and discussion.

ART 2906 - Studio Art

Credit(s): 3
Art Studio Hour(s): 6
Prerequisite(s): Department Chair Approval.
Formerly ART 209 Designed for advanced students interested in further exploring an art discipline to develop a more comprehensive portfolio.

Astronomy

AST 1075-1077 - Special Topics

Credit(s): 0-12
Formerly AST 175-177 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

AST 1110 - Astronomy I With Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly AST 101 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 - Astronomy II with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): AST 1110.
Formerly AST 102 Emphasizes the structure and life cycle of the stars, the sun, galaxies, and the universe as a whole, including cosmology and relativity. Stellar phenomena including white dwarves, black holes will be explored. Incorporates laboratory experience.

AST 2075-2077 - Special Topics

Credit(s): 0-12
Formerly AST 275-277 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

Automotive Service Technology

ASE 1001 - Auto Shop Orientation

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 101 Covers safety instruction in the shop and on the automobile. Emphasis on the proper use and care of test equipment, precision measuring and machining equipment, gaskets, adhesives, tubing, wiring, jacks, presses, and cleaning equipment and techniques.

ASE 1002 - Introduction to the Automotive Shop

Credit(s): 2
Lecture Hour(s): 2
Formerly ASE 102 Prepares the incoming automotive student to work in the shop safely and gain familiarity with the shop and common equipment.

ASE 1003 - Auto Maintenance I

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 103 Covers the basics of how various systems on the automobile operate, maintenance requirements, and financial concerns related to operating and maintaining an automobile.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessmentpage.

ASE 1010 - Brakes I

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 110 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

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Prerequisite(s): ASE 1010.
Formerly ASE 111 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 Auto Electricity

Credit(s): 2
Lecture Hour(s): 1.5
Vocational Lab Hour(s): 0.75
Formerly ASE 120 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 1022 - Automotive Electrical Safety Systems

Credit(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 122 Covers the operation of electrical systems including vehicles safety concerns of vehicle lighting systems, Supplemental Inflatable Restraints (SIR), windshield wipers, driver warning systems, and vehicle accessories. This course meets MLR/AST/MAST program requirements.

ASE 1023 - Starting and Charging System

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 123 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 1024 - Advanced Ignition System Diagnosis & Repair

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Formerly ASE 124 Focuses on lecture and related laboratory experiences in the diagnosis, service, adjustments and repair of various ignitions systems on customer vehicles.

ASE 1030 - General Engine Diagnosis

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 130 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 and Repair

Credit(s): 2
Lecture Hour(s): 1.50
Vocational Lab Hour(s): 0.75
Formerly ASE 132 Focuses on lecture and related laboratory experiences in the diagnosis, service, adjustments and repair of various automotive ignition systems.

ASE 1034 - Automotive Fuel and Emissions Systems I

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 134 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 and Steering I

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 140 Focuses on diagnosis and service of suspension and steering systems and components. This course meets MLR/AST/MAST requirements.

ASE 1041 - Suspension and Steering II

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 141 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 1051 - Automotive Manual Transmission/Transaxles & Clutches

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 151 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 and Clutches II

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 152 Focuses on lecture and related laboratory experiences in the diagnosis and repair of automotive differentials, four wheel and all-wheel drive units.

ASE 1053 - Automotive Drive Axle Overhaul

Credit(s): 1
Vocational Lab Hour(s): 1.50
Formerly ASE 153 Teaches the student skills to check, inspect, and replace parts necessary to rebuild differential assembly.

ASE 1054 - Manual Transmission/Transaxle Diagnosis and Repair

Credit(s): 1
Vocational Lab Hour(s): 1.50
Formerly ASE 154 Covers operation, diagnosis and repair procedures of manual transmission and transaxle assemblies.

ASE 1060 - Automotive Engine Removal & Installation

Credit(s): 1
Lecture Hour(s): 0.5
Vocational Lab Hour(s): 0.75
Formerly ASE 160 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 - Engine Repair & Rebuild

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly ASE 161 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 1062 - Automotive Engine Repair

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 162 Covers engine sealing requirements and repair procedures including engine fasteners, bolt torque, repair of fasteners, cooling system, and basic engine maintenance. This course meets AST/MAST requirements.

ASE 1063 - Automotive Component Removal and Replacement

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly ASE 163 Practical methods of removal and installation of engines, transmissions, transfer cases, clutch assemblies, bolt, and thread repair.

ASE 1065 - Automotive Machining

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 165 Focuses on the machining processes used to repair or build the automotive engine, using up-to-date machines and equipment to recondition connecting rods, engine blocks, cylinder heads, valves, flywheels, crankshafts, pistons, and also including brake drum and rotor service.

ASE 1070 - Laboratory Experience I

Credit(s): 1-6
Vocational Lab Hour(s): 1.50-9
Formerly ASE 170 Continues to build upon the principles that are expected to be understood by students.

ASE 1071 - Laboratory Experience II

Credit(s): 1-6
Vocational Lab Hour(s): 1.50-9
Formerly ASE 171 Continues to build upon the principles that are expected to be understood by students.

ASE 1072 - Laboratory Experience III

Credit(s): 1-6
Vocational Lab Hour(s): 1.50-9
Formerly ASE 172 Continues to build upon the principles that are expected to be understood by students.

ASE 1075-1077 - Special Topics

Credit(s): 0-12
Formerly ASE 175-177 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

ASE 2010 - Automotive Power and ABS Brake Systems

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 210 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 2020 - Specialized Electronics Training

Credit(s): 2
Lecture Hour(s): 1.50
Vocational Lab Hour(s): 0.75
Formerly ASE 220 Provides a systematic approach to automotive electrical and electronic systems. This course applies electrical principles to semiconductors and microprocessors commonly found in automobiles and covers diagnostic procedures that have applications to present and future automotive electronics and electrical systems.

ASE 2021 - Auto/Diesel Body Electrical

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Formerly ASE 221 Provides a comprehensive study of the theory, operation, diagnosis, and repair of vehicle accessories.

ASE 2031 - Auto/Diesel Computers

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Formerly ASE 231 Focuses on lecture and laboratory experiences in the inspection and testing of typical computerized engine control systems.

ASE 2033 - Auto Fuel Injection and Emissions Systems II

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Formerly ASE 233 Focuses on lecture and related laboratory experiences in the diagnosis and repair of electronic fuel injection systems and modern exhaust systems.

ASE 2034 - Advanced Automotive Emissions

Credit(s): 2
Lecture Hour(s): 1.50
Vocational Lab Hour(s): 0.75
Formerly ASE 234 Provides laboratory experiences with a variety of customer work in the areas that the student received training during previous automotive classes.

ASE 2035 - Drivability Diagnosis

Credit(s): 1
Lecture Hour(s): 0.50
Vocational Lab Hour(s): 0.75
Formerly ASE 235 Focuses on diagnostic techniques and the use of diagnostic scan tools, oscilloscopes, lab scopes, multi-meters, and gas analyzers.

ASE 2036 - Advanced Drivability Diagnosis/Repair

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Formerly ASE 236 Focuses on lecture and laboratory experiences in the inspection, testing and repair of typical computerized engine control systems on customer vehicles.

ASE 2040 - Suspension and Steering III

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Formerly ASE 240 Covers operation of steering and power steering systems. It will also include different alignment types and procedures.

ASE 2050 - Automatic Transmission/Transaxle Service

Credit(s): 1
Lecture Hour(s): 1
Formerly ASE 250 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 and Transaxle Repair

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly ASE 251 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 2052 - Advanced Automatic Transmissions/Transaxles

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 252 Covers the diagnosis, repair, and rebuild of automatic transmissions and transaxles including the hydraulic, electronic, and mechanical components. This course meets MAST requirements.

ASE 2053 - Advanced Manual Transmission/Transaxles

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Formerly ASE 253 Focuses on lecture and laboratory experiences in the diagnosis and repair of automotive manual transmissions, transaxles, clutches and their related components on customer vehicles.

ASE 2060 - Advanced Engine Diagnosis

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Formerly ASE 260 Focuses on lecture and related laboratory experiences in the diagnosis and necessary corrective actions of automotive engine performance factors related to customer vehicles.

ASE 2064 - Introduction Automotive Heating and Air Conditioning

Credit(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 264 Covers basic operation of heating and air conditioning components. This course meets MLR/AST/MAST requirements.

ASE 2065 - Heating and Air Conditioning Systems

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Formerly ASE 265 Emphasizes lecture and related laboratory experiences in the diagnosis and service of vehicle heating and air conditioning systems and their components.

ASE 2075-2077 - Special Topics

Credit(s): 0-12
Formerly ASE 275-277 Provides the student with a vehicle to pursue in-depth exploration of Special Topics of interest.

ASE 2085 - Independent Study

Credit(s): 1-6
Vocational Lab Hour(s): 1.50-9
Formerly ASE 285 Meets the individual needs of students. Students engage in intensive study or research under the direction of a qualified instructor.

ASE 2087 - Cooperative Education

Credit(s): 1-9
Internship Hour(s): 3-27
Formerly ASE 287 Develops practical objectives assigned by an automotive employer providing an on-the-job learning experience at an approved automotive repair facility.

ASE 2180 - Internship: Basic Electrical and Engine Performance

Credit(s): 1
Internship Hour(s): 3
Formerly ASE 280 Focuses on 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 (FAST) Fundamental Automotive Systems Training (Chrysler) or others as required by the program track.

ASE 2181 - Internship: Basic Heavy Duty and Power Train

Credit(s): 1
Internship Hour(s): 3
Formerly ASE 281 Focuses on 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 (FAST) Fundamental Automotive Systems Training (Chrysler) or others as required by the program track.

ASE 2182 - Internship: General (Summer)

Credit(s): 1
Internship Hour(s): 3
Formerly ASE 282 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 (FAST) Fundamental Automotive Systems Training (Chrysler) or others as required by the program track.

ASE 2183 - Internship: Advanced Electrical & Engine Performance

Credit(s): 1
Internship Hour(s): 3
Formerly ASE 283 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 (FAST) Fundamental Automotive Systems Training (Chrysler) or others as required by the program track. The student registers for and takes the (ASE) Automotive Service Excellence based tests for engine performance and electrical systems.

ASE 2184 - Internship: Advanced Heavy Duty & Power Train

Credit(s): 1
Internship Hour(s): 3
Formerly ASE 284 Focuses on 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 (FAST) Fundamental Automotive Systems Training (Chrysler) or others as required by the program track they are enrolled in. The student registers for and takes the ASE-Automotive Service Excellence based test for brake systems and suspension and steering.

Barber

BAR 1003 - Introduction to Hair & Scalp

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly BAR 103 Introduces various types of hair, scalp treatments and shampoos. Focuses on recognition and treatment of disorders of hair and scalp, product knowledge and proper massage techniques to help control these disorders and cleanse the hair and scalp. Covers terminology dealing with hair structure scalp and hair disorders. Training is provided in a lab or classroom setting.

BAR 1007 - Introduction to Shaving, Honing & Stropping

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly BAR 107 Introduces the general principles of shaving to include hair texture, grain of the beard and analysis of the skin. Theory is combined with the practical application of proper shaving procedures and cutting strokes used on the face.

BAR 1008 - Intermediate Shaving, Honing & Stropping

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly BAR 108 Focuses on theory and practical training related to mustache and beard designing and trimming. Practical applications are incorporated in specialized classes or in a supervised salon.

BAR 1066 - Introduction to Facial Massages & Skin Care

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly BAR 166 Emphasizes basic understanding of facial massage manipulations and the study of skin in both practical and theory applications. Covers the benefits derived from proper facial massage and a good skin care routine.

BAR 1067 - Intermediate Facial Massage & Skin Care

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly BAR 167 Focuses on practical application dealing with anatomy, skin disorders, skin types and facial shapes. Students help patrons select proper skin care treatments

BAR 2007 - Advanced Shaving, Honing & Stropping

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly BAR 207 Focuses on advanced training in shaving, honing and stropping. Practical and theory application is completed in specialized classes or supervised clinical training. Student will be prepared for State Board license exam.

BAR 2066 - Advanced Facial Massage & Skin Care

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly BAR 266 Emphasizes anatomy, skin disorders, skin types and facial shapes. Students guide patrons on selection of proper skin care treatments. Covers student preparation for State Board licensing examination on theory and practical procedures.

Biology

BIO 1005 - Science of Biology with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly BIO 105 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 - as is the impact of biological science on society. Includes laboratory experiences. Designed for non-science majors.

BIO 1006 - Basic Anatomy and Physiology

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly BIO 106 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, Paramedic Program, and the Medical Office Technology Program.

BIO 1016 - Introduction to Human Disease: GT-SC2

Credit(s): 3
Lecture Hour(s): 3
Formerly BIO 116 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 1075-1077 - Special Topics

Credit(s): 0-12
Formerly BIO 175-177 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

BIO 1111 - General College Biology I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): ENG 1021
Formerly BIO 111 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 - General College Biology II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Corequisite(s): ENG 1021.
Formerly BIO 112 A continuation of Biology I. Includes ecology, evolution, classification, structure, and function in plants and animals. This course includes laboratory experience.

BIO 2075-2077 - Special Topics

Credit(s): 0-12
Formerly BIO 275-277 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

BIO 2101 - Human Anatomy and Physiology I with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 201 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, nervous and endocrine systems. Includes a mandatory hands-on laboratory experience covering experimentation, microscopy, observations and dissection. This is the first semester of a two-semester sequence.

BIO 2102 - Human Anatomy and Physiology II with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 202 Focuses on the integrated study of the human body and the histology, anatomy, and physiology of the following systems and topics: cardiovascular, hematology, lymphatic and immune, urinary, fluid and electrolyte control, digestive, nutrition, respiratory, reproductive and development. Includes a mandatory hands-on laboratory experience involving experimentation, microscopy, observations and dissection. This is the second semester of a two-semester sequence.

BIO 2103 - Advanced Human Anatomy

Credit(s): 2
Lecture Hour(s): 1
Academic Lab Hour(s): 2
Prerequisite(s): Successful completion of BIO 2101 and BIO 2102 with a grade of "C" or better. CHE 1011 strongly recommended.
Formerly BIO 203 Examines the gross anatomical structure of the human body and the relationship between form and function. Students will prospect 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: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 204 Designed for health science majors. Examines microorganisms with an emphasis on their structure, development, physiology, classification and identification. The laboratory experience includes culturing, identifying and controlling microorganisms with an emphasis on their role in infectious disease.

BIO 2116 - Human Pathophysiology

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): BIO 2101, BIO 2102
Formerly BIO 216 Focuses on the alterations in physiological, cellular and biochemical processes, the associated homeostatic response, and the manifestations of disease. Prior knowledge of cellular biology, anatomy and physiology is essential for the study of pathophysiology.

BIO 2169 - Nucleic Acid Techniques and Molecular Cloning

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): Successful completion of BIO 1111, CHE 1111, and MAT 1340 with a grade C or better.
Formerly BIO 269 Introduces Recombinant DNA technology as used in Biomedical Research. Covers basic information on the structure and function of DNA as a genetic material before students are guided through a research project involving the isolation and sequence analysis of a gene. Students perform hands-on laboratory techniques on non-infectious material to include PCR, gel electrophoresis, molecular cloning and automated DNA sequencing.

Business

BUS 1002 - Entrepreneurial Operations

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 102 Explores the essential requirements for starting and operating a business. This course covers basic concepts of business law, marketing, finance and operations. It guides the development of an effective business plan and prepares students to launch and sustain their own businesses.

BUS 1015 - Introduction to Business

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 115 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 1016 - Personal Finance

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 116 Surveys the basic personal financial needs of most individuals. Emphasizes the basics of budgeting and buying, saving and borrowing money, the intricacies of home ownership, income tax and investments, and the wise use of insurance, wills and trusts.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

BUS 1018 - Business Survival Skills

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 118 Provides an overall perspective for the student to understand the current domestic and world business environment and how the student as an employee fits into that environment. Roles and responsibilities of the business and the employees will be studied especially as they relate to alternatives for increasing positive impact in the workplace. The focus will be on practical skills application.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

BUS 1021 - Basic Workplace Skills

Credit(s): 1
Lecture Hour(s): 1
Formerly BUS 121 Examines techniques for communicating effectively on the job including both verbal and written communication; identifies the roles of individuals and companies and necessary critical thinking and problem solving skills; examines relationship skills, effective self-presentation, and workplace issues such as sexual harassment, stress, and substance abuse.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

BUS 1075-1077 - Special Topics

Credit(s): 0-12
Formerly BUS 175-177 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

BUS 1081 - Internship

Credit(s): 0-6
Internship Hour(s): 0-18
Formerly BUS 181 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 3 Seminars during the semester of enrollment. Class utilizes cooperative work experience or project methods depending on the individual situation.

BUS 2016 - Legal Environment of Business

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 216 Emphasizes public law, regulation of business, ethical considerations, and various relationships existing within society, government, and business. Specific attention is devoted to economic regulation, social regulation, regulation and laws impacting labor-management issues and environmental concerns. Students develop an understanding of the role of law in social, political, and economic change.

BUS 2017 - Business Communication & Report Writing

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 217 Emphasizes effective business writing and covers letters, memoranda, reports, application letters and resumes. Includes the fundamentals of business communication and an introduction to international communication.

BUS 2026 - Business Statistics

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 226 Focuses on statistical study, descriptive statistics, probability, and the binominal distribution, index numbers, time series, decision theory, confidence intervals, linear regression and correlation. Intended for the business major.

BUS 2075-2077 - Special Topics

Credit(s): 0-12
Formerly BUS 275-277 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

BUS 2087 - Cooperative Education

Credit(s): 0.50-6
Internship Hour(s): 1.50-18
Prerequisite(s): Department advisor/chair approval.
Formerly BUS 287 Provides students with the opportunity to supplement course work with practical work experience related to their educational program and occupational objectives. Students are placed at approved work stations related to their program of study. They work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor/coordinator.

Business Technologies

BTE 1000 - Computer Keyboarding

Credit(s): 1
Lecture Hour(s): 0.50
Vocational Lab Hour(s): 0.75
Formerly BTE 100 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

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): BTE 1000 or Instructor or Department Chair Approval.
Formerly BTE 102 Designed for students with minimal keyboarding skills. Introduces letters, tables, memos, and manuscripts. Emphasizes speed and accuracy.

BTE 1003 - Keyboarding Applications II

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Prerequisite(s)/Corequisite(s): BTE 1002, or equivalent assessment test score, or Department Chair Approval.
Formerly BTE 103 Reinforces basic keyboarding formats and procedures. Productivity and decision-making skills are exercised. Emphasizes speed and accuracy.

BTE 1008 - Ten-Key by Touch

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): Department Chair Approval.
Formerly BTE 108 Introduces touch control of the ten-key pad. Emphasizes the development of speed and accuracy using proper technique.

BTE 1011 - Keyboarding Speed Building I

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): BTE 1000 or instructor approval, or Department Chair Approval.
Formerly BTE 111 Designed to increase speed and improve accuracy in keyboarding on the PC through the use of correct techniques and concentrated effort.

BTE 1012 - Keyboarding Speed Building II

Credit(s): 2
Vocational Lab Hour(s): 3
Prerequisite(s): BTE 1011.
Formerly BTE 112 Continues the skill building sets from BTE 1011. This course is designed to further increase speed and improve accuracy in keyboarding on the PC through the use of correct techniques and concentrated effort.

BTE 1016 - File Management

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): Department Chair Approval.
Formerly BTE 116 Provides instruction principles, organization, and procedures for alphabetic, numeric, subject, chronological and geographic systems of filing.

BTE 1020 - Introduction to Business Practices

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Department Chair Approval.
Formerly BTE 120 Examines business practices in the workplace.

BTE 1025 - Records Management

Credit(s): 3
Vocational Lab Hour(s): 4.50
Prerequisite(s): Department advisor/chair/instructor approval.
Formerly BTE 125 Instructs on how records are created, stored and retrieved. Covers the basic filing rules - classifying, indexing, coding, storing, and retrieving as applied to basic methods - alphabetic, chronological, subject, numeric, and geographic. Emphasizes hands-on records management through the use of simulations, which includes manual and/or computer software.

BTE 1028 - Legal Terminology

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): Department Chair Approval.
Formerly BTE 128 Allows students to develop a basic legal terminology background. Students learn the state, federal, and local court structures.

BTE 1056 - Business Mathematics with Calculators

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Prerequisite(s): Department Chair Approval.
Formerly BTE 156 Covers basic business mathematics using the touch system on electronic calculators to solve business problems.

BTE 1066 - Business Editing Skills

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1013, or Department Chair Approval.
Formerly BTE 166 Provides proofreading techniques and reviews spelling, punctuation, grammar and word processing formats on various types of business documents and worksheets.

BTE 1075-1077 - Special Topics

Credit(s): 0-12
Formerly BTE 175-177 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

BTE 2002 - Office Simulation I

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly BTE 202 Provides experience in using in-basket exercises typical of those occurring in an office operation. It focuses on procedures and computer skills needed for successful performance in the workplace.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

BTE 2003 - Office Simulation II

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly BTE 203 Provides the student the opportunity to demonstrate and perfect the computer skills, organizational skills, and communication skills required to secure employment and/or advancement in the workplace.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

BTE 2004 - Keyboarding Applications III

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Prerequisite(s): BTE 1003, BTE 1066 and 45 wpm, or Department Chair Approval.
Formerly BTE 204 Produces mailable computer printouts from straight-copy, rough-draft, and simulated office projects and develops the ability to make decisions without direct supervision.

BTE 2011 - Legal Formatting

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Department Chair Approval.
Formerly BTE 211 Introduces keyboarding and formatting legal correspondence, legal instruments and court documents and provides an introduction to legal procedures.

BTE 2013 - Introduction to Legal Office Procedures

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Department Chair Approval.
Formerly BTE 213 Simulates a typical legal office and acquaints students with the tasks and responsibilities performed in a legal office environment and shows how these tasks relate to the court system.

BTE 2025 - Office Management

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Department Chair Approval.
Formerly BTE 225 Emphasis is placed on functions of the office. Includes office organization, work in the office, office layout, equipment and supplies, procurement and control, work flow, forms design, record storage and retrieval systems, personnel administration and problems, and government control.

BTE 2029 - Legal Transcription

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Prerequisite(s): BTE 1028, BTE 1003, or Department Chair Approval.
Formerly BTE 229 Prepares students to work as legal transcriptionists. Students transcribe a variety of legal documents and develop a legal vocabulary.

BTE 2038 - Legal Office Procedures

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Prerequisite(s): 40 wpm, BTE 1028
Formerly BTE 238 Designed for students who will be working in a legal office either in the private or the public sector. Covers fundamental office procedures found in both general and specialized law offices.

BTE 2039 - Billing Systems: PC Law

Credit(s): 3
Lecture Hour(s): 3
Formerly BTE 239 Introduces the fundamental applications of PC Law software as used for time, billing, and accounting.

BTE 2075-2077 - Special Topics

Credit(s): 0-12
Formerly BTE 275-277 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

BTE 2087 - Cooperative Education/Internship

Credit(s): 0.50-6
Cooperative Education Hour(s): 0.75-9
Prerequisite(s): Department Chair Approval.
Formerly BTE 287 Provides students with the opportunity to supplement course work with practical work experience related to their educational program and occupational objectives. Students are placed at approved work sites that are related to their program of study. They work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor/coordinator.

Carpentry

CAR 1000 - Introduction to Carpentry

Credit(s): 1
Lecture Hour(s): 1
Formerly CAR 100 Provides a basic introduction to construction work for all crafts. This course specifically applies to construction sites.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

CAR 1001 - Basic Safety

Credit(s): 1
Lecture Hour(s): 1
Formerly CAR 101 An overview of safety concerns and procedures in the construction field.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

CAR 1002 - Hand and Power Tools

Credit(s): 1
Lecture Hour(s): .25
Vocational Lab Hour(s): 1.12
Formerly CAR 102 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

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.5
Formerly CAR 103 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 1005 - Job Site Layout and Blueprint Reading

Credit(s): 1
Lecture Hour(s): 0.50
Vocational Lab Hour(s): 0.75
Formerly CAR 105 Introduces blueprint reading and how they apply to the construction site. Includes in-depth introduction to site layout (materials and methods).

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

CAR 1021 - Floor Framing

Credit(s): 1
Lecture Hour(s): 0.25
Vocational Lab Hour(s): 1.12
Formerly CAR 121 Covers framing basics as well as the procedures for laying out and constructing a wood floor using

common lumber as well as engineered building materials.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

CAR 1022 - Wall Framing

Credit(s): 1
Lecture Hour(s): 0.25
Vocational Lab Hour(s): 1.12
Formerly CAR 122 Focuses on the procedures for laying out and framing walls and ceilings, including roughing-in door and window openings, construction corners and partition Ts, bracing walls and ceilings, and applying sheathing.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

CAR 1023 - Roof Framing

Credit(s): 1
Lecture Hour(s): 0.25
Vocational Lab Hour(s): 1.12
Formerly CAR 123 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.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

CAR 1030 - Windows and Exterior Doors

Credit(s): 1
Lecture Hour(s): 1
Formerly CAR 130 Describes the various types of windows, skylights and exterior doors and provides instructions for installing them. Includes instructions for installing weather-stripping and locksets.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

CAR 1040 - Stair Construction/layout

Credit(s): 1
Lecture Hour(s): 0.50
Vocational Lab Hour(s): 0.75
Formerly CAR 140 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.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

CAR 1070 - Clinical: Construction Lab I

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly CAR 170 Continues to build upon the principles that are expected to be understood by students in the construction discipline.

CAR 1071 - Clinical: Construction Lab I

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly CAR 171 Continues to build upon the principles that are expected to be understood by students in the construction discipline.

CAR 1072 - Clinical: Construction Lab I

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly CAR172 Continues to build upon the principles that are expected to be understood by students in the construction discipline.

CAR 1075-1077 - Special Topics

Credit(s): 0-12
Formerly CAR 175-177 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

CAR 1080 - Internship

Credit(s): 5
Internship Hour(s): 15
Formerly CAR 180 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.

CAR 1081 - Internship

Credit(s): 6
Internship Hour(s): 18
Formerly CAR 181 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.

CAR 2070 - Clinical: Construction Lab I

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly CAR 270 Continues to build upon the principles that are expected to be understood by students in the construction discipline.

CAR 2071 - Clinical: Construction Lab I

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly CAR 271 Continues to build upon the principles that are expected to be understood by students in the construction discipline.

CAR 2072 - Clinical: Construction Lab I

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly CAR 272 Continues to build upon the principles that are expected to be understood by students in the construction discipline.

CAR 2075-2077 - Special Topics

Credit(s): 0-12
Formerly CAR 275-277 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

CAR 2080 - Internship

Credit(s): 5
Internship Hour(s): 15
Formerly CAR 280 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.

CAR 2081 - Internship

Credit(s): 6
Internship Hour(s): 18
Formerly CAR 281 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

CHE 1004 - Concepts of Chemistry I

Credit(s): 4
Academic Lab Hour(s): 2
Formerly CHE 104 Includes the study of measurements, atomic theory, chemical bonding, nomenclature, stoichiometry, solutions, acid and base, and gas laws. Designed for non-science majors, students in occupational and health programs, or students with no chemistry background. This course has no lab and may not be transferable. Equivalent of CHE 1011lecture.

CHE 1005 - Chemistry in Context with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Formerly CHE 105 Covers the study of measurements, matter, molecules, atoms, chemical bonding, nomenclature, energy, acids, bases, and nutrition. Course work examines chemistry in the modern world and surveys the current knowledge as well as the conceptual framework of the discipline. Chemistry as a science is explored, as is the impact of chemistry on society. This course includes laboratory experience and is designed for non-science majors.

CHE 1009 - General, Organic, and Biochemistry

Credit(s): 4
Lecture Hour(s): 4
Formerly CHE 109 Focuses on fundamentals of inorganic, organic and biochemistry primarily for students in health science, non-science majors and/or students in the occupational and health related career areas. Includes the study of measurement, atomic theory, chemical bonding, nomenclature, stoichiometry, solutions, acid and base chemistry, gas laws, condensed states of matter and nuclear chemistry, nomenclature of organic compounds, properties of different functional groups, nomenclature of various biological compounds, their properties and biological pathways. This course has no lab and may not be transferable.

CHE 1011 - Introduction to Chemistry I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 0300.
Formerly CHE 101 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: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): CHE 1011.
Formerly CHE 102 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 1075-1077 - Special Topics

Credit(s): 0-12
Formerly CHE 175-177 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

CHE 1111 - General College Chemistry I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4

Academic Lab Hour(s): 2
Prerequisite(s): MAT 1340, CHE 1011.
Corequisite(s): ENG 1021.
Formerly CHE 111 Focuses on basic chemistry and measurement, matter, chemical formulas, reactions and equations, stoichiometry. This course covers the development of atomic theory culminating in the use of quantum numbers to determine electron configurations of atoms, and the relationship of electron configuration to chemical bond theory. The course includes gases, liquids, and solids and problem-solving skills are emphasized through laboratory experiments.

CHE 1112 - General College Chemistry II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): CHE 1111, ENG 1021.
Formerly CHE 112 Presents concepts in the areas of solution properties, chemical kinetics, chemical equilibrium, acid-base and ionic equilibrium, thermodynamics, and electrochemistry. This course emphasizes problem solving skills and descriptive contents for these topics. Laboratory experiments demonstrate qualitative and quantitative analytical techniques.

CHE 2075-2077 - Special Topics

Credit(s): 0-12
Formerly CHE 275-277 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

CHE 2085 - Independent Study

Credit(s): 0-12
Independent Study Hour(s): 0-24
Prerequisite(s): Approval of department chair.
Formerly CHE 285 Provides the opportunity for the highly motivated student to engage in intensive study and research on a specified topic under the direction of a faculty member. Allows a student to complete a course in a semester when the course has not been offered or has been canceled. The option to make independent study available is at the discretion of qualified faculty and the department chair. The student is limited to the number of independent study courses taken per semester.

CHE 2111 - Organic Chemistry I with Lab

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): Successful completion of CHE 1112 with a grace of "C" or better.
Formerly CHE 211 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, reaction mechanisms such as SN1, SN2, E1 and E2. Laboratory experiments demonstrate the above concepts plus the laboratory techniques associated with organic chemistry.

CHE 2112 - Organic Chemistry II with Lab

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2

Prerequisite(s): Successful completion of CHE 2111 with a grade of "C" or better.
Formerly CHE 212 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 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.

Computer Aided Drafting

CAD 1075-1077 - Creo Advanced

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Prerequisite(s): CAD 2458.
Formerly CAD 175-177 Introduces advanced applications of the 3D parametric software Creo. 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 1075-1077 - Special Topics

Credit(s): 0-12
Formerly CAD 175-177 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

CAD 1100 - Computer Aided Drafting/2D I

Credit(s): 3
Lecture Hour(s): 3
Formerly CAD 100 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.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

CAD 1101 - Computer Aided Drafting/2D I

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly CAD 101 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

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly CAD 102 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 1110 - Sketchup

Credit(s): 3
Lecture Hour(s): 3
Formerly CAD 115 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.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

CAD 2075-2077 - Special Topics

Credit(s): 0-12
Formerly CAD 275-277 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

CAD 2089 - Capstone

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CAD 289 Provides a demonstrated culmination of learning within a given program of study.

CAD 2400 - Computer Aided Drafting/3D

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Prerequisite(s): CAD 1101 or instructor approval.
Formerly CAD 202 Focuses on construction of three-dimensional objects using the AutoCAD software. Includes mesh & surface modeling, solid modeling, extrusions, Boolean operations, 3D editing, 3D views, rendering, materials, advanced lighting, and walkthrough, flyby animations of 3D Solids to 2D Layouts.

CAD 2455 - Solidworks/Mechanical

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly CAD 255 Introduces parametric feature-based solid modeling 3D concepts to build confidence in 3D thinking and progresses to three-dimensional parameters. The student learns 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

Credit(s): 3
Lecture Hour(s): 3
Formerly CAD 259 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 Crea Basics

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Prerequisite(s): CAD operation experience.
Formerly CAD 153 Introduces basic Creo software and its operations such as part, assembly, and drawing creation. The student learns to construct, modify, and manage complex parts in 3D space as well as to produce 2D drawings from the 3D models. Creo is a 3D Parametric Solid Modeling program.

CAD 2540 - 3DS Max

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Prerequisite(s): CAD 1101 or Instructor approval
Formerly CAD 219 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 2541 - Advanced 3DS Max Character Modeling

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Prerequisite(s): CAD 2540.
Formerly CAD 220 Focuses on advanced 3D geometry and character construction, animation and rendering techniques using Autodesk 3D Max software. Emphasis will include 3D geometry manipulation, character/bone/biped constructions, animation and video post-production of 3D animations.

CAD 2660 - 3D Printing/Additive Manufacturing

Credit(s): 3
Lecture Hour(s): 3
Formerly CAD 262 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.

Computer Information Systems

CIS 1001 - Alternative Input/Output for Computers

Credit(s): 1
Vocational Lab Hour(s): 1.50
Formerly CIS 101 Focuses on teaching alternative methods for interacting with a computer. Individualized for each

student, the course covers such programs as Dragon NaturallySpeaking, Dragon Dictate, or Job Access with Speech (JAWS). It is designed for students who have little or no previous computer experience.

CIS 1002 - Computer Assistive Technology

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly CIS 102 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

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly CIS 104 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 1007 - Voice Recognition: Dragon

Credit(s): 1
Vocational Lab Hour(s): 1.50
Formerly CIS 107 Teaches the basics of voice recognition software for word processing and other related office applications. Benefits include the reduction of repetitive stress injuries, increasing accuracy, and saving report time preparation.

CIS 1009 - Management Software and Technical Applications

Credit(s): 1
Vocational Lab Hour(s): 1.50
Formerly CIS 109 Introduces the use of computer management software and the concepts of software applicable to various technology programs. Covers features of selected software, terminology related to hardware, software and online resources (which include PC, word processing, databases, spreadsheets and e-mail). Provides opportunities for practical application of computer skills.

CIS 1010 - Intro to Computing Technology (Device)

Credit(s): 1
Vocational Lab Hour(s): 1
Formerly CIS 110 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

Credit(s): 3
Lecture Hour(s): 3
Formerly CIS 115 Focuses on an overview of the needs for and roles of computer information systems. Emphasizes

computer requirements in organizations, history, hardware functions, programming, systems development and computer operations. Introduces computer applications.

CIS 1018 - Intro to PC Applications

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 118 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 1055 - PC Spreadsheet Concepts: (Software Package)

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 155 Exposes the student to a wide range of uses of the electronic spreadsheet with special emphasis on using it as a business tool. Includes fundamentals and terms, creating and saving workbooks, entering and using formulas, formatting, printing, multiple-page workbooks, creating charts, entering and using functions, managing lists, and simple macros.

CIS 1067 - Desktop Publishing: (Software)

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 167 Introduces the concepts and applications for desktop publishing using work processing software. Emphasizes page layout and design with techniques for incorporating text and graphics and final production of printed documents.

CIS 1075-1077 - Special Topics

Credit(s): 0-12
Formerly CIS 175-177 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

CIS 1078 - Seminar/Workshop

Credit(s): 1-6
Seminar Hour(s): 1-6
Formerly CIS 178 Provides students with an experiential learning experience.

CIS 2018 - Advanced PC Applications

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Prerequisite(s): CIS 1018 or Instructor approval.
Formerly CIS 218 Covers the advanced capabilities of a PC software applications suite. Emphasizes solving business problems by integrating data from all of the software applications that facilitate the production of useful information. Printed documents, reports, slides and forms are produced to communicate information.

CIS 2020 - Fundamentals of Unix

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 220 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

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly CIS 223 Introduces students to the concepts of installing, configuring, and managing the Linux operating system. Topics covered include working with various desktops, use of filesystem commands, and management of user and group permissions.

CIS 2040 - Database Design and Development

Credit(s): 3
Lecture Hour(s): 3
Formerly CIS 240 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 2041 - Advanced Database Design and Development

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): CIS 2040.
Formerly CIS 241 Continues work started in CIS 2040 - Database Design and Development. Surveys the two common types of databases, relational and object oriented. Covers transactions and concurrency, database administration and backup and database applications.

CIS 2043 - Introduction to Structured Query Language (SQL)

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Prerequisite(s): CIS 2040, Database Design and Development
Formerly CIS 243 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 2068 - Systems Analysis and Design I

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): CIS 1015 and one programming language course.
Formerly CIS 268 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 2075-2077 - Special Topics

Credit(s): 0-12
Formerly CIS 275-277 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

CIS 2087 - Cooperative Education

Credit(s): 1-12
Internship Hour(s): 3-36
Formerly CIS 287 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 works with the student to select an appropriate work site, establish learning objectives and to coordinate learning activities with the employer work site supervisor.

CIS 2089 - Capstone

Credit(s): 1-6
Internship Hour(s): 3-18
Formerly CIS 289 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 & Networking Technology

CNG 1004 - Intro to TCP/IP

Credit(s): 3
Lecture Hour(s): 3
Formerly CNG 104 Covers the basic elements of the Transmission Control Protocol and the Internet Protocol, the basic technologies that implement the Internet and computer networking. In addition to TCP and IP the course covers networking media, link layer, network layer and transport layer protocols. Also included are routing, broadcast, multicast and network address translation. IP version 4 and IP version 6 are both covered.

CNG 1020 - A+ Certification Preparation

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Formerly CNG 120 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+

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3

Formerly CNG 121 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+

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Prerequisite(s): CNG 1021 or Department Chair Approval.
Formerly CNG 122 Provides students with an in-depth look at desktop and mobile Operating System support, maintenance and troubleshooting, and an overview of 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 current operating systems, including using common GUI and command line tools, registry editing, system backup and recovery, and advanced troubleshooting. This course helps prepare you for the second CompTIA A+ Exam.

CNG 1024 - Networking I: Network +

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 124 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 +

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Prerequisite(s): CNG 1024
Formerly CNG 125 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

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 131 Delivers a comprehensive overview of network security, including general security concepts. Communication Security is studied, including remote access, email, 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 1032 - Network Security Fundamentals

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 132 Examines the field of information security to prepare information systems students for their future roles as business decision-makers. The course presents a balance of the managerial and the technical aspects of information security. The concepts covered in this course should be helpful for students working towards the Certified Information Systems Security Professional (CISSP) certification.

CNG 1033 - Network Security: Fire Walls and Intrusion Detection and Network Security

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 133 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 Disaster Recovery

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Department Chair Approval.
Formerly CNG 136 Presents methods to identify vulnerabilities and take appropriate countermeasures to prevent and mitigate failure risks for an organization. It will take an enterprise-wide approach to developing a disaster recovery plan.

CNG 1042 - Introduction to Cloud Computing Concepts

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Formerly CNG 142 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 1075-1077 - Special Topics

Credit(s): 0-12
Formerly CNG 175-177 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

CNG 2012 - Configuring Windows Server

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Formerly CNG 212 Provides students with the knowledge and skills that are required to install and configure a Microsoft Windows Server. This course helps prepare students for a MTA (Microsoft Technology Associate) and/or MCSA (Microsoft Certified Solutions Associate) exams.

CNG 2024 - Microsoft Windows Wireless Network

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Prerequisite(s): CNG 1004 or instructor approval.
Formerly CNG 224 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

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Formerly CNG 240 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 2042 - Cloud Computing

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Formerly CNG 242 Installs, configures and manages a cloud environment. Builds on knowledge of hypervisor and virtual machine environments.

CNG 2043 - Cloud Security and Cyber Law

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Formerly CNG 243 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

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Department Chair Approval.
Formerly CNG 251 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 2054 - Data Encryption

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Department Chair Approval.
Formerly CNG 254 Exposes the student to data encryption models. Examines the differences between data storage including Microsoft, Novell Netware and UNIX. Includes encryption and data transmission. Covers encryption over various networks including the Internet.

CNG 2056 - Vulnerability Assessment I

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Prerequisite(s): CIS 2020, CNG 1024, and CNG 1032.
Formerly CNG 256 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 and Counter Measure

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Prerequisite(s): CNG 1004 or Instructor approval.
Formerly CNG 257 Examines the tools, techniques and technologies used in the technical securing of information assets. This course provides in-depth information of the software and hardware components of Information Security and Assurance. Topics include firewall configurations, hardening Unix and NT servers, Web and distributed systems security and specific implementation of security modes and architectures. The curriculum maps to the Security Certified Network Professional (SCP) Network Defense and Countermeasures exam.

CNG 2058 - Digital Forensics

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): CNG 1024.
Corequisite(s): CIS 2020.
Formerly CNG 258 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 2060 - Cisco Network Associate I

Credit(s): 5
Lecture Hour(s): 5
Formerly CNG 260 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 2061 - Cisco Network Associate II

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): CNG 2060.
Formerly CNG 261 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 2062 - Cisco Network Associate III

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): CNG 2061.
Formerly CNG 262 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 2063 - Cisco Network Associate IV

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): CNG 2062.
Formerly CNG 263 Implements WAN technologies and network services required by converged applications in a complex switched and routed networks.

CNG 2075-2077 - Special Topics

Credit(s): 0-12
Formerly CNG 275-277 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

Computer Science

CSC 1019 - Introduction to Programming

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CSC 119 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 Java

Credit(s): 3
Lecture Hour(s): 3
Formerly CSC 120 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 1029 - Introduction to Secure Coding

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5

Prerequisite(s): CSC 1060 , Computer Science I
Formerly CSC 129 Focuses on introduction to secure coding. Emphasizes concepts, principles, and 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)

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Prerequisite(s): CSC 1020.
Formerly CSC 160 Introduces students to the discipline of computer science. Covers algorithm development, data representation, logical expressions, sub-programs and input/output operations using a structured programming language. Requires intensive lab work outside of class time.

CSC 1061 - Computer Science II: (Language)

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Prerequisite(s): CSC 1060 or instructor approval.
Formerly CSC 161 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 1075-1077 - Special Topics

Credit(s): 0-12
Formerly CSC 175-177 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

CSC 2017 - Advanced Python Programming

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Prerequisite(s): CSC 1020
Formerly CSC 217 Continues program development and problem solving not covered in CSC119: Introduction to Programming. Students will create larger programs in the areas of advanced expression, iterator objects, parsing, and GUI applications.

CSC 2025 - Computer Architecture/Assembly Language Programming

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.5
Prerequisite(s): CIS 2023, Linux, and CSC 1060, Computer Science I
Formerly CSC 225 Introduces concepts of computer architecture, functional logic, design and computer arithmetic. Focuses on the mechanics of information transfer and control within a computer system. Includes symbolic

programming techniques, implementing high level control structures, addressing modes and their relation to arrays, subprograms, parameters, linkage to high level languages and the assembly process.

CSC 2030 - C Programming: Platform

Credit(s): 3
Lecture Hour(s): 3
Formerly CSC 230 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 2034 - C++ Programming

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.5
Prerequisite(s): CSC 1020
Formerly CSC 234 Starts with basic differences between C++ and other programming languages and progresses to programming advanced C++ concepts such as operator overloading, friends, references, namespaces, pointers and dynamic arrays, templates, streams and file I/O, recursion, polymorphism, exception handling and Standard Template Library. The course covers large programs that are coded implementing object-oriented design principles such as classes and objects, polymorphism, encapsulation, composition, inheritance and templates.

CSC 2040 - Java Programming

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CSC 240 Introduces the Java programming language and covers basic graphics, events/procedures, user interface and libraries. Enables the student to write and execute a variety of Java programs. Incorporates Java Applets into HTML.

CSC 2041 - Advanced Java Programming

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Prerequisite(s): CSC 2040 or instructor approval.
Formerly CSC 241 Continues the study of the Java programming language. Covers advanced programming topics including multithreading, network/Internet programming, database programming and JavaBeans. Enables the student to write advanced, large and complex programs.

CSC 2045 - Secure Software Development: (Language)

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Prerequisite(s): CSC 1061 OR Co-Requisite
Corequisite(s): CSC 1061 or Pre-Requisite

Formerly CSC 245 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

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Prerequisite(s): CSC 1019.
Formerly CSC 246 Learn how to develop mobile apps using key features and frameworks. Students will learn application design and development using a mobile development platform software development kit (SDK) and corresponding programming language. Main features include: handling UI triggered and touch events, data management, simple and complex UI views, drawing, location and application settings.

CSC 2067 - Object-Oriented Analysis and Design

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): CSC 1060, Computer Science I
Formerly CSC 267 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 2075-2077 - Special Topics

Credit(s): 0-12
Formerly CSC 275-277 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

CSC 3000 - Advanced Computer Architecture

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.5
Prerequisite(s): Department Chair Approval
Formerly CSC 300 Covers the analysis of advanced concepts in the applications of computer architecture and programming capabilities with keyboard and display controllers within programs. This course investigates the impact of exceptions and interrupts within a simulator, examines the hazards associated with a pipelined datapath, and uses the analysis of floating-point instructions.

CSC 3020 - Software Engineering Fundamentals

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.5
Prerequisite(s): Department Chair Approval
Formerly CSC 320 Focuses on the skills necessary to analyze, design, and implement software engineering projects. The course includes software engineering standards and processes, qualitative aspects including maintainability, extensibility, reusability, and robustness in every stage of the software-engineering life-cycle.

CSC 3022 - Security Fundamentals and Databases

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.5
Prerequisite(s): Department Chair Approval
Formerly CSC 322 Examines the vulnerabilities of databases to attack. Functional requirements and security testing, focusing on the interaction between a software user and the application, are analyzed. This course will investigate database platforms and provide database developers with an understanding of database development best practices for optimum security.

CSC 3024 - Secure Coding Vulnerabilities I

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.5
Prerequisite(s): Department Chair Approval
Formerly CSC 324 Focuses on analyzing and implementing software vulnerabilities. This course explores vulnerabilities through code evaluation and implementation of language-specific solutions.

CSC 3026 - Secure Scripting of Operating Systems

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Prerequisite(s): Department Chair Approval
Formerly CSC 326 Focuses on analyzing and configuring an environment and assessing configuration variables in multiple operating systems. Topics include using multiple utilities in order to assimilate information on a network, host and data communications, and creating scripts for evaluation.

CSC 3028 - Security Libraries in Programming Languages

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.5
Prerequisite(s): Department Chair Approval
Formerly CSC 328 Focuses on the issues surrounding security libraries within programming languages. This course analyzes static typing within a software program to assess integrity within a given programming library. The course will also explore what effect mutable resources have on security, along with encryption tools, and violation channels.

CSC 4022 - Secure Software Engineering

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.5
Prerequisite(s): Department Chair Approval
Formerly CSC 422 Focuses on the analysis and functionality of defective software and how to develop and implement secure software. The analysis performed by software engineers in order to detect, repair, and maintain safe systems will also be covered.

CSC 4024 - Secure Code Vulnerabilities II

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.5
Prerequisite(s): CSC 3024
Formerly CSC 424 Focuses on advanced implementation of software vulnerabilities. This course covers attack vectors frequently used by malicious actors such as email attachments, compromised "watering hole" websites, and other tools often relied on to take advantage of unpatched vulnerabilities found in widely-used software applications. Patching techniques will be deployed in order to repair vulnerabilities found in software components.

CSC 4026 - Secure Cloud Programming

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.5
Prerequisite(s): Department Chair Approval
Formerly CSC 426 Focuses on analyzing and implementing secure applications in the cloud. Topics covered will include designing and implementing applications via the cloud with a focus on security policies, analyzing computer models with recommendations to reduce the risks and security challenges surrounding programming, and data security within the cloud.

CSC 4028 - Software Security Testing

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.5
Prerequisite(s): Department Chair Approval
Formerly CSC 428 Focuses on testing software as it pertains to vulnerabilities within operating systems, libraries, and cloud applications. Topics covered include implementing testing environments through analytical assessments using tools that detect software inefficiencies and using reliable solutions in order to reduce security risks.

Computer Web-Based

CWB 1010 - Complete Web Authoring: (Scripting Language)

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CWB 110 Explores the complete set of web authoring skills using HTML and/or other scripting languages. Includes links, backgrounds, controlling text and graphic placement, tables, image maps, frames and forms.

CWB 1030 - Web Editing Tools: (Editor)

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CWB 130 Teaches the use of tools for webpage design and development. These tools are designed to make the creation of webpages easy and consistent. With the use of editing tools, students will be able to build webpages 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 website once it is created.

CWB 1075-1077 - Special Topics

Credit(s): 0-12
Formerly CWB 175-177 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

CWB 1075-1077 - Structured Information Creation (Language)

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CWB 175-177 Explores the complete set of web authoring skills using a structured web information language and/or other scripting languages. Course content also includes links, backgrounds, controlling text and graphic placement, tables, image maps, frames and forms.

CWB 1085 - Independent Study

Credit(s): 1-6
Independent Study Hour(s): 2-12
Formerly CWB 185 Meets the individual needs of students. Students engage in intensive study or research under the direction of a qualified instructor.

CWB 2005 - Client-Side Scripting: (Software)

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Formerly CWB 205 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)

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Prerequisite(s): MGD 1041
Formerly CWB 206 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 2008 - Web Application Development: (Development Tool(s))

Credit(s): 3
Vocational Lab Hour(s): 4.5
Formerly CWB 208 Teaches students how to work in the server-side scripting environment. Students learn the basics of application development, and general principles that apply to most development environments. Students develop applications using two different server-side application development tools: PHP Hypertext Preprocessor (PHP), and Cold Fusion. Students also learn key application standards such as source and revision control, coding stndards, code optimization and data integrity.

CWB 2009 - Web Content Management Systems

Credit(s): 3
Vocational Lab Hour(s): 4.50
Prerequisite(s): MGD 1041

Formerly CWB 209 Explores the use of open source Content Management Systems (CMS) to simplify the creation and maintenance of web sites.

CWB 2021 - Technology Foundations for E-commerce

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CWB 221 Provides the student with thorough knowledge of e-commerce architecture, relational database management systems, and HTML and Network fundamentals.

CWB 2075-2077 - Special Topics

Credit(s): 0-12
Formerly CWB 275-277 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

CWB 2087 - Cooperative Education

Credit(s): 1-6
Internship Hour(s): 3-18
Formerly CWB 287 Provides a college-to-work based experience that draws on combined efforts of educators and employers to produce outcomes related to student career objectives.

Construction Technology

CON 1005 - Construction Technology

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Formerly CON 105 Explores a variety of new software applications now available for the construction trade. Introduces computer applications such as CAD, scheduling, estimating and accounting programs. Explores technology choices and compares them.

CON 1006 - Site Prep through Foundation

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly CON 106 Introduces blue-print reading and how they apply to the construction site. Includes in-depth introduction to site layout (materials and methods). It also covers materials and methods for concrete forms and foundations. Includes various reinforcement methods such as re-bar and welded-wire fabric.

CON 1010 - Introduction to Construction, Part 1

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Formerly CON 110 Explores the expanding array of careers within the construction industry. Students will be exposed

to the construction industry throughout job site tours, hands-on experience and classroom activities. Math and science application will be established throughout the academic integration of jobsite technical skills and classroom theory.

CON 1011 - Introduction to Construction, Part 2

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Formerly CON 111 Explores additional careers within the construction industry. Students will be exposed to the construction industry throughout job site tours, hands-on experience and classroom activities. Math and science application will be established through the academic integration of jobsite technical skills and classroom theory.

CON 1012 - Basic Repairs for Home or Apartment

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Formerly CON 112 Focuses on repair and maintenance of buildings. Covers preventative maintenance methods and skills.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

CON 1020 - Building Materials and Environmental Impact

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CON 120 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 1040 - Introduction to Building Codes & Enforcement

Credit(s): 3
Lecture Hour(s): 3
Formerly CON 140 Introduces the basic concepts of code enforcement.

CON 1057 - National Center for Construction Education & Research Core

Credit(s): 5
Lecture Hour(s): 2
Vocational Lab Hour(s): 4.5
Formerly CON 157 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 1075-1077 - Special Topics

Credit(s): 0-12
Formerly CON 175-177 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

CON 2044 - Concrete and Asphalt Technology

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Prerequisite(s): EGG 100.
Formerly CON 244 Focuses on the study of Portland cement concrete and bituminous pavements. Covers manufacturing, mix design and placement of these materials.

CON 2045 - Project Management

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Prerequisite(s): EGG 100.
Formerly CON 245 Covers the principles of project planning, scheduling, estimating and management. Emphasizes the basic skills required to supervise personnel. Includes case studies.

CON 2075-2077 - Special Topics

Credit(s): 0-12
Formerly CON 275-277 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

CON 2080 - Internship

Credit(s): 3
Internship Hour(s): 9
Prerequisite(s): Instructor approval.
Formerly CON 280 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.

Cosmetology

COS 1003 - Shampoo/Rinses/Conditioners I

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly COS 103 Introduces various types of scalp treatments and shampoos. Enables student to recognize and treat disorders of hair and scalp. Covers product knowledge and proper massage techniques to help control disorders and to cleanse the hair and scalp. Includes terminology dealing with hair structure, scalp and hair disorders. Provides training in a lab or classroom setting.

COS 1010 - Introduction to Hair Coloring

Credit(s): 2
Vocational Clinic Hour(s): 4

Formerly COS 110 Provides theory pertaining to the law of color, theory of color, chemistry of color, product knowledge and analysis of hair and scalp. Covers basic techniques and procedures for the application of hair coloring.

COS 1011 - Intermediate: Hair Coloring

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 1010.
Formerly COS 111 Focuses on theory and practical application of color products, formulations of color, level and shades of color. Examines techniques in a specialized class or in a supervised salon setting.

COS 1020 - Introduction to Hair Cutting

Credit(s): 2
Vocational Clinic Hour(s): 4

Formerly COS 120 Introduction to the theory relevant to patron protection, angles, elevations and the analysis of hair textures as related to hair cutting. Covers the proper use and care of hair-cutting implements. Focuses on basic hair-cutting techniques using all cutting implements, disinfection and sanitation procedures as they relate to haircutting.

COS 1021 - Intermediate I: Haircutting

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 120.
Formerly COS 121 Focuses on theory related to facial shapes, head and body forms to determine the clients appropriate haircut. Incorporates practical applications of hair cutting techniques in specialized classes or in the supervised salon (clinical setting).

COS 1030 - Introduction to Hair Styling

Credit(s): 2
Vocational Clinic Hour(s): 4

Formerly COS 130 Combines theory with the practical application of roller placement, shaping, pin curls, finger waves, air forming iron curling, soft pressing and hard pressing.

COS 1031 - Intermediate I: Hair Styling

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 1030.
Formerly COS 131 Focuses on the accepted methods of styling hair, air forming roller sets, finger waves pin curls braiding and hair pressing.

COS 1040 - Introduction to Chemical Texture

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly COS 140 Introduces a combination of theory and practice focusing on the analysis of hair and scalp, proper equipment and product knowledge. Includes basic techniques in permanent waving and chemical relaxing. Provides training in a classroom or lab setting on mannequins or live models.

COS 1041 - Intermediate I: Chemical Texture

Credit(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): COS 1040.
Formerly COS 141 Emphasizes theory and practical application of permanent waves and chemical relaxers in specialized classes or a supervised salon setting. Enables the student to practice different wrapping techniques required by trend styles.

COS 1050 - Laws, Rules and Regulations

Credit(s): 1
Lecture Hour(s): 1
Formerly COS 150 Provides instruction on the laws, rules and regulations and how they govern the cosmetology and barber industry, as well as the effects they have on the student, licensed individual, salons and school owners.

COS 1060 - Introduction to Disinfection, Sanitation & Safety

Credit(s): 2
Vocational Clinic Hour(s): 4

Formerly COS 160 Introduces the various methods of disinfection, sanitation and safety as used in the cosmetology industry. Includes classroom study of bacteriology and the terminology dealing with cosmetology.

COS 1061 - Intermediate I: Disinfection, Sanitation & Safety

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly COS 161 Focuses on the theory and daily practice of proper methods of disinfection, sanitation and safety procedures as related to all phases of cosmetology. Covers terminology and training of disinfection, sanitation and safety procedures. Also includes customer service in a supervised salon (clinical) setting or specialized class.

COS 1075-1077 - Special Topics

Credit(s): 0-12
Formerly COS 175-177 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

COS 2003 - Shampoo/Rinses/Conditioners II

Credit(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): COS 1003.
Formerly COS 203 Provides theory and practical training in shampoos, rinses and conditioners. Examines advanced techniques to prepare the student for employment. Includes preparation for the State Board Licensing Examination in shampoos, rinses and conditioners.

COS 2010 - Intermediate II: Hair Coloring

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 1010.
Formerly COS 210 Provides continued instruction in the theory and practical application of color products, formulations of color, level and shades of color. Enables students to practice techniques in a specialized class or in a supervised salon setting.

COS 2011 - Advanced Hair Coloring

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 1011.
Formerly COS 211 Provides continued instruction on advanced theory and practical techniques in hair coloring. Focuses on the recognition of color problems and color correction procedures. Covers advanced techniques and product knowledge to prepare the student for employment. Prepares the student for the State Board Licensing Examination pertaining to hair coloring.

COS 2020 - Intermediate II: Haircutting

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 1020.
Formerly COS 220 Provides continued instruction in the theory related to facial shapes, head and body forms to determine the client's appropriate haircut. Incorporates practical applications of haircutting techniques.

COS 2021 - Advanced Hair Cutting

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 1021.
Formerly COS 221 Focuses on advanced cutting techniques using all the cutting tools. Emphasizes current fashion trends. Includes student preparation for the State Licensure examination.

COS 2030 - Intermediate II: Hair Styling

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 1030.
Formerly COS 230 Provides continued instruction on accepted methods of styling hair, air forming, roll set, finger waves and hair pressing. Examines techniques in specialized classes or in a supervised salon setting.

COS 2031 - Advanced Hair Styling

Credit(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): COS 1031.
Formerly COS 231 Focuses on theory and advanced techniques in all phases of hair styling to prepare the student for employment. Training is a combination of supervised salon (clinical) work and specialized classes. Includes student preparation for the State Board Licensing Examination relating to hairstyling.

COS 2040 - Intermediate II: Chemical Texture

Credit(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): COS 1040.
Formerly COS 240 Provides continued instruction in the theory and practical application of permanent waves and chemical relaxers in specialized classes or a supervised salon setting. Enables students to practice different wrapping techniques required by trend styles.

COS 2041 - Advanced Chemical Texture

Credit(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): COS 1041.
Formerly COS 241 Focuses on advanced techniques to prepare the student for employment and the changes in current industry standards. Instruction is provided in specialized classes or supervised salon (clinical) setting. Includes student preparation for the State Board Licensing Examination pertaining to permanent waves and chemical relaxers.

COS 2050 - Management, Ethics, Interpersonal Skills & Salesmanship

Credit(s): 1
Lecture Hour(s): 1
Formerly COS 250 Emphasizes the importance of salon management and the knowledge and skills necessary to build a successful business. Focuses on the importance of interpersonal skills and basic techniques in salesmanship and customer services. Integrates job readiness skills and professional ethics.

COS 2060 - Intermediate II: Disinfection, Sanitation & Safety

Credit(s): 2
Vocational Clinic Hour(s): 4

Formerly COS 260 Provides continued study of theory and practice of proper methods of sterilization, disinfection, sanitation and safety procedures as related to all phases of the industry. Covers terminology and training of

disinfection, sanitation and safety procedures. The individual responsibility to provide a safe work environment is practiced.

COS 2061 - Advanced Disinfection, Sanitation & Safety

Credit(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): COS 1061.
Formerly COS 261 Provides advanced training on decontamination and safety practices in a supervised salon and/or classroom setting. Examines advanced techniques that prepare the student for employment. Includes student preparation for the State Board Licensing Examination in decontamination and safety for all aspects of the industry. Study of OSHA requirements for schools and salon are done in a theory or practical setting.

COS 2062 - Advanced II: Disinfection, Sanitation & Safety

Credit(s): 3
Vocational Clinic Hour(s): 6

Prerequisite(s): COS 2060.
Formerly COS 262 This course is the extra hours/credits required for the hairstylist program, per State Board of Colorado Barber/Cosmetology Board. Provides advanced training on decontamination and safety practices in a supervised salon and/or classroom setting. Examines advanced techniques that prepare the student for employment. Includes student preparation for the State Board Licensing Examination in decontamination and safety for all aspects of the industry. Study of OSHA requirements for schools and salon are done in a theory or practical setting.

COS 2075-2077 - Special Topics

Credit(s): 0-12
Formerly COS 275-277 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

Counseling

CSL 2046 - Professional Ethics I

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): High School diploma or equivalent.
Formerly CSL 245 This course focuses on ethical issues specific to the practice of addiction counseling and on jurisprudence, which is the law and the practice of psychotherapy in Colorado. The class will cover the Colorado Mental Health Practice Act and introduce the student to the regulatory system and the role of DORA (Dept. of Regulatory Agencies) and DBH (Division of Behavioral Health) in the development and credentialing of the addiction counselor. There will be emphasis on developing ethical decision making skills, knowledge of confidentiality and the prohibited activities in the Mental Health Practice Act. Students will become familiar with the NAADAC Code of Ethics and acquire the tools for ethical and legal practice.

CSL 2048 - Clinical Assessment & Treatment Planning

Credit(s): 1
Lecture Hour(s): 1

Formerly CSL 248 Covers the differences between screening and assessment and use of assessment instruments. In this course components of the clinical assessment include a biopsychosocial interview, assessing risk for self-harm, identifying cultural needs and supports, problem domains, determining stage of readiness for change and strengths of the client. Stages of treatment and systems of care will be covered along with facets of treatment planning.

CSL 2050 - Motivational Interviewing I

Credit(s): 1.5
Lecture Hour(s): 1.5
Prerequisite(s): CSL 2068
Formerly CSL 250 Provides the opportunity for students to learn both the model of Motivational Interviewing as well as the underlying Stages of Development model. Discussion of the populations of clients where these models have proven most effective will be discussed. Student opportunity for skills practice during class that includes skill sets specific to each stage of client readiness will be used. Presentation of assessment instruments to evaluate client readiness for change.

CSL 2051 - Pharmacology I for Addiction Counselors

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): High School diploma or equivalent.
Formerly CSL 251 This class will provide a solid base of knowledge about the drugs of abuse, including what is happening in human physiology and behaviors, and will enhance the ability of the counselor to offer treatment services in a manner that respects gender, race and ethnicity, sexual orientation, cultural, familial, systemic and socioeconomic diversity.

CSL 2052 - Pharmacology II for Counselors

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): High school diploma or equivalent
Formerly CSL 252 Focuses on the pharmacology of alcohol and drugs such as stimulants, nicotine, cannabis, hallucinogens, designer drugs, over the counter medications, and medications for psychiatric illnesses. When combined with CSL 251, this course meets the pharmacology training requirement for the Counselor II level of the Colorado Alcohol and Drug Abuse Program.

CSL 2053 - Cognitive Behavior Therapy

Credit(s): 1
Lecture Hour(s): 1
Formerly CSL 253 Opportunity for students to learn the model of Cognitive Behavior Therapy as it applies to addiction. Discussion of the populations of clients where this model has proven most effective. Opportunity for skills practice during class that includes clincial feeback. Minimum of 14 contact hours.

CSL 2054 - Trauma Informed Care

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): High School Diploma or equivalent
Formerly CSL 254 Covers the concept of trauma?informed care, an approach being adopted within human services based upon an increased awareness of the ways trauma impacts functioning. Course will define what trauma informed

care is and ways a traditional treatment setting can be modified to increase the sense of safety experienced by clients. Participants will learn how to incorporate trauma?informed practices into treatment with diverse populations, such as military veterans, women, and people with co?occurring disorders.

CSL 2055 - Infectious Diseases for Addiction Counselors

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): High School diploma or equivalent.
Formerly CSL 255 This class will help prepare addiction professionals to identify diseases frequently associated with drug abuse, determine client risk for infection, educate clients about disease prevention and treatment options, and assist clients in obtaining appropriate treatment as needed. This class will enhance the ability of the counselor to offer treatment services in a manner that respects gender, race and ethnicity, sexual orientation, cultural, familial, systemic and socioeconomic diversity.

CSL 2056 - Co-occurring Disorders

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): High School Diploma or equivalent
Formerly CSL 256 Presents the basics of working with clients with co-occurring mental health and substance abuse disorders. This class will address clinical assessment, treatment philosophy, strategies, and guidelines to provide integrated treatment with co?occurring disorders. It will include an introduction to the diagnostic criteria for the mental disorders most often seen with substance use disorders. The essential values, attitudes, and competencies of the counselor working with this population are discussed.

CSL 2057 - Certified Addiction Counselor

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): High School Diploma or equivalent
Formerly CSL 257 Provides participants with an overview of ethical and risk management issues related to addiction treatment services with an emphasis on professional conduct, professional boundaries, boundary crossings, boundary violations, dual relationships and an appropriate use of counselor self?disclosure. Class will focus on issues of professional distance, modeling and maintaining healthy therapeutic boundaries. The ethics of delivering professional counseling to persons of culturally diverse backgrounds will be discussed along with issues of professional readiness and professional development.

CSL 2058 - Group Counseling Skills

Credit(s): 1.5
Lecture Hour(s): 1.5
Prerequisite(s): CSL 2068
Formerly CSL 258 Provides students with the skills that allow one therapist to facilitate a group process that help a number of clients simultaneously, and provides positive peer support and pressure for recovery. This class will help the student understand the use of group therapy and be able to demonstrate the skills necessary to facilitate a therapy group. The class will focus on group process and discuss diversity within groups, as well as challenges for group leaders.

CSL 2059 - Advanced Professional and Ethical Practice

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): CSL 2046
Formerly CSL 259 Addresses organizational ethics and practices, individual provider ethics and practices, and guidelines for setting up a private practice. Topics will include Office of Behavioral Health (OBH) licensing rules; OBH behavioral health rules and regulations; practice standards and guidelines; Department of Regulatory Agencies (DORA) and the Mental Health Practice Act; the purpose of and the need for written policies and procedures; professional competencies, boundaries and ethical relationships; reporting violations; employee drug testing; liability insurance; clinical versus administrative supervision; the ethical delivery of culturally-responsive care and trauma-informed care; and the need for professional self-care plan. This course will build on Ethical Practice in Addiction Treatment course.

CSL 2061 - Client Records Management

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): High School diploma or equivalent.
Formerly CSL 260 This class will provide the counselor with an understanding of the clinical record and the continuum of client care that the record documents and tracks. The class presents screening, assessment and evaluation, diagnosis, ASAM patient placement criteria, treatment planning, progress note completion, documentation requirements and discharge planning. It emphasizes the confidentiality of the client record and includes releases of information, mandatory disclosure and informed consent among others.

CSL 2065 - Culturally Informed Treatment

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): High School diploma or equivalent.
Formerly CSL 265 This class will provide a basic foundation for understanding how cultural competence, awareness and sensitivity can improve quality of care and increase positive outcomes. Cultural variables to be considered will include age, gender, sexual orientation, religious affiliation, language, educational level, physical ability, economic status and social class as well as racial and ethnic backgrounds. This course is intended to provide participants with basic skills to recognize and respect the behavior, ideas, attitudes, values, beliefs, customs, language, rituals, ceremonies and practices characteristic of diverse groups of people. Course design will include definitions and descriptions of culture including concepts of assimilation and acculturation. Exercises will involve self-examination and discussion of the evolution of one's own personal beliefs, values and attitudes.

CSL 2068 - Addictions Counseling Skills

Credit(s): 1.50
Lecture Hour(s): 1.50
Prerequisite(s): High School diploma or equivalent.
Formerly CSL 268 This class will provide a framework and counseling model for working with clients with substance abuse or dependence. This course will teach the counseling skills needed to help clients process their information and move toward the change process. The models utilized in this class are client-centered, counselor-directed therapy using a motivational style and spirit.

CSL 2069 - Principles of Addiction

Credit(s): 1.50
Lecture Hour(s): 1.50
Prerequisite(s): High School diploma or equivalent.

Formerly CSL 269 Focuses on the major theories of addiction in an historical and theoretical context. Includes an elaboration on NIDA's Principles of Drug Addiction Treatment. This class meets the principles of addictions training requirement for the Counselor I level of the Colorado Alcohol and Drug Abuse Program.

Criminal Justice

CRJ 1010 - Intro to Criminal Justice: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): ENG 1021.
Formerly CRJ 110 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. This is a statewide Guaranteed Transfer course in the GT-SS3 category.

CRJ 1025 - Policing Systems

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): CRJ 1010.
Formerly CRJ 125 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 1035 - Judicial Function

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of CRJ 1010.
Formerly CRJ 135 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

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of CRJ 1010.
Formerly CRJ 145 Examines the history and total correctional process from law enforcement through the administration of justice, probation, prisons, correctional institutions and parole. Also examines the principles, theories, phenomena and problems of the crime, society and the criminal justice system from the perspective of criminology and the criminal justice system in general. Emphasizes the role of sociology and other interdisciplinary approaches to the field of corrections and society's response.

CRJ 1075-1077 - Special Topics

Credit(s): 0-12
Formerly CRJ 175-177 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

CRJ 2005 - Principles of Criminal Law

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of CRJ 1010, CRJ 1025, CRJ 1035, CRJ 1045, and ENG 1021.
Prerequisite(s)/Corequisite(s): COM 1150 and ENG 1022.
Formerly CRJ 205 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 2010 - Constitutional Law

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of CRJ 1010and CRJ 1035.
Prerequisite(s)/Corequisite(s): COM 1150and ENG 1021.
Formerly CRJ 210 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 2030 - Criminology

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of CRJ 1010 and CRJ 1045.
Prerequisite(s)/Corequisite(s): COM 1150 and ENG 1021.
Formerly CRJ 230 Provides an introduction to the study of crime, understanding the causes of crime, and examines, theoretical frameworks and theories to explain criminal behavior. Within a social context, consideration is given to how theories have emerged and understand how social context contributes to explanations of crime. Examination of the nature of crime, crime victimization, crime patterns, types of crime, crime statistics, and criminal behavior is also included.

CRJ 2075-2077 - Special Topics

Credit(s): 0-12
Formerly CRJ 275-277 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

CRJ 2080 - Cooperative Education/internship

Credit(s): 3
Internship Hour(s): 9
Prerequisite(s): Department chair or program coordinator approval.
Formerly CRJ 280 Provides work experience for students to gain practical work experience related to their educational program. *Individuals desiring this Peace Officers Standard and Training (P.O.S.T.) course of study must file an application with the Police Academy coordinator before registering. Colorado State law requires that Police Academy students meet specific guidelines prior to admission. *Students pursuing a Police Science area of emphasis are expected to complete the Pueblo Law Enforcement Academy. This must be coordinated with the Director of the Academy and the assigned CRJ student advisor.

Culinary Arts

CUA 1001 - Food Safety and Sanitation

Credit(s): 2
Lecture Hour(s): 2
Formerly CUA 101 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 from the Education Foundation.

CUA 1003 - Sanitation & Production Servsafe

Credit(s): 3
Vocational Lab Hour(s): 1.50
Formerly CUA 103 This course parallels CUA 1001and CUA 1021. It accommodates the need for students to have to register for a 3 credit hour course in order to qualify for third-party sponsorship. Students will learn the basics of sanitation and safe food handling, resulting in ServSafe Certification from the National Restaurant Association if they pass a national exam with a score of 75% or higher. They will also be introduced to the principles of food production as practiced in commercial kitchens. Skills included are use of weights and measures, recipe conversion, basic knife cuts and fundamental principles of classical cuisine.

CUA 1020 - Wines and Spirits

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly CUA 120 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 1021 - Introduction to Food Production Principles and Practices

Credit(s): 1
Vocational Lab Hour(s): 1.50
Corequisite(s): CUA 1001 or Department Chair Approval.
Formerly CUA 121 Provides students with the fundamental principles of commercial kitchen operations 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. The class meets a minimum of 22.5 hours.

CUA 1022 - Introduction to Stocks, Soups, and Sauces

Credit(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s)/Corequisite(s): CUA 1001, CUA 1021 or Department Chair Approval.
Formerly CUA 122 Focuses on the fundamental principles of stocks, soups, sauces, gravies and thickening agents. Enables students to produce a variety of these products in the commercial kitchen incorporating practice in the use of tools, utensils, equipment and application of safety and sanitation practices. Students apply pre-preparation skills and efficient organization of work techniques. Meets a minimum of 22.5 hours.

CUA 1023 - Introduction to Garde Manger

Credit(s): 1
Vocational Lab Hour(s): 1.50
Corequisite(s): CUA 1001, CUA 1021, or Department Chair Approval.
Formerly CUA 123 Provides fundamental principles of cold food and nonalcoholic beverage preparation and production. Enables students to produce a variety of cold food and non-alcoholic beverage products incorporating practice in the use of tools, utensils, equipment and application of safety and sanitation methods. Introduces basic cold food decorative work such as fruit and vegetable garnishes and carvings, terrines and hors d'oeuvres. Focuses on pre-preparation procedures and efficient organization of work techniques. Meets for a minimum of 22.5 hours.

CUA 1024 - Vegetable Preparation and Breakfast Cookery

Credit(s): 1
Vocational Lab Hour(s): 1.50
Corequisite(s): CUA 1001, CUA 1023, or Department Chair Approval.
Formerly CUA 124 Introduces students to vegetable preparation and breakfast cookery in a commercial kitchen. Focuses on the significance of variety of breakfast items and the preparation of vegetable items using a variety of cooking methods. Emphasizes the affects of seasonings and cooking methods on vegetable products. Students prepare, plate and garnish breakfast orders similar to those ordered in restaurants with egg cookery and dairy products emphasized. Meets a minimum of 22.5 hours.

CUA 1025 - Introduction to Foods

Credit(s): 4
Vocational Lab Hour(s): 6
Corequisite(s): CUA 1001
Formerly CUA 125 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 nonalcoholic 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 1029 - Center of the Plate

Credit(s): 4
Vocational Lab Hour(s): 6
Prerequisite(s): CUA 1025
Formerly CUA 129 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 1031 - Starches, Pastas, Casseroles and Grain Products

Credit(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): CUA 1001, CUA 1021, CUA 1024, or equivalent assessment test score, or Department Chair Approval.

Formerly CUA 131 Provides the basics of preparing and/or cooking potatoes, starches, legumes and pastas. Enables students to prepare and cook a variety of casseroles and grain products using a commercial kitchen for their preparation area. Allows students to apply pre-preparation skills and efficient organization of work techniques. Class meets a minimum of 22.5 hours.

CUA 1032 - Center of the Plate: Meat

Credit(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): CUA 1001, CUA 1021, CUA 1024, or equivalent assessment test score, or Department Chair Approval.
Formerly CUA 132 Provides the student with the basics of meat handling, including principles used for selecting meat products, their basic cuts and cooking methods. Focuses on a variety of meat products in the college kitchen. Meets for a minimum of 22.5 hours.

CUA 1033 - Center of the Plate: Poultry, Fish, & Seafood

Credit(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): CUA 1001, CUA 1021, CUA 1024, or equivalent assessment test score, or Department Chair Approval.
Formerly CUA 133 Provides the basics of handling poultry, fish and seafood including principles used for selection and the basic forms these products have and the methods of cooking them. Focuses on preparation of poultry, fish and seafood products in a commercial kitchen and incorporates practice in the use of these principles and methods. Covers pre-preparation skills and efficient organization of work techniques. Meets for a minimum of 22.5 hours.

CUA 1034 - Application of Food Production Principles

Credit(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): CUA 1022, CUA 1023, CUA 1024, CUA 1031, CUA 1032, CUA 1033, Department Chair Approval.
Formerly CUA 134 Serves as the practice vehicle for the student to apply food production principles for foods covered in CUA 1021, CUA 1022, CUA 1023, CUA 1024, CUA 1031, CUA 1032and CUA 1033. Enables the student to plan and prepare a variety of complete meals intended for a variety of settings. Meets a minimum of 22.5 hours.

CUA 1036 - Alcohol and Bartending Management

Credit(s): 2
Vocational Lab Hour(s): 3
Prerequisite(s): CUA 1025
Formerly CUA 136 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 1041 - Baking: Principles and Ingredients

Credit(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s)/Corequisite(s): CUA 1001 or Department Chair Approval.
Formerly CUA 141 Provides the student with the fundamentals of baking terminology, principles of baking and the characteristics and functions of the main ingredients used in bakery production. Meets for a minimum of 22.5 hours.

CUA 1042 - Basic Yeast-Raised Products and Quick Breads

Credit(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s)/Corequisite(s): CUA 1041 or Department Chair Approval.
Formerly CUA 142 Provides the student with the fundamentals of basic yeast-raised production and quick breads. Enables the student to produce white bread, rolls, variety grain breads, specialty breads, sweet yeast-raised products, and quick breads in a commercial kitchen. Meets for a minimum of 22.5 hours.

CUA 1043 - Baking: Cakes, Pies, Pastries, and Cookies

Credit(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s)/Corequisite(s): CUA 1041 or Department Chair Approval.
Formerly CUA 143 Provides the student with the 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. Meets for a minimum of 22.5 hours.

CUA 1044 - Baking Applications

Credit(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s)/Corequisite(s): CUA 1041, CUA 1042, CUA 1043 or Department Chair Approval.
Formerly CUA 144 Serves as the practical vehicle for the student to apply basic baking principles and practices to the production of yeast breads, quick breads, cakes, icings, pastries, pies and cookies. Focuses on the preparation of a variety of baked goods in a commercial kitchen according to a baking production schedule. Enables the student to demonstrate comprehensive knowledge of products as well as speed and efficiency in the production of quality baked goods. Meets a minimum of 22.5 hours.

CUA 1045 - Introduction to Baking

Credit(s): 4
Vocational Lab Hour(s): 6
Formerly CUA 145 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 and 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 1054 - Introduction to the Business of Catering

Credit(s): 3
Lecture Hour(s): 3
Formerly CUA 154 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

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Department Chair Approval.
Formerly CUA 156 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

Credit(s): 3
Lecture Hour(s): 3
Formerly CUA 157 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 1075-1077 - Front of the House Planning

Credit(s): 1
Vocational Lab Hour(s): 1.50
Formerly CUA 175-177 Teaches how to organize special meal functions, handle reservations and special requests, evaluate dining room personnel, create menu format for the GPA Dining Room and operate the POS manager's menu. Students will meet 22.5 hours during the semester in a scheduled class setting. Assignments and projects will be completed outside of class meetings.

CUA 1075-1077 - Special Topics

Credit(s): 0-12
Formerly CUA 175-177 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

CUA 1081 - Work Exploration

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): 10 hours of completed course work in CUA and/or HOS classes.
Formerly CUA 181 ll be responsible for creating searching questions for quest speakers and will maintain a journal that documents each class's industry representative's main points. Included in the course will be the requirement that students read and report on a book representative of a management theory or industry leader's experience.

CUA 1190 - Advanced Cuisine and Garde Manger

Credit(s): 4
Vocational Lab Hour(s): 6
Prerequisite(s): CUA 1001, CUA 1029
Formerly CUA 210 then CUA 2010 Focuses on the preparation of food display items for buffets and banquets such as fancy garnishes, fruit and vegetable carvings, canap, 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 1190 - Dining Room Management

Credit(s): 4
Vocational Lab Hour(s): 6
Prerequisite(s)/Corequisite(s): CUA 1001 or Department Chair Approval.
Formerly CUA 190 then CUA 1090 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 2033 - Advanced Line Prep and Cookery

Credit(s): 4
Vocational Lab Hour(s): 6
Prerequisite(s): CUA 1001 CUA 1029
Formerly CUA 233 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, entr salads, edible garnishes and meals determined by the menu prepared for a dining room setting. Emphasizes line supervisor, sautcook, pantry cook, cook's helper and runner responsibilities.

CUA 2034 - Advanced Line Planning

Credit(s): 2
Vocational Lab Hour(s): 3
Prerequisite(s): CUA 2033 or Department Chair Approval.
Formerly CUA 234 Teaches students to plan a variety of menus to be prepared in CUA 2033 - Advanced Line Prep and Cookery. They will also perform the duties of a supervisor in charge of line cookery. They will be responsible for thorough knowledge of menu items including all methods of cookery. Students will order, pre-prep, store and organize food and supply items for students in the Advanced Line Prep class. They will also organize work (learning) stations for students in the Advanced Line Prep Class. They will learn how to substitute menu items if there are difficulties in equipment or shortages of food items or personnel. Examples of other areas of learning include inventory, ordering, storage and issuing. By the conclusion of this class, students will be able to supervise an entire line prep station.

CUA 2036 - Advanced Baking

Credit(s): 2
Vocational Lab Hour(s): 3
Prerequisite(s): CUA 1001,CUA 1045
Formerly CUA 236 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 2038 - Production Applications of American Regional Cuisines

Credit(s): 4
Vocational Lab Hour(s): 6
Prerequisite(s): CUA 1029
Formerly CUA 238 Provides students with advanced a la carte cooking skills involving foods representative of major American regions. Using in depth research, students will develop regional menus; prepare presentations about their regions; create cooking demonstrations; and lead the class in the preparation of complete menus. Menus will be prepared and served to customers in a dining setting. Students will work as members of highly functioning teams as they prepare menus which reflect unique characteristics of American regions.

CUA 2055 - Supervision in the Hospitality Industry

Credit(s): 3
Lecture Hour(s): 3
Formerly CUA 255 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

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Department Chair Approval.
Formerly CUA 256 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

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): MAT 1140, CIS 1009, CIS 1018, or Department Chair Approval
Corequisite(s): MAT 1140.
Formerly CUA 261 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% or higher, they will receive a national certificate for the course.

CUA 2062 - Purchasing for the Hospitality Industry

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Department Chair Approval.
Formerly CUA 262 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

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Department Chair Approval.
Formerly CUA 263 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 2075-2077 - Special Topics

Credit(s): 0-12
Formerly CUA 275-277 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

CUA 2081 - Internship

Credit(s): 2-6
Internship Hour(s): 6-18
Prerequisite(s): MAT 1140, CUA 1057, CUA 1190, CUA 2033, CUA 2061 or, HOS 1023, HOS 2007, and CIS 1018; or Department Chair Approval.
Formerly CUA 281 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.

CUA 2401 - Production Applications of International Cuisines

Credit(s): 4
Vocational Lab Hour(s): 6
Prerequisite(s): CUA 2033.
Provides students with advanced a la carte cooking skills involving foods representative of cuisines in International areas. Using in depth research, students will develop menus representative of an assigned International area; prepare presentations about their area; create cooking demonstrations; and lead the class in the preparation of complete menus. Menus will be prepared and served to customers in a dining setting. Students will work as members of highly functioning teams as they prepare menus which reflect unique characteristics of International locations.

Dance

DAN 1011 - Modern Dance I

Credit(s): 1
Academic Lab Hour(s): 2
Formerly DAN 111 Introduces basic concepts and skills of modern dance. Focuses on technique work to increase strength, flexibility, endurance, coordination, rhythm and spatial awareness. Explores dance as a tool for communication and dance as an art form. May be repeated for no more than three credits.

DAN 1021 - Jazz I

Credit(s): 1
Academic Lab Hour(s): 2
Formerly DAN 121 Introduces the basic techniques and vocabulary of jazz dance and the basic elements of dance. Focuses on movement-oriented dance, comprising warm-up exercises, center combinations, traveling combinations and cool down.

DAN 1025 - Dance Appreciation: AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly DAN 150 Introduces and allows discovery, experience, analyzation, and evaluation of different genres of

dance, including but not limited to, music, choreography, costuming, history, and culture. This is a statewide Guaranteed Transfer course in the GT-AH1 category.

DAN 1029 - Introduction to Dance

Credit(s): 1
Art Studio Hour(s): 2
Formerly DAN 129 Introduces the art of dance and movement expression from a variety of viewpoints - historical, cultural, aesthetic, critical and creative. Examines the art and craft of dance as an expression of culture and community while exploring personal expression, imagery, dance techniques and performance qualities.

DAN 1031 - Ballet I

Credit(s): 1
Art Studio Hour(s): 2
Formerly DAN 131 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, comprising stretching, barre warm-up exercises, simple Terre Terre and jumping steps, and basic extended positions. May be repeated for a maximum of three credits.

DAN 1041 - Ballroom Dance

Credit(s): 1
Academic Lab Hour(s): 2
Formerly DAN 141 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 they study. Partners are not required. May be repeated for a maximum of three credits.

DAN 1050 - Dance History: AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly DAN 125 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category.

DAN 1075-1077 - Special Topics

Credit(s): 0-12
Formerly DAN 175-177 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

DAN 2075-2077 - Special Topics

Credit(s): 0-12
Formerly DAN 275-277 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

Dental Assisting

DEA 2011 - Introduction to Expanded Functions

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Prerequisite(s): Graduate of an ADA-accredited program, certified dental assistant, or 2 years of full time documented chairside experience
Formerly DEA 200 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

Credit(s): 4
Lecture Hour(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): DEA 2011
Formerly DEA 205 Focuses on clinical application of expanded functions in dental assisting.

Dental Hygiene

DEH 1001 - Preclinical Dental Hygiene Lecture

Credit(s): 2
Vocational Lab Hour(s): 3
Prerequisite(s): Current enrollment in the Dental Hygiene program.
Formerly DEH 101 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 Care

Credit(s): 3
Vocational Clinic Hour(s): 6

Prerequisite(s): Current enrollment in the Dental Hygiene program.
Formerly DEH 102 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

Credit(s): 3
Lecture Hour(s): 2
Vocational Clinic Hour(s): 2

Prerequisite(s): Current enrollment in the Dental Hygiene program.
Formerly DEH 103 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

Credit(s): 3
Lecture Hour(s): 2
Vocational Clinic Hour(s): 2

Prerequisite(s): Current enrollment in the Dental Hygiene program.
Formerly DEH 104 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

Credit(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): Current enrollment in the Dental Hygiene program.
Formerly DEH 105 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

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Current enrollment in Dental Hygiene program.
Formerly DEH 111 Introduces the management of emergency situations in the dental office setting. 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

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Current enrollment in Dental Hygiene program.
Formerly DEH 122 Introduces the principles of periodontics. Focuses on recognition of the tissues in health and disease, macro and microanatomy of the periodontium, and histopathology of periodontal diseases and other related gingival conditions. Provides the theory and discussion of periodontal assessment, etiology, epidemiology, inflammatory process/immune response, and the AAP classification system.

DEH 1023 - Head & Neck Anatomy

Credit(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): BIO 2101, BIO 2102, current enrollment in Dental Hygiene program.
Formerly DEH 123 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, lymphatic, glandular system, vascular supply, nervous system, and the oral cavity.

DEH 1026 - Dental Materials

Credit(s): 2
Lecture Hour(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): Current enrollment in Dental Hygiene program.
Formerly DEH 126 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 Pharmacology

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Current enrollment in Dental Hygiene program.
Formerly DEH 132 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 1033 - Local Anesthesia

Credit(s): 2
Lecture Hour(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): DEH 1011, DEH 1023, current enrollment in Dental Hygiene program.
Formerly DEH 133 Provides a working knowledge of the theory and practice of local anesthesia as applied to the practice of dentistry/dental hygiene. Emphasizes mastery of the armamentarium and techniques of regional anesthesia. Covers the knowledge and skills necessary to administer local anesthetics proficiently and safely.

DEH 1034 - Advanced Clinical Skills

Credit(s): 1
Lecture Hour(s): 0.70
Vocational Clinic Hour(s): 0.60

Prerequisite(s): Current enrollment in Dental Hygiene program.
Formerly DEH 134 Focuses on dental hygiene theory and laboratory experiences with major topics related to advanced clinical skills, including advanced instrumentation fulcrums, root morphology, periodontal files, periodontal file sharpening, mini curettes, after five curettes, nabors probe, universal focus spray ultrasonics and scaling implants.

DEH 1036 - Clinical Dental Roentgenology

Credit(s): 0.50
Vocational Clinic Hour(s): 1

Prerequisite(s): Current enrollment in Dental Hygiene program.
Formerly DEH 136 Enhances clinical competence of basic radiographic principles including intra-oral, positioning techniques, exposure factors, bisecting technique, vertical bitewing survey and management of anatomical deviations.

DEH 1038 - Nitrous Oxide/Oxygen Sedation

Credit(s): 1
Lecture Hour(s): 0.80
Vocational Clinic Hour(s): 0.40

Prerequisite(s): BIO 2101, BIO 2102, current enrollment in Dental Hygiene program.
Formerly DEH 138 Provides a working knowledge of the latest equipment and methods of nitrous oxide/oxygen sedation administration in the dental office.

DEH 1053 - Clinical Theory of Dental Hygiene I

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Current enrollment in Dental Hygiene program.
Formerly DEH 153 Builds on the broad theoretical basis provided in DEH 1001and DEH 1002. Focuses on enhancing patient assessment skills, instrumentation and additional information on preventative and prophylactic clinical procedures.

DEH 1070 - Clinical Practice of Dental Hygiene I

Credit(s): 4.50
Vocational Clinic Hour(s): 9

Prerequisite(s): Current enrollment in Dental Hygiene program.
Formerly DEH 170 Provides clinical experience in patient skills assessment, instrumentation and additional preventative and prophylactic clinical procedures.

DEH 1071 - Clinical Practice of Dental Hygiene I-A

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): Current enrollment in Dental Hygiene program.
Formerly DEH 171 Continues patient care sessions for the performance of traditional dental hygiene treatment. Enables the student to provide treatment to periodontally involved patients utilizing advanced instrumentation and power scaling.

DEH 1075-1077 - Special Topics

Credit(s): 0-12
Formerly DEH 175-177 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

DEH 2002 - Applied Nutrition in Dentistry

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Current enrollment in the Dental Hygiene program.
Formerly DEH 202 Gives students a fundamental understanding of general nutrition with an emphasis on the interrelationship between nutrition and dental health. Focuses on recognizing nutritional deficiencies and how to conduct and evaluate nutritional surveys on patients.

DEH 2004 - Community Dental Health I

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Current enrollment in Dental Hygiene program.
Formerly DEH 204 Course provides instruction in the concepts, methods and issues of dental public health. Emphasis is placed on evidence-based criteria for effective promotion and prevention of dental disease in the public health setting. Concepts of dental health education and program planning in the community setting are reinforced through case-based materials, including methods of assessment, planning, implementation and evaluation of effectiveness. Course activities will reinforce skills in speaking and writing effectively in preparation for the subsequent community dental health field experience course.

DEH 2013 - General and Oral Pathology

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Current enrollment in Dental Hygiene program.
Formerly DEH 213 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

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Current enrollment in Dental Hygiene program.
Formerly DEH 221 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

Credit(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): DEH 2004.
Formerly DEH 225 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

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): DEH 1022.
Formerly DEH 242 Continues to explore theoretical/clinical preparations with emphasis on dental hygiene process of care, treatment planning, nonsurgical 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 2059 - Advanced Dental Hygiene Theory

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Current enrollment in Dental Hygiene program.
Formerly DEH 259 Focuses on the care of patients with special needs, such as physical and mental disabilities and systemic conditions. Emphasizes patient management and treatment considerations.

DEH 2066 - National Boards Review

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Current enrollment in Dental Hygiene program.
Formerly DEH 266 Provides formal review sessions for second-year dental hygiene students preparing to sit for the National Board Examination.

DEH 2068 - Clinical Theory of Dental Hygiene II

Credit(s): 2
Vocational Lab Hour(s): 3
Prerequisite(s): Current enrollment in Dental Hygiene program.
Formerly DEH 268 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

Credit(s): 6
Vocational Clinic Hour(s): 12

Prerequisite(s): Current enrollment in Dental Hygiene program.
Formerly DEH 270 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

Credit(s): 6
Vocational Clinic Hour(s): 12

Prerequisite(s): Current enrollment in Dental Hygiene program.
Formerly DEH 271 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 extramural clinical sites for additional practice.

DEH 2075-2077 - Special Topics

Credit(s): 0-12
Formerly DEH 275-277 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

DEH 2082 - Periodontics III

Credit(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): DEH 1022.
Formerly DEH 282 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

Credit(s): 2
Vocational Lab Hour(s): 3
Prerequisite(s): Current enrollment in Dental Hygiene program.
Formerly DEH 285 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.

DEH 3001 - Advanced Careers in Dental Hygiene

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to the program.
Formerly DEH 301 Provides an overview of the career options available to the dental hygienist with an advanced degree. In depth analysis of alternative careers to include: public health systems, dental hygiene education, research, sales and marketing, oral health policy and oral health care delivery systems.

DEH 3002 - Applied Dental Hygiene Research Methodologies

Credit(s): 3
Lecture Hour(s): 3

Prerequisite(s): Admission to the program.
Corequisite(s): MAT 1260.
Formerly DEH 302 Develops the skills necessary to identify and develop a research topic, navigate a research database and develop an effective, scientifically sound and persuasive research paper with specific emphasis on dental and dental hygiene topics.

DEH 3041 - Clinical Teaching Methodologies

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to the program.
Formerly DEH 341 This course provides students the opportunity to compare and contrast practical experience as it relates to dental hygiene clinical instruction. Students will apply teaching methodologies, psychomotor learning theories, feedback techniques and motivational strategies to direct student learning.

DEH 3043 - Principles of Conflict Resolution in Dentistry

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to the program.
Formerly DEH 343 This course studies the principles of conflict resolution as it relates to the profession of dental hygiene. Students will learn the strategies available for resolving conflicts with peers, team members, patients and employers. Students will reflect on their own strategies for resolving conflicts based on practical experiences.

DEH 3055 - Social and Behavioral Determinants of Oral Health

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission into the program.
Formerly DEH 355 Evaluate the complexity and interplay of social and physical environmental structures, economic systems and behavioral patterns that affect overall health with a focus on health services, health beliefs and their impact on health-related behavior choices.

DEH 3087 - Dental Hygiene Leadership and Administration

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission into the program.
Formerly DEH 387 Examining the skills needed for leadership roles in public health, community health, education, business and industry with emphasis on leadership theories and application.

DEH 4011 - Teaching Methodologies

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): Admissions to the program.
Formerly DEH 411 This course provides a general overview of the concepts and theory relative to dental hygiene education. Students will be introduced to dental hygiene accreditation standards, outcomes-centered objectives, syllabus development, lesson planning, content delivery, test construction and assessing student learning. Students will explore the various learning styles and technology available for delivery of course content.

DEH 4055 - Topics in Dental Public Health

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): Admission to the program.
Formerly DEH 455 Provides a comprehensive overview in public health as it relates to the field of dentistry. Surveys and analyzes oral health services, community programs, disease prevention, policy, ethics and issues facing the profession today.

DEH 4071 - Advanced Pharmacology

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): Admission to the program.
Formerly DEH 471 This course provides the student with current research application of pharmacology as it relates to the oral manifestations and complications of associated drugs. Students will investigate the effects, oral implications, treatment considerations and contraindications for the management of patient care. This course will study the most frequently used drugs by patients today and determine the overall impact on oral health.

DEH 4089 - Capstone: Dental Hygiene

Credit(s): 5
Seminar Hour(s): 5
Prerequisite(s): MAT 1260 and admission to the program.
Formerly DEH 489 Provides the student an opportunity to participate in a cumulative learning experience that integrates theory and applies previously learned knowledge and skill. The student will design, implement and evaluate a project related to their specific area of interest.

Diagnostic Medical Sonography

DMS 1001 - Introduction to Sonography

Credit(s): 2
Lecture Hour(s): 2
Formerly DMS 101 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 1075-1077 - Special Topics

Credit(s): 0-12
Formerly DMS 175-177 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

DMS 2001 - Ultrasound Physics I

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Program admission and DMS 1001
Formerly DMS 241 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 2002 - Ultrasound Physics II

Credit(s): 2
Lecture Hour(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): DMS 2201, DMS 2101, DMS 2001, DMS 2082.
Corequisite(s): DMS 2202, DMS 2102, DMS 2083.
Formerly DMS 242 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 2075-2077 - Special Topics

Credit(s): 0-12
Formerly DMS 275-277 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

DMS 2080 - Clinical Observation

Credit(s): 2.50
Internship Hour(s): 7.50
Prerequisite(s): BIO 2101, BIO 2102, RTE 2055.
Corequisite(s): DMS 2201, DMS 2101, DMS 2001 and DMS 2111 .
Formerly DMS 280 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

Credit(s): 8
Internship Hour(s): 24
Prerequisite(s): DMS 2111 , DMS 2080.
Formerly DMS 281 Offers the initial clinical course wherein the fundamental principles of abdominal, OB/GYN and ultrasound physics will be applied under the direct supervision of a registered sonographer. The mastery of the foundations of instrumentation, scanning techniques, and image evaluation in sectional planes in abdominal and OB/GYN sonography will be stressed.

DMS 2082 - Clinical Internship II

Credit(s): 8
Internship Hour(s): 24
Prerequisite(s): DMS 2081.
Formerly DMS 282 Offers continued clinical experience for the ultrasound student. Application of the small parts didactic lectures will be applied and will include image evaluation and cross-sectional anatomy of the thyroid, breast and scrotum. The foundations of vascular anatomy, instrumentation, scanning techniques and image evaluation will be

stressed. The student will spend 30 hours per week at the clinical site under the direct supervision of a registered sonographer.

DMS 2083 - Clinical Internship III

Credit(s): 8
Internship Hour(s): 24
Prerequisite(s): DMS 2082.
Formerly DMS 283 Continues clinical experience for the ultrasound student. Application of the topics covered in advanced didactic lectures to include an introduction to invasive procedures using ultrasound guidance. Sterile technique and standard precautions will be reviewed. The student will spend 30 hours per week at the clinical site under the direct supervision of a registered sonographer.

DMS 2089 - Ultrasound Capstone

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): DMS 2082.
Corequisite(s): DMS 2083.
Formerly DMS 289 Prepares the sonography student to effectively search for a job and sit for the American Registry of Diagnostic Medical Sonographers examination in their specialty.

DMS 2100 - Small Parts Ultrasound

Credit(s): 2
Lecture Hour(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): DMS 2201, DMS 2101, DMS 2001, DMS 2081.
Corequisite(s): DMS 2400, DMS 2082.
Formerly DMS 205 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

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Program admission and DMS 1001.
Formerly DMS 231 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

Credit(s): 2
Lecture Hour(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): DMS 2201, DMS 2001, DMS 2081.
Corequisite(s): DMS 2202, DMS 2002, DMS 2083.
Formerly DMS 232 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 2201 - OB/GYN Ultrasound I

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Program admission and DMS 1001.
Formerly DMS 221 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

Credit(s): 2
Lecture Hour(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): DMS 2201, DMS 2101, DMS 2001, DMS 2081.
Corequisite(s): DMS 2102, DMS 2002, DMS 2083.
Formerly DMS 222 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

Credit(s): 2
Lecture Hour(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): DMS 2201, DMS 2101, DMS 2001, DMS 2081.
Corequisite(s): DMS 2100, DMS 2082.
Formerly DMS 206 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

DPM 1001 - Diesel Shop Orientation

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Formerly DPM 101 Focuses on maintaining a safe and clean working heavy-duty diesel shop. Emphasis is placed on the proper safe use and care of hand, electric, air and hydraulic tools. Covers how to clean equipment properly, handle and dispose of hazardous materials correctly, and apply mandated regulations. Emphasis is also placed on proper lifting equipment.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

DPM 1003 - Diesel Engines I

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.5
Formerly DPM 103 Covers the theory and operation of diesel engines with emphasis on cylinder heads, valve train diagnosis, and repair. This course introduces the cooling systems 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

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly DPM 105 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

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly DPM 106 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 1011 - Preventive Maintenance I

Credit(s): 1.50
Vocational Lab Hour(s): 2.25
Formerly DPM 111 Enables the student to perform preventive maintenance on heavy equipment and trucks and complete appropriate maintenance records. Addresses the process of diagnostics and troubleshooting. Focuses on the importance of preventive maintenance.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

DPM 1021 - Hydraulic Systems I

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 2
Formerly DPM 121 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

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly DPM 122 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 1040 - H/D Steering & Suspension I

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly DPM 140 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 1070 - Lab Experience I

Credit(s): 4
Vocational Lab Hour(s): 6
Formerly DPM 170 Continues to build upon the principles that are expected to be understood by students.

DPM 1071 - Lab Experience II

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly DPM 171 Continues to build upon the principles that are expected to be understood by students.

DPM 1072 - Lab Experience III

Credit(s): 4
Vocational Lab Hour(s): 6
Formerly DPM 172 Continues to build upon the principles that are expected to be understood by students.

DPM 1075-1077 - Special Topics

Credit(s): 0-12
Formerly DPM 175-177 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

DPM 2003 - Diesel Engines II

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.5
Formerly DPM 203 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

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly DPM 205 Covers clutch and transmission problems. The course focuses on clutch and transmission operation, testing removal, rebuilding, inspection, 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

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly DPM 206 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

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly DPM 207 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 2022 - H/D Lighting & Instrumentation

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly DPM 222 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 2040 - H/D Steering & Suspension II

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly DPM 240 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 2075-2077 - Special Topics

Credit(s): 0-12
Formerly DPM 275-277 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

DPM 2080 - Internship

Credit(s): 4
Internship Hour(s): 12
Formerly DPM 280 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.

Drafting and Design Technology

AEC 1075-1077 - Special Topics

Credit(s): 0-12
Formerly AEC 175-177 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

AEC 1200 - Print Reading Residential/Commercial

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Formerly AEC 107 Interpret construction prints and the related documents produced by the residential or commercial architect and used in the construction industry.

AEC 1231 - Residential Construction Drawing

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Prerequisite(s): CAD 2400.
Formerly AEC 102 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

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Prerequisite(s): CAD 2400.
Formerly AEC 123 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 and Systems

Credit(s): 3
Lecture Hour(s): 3
Formerly AEC 121 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 2075-2077 - Special Topics

Credit(s): 0-12
Formerly AEC 275-277 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

Driving

DRV 1030 - Preparing for CDL

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Formerly DRV 130 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 and Trailering

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Formerly DRV 132 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

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Formerly DRV 134 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

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly DRV 136 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

Credit(s): 6
Vocational Lab Hour(s): 9
Formerly DRV 138 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.

DRV 1075-1077 - Special Topics

Credit(s): 0-12
Formerly DRV 175-177 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

DRV 2075-2077 - Special Topics

Credit(s): 0-12
Formerly DRV 275-277 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

Early Childhood Education

ECE 1011 - Introduction to Early Childhood Education

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 101 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

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 103 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

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly ECE 102 Focuses on a classroom Seminar and placement in a child care setting. The supervised placement provides the student with the opportunity to observe children, practice appropriate interactions and develop effective guidance and management techniques. Addresses ages birth through 8 years.

ECE 1075-1077 - Special Topics

Credit(s): 0-12
Formerly ECE 175-177 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

ECE 1078 - Workshop

Credit(s): 0.50-6
Lecture Hour(s): 0.50-6
Formerly ECE 178 Provides students with an experiential learning opportunity.

ECE 1111 - Infant and Toddler Theory and Practice

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 111 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. Focuses on birth through age 3.

ECE 1125 - Intro to Infant/Toddler Lab Techniques

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly ECE 112 Includes a classroom Seminar and placement in an infant and/or toddler setting. The supervised placement provides the student with the opportunity to observe, practice appropriate interactions and develop effective guidance and nurturing techniques with infants and/or toddlers. Addresses ages prenatal through age 2.

ECE 2051 - Nutrition, Health and Safety

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 205 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 2075-2077 - Special Topics

Credit(s): 0-12
Formerly ECE 275-277 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

ECE 2088 - Practicum: Early Childhood Education

Credit(s): 3
Lecture Hour(s): 1
Practicum Hour(s): 4
Prerequisite(s): Successful completion of ECE 1011 and ECE 1045
Formerly ECE 288 Provides students with advanced field experience opportunities in early childhood education programs.

ECE 2101 - Working with Parents, Families, and Community Systems

Credit(s): 3
Lecture Hour(s): 3

Formerly ECE 256 Examines personal attitudes regarding families, family values systems, and how personal attitudes affect parent-professional partnerships in the early childhood education program. This course covers communication, problem-solving and conflict resolution strategies. Effective activities and resources to support family involvement in the classroom will be created. This course addresses children ages birth through 8 years.

ECE 2381 - Ece Child Growth and Development

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of ECE 1011 and ECE 1045.
Formerly ECE 238 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 and Education Programs

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of ECE 1011, ECE 1045, ECE 1031, ECE 2621, and ECE 2381.
Formerly ECE 240 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

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of ECE 1011, ECE 1045, ECE 1031, ECE 2621, and ECE 2381.
Formerly ECE 241 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

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 260 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 2621 - ECE Curriculum Development: Methods and Techniques

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of ECE 1011, ECE 1045, and ECE 1031.
Formerly ECE 220 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 and Cognition for the Young Child

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 225 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 8 years.

ECE 2641 - Creativity and the Young Child

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 226 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 8 years.

ECE 2661 - Science/Math and the Young Child

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 125 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

ECO 1005 - Introduction to Economics

Credit(s): 3
Lecture Hour(s): 3
Formerly ECO 105 This course is a survey of economics. It is designed as a beginning economics class. The course covers economics theories, supply and demand, national income accounting, money and banking, market structures and contemporary economic issues.

ECO 1075-1077 - Special Topics

Credit(s): 0-12
Formerly ECO 175-177 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

ECO 2001 - Principles of Macroeconomics: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly ECO 201 Focuses on the study of the American economy, stressing the interrelationships among household, business and government sectors. Explores saving and investment decisions, unemployment, inflation, national income

accounting, taxing and spending policies, the limits of the market and government, public choice theory, the Federal Reserve System, money and banking, and international trade.

ECO 2002 - Principles of Microeconomics: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly ECO 202 Studies the firm, the nature of cost and how these relate to the economy as a whole. Analyzes economic models of the consumer, perfect competition, monopoly, oligopoly and monopolistic competition. Explores economic issues including market power, population growth, positive and negative externalities, income distribution, poverty and welfare, discrimination, and international economic interdependence.

ECO 2045 - Environmental Economics: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly ECO 245 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. This is a statewide Guaranteed Transfer course in the GT-SS1 category. GT-SS1

ECO 2075-2077 - Special Topics

Credit(s): 0-12
Formerly ECO 275-277 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

Education

EDU 2088 - Practicum II

Credit(s): 0-12
Lecture Hour(s): 0-12
Formerly EDU 288 Provides students with the opportunity to supplement coursework with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the education facility and with the direct guidance of the instructor.

EDU 2211 - Introduction to Education

Credit(s): 3
Lecture Hour(s): 3
Formerly EDU 221 Focuses on the historical, social, political, philosophical, cultural and economic forces that shape the United States public school system. Includes current issues of educational reform, technology as it relates to education and considerations related to becoming a teacher in the state of Colorado. Special interest will be paid to the topic of diversity in the K-12 school system.

EDU 2341 - Multicultural Education

Credit(s): 3
Lecture Hour(s): 3
Formerly EDU 234 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 Learner

Credit(s): 3
Lecture Hour(s): 3
Formerly EDU 240 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 2611 - Teaching, Learning and Technology

Credit(s): 3
Lecture Hour(s): 3
Formerly EDU 261 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 and Learning Online

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of EDU 2211 and EDU 2611 or Department Chair Approval.
Formerly EDU 263 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.

Electronics

ELT 1075 - Special Topics

Credit(s): 0-12
Formerly ELT 175 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

ELT 1206 - Fundamentals of DC/AC

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Corequisite(s): ELT 1207.
Formerly ELT 106 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 - Industrial Electronics

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Corequisite(s): ELT 1206.
Formerly ELT 107 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

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Prerequisite(s): MAT 1150.
Formerly ELT 112 Continues to build on ELT 1206and 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 2075 - Special Topics

Credit(s): 0-12
Formerly ELT 275 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

ELT 2080 - Internship

Credit(s): 1-12
Internship Hour(s): 3-36
Formerly ELT 280 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 2089 - Capstone: Automated Systems

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly ELT 289 Enables the student to plan, construct and evaluate a modified flexible manufacturing system using a programmable logic controller, industrial computer, robot and work cell peripherals. Addresses safety and emergency control procedures throughout this course.

ELT 2252 - Motors and Controls

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly ELT 252 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. 68 contact hours.

ELT 2254 - Industrial Wiring

Credit(s): 3
Lecture Hour(s): 2

Vocational Lab Hour(s): 1.50
Formerly ELT 254 Focuses on the required and recommended practice for industrial wiring. The National Electrical Code is applied to industrial power and control wiring. Covers specification and installation of wiring, conduit, enclosures and termination components in lecture and applied during lab.

ELT 2357 - Sensors and Transducers

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Prerequisite(s): ELT 1001 , ELT 1206.
Formerly ELT 257 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. 68 contact hours.

ELT 2358 - Programmable Logic Controllers

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly ELT 258 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

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Prerequisite(s): ELT 2358.
Formerly ELT 259 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.

Emergency Medical Services

EMS 1015 - Emergency Medical Responder

Credit(s): 3
Lecture Hour(s): 3
Formerly EMS 115 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

Credit(s): 3
Lecture Hour(s): 2

Vocational Lab Hour(s): 1.50
Formerly EMS 121 Introduces the Emergency Medical Technician (EMT) student to prehospital 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

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Prerequisite(s): EMS 1021. EMS 1070.
Formerly EMS 122 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

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): EMS 1021.
Formerly EMS 123 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

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): EMS 1021.
Formerly EMS 124 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

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): Student must have current Colorado EMT certification or EMS department approval.
Formerly EMS 126 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. P/F grading (F).

EMS 1070 - EMT Clinical

Credit(s): 1
Vocational Lab Hour(s): 1.50

Formerly EMS 170 Provides the EMT student with the clinical experience required for initial certification and some renewal processes.

EMS 1071 - AEMT Clinical Internship

Credit(s): 2
Internship Hour(s): 6
Prerequisite(s): Acceptance into the AEMT Program.
Formerly EMS 171 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 1075-1077 - Special Topics

Credit(s): 0-12
Formerly EMS 175-177 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

EMS 1078 - EMS Seminar

Credit(s): 1
Lecture Hour(s): 1
Formerly EMS 178 Provides the student with the opportunity to explore local interests and needs in a less formal setting.

EMS 1080 - EMT Clinical Internship

Credit(s): 2
Internship Hour(s): 6
Formerly EMS 180 Provides the Emergency Medical Technician (EMT) with a supervised clinical learning experience that goes beyond the initial EMT requirements for the State of Colorado Department of Health. Enables the student to work with an assigned preceptor for 90 hours of clinical experience to develop an understanding of the role and responsibilities of the EMT-Basic.

EMS 1125 - AEMT Fundamentals

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): Acceptance into the AEMT Program.
Formerly EMS 131 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 - AEMT Special Considerations

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5

Prerequisite(s): Acceptance into the AEMT Program.
Formerly EMS 127 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 - AEMT Pharmacology

Credit(s): 1
Lecture Hour(s): 0.50
Vocational Lab Hour(s): 0.75
Prerequisite(s): Acceptance into the AEMT Program.
Formerly EMS 129 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

Credit(s): 2
Lecture Hour(s): .25
Vocational Lab Hour(s): 1.9
Vocational Clinic Hour(s): 1

Prerequisite(s): Current Colorado Certification as EMT or Department Chair Approval
Formerly EMS 132 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 - AEMT Medical Emergencies

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): Acceptance into the AEMT Program.
Formerly EMS 133 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 - AEMT Trauma Emergencies

Credit(s): 2
Lecture Hour(s): 1

Vocational Lab Hour(s): 1.50
Prerequisite(s): Acceptance into the AEMT Program.
Formerly EMS 135 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 2020 - Paramedic Refresher

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Prerequisite(s): EMT-P certification or eligibility for recertification.
Formerly EMS 220 Updates the EMT-P in four specific areas of prehospital emergency care. Includes trauma, medical, Advanced Life Support (ALS) and elective topics focused on ancillary issues in EMS.

EMS 2025 - Fundamentals of Paramedic Practice

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Prerequisite(s): BIO 2101, current Colorado Certification as an EMT with IV endorsement or higher and acceptance into the Paramedic Education Program.
Corequisite(s): EMS 2026.
Formerly EMS 225 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

Credit(s): 2
Vocational Lab Hour(s): 1.50
Vocational Clinic Hour(s): 2

Prerequisite(s): Currently enrolled in EMS 2025, or have successfully completed EMS 2025.
Formerly EMS 226 Complete all pre-course screening requirements, including drug test and criminal background check. Instructor approval. Serves as the lab experience to coincide with EMS 2025topics.

EMS 2027 - Paramedic Special Considerations

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): BIO 2101, current Colorado Certification as an EMT with IV endorsement or higher and acceptance into the Paramedic Education Program.
Formerly EMS 227 Introduces the paramedic student to concepts in assessing and meeting the emergency care needs of the neonate, pediatric, geriatric and special needs patient. This course focuses on epidemiology, pathophysiology, assessment and treatment of these patient groups. Common medical and traumatic presentations are addressed. Relevant psychosocial and ethno cultural concepts and legal and ethical implications are integrated throughout.

EMS 2028 - Paramedic Special Considerations Lab

Credit(s): 2
Vocational Lab Hour(s): 1.50
Vocational Clinic Hour(s): 2

Prerequisite(s): Completion of pre-course screening including drug screen and criminal background check.
Corequisite(s): EMS 2027.
Formerly EMS 228 Teaches the skills necessary for the paramedic to effectively assess and treat neonatal, pediatric, geriatric and special needs patients utilizing skills and simulation scenarios. Serves as the companion course to Paramedic Special Considerations.

EMS 2029 - Paramedic Pharmacology

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Prerequisite(s): BIO 2101, current Colorado Certification as an EMT with IV endorsement or higher and acceptance into the Paramedic Education Program.
Corequisite(s): EMS 2030.
Formerly EMS 229 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

Credit(s): 2
Vocational Lab Hour(s): 1.50
Vocational Clinic Hour(s): 2

Prerequisite(s): Currently enrolled in EMS 2029, or have successfully completed EMS 2029.
Formerly EMS 230 Teaches the skills necessary for the paramedic to safely and effectively administer emergency medications. Serves as the companion course to Paramedic Pharmacology.

EMS 2031 - Paramedic Cardiology

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): BIO 2101, current Colorado Certification as an EMT with IV endorsement or higher and acceptance into the Paramedic Education Program.
Formerly EMS 231 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

Credit(s): 1
Vocational Lab Hour(s): 0.75
Vocational Clinic Hour(s): 1

Prerequisite(s): Completion of pre-course screening including drug screen and criminal background check.
Corequisite(s): EMS 2031.

Formerly EMS 232 Teaches the skills necessary for the paramedic to effectively assess and treat patients presenting with cardiovascular emergencies utilizing skills and simulation scenarios. Serves as the companion course to Paramedic Cardiology.

EMS 2033 - Paramedic Medical Emergencies

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Prerequisite(s): BIO 2101, current Colorado Certification as an EMT with IV endorsement or higher and acceptance into the Paramedic Education Program.
Corequisite(s): EMS 2034.
Formerly EMS 233 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, nontraumatic musculoskeletal disorders and diseases of the eyes, ears, nose and throat.

EMS 2034 - Paramedic Medical Emergencies Lab

Credit(s): 1
Vocational Lab Hour(s): 0.75
Vocational Clinic Hour(s): 1

Prerequisite(s): Completion of pre-course screening including drug screen and criminal background check.
Corequisite(s): EMS 2033.
Formerly EMS 234 Teaches the skills necessary for the paramedic to effectively assess and treat patients with a variety of medical emergencies utilizing skills and simulation scenarios. Serves as the companion course to Paramedic Medical Emergencies.

EMS 2035 - Paramedic Trauma Emergencies

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): BIO 2101, current Colorado Certification as an EMT with IV endorsement or higher and acceptance into the Paramedic Education Program.
Formerly EMS 235 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

Credit(s): 1
Vocational Lab Hour(s): 0.75
Vocational Clinic Hour(s): 1

Prerequisite(s): Completion of pre-course screening including drug screen and criminal background check.
Corequisite(s): EMS 2035.
Formerly EMS 236 Teaches the skills necessary for the paramedic to effectively assess and treat patients with a variety

of traumatic emergencies utilizing skills and simulation scenarios. Serves as the companion lab course for Paramedic Trauma Emergencies.

EMS 2037 - Paramedic Internship Preparatory

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Prerequisite(s): EMS 2025, EMS 2027, EMS 2029, EMS 2031, EMS 2033, EMS 2035
Formerly EMS 237 Reviews concepts and techniques used in the prehospital setting.

EMS 2075 - Special Topics

Credit(s): 0-12
Formerly EMS 275 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

EMS 2080 - Paramedic Internship I

Credit(s): 6
Internship Hour(s): 18
Prerequisite(s): EMS 2037.
Formerly EMS 280 Provides the first course of a proctored Internship to develop paramedic skills in a field setting. The student will gain experience in scene management as a member of an ALS team. The student will also apply advanced life support patient care knowledge to the assessment and treatment of patients.

EMS 2081 - Paramedic Internship II

Credit(s): 6
Internship Hour(s): 18
Prerequisite(s): EMS 2080.
Formerly EMS 281 Provides the second course of a proctored Internship to develop paramedic skills in a field setting. The student will gain experience in scene management as a leader of the ALS team. The student will also apply advanced life support patient care knowledge to the assessment and treatment of patients.

EMS 2085 - Independent Study

Credit(s): 1-6
Internship Hour(s): 3-18
Formerly EMS 285 Meets the individual needs of students. Students engage in intensive study or research under the direction of a qualified instructor.

EMS 3010 - Clinical Assessment and De-escalation Techniques

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to the Advanced Paramedic Practitioner BAS program
Formerly EMS 310 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 for EMS

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s):
Admission to the Advanced Paramedic Practitioner BAS program

SOC 2031

Formerly EMS 311 Introduces the Motivational Interviewing (MI) concept as a client-centered and conversational method of communication designed to assist helping professionals to address clients' ambivalence to change.

EMS 3012 - Trauma Informed Care and Assessment

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to the Advanced Paramedic Practitioner BAS program
SOC 2031
Formerly EMS 312 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 and Outreach

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to the Advanced Paramedic Practitioner BAS program
Formerly EMS 330 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

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to the Advanced Paramedic Practitioner BAS program
Formerly EMS 331 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

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): Admission to the Advanced Paramedic Practitioner BAS program
Formerly EMS 425 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 and Prevention Development Strategies

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to the Advanced Paramedic Practitioner BAS program
Formerly EMS 430 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

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): Admission to the Advanced Paramedic Practitioner BAS program
Formerly EMS 433 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

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to the Advanced Paramedic Practitioner BAS program
Formerly EMS 435 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

Credit(s): 4
Internship Hour(s): 12
Prerequisite(s): Admission to the Advanced Paramedic Practitioner BAS program
Formerly EMS 489 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.

Engineering

EGG 1010 - Engineering Graphics I

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Prerequisite(s): EGG 100.
Formerly EGG 101 Provides an application of engineering graphics as a communication form and a tool to solve three-dimensional design problems. Topics include orthographic, axonometric, and isometric projections, sections and auxiliary views, the geometry of lines, planes, and curved surfaces. This course is an introduction to PC-based, menu driven, 3D Computer Aided Design systems, spreadsheets, and freehand drawing.

EGG 1020 - Engingeering Methodologies

Credit(s): 3
Lecture Hour(s): 2
Academic Lab Hour(s): 2
Prerequisite(s): MAT 1340
Formerly EGG 102 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 1040 - Engineering Projects

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly EGG 140 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 1075-1077 - Special Topics

Credit(s): 0-12
Formerly EGG 175-177 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

EGG 2006 - Engineering Surveying I

Credit(s): 5
Lecture Hour(s): 2.50
Vocational Lab Hour(s): 3.75
Formerly EGG 260 Focuses on plane surveying including pacing, chaining, horizontal and vertical distances, care and use of engineering levels, transits and theodolites. Emphasizes the proper survey note procedures and surveying terminology. Covers various procedures in the calculation of bearings, azimuths and slope reduction.

EGG 2007 - Engineering Surveying II

Credit(s): 5
Lecture Hour(s): 2.50
Vocational Lab Hour(s): 3.75
Prerequisite(s): EGG 2006.
Formerly EGG 261 Introduces land surveying including legal terminology, riparian rights, legal descriptions, common law, statutory law, and the public land survey system. Addresses construction surveying, including notekeeping, construction etiquette, building layout, slope staking, and horizontal and vertical curves. Covers topographic surveying, x, y, z coordinates using total stations, and data collection.

EGG 2011 - Engr Mechanics I - Statics

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): MAT 2410.
Formerly EGG 211 Focuses on the vector and calculus treatment of forces and force systems, including particle and rigid body force systems. Additional topics include moments, friction, structures, and section properties.

EGG 2012 - Engineering Mechanics II (Dynamics)

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): MAT 2410.
Formerly EGG 212 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

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of PHY 2112.
Formerly EGG 230 Explores fundamental concepts and basic theory, including first and second laws of thermodynamics, thermodynamic functions, properties, states, cycles, pure substances, and chemical and phase equilibrium.

EGG 2071 - Theoretical Mechanics-Statics

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): MAT 1420.
Formerly EGG 271 Emphasizes vectors, resolution and composition of forces in two and three dimensions, vector notation, free body diagrams, static equilibrium of rigid bodies, moments, couples, centroids, and moments of inertia.

EGG 2075-2077 - Special Topics

Credit(s): 0-12
Formerly EGG 275-277 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

Engineering Technology

ENT 1075-1077 - Strength of Materials

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): EGG 2071.
Formerly ENT 175-177 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.

ENT 2044 - Surveying III

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Prerequisite(s): CAD 1101.
Focuses on advanced electronic surveying techniques. Introduces data collection and processing via computer software.

English

ENG 0092 - College Composition and Reading

Credit(s): 5
Lecture Hour(s): 5
Formerly CCR 092 Integrates and contextualizes college level reading and writing. Students will read and understand complex materials and respond to ideas and information through writing informative and/or persuasive texts. Developmental grading (D).

ENG 0093 - Studio D

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s)/Corequisite(s): Linked 100 level course in Communication, Science, Social Science or Arts and Humanities.
Formerly CCR 093 Integrates and contextualizes reading and writing strategies tailored to a co-requisite 100-level course within one or more of the four discipline strands. The four discipline strands are defined as: Communications, Science, Social Science, and Arts and Humanities. Non-GT courses are not eligible for this consideration. Students will read and understand complex discipline-specific materials, and respond to ideas and information through writing informative and/or persuasive texts. Developmental grading (D).

ENG 0094 - Studio 121

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): Linked ENG 1021.
Formerly CCR 094 Integrates and contextualizes reading and writing strategies tailored to co-requisite ENG 1021coursework. Students will read and understand complex materials, and respond to ideas and information through writing informative and/or persuasive texts. Developmental grading (D).

ENG 1013 - Business English

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 113 Introduces business English skills that are applicable to business correspondence. This course will review basic principles of grammar, punctuation, capitalization, spelling and word usage.

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3

Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

ENG 1031 - Technical Writing I

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 131, then ENG 1020 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

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of ENG 1031 with a grade of C or better.
Formerly ENG 132 then ENG 1030 Expands and refines the objectives of ENG 1031, emphasizing formal presentations, both written and oral.

ENG 1075 - Special Topics

Credit(s): 0-12
Formerly ENG 175 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

ENG 2001 - Composition III: Writing for Public Discourse GT-CO3

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of ENG 1022 with a grade of C or better.
Formerly ENG 201 Provides students with skills necessary to enter into higher-level undergraduate academic discourse or professional workplace writing. ENG 201 extends students' rhetorical knowledge and develops critical reading, thinking and writing strategies in multiple specialized areas of discourse beyond what they encounter in ENG 1022. In ENG 201, students deepen their rhetorical and writing skills by learning to analyze, synthesize and summarize complex texts and incorporate this information into specific writing conventions for a defined discipline. As a more advanced composition course, ENG 201 provides interested students with the opportunity to continue their exploration of expository writing with the added benefit of learning to write for distinct audiences (format, language, level of specificity, length and documentation style). Students will also learn effective editing and revising techniques, discipline-specific writing strategies, and how to extend their mastery of rhetorical strategies. While ENG 201 may be taught with the focus in a variety of disciplines (science writing, gender studies, literary criticism, writing in the humanities, business writing, political geography, philosophy, and so on), every discipline will allow students the opportunity to learn how to communicate with specialized audiences and adapt content to the needs of varying rhetorical situations.

ENG 2021 - Creative Writing I

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 221 Teaches techniques for creative writing. Explores imaginative uses of language through creative genres (fiction, poetry, literary nonfiction) with emphasis on the student's own unique style, subject matter and needs.

ENG 2022 - Creative Writing II

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 2021.
Formerly ENG 222 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 2028 - Writing for the Graphic Novel

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 228 Introduces story analysis and writing concepts used in writing for the graphic novel. Students explore the graphic novel as a vehicle for a unique, personal venue for written expression. Students explore the history and universal themes of the graphic novel as well as examine the principles of composition, different writing styles and processes used in the development of the graphic novel. The application of writing skills, script development and revision processes necessary for the creation of an individual graphic work and thorough examination of course material in terms of writing style, process considerations and written themes are the primary focus. Students create outlines, scripts and a final written work for a graphic novel, focusing on unity of style and techniques for authoring appropriate to story lines.

ENG 2030 - Creative Nonfiction

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 230 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

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of ENG 1021 with a grade of C or better or instructor approval.
Formerly ENG 231 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 2038 - Writing the Novel 1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 238 Learn the art and craft of writing a literary novel through intensive study of the process of developing long form narrative. Explore techniques for outlining plot, developing characters, and establishing setting. Workshops will emphasize critical review of students' own creative writing and all participants will develop and refine their critical vocabulary and methodology.

ENG 2075 - Special Topics

Credit(s): 0-12
Formerly ENG 275 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

Entrepreneurship

ENP 1005 - Introduction to Entrepreneurship

Credit(s): 3
Lecture Hour(s): 3
Formerly ENP 105 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.

ENP 1006 - Entrepreneurship Opportunity Analysis/Feasibility Study

Credit(s): 3
Lecture Hour(s): 3
Formerly ENP 106 Determines if a business venture is feasible based on personal, professional, and financial goals. This course will help to identify and analyze the present climate for business ideas through an industry analysis, target market analysis, competitive analysis, and financial analysis.

ENP 2005 - Marketing for the Entrepreneur

Credit(s): 3
Lecture Hour(s): 3
Formerly ENP 205 Covers marketing strategies to launch and sustain an entrepreneurial venture. This course will include topics on marketing entrepreneurial ventures utilizing innovative and financially responsible marketing strategies. This course will help students to develop an understanding of entrepreneurial marketing goals and objectives. The course covers marketing principles and electronic marketing.

ENP 2006 - Entrepreneurship Legal Issues

Credit(s): 3
Lecture Hour(s): 3
Formerly ENP 206 Explores legal issues related to business entities including sole proprietorship, general partnerships, limited partnerships, and corporations. This course reviews articles of incorporation and the filing process, employment law, property, landlord tenant rights and duties, and business insurance.

ENP 2007 - Entrepreneurship Financial Topics

Credit(s): 3
Lecture Hour(s): 3
Formerly ENP 207 Will cover topics such as financial planning for entrepreneurs, understanding tax considerations, understanding financial documents, financial ratio analysis, cash flow management, cost of capital and budgeting, raising capital, valuation, risk assessment, and venture exits.

ENP 2009 - Entrepreneurship Business Plan

Credit(s): 3
Lecture Hour(s): 3
Formerly ENP 209 Guides students through the evaluation of a business concept. This course will include writing a comprehensive business plan. This course explores both traditional and lean business planning as a means to establish strategic vision and direction for a business. This course assesses the strengths and weaknesses of a business concept. This course will include identifying external and environmental factors related to business ownership and evaluating various resources available for funding small businesses.

Environmental Science

ENV 1111 - Environmental Science with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly ENV 101 Provides an introduction to the basic concepts of ecology and the relationship between environmental problems and biological systems. Includes interdisciplinary discussions on biology, chemistry, geology, energy, natural resources, pollution and environmental protection. Using a holistic approach, students will study how the foundations of natural sciences interconnect with the environment. This course includes laboratory experience.

ENV 2075 - Special Topics

Credit(s): 0-12
Formerly ENV 275 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

Esthetician

EST 1001 - Introduction to Sterilization, Sanitation & Safety

Credit(s): 2
Vocational Clinic Hour(s): 4

Formerly EST 101 Introduces the various methods of sterilization, sanitation and safety as used today in the industry. Classroom study of bacteriology and the terminology dealing with sterilization and sanitation.

EST 1010 - Introduction to Facials and Skin Care

Credit(s): 3
Vocational Clinic Hour(s): 6

Formerly EST 110 Provides a basic understanding of massage manipulations when providing facials, the study of skin in both theory and practical applications, and benefits derived from proper facial and good skin care routines. Training is conducted in a classroom or lab setting using mannequins or models.

EST 1011 - Intermediate Facials & Skin Care

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): EST 1010.

Formerly EST 111 Covers theory and practical application pertaining to anatomy, skin disorders, skin types and facial shapes. Students help patrons to select the proper skin care treatment. Practical and theory application can be done in specialized classes or supervised salon (clinical) setting using models or customer service.

EST 1060 - Introduction to Disinfection, Sanitation & Safety

Credit(s): 2
Vocational Clinic Hour(s): 4

Formerly EST 160 Introduces the various methods of disinfection, sanitation and safety as used today in the industry. Classroom study of bacteriology and the terminology dealing with disinfection, sanitation and safety.

EST 1061 - Intermediate Disinfection, Sanitation & Safety

Credit(s): 3
Vocational Clinic Hour(s): 6

Formerly EST 161 Presents theory and the daily utilization and practice of the proper methods of disinfection, sanitation, and safety. Procedures as related to all phases of the industry. Training is provided in a supervised (clinical) setting.

EST 2010 - Advanced Massage & Skin Care

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): EST 1011.
Formerly EST 210 Provides the student with advanced techniques in massage, skin care and lash/brow tinting. Theory and practical procedures ready the student for employment. Instruction is provided in specialized classes or in a supervised salon (clinical) setting. Student preparation for State Board Licensing Examination.

EST 2011 - Facial Make-up

Credit(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): EST 1010.
Formerly EST 211 Provides instruction on cosmetics and their functions. The importance of color theory, facial types and skin tones as they relate to facial makeup. Instruction from the basic makeup application to the corrective makeup procedure is taught. Disinfection and sanitation is taught as it pertains to all aspects of makeup.

EST 2012 - Hair Removal

Credit(s): 3
Vocational Clinic Hour(s): 6

Prerequisite(s): EST 1010.
Formerly EST 212 Provides in-depth study and practice of hair removal and the practice of patron protection and safety. Training for general waxing and body waxing procedures are provided. Demonstration of disinfection and sanitation as it pertains to Colorado rules and regulations will be practiced.

EST 2075 - Special Topics

Credit(s): 0-12
Formerly EST 275 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

Ethics

ETH 2000 - Introduction to Ethnic Studies: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly ETH 200 Introduces students to the issues of race and ethnicity. Emphasizes ethnic relations in the United States as it pertains to four major groups Americans of African, Asian, Latino and Native descent. Explores issues of racial and ethnic identity, racism and discrimination, stereotyping, prejudice, segregation, colonialism, integration and acculturation.

ETH 2024 - Introduction to Chicano Studies

Credit(s): 3
Lecture Hour(s): 3
Formerly ETH 224 Introduces students to skills development in multicultural education. Covers Chicano history, migration and labor, education, law and Chicano culture.

ETH 2075 - Special Topics

Credit(s): 0-12
Formerly ETH 275 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

Fire Science Technology

FST 1000 - Firefighter I

Credit(s): 9
Lecture Hour(s): 6
Vocational Lab Hour(s): 4.50
Formerly FST 100 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 using IFSTA Essentials.

FST 1001 - Firefighter II

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Prerequisite(s): FST 1000.
Formerly FST 101 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

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 102 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

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 103 Explores the theories and fundamentals of how and why fires start, spread and are controlled.

FST 1005 - Building Construction for Fire Protection

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 105 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

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 106 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)

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 107 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 1008 - Firefighter Professional Preparation

Credit(s): 1
Lecture Hour(s): 1
Formerly FST 108 Articulates strategies for creating success in a career as a Firefighter. This course discusses requirements in professionalism, emergency response in a multicultural environment, the psychological rigors and stressors typical of the vocation, and use of potential resources to attain career goals and plans.

FST 1009 - Occupational Safety & Health

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 109 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 and Assessment

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly FST 110 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 1021 - Technical Rope Rescue

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Formerly FST 121 Provides students with the knowledge and skills to handle low and high angle rescues using rescue rope and associated hardware. The course takes students from the introductory level up to advanced skills in three separate sessions. Belay, rappel and raising systems are taught in a real-life setting in both high- and low-angle rescue environments. Students are also taught care and maintenance of equipment.

FST 1026 - Vehicle Extrication Awareness Level

Credit(s): 1
Vocational Lab Hour(s): 1.50
Formerly FST 126 Provides the student with entry level knowledge and skills to safely operate at the scene of a vehicle/machinery extrication. Training in this course represents the minimum level of training needed to respond to a vehicle extrication incident.

FST 1027 - Vehicle Extrication Operations Level

Credit(s): 2
Lecture Hour(s): 0.50
Vocational Lab Hour(s): 2.25
Formerly FST 127 Expands and refines the objectives of FST 1026. Students shall be capable of hazard recognition, equipment use and techniques necessary to operate safely and effectively at incidents involving persons injured or entrapped in a vehicle or machinery.

FST 1028 - Vehicle Extrication Technician Level

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly FST 128 Expands and refines the objectives learned in FST 1027. Training in this course represents the highest level of operation at the rescue scene involving vehicle extrication. Students shall be capable of hazard

recognition, equipment use and techniques necessary to operate and effectively supervise at incidents involving persons injured or entrapped in a vehicle or machinery.

FST 1032 - Structural Collapse

Credit(s): 2
Lecture Hour(s): 0.50
Vocational Lab Hour(s): 2.25
Formerly FST 132 Covers the various types of construction, causes for structural collapse, types of structural collapse, and identification of structural component failures. Mitigation of a structural collapse response and other associated hazards through use of ICS, proper size-up, building failure analysis, monitoring techniques, shoring systems and associated equipment, proper search and recovery techniques, and personal protective equipment requirements.

FST 1033 - Trench Rescue

Credit(s): 2
Lecture Hour(s): 0.50
Vocational Lab Hour(s): 2.25
Formerly FST 133 Covers trench types; trench versus excavation rescues; soil types encountered at trench rescue sites; collapse dynamics; ICS/IMS; equipment, materials and tools used for rescue operations; personal protection issues; trench shoring; and victim extrication.

FST 1034 - Confined Space Rescue

Credit(s): 2
Lecture Hour(s): 0.50
Vocational Lab Hour(s): 2.25
Formerly FST 134 Covers the definition of confined space; OSHA considerations and permit requirements; monitoring instruments; ICS/IMS; victim contact; breathing apparatus such as SABA/SCBA; communications and equipment, e.g., radio/hardwired; patient packaging; rescue versus recovery; and patient extrication.

FST 1035 - Ice Water Rescue

Credit(s): 2
Lecture Hour(s): 0.50
Vocational Lab Hour(s): 2.25
Formerly FST 135 Covers types of ice encountered in ice water rescue; ICS/IMS; ice strength; patient evaluation and contact; rescue equipment; ice water rescue techniques; rescue suit safety; belay line and shore support; hypothermia; Zodiac boat techniques; and victim rescue.

FST 1036 - Swift Water Rescue

Credit(s): 2
Lecture Hour(s): 0.50
Vocational Lab Hour(s): 2.25
Formerly FST 136 Covers fast water hazards and risk analysis relating to swift water rescue; low head dam; ICS/IMS; victims in vehicles; rescue equipment and techniques; rope systems and throw bags; reach/throw/go; rescuer safety and shore support; and personal protective equipment.

FST 1050 - Introduction to Fire Prevention Education

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 150 Focuses on conducting prevention and education needs assessment, targeting audiences; development and delivery of prevention and education programs. Includes methods of conducting fire prevention and safety inspections.

FST 1051 - Driver-Operator

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly FST 151 Provides the student with the basic knowledge and skills to safely operate fire apparatus according to the NFPA professional standard. Enables the student to display and demonstrate knowledge of fire apparatus, operation of apparatus, pumps and pumping, hydraulics calculations, maintenance and testing.

FST 1060 - Candidate Physical Abilities Test Prep

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly FST 160 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 1075 - Special Topics

Credit(s): 0-12
Formerly FST 175 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

FST 2001 - Instructional Methodology

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 201 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 and Tactics

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 202 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

Credit(s): 3
Lecture Hour(s): 3

Formerly FST 203 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 2004 - Principles of Code Enforcement

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 204 To provide the students with the fundamental knowledge of the role of code enforcement in a comprehensive fire prevention program.

FST 2005 - Fire Investigation I

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 205 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 firesetter, and types of fire causes.

FST 2006 - Fire Co Superv and Leadership

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 206 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 and Tactics II

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 207 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 2008 - Fire Plans Review and Acceptance Testing

Credit(s): 2
Lecture Hour(s): 2
Formerly FST 208 Instructs the student on how to review building plans submitted to a fire department, acceptance testing procedures, implementation of a fire inspection program, and how to deal effectively with the public for fire prevention and education activities.

FST 2009 - Fire Protection Systems

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 209 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

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 251 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 2052 - Fire Investigation II

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 252 Provides the student with advanced technical knowledge on rule of law, fire scene analysis, fire behavior, evidence collection and preservation, scene documentation, case preparation, and testifying.

FST 2053 - NIMS

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): FST 2002.
Formerly FST 253 Focuses on the National Incident Management System, including fire ground management and resource management. Multiagency coordination systems are discussed; organization preparedness for large scale emergencies, communication and information are addressed. The course concludes with a review of the National Response Plan.

FST 2054 - Hazardous Materials Technician Level

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): FST 1007.
Formerly FST 254 Focuses on techniques associated with hazardous materials mitigation, the use of monitoring devices, components of a mitigation teams, command and control of hazardous materials incidents.

FST 2055 - Fire Service Management

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 255 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

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 257 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 2075 - Special Topics

Credit(s): 0-12
Formerly FST 275 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

Fire Science Wildland

FSW 1000 - S-190 Introduction to Wildland Fire Behavior

Credit(s): 1
Lecture Hour(s): 1
Formerly FSW 100 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 FSW 1001 - S-130 Firefighting Training.

FSW 1001 - S-130 Firefighting Training

Credit(s): 2
Lecture Hour(s): 0.50
Vocational Lab Hour(s): 2.25
Formerly FSW 101 Provides entry-level firefighter skills. A version of the L-180, Human Factors on the Fire line, is included as part of the course. Credit should be issued for S-130.

FSW 1002 - S-131 Firefighter Type I

Credit(s): 0.50
Lecture Hour(s): 0.50
Formerly FSW 102 Designed to meet the training needs of the Firefighter Type 1. It contains several tactical decision modules designed to facilitate learning the objectives and class discussion. This course is designed to be interactive in nature. Topics include fire line reference materials, communications and tactical decision making.

FSW 1003 - D-110 Dispatch Recorder with Introduction to Ross

Credit(s): 1
Lecture Hour(s): 1
Formerly FSW 103 Trains potential dispatch recorders on the structure of an expanded dispatch organization and how to effectively perform within that organization. Course will provide the student with a working knowledge of the purpose and process of completing the resource order and other dispatch forms. It will also provide instruction on established dispatch procedures.

FSW 1004 - I-100 Introduction to ICS

Credit(s): 0.25
Lecture Hour(s): 0.25
Formerly FSW 104 Address the ICS organization basic terminology and common responsibilities. It provides a foundation upon which to enable entry-level personnel to function appropriately in the performance of incident-related duties. For students continuing through more complex ICS modules, this course may be used as pre-course work.

FSW 1005 - L-180 Human Factors on the Fire Lane

Credit(s): 0.25
Lecture Hour(s): 0.50
Formerly FSW 105 Designed for unit-level supervisors to use when delivering orientation training to new crewmembers. Presentation of the course involves a few short lecture segments but the primary content is delivered by video and is supported with small group exercises. Topics include situation awareness, basic communication responsibilities, attitude and stress barriers, decision-making processes, and teamwork principles.

FSW 1040 - S-200 Initial Attack Incident Commander

Credit(s): 1
Lecture Hour(s): 1
Corequisite(s): Qualified as a single resource boss.
Designed to meet the training needs of the ICT4. It is presented in a lecture/discussion format and supplemented with group exercises. The six instructional units cover: Readiness and Mobilization; Size-up, Planning, and Ordering; Deployment and Containment; Administrative Requirements; and Post-Fire Evaluation.

FSW 1043 - S-212 Wildfire Chain Saws

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Formerly FSW 143 Provides introduction to the function, maintenance and use of internal combustion, engine-powered chain saws and their tactical wildland fire application. Modules support entry-level training for firefighters with little or no previous experience in operating a chain saw and provide hands-on cutting in surroundings similar to fire line situations.

FSW 1053 - S-290 Intermediate Wildland Fire Behavior

Credit(s): 2
Lecture Hour(s): 2
Formerly FSW 153 Designed to prepare the prospective supervisor to undertake safe and effective fire management operations.

FSW 1075-1077 - Special Topics

Credit(s): 0-12
Formerly FSW 175-177 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

FSW 2075-2077 - Special Topics

Credit(s): 0-12
Formerly FSW 275-277 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

Floral Design

FLD 1000 - Introductory Floral Design

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50

Formerly FLD 100 Teaches students working in the floral design Industry a working knowledge of retail flower shop management and procedures. Introduces students to the basic principles and elements of floral design that can be used for personal or professional industry applications. Students also learn basic care and identification of fresh flowers, design, purchasing and pricing of various types of floral compositions.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

Geography

GEO 1005 - World Regional Geography: GT-SS2

Credit(s): 3
Lecture Hour(s): 3
Formerly GEO 105 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. This is a statewide Guaranteed Transfer course in the GT-SS2 category.

GEO 1006 - Human Geography: GT-SS2

Credit(s): 3
Lecture Hour(s): 3
Formerly GEO 106 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. This is a statewide Guaranteed Transfer course in the GT-SS2 category. GT-SS2

GEO 1011 - Physical Geography: Landforms with Lab: GT-SCI

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly GEO 111 Introduces students to 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. The course incorporates an integrated process of lectures, discussion and laboratory assignments.

GEO 1012 - Physical Geography: Weather and Climate with Lab: GT-SCI

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly GEO 112 Introduces the principles of meteorology, climatology, world vegetation patterns and world regional climate classification. The course includes investigating the geographic factors which influence climate, such as topography, location, elevation, winds and latitude.

GEO 1075 - Special Topics

Credit(s): 0-12
Formerly GEO 175 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

GEO 2075 - Special Topics

Credit(s): 0-12
Formerly GEO 275 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

Geography Information Systems

GIS 1001 - Introduction to GIS

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Department Chair Approval.
Formerly GIS 101 Surveys the development, application and use of geographic information systems (GIS).

GIS 1005 - Arcview GIS

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): GIS 1001 or Department Chair Approval.
Formerly GIS 105 Introduces the fundamentals of GIS including cartographic principles, hardware, and software requirements, raster, and vector data structures, and data sources, accuracy, and acquisition, spatial data databases and spatial analysis. Hands-on experience with vector data utilizing ArcView software includes use of map scales, coordinate systems, determining spatial relationships, map features and attributes, map overlays, and basic operations with databases. Student will learn to create charts and graphs and full map layouts. A final project is required.

GIS 1010 - Introduction to Cartography for GIS

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): GIS 1005 or Department Chair Approval.
Formerly GIS 110 Examines a broad range of map types, emphasizing maps as a communication system with both symbology and specific organizational hierarchies. Discussion and demonstration focuses on essential cartographic principles and practices used for designing maps, with emphasis on cartographic principles resulting in the effective map communication, qualitative messages and quantitative information.

GIS 1031 - Global Positioning Systems for Global Information Systems

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): GIS 1010 or Department Chair Approval.
Formerly GIS 131 Introduces the terminology, hardware and technological principles of GPS. Students will receive an introduction in the fundamentals of using a basic hand-held GPS unit. Data will be integrated with pre-existing spatial data. Fundamentals of mapping and map reading will be covered. Garmin GPS units will be used initially, followed with Trimble GeoExplorers and Pathfinder Office software. Final student projects integrate GPS data within ArcView projects.

GIS 1075-1077 - Special Topics

Credit(s): 0-12
Formerly GIS 175-177 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

GIS 2012 - GIS Remote Sensing

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): GIS 1031 or Department Chair Approval.
Formerly GIS 212 Introduce concepts and procedures used in remote sensing with an emphasis on integration of aerial and satellite imagery into GIS applications. Apply the science of remote sensing and imagery interpretation to understand local to global earth observation characteristics based on remotely sensed data and logical interpretation.

GIS 2075-2077 - Special Topics

Credit(s): 0-12
Formerly GIS 275-277 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

Geology

GEY 1075 - Special Topics

Credit(s): 0-12
Formerly GEY 175 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

GEY 1111 - Physical Geology with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly GEY 111 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: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly GEY 112 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: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): MAT 0300 with a grade of S/C or better.
Formerly GEY 135 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 2075 - Special Topics

Credit(s): 0-12
Formerly GEY 275 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

Health Information Technology

HIT 1001 - Health Information Management Science

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): HIT 1002 or Department Chair Approval.
Formerly HIT 101 Introduces the student to the health record, from inception to completion. Emphasis is on content and regulations impacting the health record in the various settings. Other areas to be discussed include the electronic health record and responsibilities of the health information department. This course also examines various health care delivery systems and healthcare practitioners. Professional and practice-related ethical issues are discussed, as well as evaluating the consequences of a breach of healthcare ethics.

HIT 1002 - Medical Vocabulary for Documentation

Credit(s): 3
Lecture Hour(s): 3
Formerly HIT 102 Introduces medical vocabulary through the study of word structures and phrases with reinforcement in writing narratives and the study of medical records. Anatomy and physiology of all body systems are reviewed with discussion of related diseases, diagnostic procedures, treatments and drugs. Emphasis on learning to read, pronounce and interpret medical documentation prepares the student for document review in HIT fields. Illustrates the importance of HIPAA in both physical and electronic dissemination of medical records.

HIT 1005 - Principles of Healthcare Reimbursement

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): HIT 2020, HIT 2041
Formerly HIT 105 Provides students with the knowledge needed to perform necessary tasks involved in healthcare reimbursement systems, including payment methodologies, use of clinical data and compliance.

HIT 1011 - Health Data Management and Information Systems

Credit(s): 3
Lecture Hour(s): 3
Formerly HIT 111 Introduces the electronic health record (EHR)/components and health informatics including infrastructure, privacy, security and legal implications. Federal involvement and its impact on information technology regarding health data will be discussed. Students will study the roles and relationships, in the transformation of data into meaningful information, through research, vital statistics and epidemiology. Data quality, integrity, collection, access and retention will also be emphasized.

HIT 1012 - Legal Aspects for Health Records

Credit(s): 2
Lecture Hour(s): 2
Formerly HIT 112 Introduces the student to the legal system and defines the role of the healthcare professionals. Specific federal and state laws are identified and discussed as they relate to release of medical information.

HIT 1020 - Working with Health IT Systems

Credit(s): 4
Lecture Hour(s): 4
Formerly HIT 120 Provides hands-on experience with a computerized HIT system/electronic health record, utilizing contemporary online systems with simulated data. The course will include additional lecture, project work and practice in the use of HIT systems. Students will play the role of practitioners using these systems and experience threats to security and gain an appreciation of the need for standards and high levels of usability. Students will also learn how errors can occur and ways to minimize them.

HIT 1021 - Networking and Health Info

Credit(s): 2.50
Lecture Hour(s): 2.50
Formerly HIT 121 In-depth analysis of data mobility, including the hardware infrastructure (wires, wireless and devices supporting them), the ISO stack, standards, Internet protocols, federations and grids. The Nationwide Health Information Network and other nationwide approaches to distribution of electronic health records by health information exchanges will also be explored. Also covered are the functional models and certification of the Electronic Health Record and Data Standards for these records.

HIT 1022 - Workflow Fund of Healthcare

Credit(s): 3
Lecture Hour(s): 3
Formerly HIT 122 Introduces the fundamentals of healthcare workflow, process analysis and redesign in various healthcare settings. Health information technology culture changes (IT/clinicians) and project management, including HIT system selection, design, implementation and support will also be covered. Electronic health record/practice management systems will be evaluated for quality and process improvement, clinical decision support, health information exchange, public health, and population health management in ambulatory and alternative care settings.

HIT 1023 - Configuring EHRS

Credit(s): 3
Lecture Hour(s): 3
Formerly HIT 123 A practical experience with a laboratory component, addressing approaches to assessing, selecting and configuring EHRs to meet the specific needs of customers and end-users.

HIT 1024 - Public Health IT

Credit(s): 1
Lecture Hour(s): 1
Formerly HIT 124 Prepare students for working with public health agencies, an overview of specialized public health applications such as registries, epidemiological databases, bio surveillance and situational awareness and emergency response. Includes information exchange issues specific to public health.

HIT 1050 - Healthcare Delivery Systems

Credit(s): 3
Lecture Hour(s): 3
Formerly HIT 150 Provides an overview of the healthcare delivery system at the national, state and local level. The course provides healthcare education, including applicable regulations and standards, reimbursement methods, and evolution and current trends in healthcare delivery.

HIT 1075 - Special Topics

Credit(s): 0-12
Formerly HIT 175 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

HIT 1088 - Health Information Practicum I

Credit(s): 2
Practicum Hour(s): 4
Prerequisite(s): HIT 2052 or Department Chair Approval.
Formerly HIT 188 Provides a directed clinical experience which focuses on the practice of skills related to the application of legal principles, record analysis and abstraction and record retention and retrieval.

HIT 2020 - ICD Coding I

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): HPR 1032
Formerly HIT 220 Introduces the ICD coding classification system and provides a basic understanding of ICD structure, conventions and principles utilized in code assignment. The student will be introduced to the official coding guidelines. They will apply knowledge of anatomy, physiology, pathophysiology and pharmacology in the assignment of diagnostic and procedural codes.

HIT 2022 - Quality Management

Credit(s): 3
Lecture Hour(s): 3
Formerly HIT 222 Introduces the student to the basic concepts of quality management in the healthcare environment. Requirements by regulatory agencies regarding quality documentation, utilization and risk management are discussed. Data collection, verification, analysis, descriptive statistics and presentation techniques will be studied. The course emphasizes the ongoing use of objective data and feedback to improve processes, systems and patient outcomes. Analysis of documentation for various purposes is also covered.

HIT 2025 - Health Information Management

Credit(s): 3
Lecture Hour(s): 3
Formerly HIT 225 Concentrates on the principles of management as they relate to the administration of the health information management department as part of a healthcare organization.

HIT 2041 - CPT Coding Basic Principles

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): HPR 1032.
Formerly HIT 241 Provides the student with skill sets to apply the current procedural terminology (CPT) and HCPCS code set principles and guidelines for application in reporting/communicating information and data about clinical services provided to patients by healthcare providers. Includes understanding what the CPT nomenclature is, how and why it is used, and guidelines for each code category and how it is applied to represent services within each code category.

HIT 2052 - Coding II for Certification

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): HIT 2020, HIT 2041
Formerly HIT 252 Covers medical necessity and coding issues using ICD and CPT coding principles. Students should already possess a fundamental understanding of the CPT, ICD and HCPCS coding principle. Intensive coding application will be achieved through the use of medical records, case studies and scenarios. DRGs, APCs, RUGs, RBRVs and the Correct Coding Initiative (CCI) will also be covered in this class.

HIT 2061 - Healthcare Software

Credit(s): 3
Lecture Hour(s): 3
Formerly HIT 261 This course covers basic computer system architecture, file structure and design for healthcare settings. Topics include system analysis, design, security and selection for a variety of hardware environments. This course provides students with a review of computer fundamentals and the fundamentals of the electronic health record and an introduction to the information systems life cycle with software application. Security and confidentiality issues, concerns and implications in relation to the electronic health record will be addressed.

HIT 2064 - Data Visualization

Credit(s): 4
Lecture Hour(s): 4
Formerly HIT 264 Introduces data visualization tools and techniques software, as well as increasing proficiency in Excel. Students will be able to tell a story with data, communicating observations in a clear, compelling way that provides meaning and explanation. As part of this course, students are also required to complete a professional practicum experience to apply classroom knowledge in a clinical setting.

HIT 2065 - Data Analytics Applications

Credit(s): 3
Lecture Hour(s): 3
Formerly HIT 265 Deepens understanding of current and emerging practices in the application of data analytics. Topics include clinical, financial, operations and qualitative analytics; trends in practices; customer expectations; regulations that affect analytics; and ethical issues in gathering, analyzing and reporting healthcare data. Explore the roles and applications of descriptive, retrospective and prescriptive analytics in various settings.

HIT 2068 - Certification Test Preparation

Credit(s): 1
Lecture Hour(s): 1

Prerequisite(s): Department Chair Approval.
Formerly HIT 268 Prepares students who have made the decision to obtain a national health information technology credential by completing national credentialing exams.

HIT 2075 - Special Topics

Credit(s): 0-12
Formerly HIT 275 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

HIT 2088 - Health Info Practicum II

Credit(s): 2
Internship Hour(s): 6
Formerly HIT 288 Focuses on the ability of the student to apply classroom knowledge in a clinical setting, practice professionalism, gain insight into the functions of the department and understand the relationship of health records to the facility as a whole. Emphasis is on the ability to act independently, complete assigned projects and demonstrate a good understanding of health information management concepts.

HIT 2089 - HIT Capstone Course

Credit(s): 3
Internship Hour(s): 9
Prerequisite(s): Department approval required
Formerly HIT 289 Provides a demonstrated culmination of learning within a given program of study.

Health & Wellness

HWE 1001 - Community First Aid and CPR

Credit(s): 1
Lecture Hour(s): 1
Formerly HWE 103 Prepares the student for certification in CPR and Basic First Aid. Skills will include basic life support, airway obstruction, control of bleeding, shock and patient care for the unconscious.

HWE 1050 - Human Nutrition

Credit(s): 3
Lecture Hour(s): 3
Formerly HWE 100 Introduces basic principles of nutrition with emphasis on personal nutrition. This course focuses on macro and micro nutrients and their effects on the functions of the human body. Special emphasis is placed on the application of wellness, disease, and lifespan as it pertains to nutrition.

HWE 1060 - Weight Loss

Credit(s): 1
Vocational Lab Hour(s): 1.50
Formerly HWE 108 Focuses on combining a healthy diet and exercise to shed unwanted pounds and inches. The course will include classroom sessions that will focus on personal habits including diet that lead to weight gain and exercise session in the Fitness Center.

HWE 1062 - Health and Fitness

Credit(s): 3
Lecture Hour(s): 3
Formerly HWE 111 Studies health and fitness in the US today. The course will look at personal health issues, managing stress, nutrition and health lifestyles.

HWE 1075 - Special Topics

Credit(s): 0-12
Formerly HWE 175 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

HWE 2075 - Special Topics

Credit(s): 0-12
Formerly HWE 275 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

Health Professional

HPR 1000 - Introduction to Health

Credit(s): 3
Lecture Hour(s): 3
Formerly HPR 100 Provides an exploratory course for students interested in a health career. Basic health skills such as vital signs and CPR will be included.

HPR 1007 - Computers in Healthcare

Credit(s): 2
Lecture Hour(s): 2
Formerly HPR 119 Introduces basic computer technology, file management, and PC system components as used in Health Care settings. Provides an overview of word processing, spreadsheets, and personal information management software. Introduces the Electronic Health Record (EHR), its content, EHR software, EHR management, patient management and scheduling, and privacy and security of the EHR.

HPR 1008 - Law & Ethics for Health Professions

Credit(s): 2
Lecture Hour(s): 2
Formerly HPR 106 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 1010 - Dietary Nutrition

Credit(s): 1
Lecture Hour(s): 1
Formerly HPR 108 Studies the basic nutritional principles in clinical practice in health care. The course will cover factors which influence the nutritional status of individuals, methods of nutritional assessment and support, and diet modification for specific disease states.

HPR 1011 - CPR for Professionals: Professional Rescuer

Credit(s): 0.50
Lecture Hour(s): 0.50
Formerly HPR 102 Meets the requirement for American Red Cross Professional Rescuer CPR or American Heart Association Basic Life Support for those who work in emergency services, healthcare 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 1017 - Anatomical Kinesiology

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Prerequisite(s): BIO 2101
Formerly HPR 117 Studies the Anatomical Bases of Human Movement.

HPR 1020 - Phlebotomy

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Prerequisite(s): Program admission required.
Formerly HPR 112 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 1021 - ACLS Recertification

Credit(s): 0.50
Lecture Hour(s): 0.50
Presents the required material for ACLS recertification. It will cover rhythm recognition, cardiac drugs, cardiac monitors, and case-based scenarios.

HPR 1032 - Disease Process and Treatment

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): BIO 1006
Formerly HPR 232 Covers disease processes and drug therapy used to treat commonly found pathological conditions. Normal anatomy and physiology of each body system is reviewed. Conditions that disrupt homeostasis are examined. Conditions considered are both acquired and congenital. Diagnostic methods, management, treatment modalities and prognosis are discussed. Classifications of drugs are introduced. A general understanding of the actions; absorption, metabolism and excretion; and reasons for use of various groups of pharmacologic agents are introduced.

HPR 1038 - Intro to Medical Terminology

Credit(s): 1
Lecture Hour(s): 1
Formerly HPR 138 Introduces the student to the structure of medical terms with emphasis on using and combining the

most common prefixes, roots and suffixes. Includes terms related to major body systems, oncology and psychiatry, as well as clinical laboratory and diagnostic procedures and imaging. Class structure provides accepted pronunciation of terms and relative use in the healthcare setting.

HPR 1039 - Medical Terminology

Credit(s): 2
Lecture Hour(s): 2
Formerly HPR 139 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 1040 - Comprehensive Medical Terminology

Credit(s): 3
Lecture Hour(s): 3
Formerly HPR 144 Provides an in-depth study of the structure of medical terms with emphasis on using and combining common prefixes, roots and suffixes. This course includes terms related to major body systems, oncology, and psychiatry as well as clinical laboratory and diagnostic procedures, and imaging, and provides accepted pronunciation of terms and relative use in the healthcare setting.

HPR 1045 - Medical Record Terminology

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): HPR None .
Formerly HPR 208 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

Credit(s): 2
Lecture Hour(s): 2
Formerly HPR 190 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 1075 - Special Topics

Credit(s): 0-12
Formerly HPR 175 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

HPR 1080 - Internship

Credit(s): 2
Internship Hour(s): 6
Prerequisite(s): Program admission and HPR 1020
Formerly HPR 180 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.

HPR 2011 - ACLS

Credit(s): 1
Lecture Hour(s): 1
Formerly HPR 120 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. P/F grade mode (F).

HPR 2012 - ACLS Instructor Course

Credit(s): 0.50
Lecture Hour(s): 0.50
Formerly HPR 122 Presents information on how to obtain a complete health history, assessment skills of inspection, palpation, percussion, and auscultation are practiced in class.

HPR 2013 - Pediatric Advanced Life Support

Credit(s): 1
Lecture Hour(s): 1
Formerly HPR 130 Provides students the needed information and skills as required by health care agencies for pediatric emergencies. Pass/fail grade mode (F).

HPR 2014 - Pediatric Advanced Life Support Renewal

Credit(s): 0.50
Lecture Hour(s): 0.50
Formerly HPR 131 Provides students with updates and skill practice to complete renewal requirements for PALS completion card.

HPR 2015 - Pediatric Advanced Life Support Instructor

Credit(s): 1
Lecture Hour(s): 1
Formerly HPR 132 Provides the current PALS provider the information and practice needed to instruct PALS initial and renewal courses.

HPR 2020 - Advanced Phlebotomy

Credit(s): 4
Lecture Hour(s): 2.50
Vocational Lab Hour(s): 2.25
Prerequisite(s): Program admission required.
Formerly HPR 113 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 2050 - Advanced ECG Interpretations

Credit(s): 3
Lecture Hour(s): 3
Formerly HPR 200 Focuses on each wave and interval of the complex, the axis, and the 12-lead presentation of some rhythm disturbances.

HPR 2075 - Special Topics

Credit(s): 0-12
Formerly HPR 275 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

HPR 3001 - Communications in Health Care

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to BAS program
Formerly HPR 301 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

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to BAS program
Formerly HPR 310 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 Healthcare Research

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to BAS program

Formerly HPR 403 Teaches how to evaluate and analyze published literature using a scientific approach to develop medical best practices, formulates and research clinical questions to effectively participate in medical discussions.

HPR 4011 - Leadership and Management in Health Professions

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to BAS program
Formerly HPR 411 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.

HPR 4038 - Pedagogy in Health Professions

Credit(s): 3
Lecture Hour(s): 3

Prerequisite(s): Admission to BAS program
Formerly HPR 468 Provides a general overview of the concepts and theory relative to education in health professions. The course will introduce concepts in developing outcome centered objectives, syllabus, lesson planning, content delivery, test construction, and assessing student learning. The course explores various learning styles and technology available for delivery of course content.

HPR 4089 - Inter-Professional Capstone

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Department approval required.
Formerly HPR 489 Provides a demonstrated culmination of learning within a given program of study.

Heavy Equipment

HEQ 1050 - Basic Principles of Engine Operation and Drive Train

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Formerly HEQ 150 Covers the theory of operation and the maintenance of engines, drive trains and related power equipment used in heavy equipment operations.

HEQ 2020 - Motor Grader I

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Formerly HEQ 220 Covers the safe operation of a motor grader and perform a variety of operations using the grader.

HEQ 2021 - Motor Grader II

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Formerly HEQ 221 Focuses on the safe operation of a motor grader and aggregate road maintenance and building.

HEQ 2025 - Backhoe I

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Formerly HEQ 225 Designed for operators with little or no experience in operating a backhoe. Covers performing pre-trip inspection, greasing and lubing equipment, nomenclature, and identifying and understanding all controls. Includes use of front-end loader to load dirt, using backhoe attachment to dig trenches of specific depth and length, replacing a cutting edge, and OSHA and industry standards of open excavations.

HEQ 2026 - Backhoe II

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Formerly HEQ 226 Covers coordinating locates, preparing sub-base, digging on uneven surfaces, backfilling trenches, loading trucks with backhoe, digging trenches to grade, use of a transit and handheld level, crossing trenches, setting up on open excavations, benching techniques, and OSHA and industry safety standards.

HEQ 2030 - Hydraulic Excavator

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Formerly HEQ 230 Covers the safe operation of the hydraulic excavator. Allows the student to perform a variety of operations with the excavator.

HEQ 2040 - Basic Bulldozer I

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Formerly HEQ 240 Teaches performing walk-around inspections, using proper terms and definitions associated with the bulldozer, and using proper safety procedures. Includes performing rough ditching and spreading, performing ripping operations, cutting and building a gentle slope bench, using the bulldozer on unstable soil, and replacing cutting edges on blades and teeth on rippers.

HEQ 2041 - Bulldozer II

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Formerly HEQ 241 Teaches how to perform excavation in confined space, construct an elevated roadway, perform finish work, move large obstacles, perform bulldozing operations on a slope. Includes identifying and repairing drainage problems, stockpiling materials, use of a transit or hand level to create a 3:1 slope, and OSHA, MSHA and industry safety standards.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

HEQ 2046 - Front End Loader II

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Formerly HEQ 246 Enables the student to learn the safe operation of a front-end loader and perform a variety of tasks. Build on skills such as excavating, stockpiling and backfilling with different types of attachments.

HEQ 2075 - Special Topics

Credit(s): 0-12
Formerly HEQ 275 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

Heavy Equipment Mechanics

HEM 2011 - Final Drives and Brakes

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Focuses on the study of single and double final drives and brake systems on both light and heavy-duty equipment. Covers diagnostics, service and repair techniques.

HEM 2075 - Special Topics

Credit(s): 0-12
Formerly HEM 275-277 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

History

HIS 1075-1077 - Special Topics

Credit(s): 0-12
Formerly HIS 175-177 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

HIS 1110 - The World: Antiquity-1500: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 111 Explores a number of peoples, groups, ideas, institutions and trends that have shaped world history from the prehistoric era to 1500. Reflects the multiple perspectives of gender, class, religion and ethnic groups in a broad global sense. Focuses on the common denominators among all people. This approach goes beyond political borders to provide a better appreciation for different cultures. Focuses on developing, practicing and strengthening the skills historians use while constructing knowledge in this discipline. This course is one of the statewide Guaranteed Transfer courses, GT-HI1.

HIS 1120 - The World: 1500-present: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 112 Explores a number of peoples, groups, ideas, institutions and trends that have shaped world history from 1500 to the present. Reflects the multiple perspectives of gender, class, religion and ethnic groups in a broad global sense. Focuses on the common denominators among all people. This approach goes beyond political borders to provide a better appreciation for different cultures. Focuses on developing, practicing and strengthening the skills historians use while constructing knowledge in this discipline. This course is one of the statewide Guaranteed Transfer courses, GT-HI1.

HIS 1210 - U.S. History to Reconstruction: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 121 Explores events, trends, peoples, groups, cultures, ideas and institutions in North America and

United States history, including the multiple perspectives of gender, class and ethnicity, between the period when Native American Indians were the sole inhabitants of North America and the American Civil War. Focuses on developing, practicing and strengthening the skills historians use while constructing knowledge in the discipline. This course is one of the statewide Guaranteed Transfer courses, GT-HI1

HIS 1220 - U.S. History Since the Civil War: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 122 Explores events, trends, peoples, groups, cultures, ideas and institutions in United States history, including the multiple perspectives of gender, class and ethnicity, between the period of the American Civil War and the present. Focuses on developing, practicing and strengthening the skills historians use while constructing knowledge in the discipline. This course is one of the statewide Guaranteed Transfer courses, GT-HI1.

HIS 1310 - Western Civilization: Antiquity-1650: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 101 Explores a number of events, peoples, groups, ideas, institutions and trends that have shaped western civilization from the prehistoric era to 1650. Reflects the multiple perspectives of gender, class, religion and ethnic groups. Focuses on developing, practicing and strengthening the skills historians use while constructing knowledge in this discipline. This course is one of the statewide Guaranteed Transfer courses, GT-HI1.

HIS 1320 - Western Civ: 1650-present: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 102 Explores a number of events, peoples, groups, ideas, institutions and trends that have shaped western civilization from 1650 to the present. Reflects the multiple perspectives of gender, class, religion and ethnic groups. Focuses on developing, practicing and strengthening the skills historians use while constructing knowledge in this discipline. This course is one of the statewide Guaranteed Transfer courses, GT-HI1.

HIS 2015 - 20th Century World History: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 247 Investigates the major political, social and economic developments, international relationships, scientific breakthroughs, and cultural trends that have shaped the various global regions and nation-states from 1900 to the present. Emphasizes the interactions of global regions and nation-states. This course is one of the statewide Guaranteed Transfer courses, GT-HI1.

HIS 2075-2077 - Special Topics

Credit(s): 0-12
Formerly HIS 275-277 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

HIS 2080 - Internship

Credit(s): 3
Internship Hour(s): 9
Prerequisite(s): Department approval 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.

HIS 2115 - American Indian History: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 208 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 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. This is a statewide Guaranteed Transfer course in the GT-HI1 category. GT-HI1

HIS 2135 - Colorado History: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 225 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 and mountain men, the gold rush, railroad builders, the cattlemen and farmers, the silver boom, the tourists and the modern state. This course is one of the statewide Guaranteed Transfer courses, GT-HI1.

HIS 2300 - The Middle Ages

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 255 Focuses on 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 is a statewide Guaranteed Transfer course in the GT-HI1 category. GT-HI1

Horticulture

HLT 1000 - Horticulture Science

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Formerly HLT 100 Introduces students to the principles of the plant science as they relate to horticulture. The course emphasizes the application of plant sciences to the propagation, improvement, culture and utilization of horticultural plants.

HLT 1060 - Greenhouse Management

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Formerly HLT 160 Covers greenhouse design, systems, management and the major greenhouse crops and their cultural needs.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

HLT 1075 - Special Topics

Credit(s): 0-12
Formerly HLT 175 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

HLT 1101 - Introduction to Horticulture

Credit(s): 4
Lecture Hour(s): 4
Formerly HLT 101 Introduces the biology of horticultural plants and basic horticultural practices. (60 contact hours)

HLT 2008 - Pesticide Safety and Use

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Formerly HLT 208 Familiarizes students with the safe handling of pesticides used in horticulture and the laws and regulations that govern all facets of pesticide use in Colorado. Can be used as preparation for completing the Colorado Department of Agriculture's pesticide licensure exams.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

HLT 2021 - Woody Landscape Plants I

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly HLT 221 Discusses the identification (common and botanical names), landscape usage and culture of regionally adapted plants. This course discusses deciduous shade and ornamental trees and conifers (evergreen trees and shrubs).

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

HLT 2022 - Woody Landscape Plants II

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly HLT 222 Discusses the identification (common and botanical names), landscape usage and culture of regionally adapted plants. This course discusses deciduous and evergreen broadleaf shrubs and vines.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

HLT 2023 - Annuals, Bulbs, and Grasses

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Formerly HLT 223 Discusses the identification (common and botanical names), landscape usage and culture of annuals, bulbs and perennial and annual grasses common to Colorado landscapes.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

HLT 2075 - Special Topics

Credit(s): 0-12
Formerly HLT 275 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

Hospitality Studies

HOS 1005 - Introduction to Management in the Hospitality Industry

Credit(s): 3
Lecture Hour(s): 3
Formerly HOS 105 Describes the history, development and operation of the hospitality industry, including careers in the industry, management practices, accounting procedures, destinations and lodging.

HOS 1010 - Introduction to Hospitality

Credit(s): 3
Lecture Hour(s): 3
Formerly HOS 110 Introduces learners to careers and the organization and structure of the hospitality industry, including hotels, restaurants, noncommercial food service, travel and tourism, conventions and meetings, clubs and other food service entities. Topics include exploring career opportunities, understanding the world of hotels and restaurants, food service organizational structures, an introduction to the meetings industry, and analyzing the size and scope of the noncommercial foods segment.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

HOS 1022 - Travel Destinations in the Western Hemisphere

Credit(s): 3
Lecture Hour(s): 3
Formerly HOS 122 Introduces geography concepts such as time zones, weather patterns, map skills and geology to the students. This in-depth study of the western hemisphere, including North and South America and the Caribbean, will be considered from the perspective of the hospitality professional.

HOS 1023 - Travel Destinations in the Eastern Hemisphere

Credit(s): 3
Lecture Hour(s): 3
Formerly HOS 123 Continues HOS 122, Travel Destinations in the Western Hemisphere, and will complete the

examination of the world. The eastern hemisphere, including Europe, Asia, the Middle East, Africa, Australia and Oceania will be studied from the perspective of the hospitality professional.

HOS 1031 - Planning for Special Events

Credit(s): 3
Lecture Hour(s): 3
Formerly HOS 131 Provides a basic knowledge of the planning and development of an event or meeting, including the budgeting, arranging of entertainment and catering, and the lodging of participants.

HOS 1041 - Convention Management

Credit(s): 3
Lecture Hour(s): 3
Formerly HOS 141 Prepares students for a management position in the convention industry. The course defines the scope and segmentation of the convention and group business market, describes marketing and sales strategies to attract markets with specific needs, and explains techniques to meet those needs as part of meeting and convention service. The class meets for a total of 45 hours. At the conclusion of the course, students will take a nationally recognized test from the Educational Institute of the American Hotel and Lodging Association.

HOS 1075-1077 - Special Topics

Credit(s): 0-12
Formerly HOS 175-177 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

HOS 2007 - Tour Management

Credit(s): 3
Lecture Hour(s): 3
Formerly HOS 207 Develops a basic understanding of the role and function of a tour conductor.

HOS 2075 - Special Topics

Credit(s): 0-12
Formerly HOS 275 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

Humanities

HUM 1003 - Introduction to Film Art: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Formerly HUM 103 Studies the relationships among film's stylistic systems, narrative systems and audience reception. Students view, discuss and critically analyze a variety of films which represent a variety of genres and themes. The course incorporates the vocabulary of stylistic systems (for instance, cinematography and editing) and narrative systems (for instance, story structure and character motivation) as both relate to the kinds of meanings a film conveys. This course is approved as part of the Colorado Statewide Guaranteed transfer curriculum: GT:AH2.

HUM 1015 - World Mythology: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Formerly HUM 115 Introduces students to a multidisciplinary approach to world mythology. Common themes are illustrated and connected to religion, philosophy, art, literature, music and contemporary culture. In addition, students will study various ways of interpreting myth. This course is one of the statewide Guaranteed Transfer courses. GT-AH2.

HUM 1021 - Humanities: Early Civilization: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Formerly HUM 121 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 prehistoric to the early medieval era. This course is one of the statewide Guaranteed Transfer courses. GT-AH2.

HUM 1022 - Humanities: Medieval - Modern: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Formerly HUM 122 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. This is a statewide Guaranteed Transfer course in the GT-AH2 category. GT-AH2

HUM 1023 - Humanities: Modern World: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Formerly HUM 123 Examines the cultures of the 17th through the 20th centuries by focusing on the interrelationships of the arts, ideas, and history. Considers the influences of industrialism, scientific development and non-European peoples. This course is one of the statewide Guaranteed Transfer courses. GT-AH2.

HUM 1031 - The Arts and Cultures of Mexico

Credit(s): 3
Lecture Hour(s): 3
Formerly HUM 131 Introduces students, through visual arts, music and literature to attitudes toward the sacred and toward power (political, economic, social, religious) held by various cultures in Mexico from the Pre-Hispanic era to the mid-twentieth century.

HUM 1075 - Special Topics

Credit(s): 0-12
Formerly HUM 175 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

HUM 1075-1077 - Special Topics

Credit(s): 0-12
Formerly HUM 175-177 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

HUM 2036 - North American Indian Arts

Credit(s): 3
Lecture Hour(s): 3
Formerly HUM 236 Focuses on North American Indian music, dance, architecture, painting, sculpture, pottery and fashions through a study of the literature of Indian cultures in North America.

HUM 2037 - Hispanic Arts of the American Southwest

Credit(s): 3
Lecture Hour(s): 3
Formerly HUM 237 Examines the history, visual arts and permanency of the Hispanic culture of the American Southwest. Through the study of historical sequences, major artistic expressions dating from 1598 and aspects of literature of the contemporary Hispanic society students will gain an insight into the Hispanic cultural contributions to the Southwest.

HUM 2038 - Sacred Images, Sacred Spaces: Southwestern US

Credit(s): 3
Lecture Hour(s): 3
Formerly HUM 238 Examines the historical, social, geographical and cultural forces that influenced the design and presentation of sacred images in several Southwestern U.S. cultures. Students will study stylistic features of images in various media in relation to the sacred spaces where they are displayed or employed in rituals.

HUM 2066 - Documentary Film: from Traditional to Experimental

Credit(s): 3
Lecture Hour(s): 3
Formerly HUM 266 Explores documentary film as art form, cultural artifact, and rhetorical strategy.

Industrial Technology Maintenance

ENY 1000 - Introduction to Energy Technologies

Credit(s): 3
Lecture Hour(s): 3
Formerly ENY 101 Introduces the energy technologies in use today and those that are in the research stage as possible alternatives. Presents technologies including active solar heating, passive solar heating, wind energy systems, biomass, photovoltaics, co-generation, low and high head hydro, hydrogen, geothermal, power towers and energy storage systems.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

ENY 1075-1077 - Special Topics

Credit(s): 0-12
Formerly ENY 175-177 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

ENY 1621 - Solar Photovoltaic Components

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Corequisite(s): ELT 1206
Formerly ENY 121 Reinforces basic safety principles and provides detailed knowledge of photovoltaic components. Also covered is an overview of site analysis and special purpose tools. Upon successful conclusion of this course the student will be able to select proper components for a photovoltaic system based on regulatory codes and standards and individual component specifications.

ENY 1632 - NABCEP Entry Level Prep Class

Credit(s): 1
Vocational Lab Hour(s): 1.5
Prerequisite(s): Department approval required
Formerly ENY 132 Reviews the knowledge needed by the student to permit passing the NABCEP Entry level test. This is an overview class only and is not meant to be a replacement for the actual class.

ENY 1655 - Solar Photovoltaic Field Lab Experience

Credit(s): 2
Vocational Lab Hour(s): 3
Prerequisite(s): Department approval required
Formerly ENY 165 Onsite / hands-on training experience for students. Experiences include on-site installations, inspection tours, mock-roof training installations, industry association meetings, field experience workshops.

ENY 1702 - Building Energy Audit Tech

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly ENY 102 Teaches the principles of building energy audit techniques to include diagnostic software. During the course the student will perform an energy audit. As a result of the audit, he/she will be able to recommend application of the most appropriate energy-saving treatments such as insulation, windows, appliances and HVAC equipment.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

IMA 1400 - Basic Fluid Power

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly IMA 160 Provide an understanding of the fundamentals of fluid power, hydraulic transmission of force and energy, operation at the suction side of the pump, petroleum based hydraulic fluids, fire resistant hydraulic fluids, flow rates and velocity, properties of hydraulic fluids, and the function and construction of basic elements of a hydraulic or fluid power system. The course will cover hydraulic symbols and prints used in industry.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

IMA 1500 - Pump, Seals, Rotating Equipment

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly IMA 120 Explains the theory and operation of various types of pumps and compressors in common use in the process and energy supply industries. Mechanical power transmission systems, including direct coupling and v-belt drives, are studied. The principles involved in the operation of centrifugal and positive displacement pumps and compressors will be discussed, along with the function of various components in pumps and compressors, disassembly and reassembly of pumps, compressors and mechanical drives, and troubleshooting pumps and compressors.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

Jewelry Repair and Design

JRD 1002 - Beginning Stone Setting I

Credit(s): 3
Art Studio Hour(s): 6
Prerequisite(s): Successful completion of ART 1604 or Department Chair Approval.
Formerly JRD 102 Introduces basic stone-setting procedures and techniques.See "ART".

JRD 1011 - Jewelry Shop I

Credit(s): 3
Art Studio Hour(s): 6
Prerequisite(s): Successful completion of ART 1604 or Department Chair Approval.
Formerly JRD 111 Introduces the student to hand fabrication techniques used in a jewelry and metalsmithing shop. See "ART".

JRD 1012 - Jewelry Shop II

Credit(s): 3
Art Studio Hour(s): 6
Prerequisite(s): Successful completion of ART 1604 or Department Chair Approval.
Formerly JRD 112 Investigates advanced approaches in jewelry techniques, emphasizing the merging of hand-fabricated forms with casting in jewelry shop work.See "ART".

JRD 2015 - Jewelry Design I

Credit(s): 3
Art Studio Hour(s): 6
Prerequisite(s): Successful completion of ART 1604 or Department Chair Approval.
Formerly JRD 215 Introduces custom jewelry design procedures and techniques.See "ART".

JRD 2016 - Jewelry Design II

Credit(s): 3
Art Studio Hour(s): 6
Prerequisite(s): Successful completion of ART 1604 or Department Chair Approval.
Formerly JRD 216 Emphasizes advanced jewelry design techniques and practices as they relate to artistic and custom projects.See "ART".

JRD 2018 - Jewelry Presentation and Photography

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Department Chair Approval.
Formerly JRD 218 Focuses on basic presentation techniques, display design and photography procedures for jewelry work.See "ART".

JRD 2021 - Jewelry Portfolio

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): Department Chair Approval.
Formerly JRD 221 Emphasizes the jewelry portfolio from the design concept and layout to the finished product.See "ART".

JRD 2075 - Special Topics

Credit(s): 0-12
Formerly JRD 275 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.See "ART".

JRD 2080 - Internship

Credit(s): 3
Internship Hour(s): 9
Prerequisite(s): Department Chair Approval.
Formerly JRD 280 Places the jewelry student in a repair shop for actual repair experience.See "ART".

Journalism

JOU 1005 - Introduction to Mass Media: GT SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly JOU 105 Places the mass media in a historical and cultural perspective, considering the validity, integrity and influence of the media in a democracy. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

JOU 1006 - Media News and Reporting

Credit(s): 3
Lecture Hour(s): 3
Formerly JOU 106 Introduces newswriting, reporting and interviewing with an emphasis on clarity, accuracy, completeness, timeliness and fairness.

JOU 1075 - Special Topics

Credit(s): 0-12
Formerly JOU 175 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

JOU 2006 - Intermediate Newswriting and Editing

Credit(s): 3
Vocational Lab Hour(s): 4.50
Prerequisite(s): JOU 1005, ENG 1021, or Department Chair Approval
Formerly JOU 206 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 2025 - New Media

Credit(s): 3
Lecture Hour(s): 3
Formerly JOU 225 Explores techniques and approaches in the latest delivery methods for new media journalism, ethics, technological advances, and media literacy.

JOU 2075 - Special Topics

Credit(s): 0-12
Formerly JOU 275 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

Law Enforcement Academy

LEA 1001 - Basic Police Academy I

Credit(s): 6
Lecture Hour(s): 6
Formerly LEA 101 Conforms to POST standards and state certification requirements as well as the basic skills and knowledge necessary to perform the entry-level duties of a peace officer. Emphasis will be on simulating actual situations utilizing a lecture and laboratory mode of learning.

LEA 1002 - Basic Police Academy II

Credit(s): 12
Lecture Hour(s): 12
Formerly LEA 102 Conforms to POST standards and state certification requirements as well as the basic skills and knowledge to perform the entry-level duties of a peace officer. Emphasis will be on simulating actual situations utilizing a lecture and laboratory mode of learning.

LEA 1003 - Basic Law Enforcement Academy III

Credit(s): 2
Lecture Hour(s): 0.50

Vocational Lab Hour(s): 2.25
Formerly LEA 103 Enhances the standards established by the POST 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 POST curriculum to create a unique learning experience.

LEA 1005 - Basic Law

Credit(s): 8
Lecture Hour(s): 8
Formerly LEA 105 Conforms to POST standards and state certification requirements as well as the basic skills and knowledge necessary to perform the entry-level duties of a peace officer. Emphasis will be on United States Constitution, arrest, search and seizure, interrogation and confessions, rules of evidence, Colorado Criminal Code, Colorado Traffic Code, Colorado Children's Code, Liquor Code and controlled substances.

LEA 1006 - Arrest Control Techniques

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly LEA 106 Covers the skills, knowledge and abilities necessary to effectively maintain control of a suspect when making an arrest. Emphasizes the continuum of force and de-escalation of force.

LEA 1007 - Law Enforcement Driving

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly LEA 107 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

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly LEA 108 Discusses the skills, knowledge and abilities necessary to safely use police firearms. Students will demonstrate skills by firing weapons on a firing range. The student will demonstrate basic safety techniques and will explain the firearms role within the continuum of force.

LEA 1018 - Report Writing

Credit(s): 3
Lecture Hour(s): 3
Formerly LEA 118 Identifies the areas of concern in regards 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.

LEA 1075 - Special Topics

Credit(s): 0-12
Formerly LEA 175 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

Library Technician

LTN 1001 - Introduction to Library Services

Credit(s): 3
Lecture Hour(s): 3
Formerly LTN 101 Introduces libraries and their procedures through research, vocabulary, readings and assignments. Identifies current tools such as wikis, blogs, podcasting, interactive web pages and other online services. Presents resources for library technicians.

LTN 1010 - Selection and Acquisitions

Credit(s): 3
Lecture Hour(s): 3
Formerly LTN 110 Introduces the student to the tools, vendors, jobbers and approval plans that comprise the selection process. In addition, the student is introduced to acquisitions policy. The student engages in a course project whereby he/she applies a collection evaluation methodology to a section of a library collection and locates and recommends replacement titles.

LTN 1015 - Library Circulation

Credit(s): 3
Lecture Hour(s): 3
Formerly LTN 115 Discusses customer service and circulation issues and procedures. Students will learn the role of customer service and the effects that automation has had on the circulation function of the library.

LTN 2005 - Introduction to Cataloging & Classification

Credit(s): 3
Lecture Hour(s): 3
Formerly LTN 205 Introduces the library organization, how to use Dewey and Sears subject headings, elements of cataloging, practice in the use of Dewey and the Library of Congress classification systems, use of cutter tables, subject classification, accession numbers, and bar codes. Basic philosophy, procedures, tools and techniques for library routines are emphasized.

LTN 2010 - Reference Materials

Credit(s): 3
Lecture Hour(s): 3
Formerly LTN 210 Teaches how to select reference materials, how to use at least 100 reference resources, the reference interview, and the role of resource sharing (interlibrary loan) in reference. Students will prepare a bibliography of the 100 titles they would want in their reference collection and 10 online sources they find useful.

LTN 2020 - Library/Media Center Management & Public Relations

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of LTN 1001.
Formerly LTN 220 Includes budget preparation, how to work with staff, the public, and administrators, and the use of statistics.

LTN 2075 - Special Topics

Credit(s): 0-12
Formerly LTN 275 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

Literature

LIT 1015 - Introduction to Literature I: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly LIT 115 Introduces students to fiction, poetry and drama. Emphasizes active and responsive reading. This course is one of the statewide Guaranteed Transfer courses, GT-AH2.

LIT 1026 - Study of Poetry

Credit(s): 3
Lecture Hour(s): 3
Formerly LIT 126 Focuses on careful reading and interpretation of various poems representing types and periods of poetry. It examines formal as well as thematic elements of poetry. Critical thinking, discussion and writing about poetry will enhance perceptive reading skills and heighten awareness of the human condition.

LIT 1075 - Special Topics

Credit(s): 0-12
Formerly LIT 175 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

LIT 2001 - World Literature to 1600: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): ENG 1021.
Formerly LIT 201 Examines significant writings in world literature from the ancients through the Renaissance. Emphasizes careful readings and understanding of the works and their cultural backgrounds. This course is one of the statewide Guaranteed Transfer courses, GT-AH2.

LIT 2002 - World Literature After 1600: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): ENG 1021.
Formerly LIT 202 Examines significant writings in world literature from the 17th century to the present. Emphasizes careful reading and understanding of the works and their cultural backgrounds. This course is one of the statewide Guaranteed Transfer courses, GT-AH2.

LIT 2005 - Race. Ethnicity, and Culture in U.S. Literature: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Formerly LIT 205 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. This is a statewide Guaranteed Transfer course in the GT-AH2 category. GT-AH2

LIT 2011 - American Literature to Civil War: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): ENG 1021.
Formerly LIT 211 Provides an overview of American literature from the Native American through the 19th-century Romantics. It explores ideas, historical and social contexts, themes and literary characteristics of works in various genres by major writers. This course is one of the statewide Guaranteed Transfer courses, GT-AH2.

LIT 2012 - American Literature After Civil War: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): ENG 1021.
Formerly LIT 212 Provides an overview of American literature from the mid-19th century to the present. It explores ideas, historical and social contexts, themes and literary characteristics of works in various genres by major writers. This course is one of the statewide Guaranteed Transfer courses, GT-AH2.

LIT 2025 - Introduction to Shakespeare: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at ENG 1021 level or consent of instructor.
Formerly LIT 225 Explores a selection of works by William Shakespeare. It focuses on careful reading and interpretation of the plays and poems, includes pertinent information about Elizabethan England, and examines formal as well as thematic elements of the selected works. This course is one of the statewide Guaranteed Transfer courses. GT-AH2.

LIT 2046 - Literature of Women: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Formerly LIT 246 Examines the techniques and themes in literature by and about women by examining women's issues from various genres. This course is one of the statewide Guaranteed Transfer courses, GT-AH2.

LIT 2055 - Children's Literature

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the Composition I level
Formerly LIT 255 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 GT:AH2

LIT 2057 - Literature and Film

Credit(s): 3
Lecture Hour(s): 3
Formerly LIT 257 Examines the relationship between literature and motion pictures, emphasizing the technique and interpretive function of filmmakers.

LIT 2059 - Survey of African American Literature

Credit(s): 3
Lecture Hour(s): 3
Formerly LIT 259 Examines African American literature from 1750 to the present. This is a statewide Guaranteed Transfer course in the GT-AH2 category.

LIT 2068 - Celtic Literature

Credit(s): 3
Lecture Hour(s): 3
Formerly LIT 268 Exposes the student to Celtic literature. The course examines significant writings in Celtic literature from the ancients through to the twenty-first century. The course emphasizes the careful reading and understanding of the works of poetry, fiction, and drama as well as their cultural backgrounds. This is a statewide Guaranteed Transfer course in the GT-AH2 category.

LIT 2069 - Popular Literature and Culture

Credit(s): 3
Lecture Hour(s): 3
Formerly LIT 269 Explores special interests in literature, such as detective fiction and science fiction.

LIT 2075 - Special Topics

Credit(s): 0-12
Formerly LIT 275 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

Machining

MAC 1000 - Machine Shop Safety

Credit(s): 1
Lecture Hour(s): 1
Formerly MAC 100 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 1002 - Print Reading for Machinists

Credit(s): 3
Lecture Hour(s): 3
Formerly MAC 102 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 1005 - Introduction to Machining Technology

Credit(s): 4
Lecture Hour(s): 1.50
Vocational Lab Hour(s): 3.75
Formerly MAC 105 Introduces the student to the changing era of machining technology, emphasizing terminology, referencing and applications related to manufacturing environments. The fundamental use of bench tools, layout procedures, materials, precision measuring tools, machining processes, drilling and cut-off machines and other machining/manufacturing processes will be stressed. Skill competencies and standards will be identified. Use of the Machinery's Handbook will be strictly required and particular competencies may require performance evaluations.

MAC 1030 - Conventional Lathe Operations

Credit(s): 4
Lecture Hour(s): 1.50
Vocational Lab Hour(s): 3.75
Formerly MAC 130 Includes calculation of speeds and feeds on various materials, identification and application of various work holding techniques, tool forming, advanced machining practices and applications, and spindle tooling. Students will learn how to calculate and turn tapers using the compound slide or taper attachment, offset work on a four jaw chuck, turning between centers, boring, grooving, finishing, single point threading, knurling, tool grinding, drilling operations, and reaming.

MAC 1031 - Milling Machines & Operations

Credit(s): 4
Lecture Hour(s): 1.50
Vocational Lab Hour(s): 3.75
Formerly MAC 131 Introduces vertical milling machines. The operations and applications will consist of using the machine controls, speeds and feeds, spindles, arbors and adapters cutting tools, tool holders, conventional and climb milling applications simple indexing, fixture alignments, work holding methods. Students will become familiar with set-up applications considering offset boring operations, face milling, plain milling, and precision drilling applications. Students will be required to produce parts to a tolerance of +/- .004in. and perform competencies set by manufacturing standards.

MAC 1041 - Advanced Machining Operations

Credit(s): 4
Lecture Hour(s): 1.50
Vocational Lab Hour(s): 3.75
Formerly MAC 141 Provides the student the use of various conventional machine tools used in a machine shop environment. The use of engine lathes, horizontal and vertical milling machines, surface grinders, drill presses, pedestal grinders, power cut-off saws and other machine tools commonly used to produce quality machined parts in today 's manufacturing environments. Machining competencies will be stressed and students will be required to produce parts manufactured by local manufacturing companies with the consideration of ISO quality standards.

MAC 1075 - Special Topics

Credit(s): 0-12
Formerly MAC 175 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

MAC 2003 - Introduction to CNC Operations

Credit(s): 6
Lecture Hour(s): 2
Vocational Lab Hour(s): 6
Formerly MAC 203 Introduces basic writing and editing of CNC programs. G&M codes, math, speeds feeds, production processes including basic process controls, simple fixturing, and documentation associated with manufacturing will be covered.

MAC 2008 - CNC Operations II

Credit(s): 6
Lecture Hour(s): 2
Vocational Lab Hour(s): 6
Formerly MAC 208 Further develops skills in writing and editing advanced CNC programs. G&M codes, math, speeds deeds, production processes including multi-part, process controls, fixturing, and documentation associated with manufacturing will be covered.

MAC 2041 - CAD CAM 2D Lab

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly MAC 241 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 remachining operations. Coursework will primarily focus on 2D geometry projects.

MAC 2043 - Mastercam

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Formerly MAC 243 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 2050 - Advanced Inspection Techniques

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly MAC 250 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.

MAC 2056 - Industrial Components

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50

Formerly MAC 256 Covers common mechanical components used on industrial equipment. It is designed to assist maintenance staff in removal, installation and maintenance of plant equipment. It includes safety, fits, threads, bearings, fasteners, and hardware, lubrication, assembly and the use of hand tools.

MAC 2065 - Mechanical Component II

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly MAC 265 Covers common mechanical components used on industrial equipment. It is designed to assist maintenance staff in removal, installation and maintenance of plant equipment. It includes coupling, vibration, shafting, keys and keyways, belts and chain drives, gears and gear drive, and seals.

MAC 2075 - Special Topics

Credit(s): 0-12
Formerly MAC 275 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

Management

MAN 1002 - Business Ethics and Values

Credit(s): 1
Lecture Hour(s): 1
Formerly MAN 102 Discusses behavior and identifies what is ethical and appropriate behavior and what is not. This course will identify the role of integrity, character, honesty, selfcontrol, self-sacrifice and core values in developing ethical and effective behavior in the workplace.

MAN 1003 - Managing Business Change

Credit(s): 1
Lecture Hour(s): 1
Formerly MAN 103 Explores how change in the workplace affects employees and customers. A description of how cultures promote behaviors will be presented. The changing roles of men and women and their impact on the workplace will be discussed and analyzed.

MAN 1004 - Managing Workplace Stress

Credit(s): 1
Lecture Hour(s): 1
Formerly MAN 104 Defines stress in both positive and negative effects. A discussion on how it effects both employees and the workplace. Causes of stress are identified and methods for managing stress are researched and practiced.

MAN 1005 - Logistics Management

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): MTE 1101,OR CIS 1018.
Formerly MAN 105 Explores the logistic system from inbound movement of materials and freight into the

organization, through physical distribution of the completed product to the consumer. Transportation systems, government regulations, material handling, inventory management and distribution centers are covered.

MAN 1016 - Principles of Supervision

Credit(s): 3
Lecture Hour(s): 3
Formerly MAN 116 Studies the principles and techniques of supervising and motivating personnel. This course is designed for students who are interested in supervising others or for those currently in supervision. Course content focuses on the human interaction in supervision.

MAN 1017 - Time Management

Credit(s): 1
Lecture Hour(s): 1
Formerly MAN 117 Provides students with the conceptual knowledge and tools to make better use of their time in the management function.

MAN 1025 - Team Building

Credit(s): 1
Lecture Hour(s): 1
Formerly MAN 125 Introduces the concept of working as a team member. Activities and assignments will emphasize the ability to negotiate, work together, build consensus and make quality decisions.

MAN 1026 - Total Quality Management

Credit(s): 3
Lecture Hour(s): 3
Formerly MAN 126 Covers the rationale for, method of implementing and key characteristics of TQM. Topics include developing a vision of a quality culture, strategic planning for implementation, customer focus, supplier relationships, benchmarking, continuous improvement, employee empowerment and teamwork. Through case studies students learn to apply TQM in manufacturing and service environments.

MAN 1028 - Human Relations in Organizations

Credit(s): 3
Lecture Hour(s): 3
Formerly MAN 128 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 1075-1077 - Special Topics

Credit(s): 0-12
Formerly MAN 175-177 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

MAN 2000 - Human Resource Management I

Credit(s): 3
Lecture Hour(s): 3
Formerly MAN 200 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 2001 - Human Resource Management II

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): MAN 2000.
Formerly MAN 201 Offers a strategic discussion of concepts of human resources utilizing practical application and theory. Emphasizes human resource trends, equal opportunity and safety, workforce training and development, appraising and improving performance, labor relations, legal and global issues in human resources.

MAN 2015 - Organizational Behavior

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): MAN 1028.
Formerly MAN 215 Introduces the behaviors of groups and individual members of organizations and how to influence their behavior. Emphasis is on the tools managers use to achieve organizational effectiveness.

MAN 2016 - Small Business Management

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): MAT 1140
Formerly MAN 216 Examines the elements necessary for the successful formation of a new small business. It is also designed 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 2024 - Leadership

Credit(s): 3
Lecture Hour(s): 3
Formerly MAN 224 Focuses on the leadership skills for contemporary organizations. Covers development and communication a shared vision to motivate and empower employees to manage conflict, to negotiate, and to develop teams.

MAN 2025 - Managerial Finance

Credit(s): 3
Lecture Hour(s): 3
Formerly MAN 225 Examines the concepts and techniques used to analyze financial accounting information for managerial planning, decision making and control. The focus of the course is on decision-making relating to the areas of budgets, forecasts, cost volume production, ROI and financial statements.

MAN 2026 - Principles of Management

Credit(s): 3
Lecture Hour(s): 3
Formerly MAN 226 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 2041 - Project Management in Organizations

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Prerequisite(s): MAT 1140
Formerly MAN 241 Introduces students to the planning, implementation and control activities of project management, including project and performance evaluation, quality control and work flow analysis. Emphasis will be on the initiating, planning, executing, controlling and closing activities of project management.

MAN 2075-2077 - Special Topics

Credit(s): 0-12
Formerly MAN 275-277 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

MAN 2089 - Capstone: Management Information Systems

Credit(s): 3
Internship Hour(s): 9
Formerly MAN 289 Utilizes Seminar and simulation techniques in management information systems. Management concepts and principles are applied to both situational and comprehensive case problems.

Manufacturing Technology

MTE 1075-1077 - Special Topics

Credit(s): 0-12
Formerly MTE 175-177 Provides student with a vehicle to pursue in-depth exploration of a special topic of interest.

MTE 1075-1077 - Special Topics

Credit(s): 0-12
Formerly MTE 175-177 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

MTE 1100 - Print Reading Manufacturing

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly MTE 106 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

Credit(s): 3
Lecture Hour(s): 3
Formerly MTE 101 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

Credit(s): 1
Lecture Hour(s): 1
Formerly MTE 105 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 1110 - Applied Communication and Teamwork in Industry

Credit(s): 3
Lecture Hour(s): 3
Formerly MTE 110 Provides the student with an in-depth focus on the fundamental concepts and approaches required by industry to establish strong comprehensive and recognized skills in the areas of critical thinking, emotional intelligence, team dynamics, leadership roles, conflict resolution and results-oriented communication skills. This course is taught from a contextualized format.

MTE 1200 - Manufacturing Processes

Credit(s): 3
Lecture Hour(s): 3
Formerly MTE 120 Provides an overview of the different methods, tools, and machines which are used to manufacture industrial and consumer products.

MTE 1220 - Lean Manufacturing Prac/Proc

Credit(s): 3
Lecture Hour(s): 3
Formerly MTE 244 Focuses on the study of the Toyota Production System (TPS).

MTE 2089 - Manufacturing Capstone

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Instructor's approval only.
Formerly MTE 289 Provides a demonstrated culmination of learning with a given program of study.

MTE 2320 - Fluid Power Control

Credit(s): 3
Lecture Hour(s): 1

Vocational Lab Hour(s): 3
Formerly MTE 238 Introduces fluid power application in industry and various types of industrial control devices used in modern manufacturing equipment and machinery. Enables the student to produce the graphics required to incorporate these items into a mechanical design.

MTE 2330 - Strength of Materials

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): EGG 2071.
Formerly MTE 247 Serves as an extension of Statics and includes the study of mechanical properties of materials and their limitations in engineering design by the study or stresses, strains, torsion forces, shear forces and deflections placed upon these materials.

Marketing

MAR 1058 - Basic Customer Service

Credit(s): 1
Lecture Hour(s): 1
Formerly MAR 158 Focus on basic concepts and techniques needed to effectively serve customers. Specific emphasis given to manage customer expectations by building customer rapport and create positive outcomes.

MAR 1060 - Customer Service

Credit(s): 3
Lecture Hour(s): 3
Formerly MAR 160 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 1075 - Special Topics

Credit(s): 0-12
Formerly MAR 175 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

MAR 2016 - Principles of Marketing

Credit(s): 3
Lecture Hour(s): 3
Formerly MAR 216 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

Credit(s): 3
Lecture Hour(s): 3
Formerly MAR 220 Examines the principles and practices of advertising and its relationship to business in order to promote a business or organization. Areas of major emphasis include advertising principles, strategies, media, copy and layout, and ethical considerations.

MAR 2075 - Special Topics

Credit(s): 0-12
Formerly MAR 275 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

Math

MAT 0010 - Applied Quantitative Lab

Credit(s): 1
Academic Lab Hour(s): 2
Corequisite(s): MAT 1120, MAT 1140, MAT 1150, or MAT 1160.
Supports skill development for students registered in MAT 1120, MAT 1140, MAT 1150, or MAT 1160. Topics covered in the course include those defined in MAT 1001 / MAT 1120/ MAT 1140/ MAT 1150/MAT 1160and/or any prerequisite skills needed by the student. Students with Accuplacer scores EA 30-59 or AR 40+, who are advised into MAT 1120/ MAT 1140/ MAT 1150/MAT 1160, are required to co-enroll in this course.

MAT 0020 - Quant Lab

Credit(s): 1
Academic Lab Hour(s): 2
Corequisite(s): MAT 1240, MAT 1260, MAT 1220, or MAT 1230.
Supports skill development for students registered in MAT 1240, MAT 1260, MAT 1220, or MAT 1230. Topics covered in this course include those defined in MAT 1240/ MAT 1260/ MAT 1220/ MAT 1230and/or any prerequisite skills needed by the student. Students with Accuplacer scores EA 80-84, who are advised into MAT 1240, MAT 1260, MAT 1220, or MAT 1230, are required to co-enroll in this course.

MAT 0030 - Algebra Lab

Credit(s): 1
Academic Lab Hour(s): 2
Corequisite(s): MAT 1340.
Supports skill development for students registered in MAT 1340or MAT 1320. Topics covered in this course include those defined in MAT 1340/ MAT 1320and/or any prerequisite skills needed by the student. Students with Accuplacer scores EA 80-84, who are advised into MAT 1340/ MAT 1320, are required to co-enroll in this course.

MAT 0200 - Algebraic Literacy Lab

Credit(s): 1
Academic Lab Hour(s): 2
Corequisite(s): MAT 0300.
Supports skill development for students registered in MAT 0300 - Algebraic Literacy. Topics covered in this course include those defined in MAT 0300and/or any prerequisite skills needed by the student. For students with Accuplacer score EA 45-59, this course is a required corequisite with MAT 0300 - Algebraic Literacy.

MAT 0250 - Quantitative Literacy

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): Refer to Basic Skills Assessment.

Develops number sense and critical thinking strategies, introduces algebraic thinking, and connects mathematics to real-world applications. Topics in the course include ratios, proportions, percents, measurement, linear relationships, properties of exponents, polynomials, factoring and math learning strategies. This course prepares students for Math for Liberal Arts, Statistics, Integrated Math and college-level career math courses.

MAT 0300 - Algebraic Literacy

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): Refer to Basic Skills Assessment.
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 and inequalities, systems of linear equations, related applications and math learning strategies. This course prepares students for College Algebra and Finite Math. Developmental grading (D).

MAT 1075 - Special Topics

Credit(s): 0-12
Formerly MAT 175 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

MAT 1120 - Math for Clinical Calculations

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 103 Provides a review of general mathematics, introductory algebra and an opportunity to learn systems of measurement and methods of solving problems related to drug dosage and intravenous fluid administration. It is designed for students in the health disciplines. Topics may include algebra, graphs, measurement and conversion between various systems of measurement.

MAT 1140 - Career Math

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 107 Covers material designed for career technical or general studies students who need to study particular mathematical topics. Topics may include measurement, algebra, geometry, trigonometry, graphs and/or finance. These are presented on an introductory level and the emphasis is on applications.

MAT 1150 - Technical Mathematics

Credit(s): 4
Lecture Hour(s): 4
Formerly MAT 108 Covers material designed for career technical or general studies students who need to study particular mathematical topics. Topics may include measurement, algebra, geometry, trigonometry, graphs and/or finance. These are presented at an introductory level and the emphasis is on applications.

MAT 1160 - Financial Mathematics

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 112 Covers topics including pricing, taxes, insurance, interest, annuities, amortization, investments using financial calculators and spreadsheets.

MAT 1220 - Integrated Math I

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): MAT 0250.
Formerly MAT 155 Engages students in the concepts of school mathematics, including the recognition of numerical and geometric patterns and their application to a variety of mathematical situations; mathematical problem-solving, reasoning, critical thinking, and communication; algebraic thinking, representation, analysis, manipulation, generalizations and extensions. (This course is only offered in the fall semester.)

MAT 1230 - Integrated Math II

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): MAT 1220.
Formerly MAT 156 Furthers MAT 1220concepts and will include fundamentals of probability, statistics and Euclidean geometry. Mathematical problem-solving, reasoning, critical thinking and communication will continue to be an integral part of this sequence. (This course is only offered in the spring semester.)

MAT 1240 - Mathematics for the Liberal Arts: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 1001 concurrency allowed, or see Basic Skills Assessment
Formerly MAT 120 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. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 1260 - Introduction to Statistics: GT-MA1

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 135 Explores and applies data presentation and summarization, introduction to probability concepts and distributions, statistical inference estimation, hypothesis testing, comparison of populations, correlation and regression. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 1320 - Finite Mathematics: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 0300 or Equivalent Test Score.
Formerly MAT 123 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. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 1340 - College Algebra: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 0300.

Formerly MAT 121 Explores topics including intermediate algebra, equations, and inequalities, functions and their graphs, exponential and logarithmic functions, linear and nonlinear systems, selection of topics from among graphing of the conic sections, introduction to sequences and series permutations and combinations, the binomial theorem and theory of equations. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 1400 - Survey of Calculus: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 1340 or see Basic Skills Assessment
Formerly MAT 125 Includes derivatives, integrals, and their applications, with attention restricted to algebraic, exponential, and logarithmic functions for business, life science and/or social science majors.. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 1420 - College Trigonometry: GT-MA1

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): MAT 1340.
Formerly MAT 122 Covers topics including trigonometric functions (with graphs and inverse functions), identities and equations, solutions of triangles, complex numbers, and other topics as time permits. This is a traditional prerequisite course to the calculus sequence. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2075 - Special Topics

Credit(s): 0-12
Formerly MAT 275 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

MAT 2410 - Calculus I: GT-MA1

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): MAT 1420.
Formerly MAT 201 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. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2420 - Calculus II: GT-MA1

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): MAT 2410.
Formerly MAT 202 Continues the study of single variable calculus which will include techniques of integration, polar coordinates, analytic geometry, improper integrals and infinite series. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2430 - Calculus III: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 2420.

Formerly MAT 203 Focuses the traditional subject matter of the Calculus. Topics include vectors, vector-valued functions, and multivariable calculus including partial derivatives, multiple integrals, line integrals and application. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2431 - Calculus III with Engineering Applications: GT-MA1

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): Successful completion of MAT 2420 with a grade of C or better.
Formerly MAT 204 Focuses on the competencies established in MAT 2430 - Calculus III: GT-MA1with an additional emphasis on word problems and problem solving. This is the third course in the three-course calculus sequence. This course will additionally contain a thorough examination of multiple integration. This will include double and triple integrals, line integrals, Stokes' and Green's Theorems, and their applications. A graphing calculator is required for this course. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2520 - Discrete Mathematics: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): Successful completion of MAT 2410 with a C or better.
Formerly MAT 215 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

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of MAT 2410 with a grade of C or better.
Formerly MAT 255 Explores vector spaces, matrices, linear transformations, matrix representation, eigenvalues and eigenvectors.

MAT 2560 - Differential Equations: GT-MA1

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of MAT 2420 with a C or better.
Formerly MAT 265 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 2561 - Differential Equations with Engineering Applications: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): Successful completion of MAT 2420 with a grade of C or better.
Formerly MAT 261 This course introduces ordinary differential equations. The content of this course includes all the topics of MAT 2560 - Differential Equations: GT-MA1with an additional emphasis on applications and problem solving. A graphing calculator is required for this course. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

Medical Assistant Professional

MAP 1010 - Medical Office Administration

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): Department Chair Approval.
Formerly MAP 110 Introduces the administrative duties specifically used in medical offices.

MAP 1020 - Medical Office Financial Management

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): Department Chair Approval.
Formerly MAP 120 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

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Department Chair Approval.
Formerly MAP 150 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

Credit(s): 4
Internship Hour(s): 12
Prerequisite(s): Department Chair Approval.
Formerly MAP 183 Provides supervised placement in contracted facility for guided experience in application of knowledge and skill acquired in the classroom. The student assists with a variety of business and clinical procedures. Positions are nonpaid. Student must have permission by program coordinator to begin Internship.

MAP 2038 - Medical Assisting Laboratory

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 4
Prerequisite(s): Department Chair Approval.
Formerly MAP 138 Introduces the student to 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

Credit(s): 4
Lecture Hour(s): 2

Vocational Lab Hour(s): 4
Prerequisite(s): Department Chair Approval.
Formerly MAP 140 Provides hands-on experience with clinical skills required in medical offices. Delivers theory and skills presentations allowing for students to properly demonstrate techniques for a variety of medical needs.

MAP 2069 - Review for Medical Assistant National Exam

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): Department Chair Approval.
Formerly MAP 189 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, supporting quality care in the office or clinic.

Medical Office Technology

MOT 1025 - Basic Medical Sciences I

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Department Approval Required.
Formerly MOT 125 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

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Department Approval Required
Formerly MOT 133 Introduces the anatomy, physiology, pathophysiology, and drug therapy of the cardiovascular, respiratory, integumentary, and senses systems. The scope of the material is limited for the medical office technology personnel.

MOT 1027 - Basic Medical Sciences III

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Department Approval Required
Formerly MOT 135 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.

Meteorology

MET 1050 - General Meteorology: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly MET 150 Provides an introduction to general meteorology and atmospheric sciences. It includes the

composition and structure of the atmosphere and characteristics that affect the atmosphere, such as temperature, pressure and moisture. Additionally, the development of weather systems such as storm systems, hurricanes, weather fronts and cloud development will also be examined. Finally, concepts of climatology will be stressed. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

Music

MUS 1000 - Music Theory Fundamentals I

Credit(s): 3
Lecture Hour(s): 3
Formerly MUS 100 Introduces the basics of music theory. Course designed to help the beginning music student, or those students with limited background in music theory, study the basic elements of music. Topics include notation, rhythm, scales, key signatures, intervals, chords, beginning level melodic and rhythm dictation, ear-training and sight-singing skills.

MUS 1001 - Music Theory Fundamentals II

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of MUS 1000, or Department Chair Approval.
Formerly MUS 101 Continues the introduction of basics of music theory and builds upon skills developed in MUS 100. Course designed to help the beginning music student, or those students with limited background in music theory, study the basic elements of music, including notation, rhythm, scales, key signatures, intervals and chords. Course continues to develop beginning level melodic and rhythm dictation, ear-training and sight singing skills.

MUS 1012 - Ear Training/Sight-singing I Lab

Credit(s): 1
Music Studio Hour(s): 2.5
Formerly MUS 112 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 1020 - Music Appreciation: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly MUS 120 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

MUS 1021 - Music History Medieval Thru Classical Period: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly MUS 121 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

MUS 1022 - Music History Early Romantic Period to the Present: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly MUS 122 Provides an 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

MUS 1025 - History of Jazz: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly MUS 125 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

MUS 1031 - Music Class I: (specify)

Credit(s): 2
Music Studio Hour(s): 5
Formerly MUS 131 Provides group instruction in music, introducing basic techniques, repertoire, and sight-reading.

MUS 1032 - Music Class II: (specify)

Credit(s): 2
Music Studio Hour(s): 5
Formerly MUS 132 Provides group instruction in music, continuing to develop basic techniques, repertoire, and sight-reading.

MUS 1041 - Private Instruction (Specify)

Credit(s): Variable 1-2
Private Instruction Hour(s): .5-1
Prerequisite(s): Instructor or Department Chair Approval
Formerly MUS 141 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. First year, first term.

MUS 1042 - Private Instruction (Specify)

Credit(s): Variable 1-2
Private Instruction Hour(s): .5-1
Prerequisite(s): Instructor or Department Chair Approval
Formerly MUS 142 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. First year, second term.

MUS 1043 - Private Instruction (Specify)

Credit(s): Variable 1-2
Private Instruction Hour(s): .5-1
Prerequisite(s): Instructor or Department Chair Approval
Formerly MUS 143 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. First year, third term.

MUS 1044 - Private Instruction (Specify)

Credit(s): Variable 1-2
Private Instruction Hour(s): .5-1
Prerequisite(s): Instructor or Department Chair Approval
Formerly MUS 144 1 credit primarly 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. First year, fourth term. May be repeated for credit more than once per individual institution policy.

MUS 1051 - Ensemble I

Credit(s): 1
Music Studio Hour(s): 2.50
Formerly MUS 151 First year, first term. Rehearses and performs various types of musical literature.

MUS 1052 - Ensemble II

Credit(s): Variable 1-2
Private Instruction Hour(s): .5-1
Formerly MUS 152 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 1053 - Ensemble III

Credit(s): 1
Music Studio Hour(s): 2.5
Formerly MUS 153
Rehearses and performs various types of musical literature. First year, third term.

MUS 1075-1077 - Special Topics

Credit(s): 0-12
Formerly MUS 175-177 Provides students with a vehicle to pursue in depth exploration of Special Topics of interest.

MUS 1075-1077 - Special Topics

Credit(s): 0-12
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MUS 2041 - Private Instruction (Specify)

Credit(s): 1-2
Music Studio Hour(s): 2.50-5
Formerly MUS 241 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 2075 - Special Topics

Credit(s): 0-12
Formerly MUS 275 Covers specific topics in music. This course is offered as needed for credit appropriate to the topic and each offering includes a description of the topic(s).

Nail Technician

NAT 1008 - Introduction of Manicuring/Pedicures/Artificial Nails

Credit(s): 3
Vocational Clinic Hour(s): 6

Formerly NAT 108 Provides a basic introduction into the proper use of implements used in manicures, pedicures and artificial nails. Theory and practical application of proper set-up, safety, sanitation, nail shapes, anatomy, product knowledge and terminology dealing with manicures, pedicures and artificial nails is covered. Training is done in a classroom or lab setting using models or other techniques.

NAT 1010 - Introduction to Manicures & Pedicures

Credit(s): 3
Vocational Clinic Hour(s): 6

Formerly NAT 110 Provides a basic introduction in the proper use of implements used in manicures and pedicures. Theory and practical application of proper set-up, safety, sanitation, nail shapes, anatomy, product knowledge and terminology dealing with manicures and pedicures is covered. Training is done in a classroom or lab setting using models or other techniques.

NAT 1011 - Intermediate Manicures & Pedicures

Credit(s): 2
Vocational Clinic Hour(s): 4

Formerly NAT 111 Presents theory and practical application dealing with different types of manicures, pedicures, nail art and massage techniques. Theory and practical application of procedures, products, nail shapes and maintenance of natural nails is covered. Students learn to recognize different nail disorders and their proper treatment. Training is done in a specialized class or in supervised salon (clinical) setting, using models or customer service. Proper sanitation and sterilization as it pertains to all aspect of manicures, pedicures and nail art is taught.

NAT 1058 - Intermediate Manicuring/Pedicures/Artificial Nails

Credit(s): 2
Vocational Clinic Hour(s): 4

Formerly NAT 158 Presents theory and practical application dealing with different types of manicures, pedicures and massage techniques. Theory and practical application of procedures, products, nail shapes and maintenance of artificial nails is covered. Students learn to recognize different nail disorders and their proper treatment. Training is done in a specialized class or in supervised salon (clinical) setting, using models or customer service.

NAT 1059 - Intermediate Manicuring/Pedicures/Artificial Nails II

Credit(s): 2
Vocational Clinic Hour(s): 4

Formerly NAT 159 Presents theory and practical application dealing with different types of manicures, pedicures and massage techniques. Theory and practical application of procedures, products, nail shapes and maintenance of artificial nails is covered. Students learn to recognize different nail disorders and their proper treatment. Training is done in a specialized class or in supervised salon (clinical) setting, using models or customer service.

NAT 2008 - Advanced Manicuring/Pedicures/Artificial Nails

Credit(s): 4
Vocational Clinic Hour(s): 8

Formerly NAT 208 Provides advanced theory and practical application of manicures, pedicures and nail art techniques. Theory and advanced practical techniques of silk wraps, tip overlays, acrylics and product knowledge to ready the student for employment is presented. Instruction is provided in specialized classes or in supervised salon (clinical) setting using models or customer service. Student preparation for state board licensing examination pertaining to manicures and pedicures is covered.

NAT 2010 - Advanced Manicures & Pedicures

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): NAT 2011.
Formerly NAT 210 Presents theory and practical application dealing with different types of manicures, pedicures massage techniques and nail art. Theory and practical application of procedures, products, nail shapes and maintenance of the natural nails is covered. Students learn to recognize different nail disorders and their proper treatment. Training is done in a specialized class or in supervised salon (clinical) setting, using models or customer service.

NAT 2011 - Application of Artificial Nails

Credit(s): 5
Vocational Clinic Hour(s): 10

Prerequisite(s): NAT 1011.
Formerly NAT 211 Provides advanced theory and practical application of nail wraps, tip overlays, acrylics and product knowledge to ready the student for employment. Theory and practical application of removal techniques for artificial

nails is covered. Instruction is provided in specialized classes or in supervised salon (clinical) setting using models or customer service. Student preparation for state board licensing examination pertaining to artificial nails is covered.

NAT 2075 - Special Topics

Credit(s): 0-12
Formerly NAT 275 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

Nursing

NUR 1001 - Pharmacology Calculations

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): Admission to Practical Nurse Program.
Formerly NUR 101 Prepares nurse to provide safe, patient-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

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): Admission to Practical Nurse Program.
Formerly NUR 102 Provides acquisition of basic nursing theory, communication, collaboration, and critical thinking necessary for safe, patient-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.

NUR 1003 - Basic Assessment for the Pn

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): Admission to Practical Nurse Program.
Formerly NUR 103 Provides the theoretical knowledge and psychomotor skills used by the Practical Nurse performing a basic assessment of health status of stable adult patients with predictable outcomes, including collecting, reporting, and recording objective/subjective data, observing conditions or changes in condition, and differentiating normal from abnormal findings. Principles of therapeutic communication and patient teaching are included. Includes practice collecting basic assessment data in the nursing skills laboratory.

NUR 1004 - Alterations in Adult Health II

Credit(s): 5
Lecture Hour(s): 4.50
Vocational Lab Hour(s): 1.50
Prerequisite(s): NUR 1001, NUR 1002, NUR 1003, NUR 1005, NUR 1016, NUR 1070, NUR 1071.
Formerly NUR 104 Apply and expand the knowledge and skills learned in Adult Health I to provide acquisition of basic nursing theory, communication, collaboration and critical thinking necessary for safe, patient-centered nursing

care for diverse adult patients with conditions that are stable and predictable. The 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 in the care of adults.

NUR 1005 - Practical Nursing Arts and Skills

Credit(s): 6
Lecture Hour(s): 3
Vocational Lab Hour(s): 9
Prerequisite(s): Admission to Practical Nurse Program.
Formerly NUR 105 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, patient-centered nursing care are applied to the care of patients across the lifespan with stable and predictable outcomes. The course applies guidelines related to the professional, legal, and ethical scope of practice of the Practical Nurse, including demonstrating safe performance of all psychomotor skills.

NUR 1006 - Med-Surg Nursing Concepts

Credit(s): 7
Lecture Hour(s): 3.40
Vocational Lab Hour(s): 0.90
Vocational Clinic Hour(s): 9.90

Prerequisite(s): Admission to Nursing Program and completion of preceding required program course work or permission of the program director.
Corequisite(s): NUR 1050 or permission of the program director.
Formerly NUR 106 NUR106 is the first medical/surgical nursing course. Building on NUR 1009, this course provides for the acquisition of basic medical/surgical nursing theory, as well as application of mental health concepts, communication, collaboration, caring, and critical thinking/clinical reasoning necessary for safe, patient-centered care to a developmentally and culturally diverse adult patient population experiencing various medical/surgical interventions. Incorporates evidence-based practice, quality improvement, professional standards, and legal and ethical responsibilities of the nurse. Application of knowledge and skills occurs in the nursing skills laboratory and a variety of clinical settings.

NUR 1009 - Fundamentals of Nursing

Credit(s): 6
Lecture Hour(s): 2
Vocational Lab Hour(s): 6
Vocational Clinic Hour(s): 6

Prerequisite(s): Admission to Nursing or Psychiatric Technician programs.
Corequisite(s): Nursing: NUR 1012, HPR 1010, MAT 1120. Psych Tech: NUR 1012.
Formerly NUR 109 Introduces the fundamental concepts necessary for safe, patient-centered nursing care to a diverse patient population while integrating legal and ethical responsibilities of the nurse. Introduces caring, critical thinking, the nursing process, quality improvement and communication used when interacting with patients and members of the interdisciplinary team, and relates evidence-based nursing practice. Application of knowledge and skills occurs in the nursing skills laboratory and a variety of clinical settings providing care to stable patients with common health alterations.

NUR 1010 - Pharmacology Practical Nursing

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to Practical Nurse Program.
Formerly NUR 110 Categorizes basic principles of pharmacology, including major drug classifications using prototype drugs, principles of medication administration including best practices for safe, quality, and patient-centered care. Discusses the legal and ethical responsibilities of the Practical Nurse related to medication administration. Application of this content is used throughout the program nursing courses.

NUR 1011 - Advancement into Practical Nursing

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): NUR 1001, NUR 1002, NUR 1003, NUR 1005, NUR 1016, NUR 1070, NUR 1071.
Formerly NUR 111 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

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Admission to Nursing or Psychiatric Technician programs.
Corequisite(s): Nursing: NUR 1009, HPR 1010, MAT 1120; Psych Tech: NUR 1009.
Formerly NUR 112 Overview of the basic principles of pharmacology including major drug classifications and prototypes of commonly used medications. Principles of medication administration include aspects of best practice for safe, quality, patient-centered care. Central points include safety, quality improvement factors in the administration of medications, patient teaching and variations encountered when administering medications to diverse patient populations across the lifespan.

NUR 1013 - Basic Concepts of Maternal-Newborn Nursing

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): NUR 1001, NUR 1002, NUR 1003, NUR 1005, NUR 1016, NUR 1070, NUR 1071.
Formerly NUR 113 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, patient-centered nursing care to childbearing families. The course incorporates the legal and ethical responsibilities of the Practical Nurse in the care of childbearing families.

NUR 1014 - Basic Concepts of Pediatric Nursing

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): NUR 1001, NUR 1002, NUR 1003, NUR 1005, NUR 1016, NUR 1070, NUR 1071.
Formerly NUR 114 Applies and expands on 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, patient-centered nursing care to children and their families. The course incorporates the legal and ethical responsibilities of the Practical Nurse in the care of children.

NUR 1015 - Basic Concepts of Mental Health Nursing

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): NUR 1001, NUR 1002, NUR 1003, NUR 1005, NUR 1016, NUR 1070, NUR 1071.
Formerly NUR 115 Applies knowledge of basic nursing theory, communication, collaboration, and critical thinking necessary for safe, patient-centered nursing care to diverse patients at various levels of mental health promotion and mental illness management. The course incorporates the legal and ethical responsibilities of the Practical Nurse in the care of patients with mental health issues.

NUR 1016 - Basic Concepts of Geriatric Nursing

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): Admission to Practical Nurse Program.
Formerly NUR 116 Applies and expands 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, patient-centered nursing care to older adults. The course incorporates the legal and ethical responsibilities of the Practical Nurse in the care of older adults.

NUR 1050 - Maternal-Child Nursing

Credit(s): 6
Lecture Hour(s): 3.30
Vocational Lab Hour(s): 2.10
Vocational Clinic Hour(s): 6

Prerequisite(s): Admission to Nursing program and completion of preceding required program course work or permission of the program director.
Corequisite(s): NUR 1006 or permission of the program director.
Formerly NUR 150 Nursing 150 provides for the acquisition of maternal/child nursing theory, as well as application of mental health concepts, communication, collaboration, caring, and critical thinking/clinical reasoning necessary for safe, family-centered nursing care to childbearing families and children that is developmentally and culturally appropriate. Incorporates evidence-based practice, standards of practice, quality improvement, and legal and ethical responsibilities of the nurse. Application of knowledge and skills occurs in the nursing skills laboratory and in a variety of maternal/child and pediatric clinical settings.

NUR 1069 - Transition into Practical Nursing

Credit(s): 4
Lecture Hour(s): 2
Vocational Clinic Hour(s): 6

Prerequisite(s): Admission to Nursing program and completion of preceding required program course work or program director permission.
Formerly NUR 169 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

Credit(s): 2
Vocational Clinic Hour(s): 6

Prerequisite(s): Admission to Practical Nursing Program.
Formerly NUR 170 Offers the clinical practicum to apply the related nursing theory.

NUR 1071 - Clinical II

Credit(s): 2
Vocational Clinic Hour(s): 6

Prerequisite(s): Admission to Nursing Program.
Formerly NUR 171 Offers the clinical practicum to apply the related nursing theory.

NUR 1072 - Clinical III

Credit(s): 3
Vocational Clinic Hour(s): 9

Prerequisite(s): NUR 1001, NUR 1002, NUR 1003, NUR 1005, NUR 1016, NUR 1070, NUR 1071.
Formerly NUR 172 Offers the clinical practicum to apply the related nursing theory.

NUR 1073 - Clinical III

Credit(s): 2
Vocational Clinic Hour(s): 6

Prerequisite(s): NUR 1001, NUR 1002, NUR 1003, NUR 1005, NUR 1016, NUR 1070, NUR 1071.
Formerly NUR 173 Offers the clinical practicum to apply the related nursing theory.

NUR 1075-1077 - Special Topics

Credit(s): 0-12
Formerly NUR 175-177 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

NUR 1089 - Transition from LPN to ADN

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Vocational Clinic Hour(s): 1.50

Prerequisite(s): Admission to Nursing program.
Formerly NUR 189 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 2006 - Advanced Concepts of Medical-Surgical Nursing I

Credit(s): 6.50
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Vocational Clinic Hour(s): 9

Prerequisite(s): Admission to Nursing program and successful completion of preceding Nursing program course work or permission of the program director.
Corequisite(s): NUR 2012 or permission of the program director.
Formerly NUR 206 NUR 206 builds on NUR 1006focusing on advanced concepts of nursing applied to care of patients with high acuity medical/surgical conditions. Builds on medical/surgical nursing theory, mental health concepts, communication, collaboration, caring, and critical thinking/clinical reasoning necessary for safe, patient-centered nursing care to developmentally and culturally diverse adult patients. Incorporates evidence-based practice, quality improvement, professional standards, and legal and ethical responsibilities of the professional nurse as applied in a variety of healthcare settings. Application of knowledge and skills occurs in the nursing skills laboratory and in a variety of clinical settings.

NUR 2011 - Psychiatric-Mental Health Nursing

Credit(s): 4
Lecture Hour(s): 2.70
Vocational Clinic Hour(s): 3.90

Prerequisite(s): Admission to Nursing program and successful completion of preceding Nursing program course work or permission of the program director.
Corequisite(s): NUR 2012 or permission of program director.
Formerly NUR 211 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

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Admission to Nursing program and successful completion of preceding required program course work or permission of the program director.
Corequisite(s): NUR 2011 or permission of the program director.
Formerly NUR 212 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

Credit(s): 5
Lecture Hour(s): 2.30
Vocational Clinic Hour(s): 8.10

Prerequisite(s): Admission to Nursing program and successful completion of preceding program course work or permission of the program director.
Corequisite(s): NUR 2006 and NUR 2012 or permission of the program director.
Formerly NUR 216 Nursing 216 is a continuation of Nursing 206, focusing on complex medical/surgical conditions of the high acuity patient. Builds on medical/surgical nursing theory, mental health concepts, communication, collaboration, caring, and critical thinking/clinical reasoning necessary for safe, patient-centered nursing care to developmentally and culturally diverse adult patients experiencing high acuity medical/surgical conditions. Incorporates evidence-based practice, quality improvement, professional standards, and legal and ethical

responsibilities of the professional nurse as applied in the acute care and high acuity settings. Application of knowledge and skills occurs in a variety of clinical settings.

NUR 2030 - Transition to Professional Nursing Practice

Credit(s): 4
Lecture Hour(s): 1.60
Vocational Clinic Hour(s): 7.20

Prerequisite(s): Admission to Nursing program and successful completion of preceding program course work or permission of the program director.
Corequisite(s): NUR 2016 or permission of the program director.
Formerly NUR 230 Nursing 230 is a Seminar and practice Capstone course that provides an integrative experience applying all dimensions of the professional nurse in the care of diverse patient populations across a variety of healthcare settings. All major concepts of the nursing program are addressed. Leadership and the management of multiple patients are emphasized. Application of knowledge and skills occurs in the clinical setting to facilitate an effective transition from student to registered professional nurse.

NUR 2054 - RN Licensing Exam Preparation

Credit(s): 1.50
Lecture Hour(s): 1.50
Prerequisite(s): Completion of three semesters of nursing coursework or instructor permission.
Formerly NUR 254 Will provide a review of the RN NCLEX test plan content areas, review of NCLEX style question formats and the Computerized Adaptive Testing method. Students will review study options for preparing for the RN NCLEX exam and have the opportunity to develop a customized preparation plan for success on the RN NCLEX for Professional Nursing Licensure.

NUR 2075-2077 - Special Topics

Credit(s): 0-12
Formerly NUR 275-277 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

NUR 3001 - Integration into Baccalaureate Nursing Practice

Credit(s): 3
Lecture Hour(s): 3
Formerly NUR 301 Explores professional nursing practice at the baccalaureate level. Focus is on knowledge and understanding of the professional nursing standards and the nursing role at a baccalaureate level.

NUR 3002 - Trends in Nursing Practice

Credit(s): 3
Lecture Hour(s): 3
Formerly NUR 302 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

Credit(s): 3
Lecture Hour(s): 3

Prerequisite(s): NUR 3001, NUR 3002, MAT 1260
Formerly NUR 303 Analyzes concepts associated with nursing research, collection, and analysis of data with emphasis on integration of evidenced-based practice within nursing. The course develops the skills for critiquing published research.

NUR 3004 - Informatics / Healthcare Technology

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): NUR 3001, NUR 3002
Formerly NUR 304 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

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): NUR 3001, NUR 3002
Formerly NUR 305 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

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): NUR 3001, NUR 3002
Formerly NUR 306 Focuses on optimizing health for the aging client within the framework of the nursing process. Emphasis is on supporting the unique needs of the aging population.

NUR 3007 - Behavioral Health

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): NUR 3001 , NUR 3002
Formerly NUR 307 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 and Ethical Issues Related to Professional Nursing Practice

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): NUR 3001, NUR 3002
Formerly NUR 408 Emphasizes the ethical and legal obligations of professional nursing practice. The focus is on values clarification, ethical theory, and ethical decision making models. Additionally, legal issues related to healthcare will be explored.

NUR 4009 - Leadership in the Nursing Profession

Credit(s): 3.5
Lecture Hour(s): 2.75

Vocational Clinic Hour(s): 1.5

Prerequisite(s): NUR 3001, NUR 3002, RN license
Formerly NUR 409 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

Credit(s): 6
Lecture Hour(s): 4.5
Vocational Clinic Hour(s): 3

Prerequisite(s): NUR 3001, NUR 3002, RN license
Formerly NUR 410 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

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): NUR 3001, NUR 3002, RN license
Formerly NUR 411 Integrates theory into practice by building on previous concepts and knowledge.

Nursing Assistant

NUA 1001 - Nurse Aide Health Care Skills

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Formerly NUA 101 Prepares the student to perform the fundamental skills of the nurse aide. Basic nursing skills, communication 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 Aid Clinical Experience

Credit(s): 1
Vocational Clinic Hour(s): 1.5

Formerly NUA 170 Applies knowledge and skill gained in NUA 101 to patient care. Pass/fail grading (F).

NUA 1075 - Special Topics

Credit(s): 0-12
Formerly NUA 175 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

Occupational Safety Technician

OSH 1130 - Hazardous Materials

Credit(s): 2
Lecture Hour(s): 2
Formerly OSH 146 Provides information to students on chemical Right-to-Know awareness. Course topics include introduction to right-to-know awareness, chemical identification, chemical labeling and material safety data sheets.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

OSH 1310 - 10-hr Construction Industry Standards

Credit(s): 1
Lecture Hour(s): 1
Formerly OSH 127 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.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

OSH 2110 - Safety Program Management

Credit(s): 3
Lecture Hour(s): 3
Formerly OSH 245
Provides principles of safety program management, to include program elements, safety culture, motivation, ethics, and auditing.

Occupational Therapy Assistant

OTA 1000 - Introduction to Occupational Therapy

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Program admission
Formerly OTA 100 Explores career options in occupational therapy through discussion, observation and participation. Identifies the need for areas of occupation and the differences between health, illness and wellness. Describes the history and philosophy of occupational therapy and the roles, responsibilities and relationships between other healthcare professionals. Discusses ethical and legal implications of health care and explores basic sociological issues.

OTA 1005 - Occupational Disruption and Activity Analysis

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Prerequisite(s): Admission into the OTA program.
Formerly OTA 105 Explores the diseases and aspects of health and wellness common to occupational therapy intervention and occupational disruption and gains insight to various treatment methods and techniques as well as applying activity/task analysis.

OTA 1006 - Basic Occupational Therapy Frames of Reference and Documentation

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Admission into the OTA program.
Formerly OTA 106 Develops the ability to identify the types of occupational therapy documentation and practice basic documentation skills. Identifies models of practice, frames of reference and occupational therapy theories, founders, underlying assumptions of the theories, and implications to occupational therapy practice and treatment interventions.

OTA 1021 - Assessing Movement Through Occupation

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Prerequisite(s): OTA 1005, BIO 1006 or BIO 2101
Formerly OTA 121 Provides communication strategies with clients and caregivers in an inter-professional setting. Students will demonstrate an understanding of how performance skills affect occupation and how assessments such as muscle movement, body mechanics, transfers, range of motion and manual muscle testing will influence rehabilitation.

OTA 1022 - Origins of Occupation and Performance from the Neonate to Adulthood

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Admission into the OTA program.
Formerly OTA 122 Explores the impact and influences of environment, community and various contexts of the client, focusing on a dynamic and ever changing occupational status through the influences of areas of occupation, contexts, performance patterns, client factors, performance skills, and activity demands from neonate through middle-age development.

OTA 1025 - Basic Occupational Therapy Application to Mental Health

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Prerequisite(s): OTA 1005, OTA 1006, PSY 1001 or PSY 1002 or PSY 2440
Formerly OTA 125 Identifies commonly seen signs and symptoms of mental illness that affect health and wellness and learn methods of screening and various occupational therapy techniques for the assessment and treatment of occupational disruption within a variety of contexts. A Level I Fieldwork experience is integrated within this course.

OTA 1031 - Geriatric Concerns, Diseases and Treatment Techniques

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Prerequisite(s): OTA 1005 and OTA 1006.
Formerly OTA 131 Explores aging trends and the impact of context and environmental influences on the older individual, focusing on an ever-changing occupational status through the influences of client factors, activity demands, and performance skills and patterns. Identify geriatric diseases and conditions common to occupational therapy and discuss strategies and methods of intervention.

OTA 1075 - Special Topics

Credit(s): 0-12
Formerly OTA 175 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

OTA 1081 - Geriatric Level I Fieldwork Experience

Credit(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): OTA 1031.
Formerly OTA 181 Identifies and provides practical experience in commonly seen disabilities, aspects of health and wellness, evaluation/assessment techniques, and methods for treatment for the geriatric population from diverse backgrounds in an inter-professional setting. Students will demonstrate universal precautions and safety standards in a variety of situations.

OTA 1082 - Physical Disabilities Level I Fieldwork Experience

Credit(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): OTA 2018
Formerly OTA 182 Identify and provide practical experience with commonly seen disabilities, aspects of health and wellness, evaluation/assessment techniques, and methods of treatment intervention for conditions affecting adult clients from diverse backgrounds in collaboration with intra-professional and inter-professional team members.

OTA 1083 - Pediatric Level I Fieldwork Experience

Credit(s): 1
Vocational Lab Hour(s): 1.50
Corequisite(s): OTA 2021.
Formerly OTA 183 Provides the student with the practical experience necessary to identify commonly seen disabilities, aspects of health and wellness, evaluation/assessment techniques, and methods of treatment for the pediatric population from diverse backgrounds in collaboration with intra-professional and inter-professional team members.

OTA 2016 - Physical Disabilities Neuro-Retraining

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Prerequisite(s): OTA 1021.
Formerly OTA 216 Provides skills necessary to utilize the occupational therapy treatment planning process, including age-appropriate assessments, treatment interventions and discharge planning within a client-centered and inter-professional context.

OTA 2017 - Occupational Therapy Rehabilitation Techniques

Credit(s): 2
Vocational Lab Hour(s): 3
Prerequisite(s): OTA 1021
Formerly OTA 217 Examines and demonstrates various treatment interventions and techniques based on aspects of health and wellness and physical/cognitive/psychosocial occupational disruption. The course focuses on adaptive equipment, assistive devices, areas of occupation and specialized physical disability assessments.

OTA 2018 - Occupational Therapy Application to Adult Physical Disabilities

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Prerequisite(s): OTA 1021.
Formerly OTA 218 Provides students with the ability to identify commonly seen medical and orthopedic diseases and disabilities, aspects of health and wellness, and areas of occupational disruption. Students will learn treatment interventions within appropriate frames of reference through a variety of methodologies and will explore aspects of intervention including, but not limited to, splinting, transfers, positioning and communication techniques.

OTA 2021 - Pediatric Concerns, Diseases, Disabilities, and Treatment

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Prerequisite(s): OTA 1021 and OTA 1022.
Formerly OTA 221 Explains the impact of environment, culture and community on the child. Focuses on an ever-changing occupational status through the influences of performance skills. Provides the skills necessary to identify commonly seen diseases and disabilities and treatment techniques used in pediatrics to promote health and wellness. Identifies occupational therapy evaluation/assessment techniques and methods of intervention within the context and environment of health care and the community.

OTA 2035 - Professional Management for the OTA

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Admission into the OTA program.
Formerly OTA 235 Provides the student with the basic management skills needed as an occupational therapy assistant as well as provides an understanding of effective job seeking skills, the role of the OTA in research, professional responsibilities and lifelong learning.

OTA 2075 - Special Topics

Credit(s): 0-12
Formerly OTA 275 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

OTA 2078 - OTA Seminar

Credit(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): OTA 2080 or OTA 2081.
Formerly OTA 278 Provides the opportunity for discussion of Level II experiences and how to apply logical thinking, critical analysis and clinical reasoning strategies to future scenarios. Students will have discussions on continuing lifelong learning opportunities and professional responsibilities.

OTA 2080 - Fieldwork in Occupational Therapy I

Credit(s): 7
Internship Hour(s): 21
Prerequisite(s): All OTA courses except OTA 2078 and OTA 2081.

Formerly OTA 280 Provides an 8-week, full-time (or an equal amount of hours completed through part-time rotation), supervised fieldwork to develop professional behaviors consistent with the profession's standards and ethics and apply previously learned academic knowledge as an occupational therapy team member. Students will gain experience in the application of occupational therapy treatment process from admission to discharge for clients from a variety of sociocultural backgrounds and age levels in the practice area of physical disabilities to promote health and wellness.

OTA 2081 - Fieldwork in Occupational Therapy II

Credit(s): 7
Internship Hour(s): 21
Prerequisite(s): All OTA courses except OTA 2078 and OTA 2080.
Formerly OTA 281 n), supervised fieldwork to develop professional behaviors consistent with the profession's standards and ethics and apply previously learned academic knowledge as an occupational therapy team member. Students will gain experience in the application of occupational therapy treatment process from admission to discharge for clients from a variety of sociocultural backgrounds and age levels in the practice area of behavioral/mental health, sensorimotor and/or developmental disabilities as well as promoting health and wellness.

OTA 2085 - Independent Study

Credit(s): 1-6
Independent Study Hour(s): 2-12
Formerly OTA 285 Meets the individual needs of students. Students engage in intensive study or research under the direction of a qualified instructor.

Outdoor Studies

OUT 1125 - Mountain Orientation

Credit(s): 2
Academic Lab Hour(s): 4
Formerly OUT 112 A concentrated field experience in the Colorado mountain environment is provided in this course. Emphasis is on backpacking skills, safety procedures, ecology, geology, geography and group dynamics.

Paralegal

PAR 1115 - Introduction to Law

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): All developmental (sub-100 level)
Corequisite(s): ENG 1021 or approval of department chair or instructor.
Formerly PAR 115 English/reading courses completed, or approval of department chair and instructor. Provides an understanding of the role of paralegals, issues facing paralegals, the working of the legal system and ethical questions. Legal terminology and an overview of the substantive areas of law will be discussed.

PAR 1116 - Torts

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021 and PAR 1115 or approval of department chair and instructor.

Formerly PAR 116 Focuses on tort law, including negligence, intentional torts and strict liability, with an emphasis on personal injury litigation.

PAR 1117 - Family Law

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021 or approval of department chair and instructor.
Corequisite(s): PAR 1115 or approval of department chair and instructor.
Formerly PAR 117 Emphasizes domestic law, common property, dissolutions, adoptions, legal separation and other family law issues.

PAR 1118 - Contracts

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021, PAR 1115, or approval of department chair and instructor.
Formerly PAR 118 Examines the basic principles of contract law.

PAR 1125 - Property Law

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021, PAR 1115, or approval of department chair and instructor.
Formerly PAR 125 Focuses on real estate law, ownership, sale, leasing, financing and government regulation of land.

PAR 2080 - Internship

Credit(s): 3
Internship Hour(s): 9
Prerequisite(s): Successful completion (C or higher) of at least 75% of PAR-Prefixed courses or approval of department chair and instructor.
Formerly PAR 280 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 2201 - Civil Litigation

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1022, PAR 1115, or approval of department chair and instructor.
Formerly PAR 201 Focuses on an intensive study of the legal process including the Federal and Colorado Rules of Civil Procedure.

PAR 2208 - Probate and Estates

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1022, PAR 1115, or approval of department chair and instructor.
Formerly PAR 208 Provides an understanding of the creation and administration of an estate, including wills and trusts and the probate process.

PAR 2211 - Legal Research

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021, PAR 1115, or approval of department chair and instructor.
Formerly PAR 211 Introduces the student to basic legal research tools, including statutes, digests, case law, citations, encyclopedias, dictionaries and online data bases.

PAR 2212 - Legal Writing

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): PAR 2211, PAR 1115, ENG 1022 or approval of department chair and instructor.
Formerly PAR 212 Enables the student to practice the content and conventions of legal writing.

Petroleum Technology

PET 1700 - Oil and Gas Production I

Credit(s): 3
Lecture Hour(s): 3
Formerly PET 130 Familiarizes the student with the duties and responsibilities of the oil and gas production technician. Specifically, students will discuss the history of the oil market, fundamentals of drilling and well completion, and operation of the equipment and systems used by the oil and gas production technician today.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

PET 2700 - Oil and Gas Production II

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): PET 1700.
Formerly PET 230 Familiarizes the student with the duties and responsibilities of the oil and gas production operations technician. Specifically, students will be able to discuss natural gas treatment, dehydration and compressions system and equipment, the produced water treatment and handling system and equipment, auxiliary systems and equipment, artificial lift and enhanced recovery techniques, pumping and transportation systems, safety, health and environmental considerations, basic concepts of refining and processing.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

Pharmacy Technician

PHT 1011 - Introduction to Pharmacy

Credit(s): 3
Lecture Hour(s): 1.5
Vocational Lab Hour(s): 2.25
Prerequisite(s): Program admission

Formerly PHT 111 Introduces 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 and Ethics

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Admission to program.
Formerly PHT 112 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 1013 - Communication and Professionalism for Pharmacy Technicians

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): Admission to program
Formerly PHT 113 Provides fundamental components of theoretical and applied aspects of personal and interpersonal communication related to pharmacy practice. Theoretical aspects include such topics as communication perceptions and barriers, listening, responding, assertiveness and non-verbal communication. Applied aspects include such techniques as role-playing, group discussion and interviewing. This course also examines the methods and practice of interviewing with respect to the roles and functions of both interviewee and interviewer.

PHT 1014 - Computer Skills for Pharmacy Technicians

Credit(s): 1
Vocational Lab Hour(s): 1.5
Prerequisite(s): Admission to program.
Formerly PHT 114 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 to allow hands-on technical experience.

PHT 1015 - Pharmacology I

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to program
Formerly PHT 115 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

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to program
Formerly PHT 118 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 and Compounding Techniques

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): Program admission required.
Formerly PHT 235 Develops the skills necessary for performing calculations in pharmacy practice and the compounding of sterile and nonsterile products. Includes a review of basic mathematical skills. Enables the student to solve problems involving calculations pertinent to the preparations of pharmaceuticals. These skills are put to practical use in the compounding portion of this course. Preparation of sterile products, parenteral admixtures, TPN solutions and chemotherapeutics, using proper aseptic techniques is taught. The safe handling of antineoplastics and other hazardous drug products, as well as special drug storage requirements, is learned. Emphasizes the importance of accuracy, quality and infection control. Use and maintenance of equipment such as laminar flow hoods, auto injectors and pumps is discussed.

PHT 1070 - Clinical:

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): Admission to program
Formerly PHT 170 Offers the clinical practicum required for the program.

PHT 1071 - Clinical:

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): Program admission
Formerly PHT 171 Offers the clinical practicum required for the program.

PHT 2075-2077 - Special Topics

Credit(s): 0-12
Formerly PHT 275-277 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

Philosophy

PHI 1011 - Introduction to Philosophy: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 111 ompletion with a minimum C? grade guarantees transfer and application of credit in this GT Pathways category.

PHI 1012 - Ethics: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 112 Examines human life, experience and thought in order to discover and develop the principles and values for pursuing a more fulfilled existence. Theories designed to justify ethical judgments are applied to a selection of contemporary personal and social issues. This course is one of the statewide Guaranteed Transfer courses, GT-AH3.

PHI 1013 - Logic: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 113 Studies effective thinking using language-oriented logic. Provides tools and develops skills for creative and critical thinking. Emphasizes the development of decision-making and problem-solving. This course is one of the statewide Guaranteed Transfer courses, GT-AH3.

PHI 1014 - Comparative Religions: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 114 Introduces students to the major world religions from both the Eastern and Western world such as Hinduism, Buddhism, Confucianism, Taoism, Zoroastrianism, Judaism, Christianity, Islam, Bahand influential preliterate traditions. Utilizes religious studies methods (historical, sociological, legal, psychological and phenomenological) 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. This course is one of the statewide Guaranteed Transfer courses, GT-AH3.

PHI 2005 - Business Ethics: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 205 Examines major ethical theories and then applies ethical decision-making criteria to various moral issues and challenges in a business environment. This course includes issues such as job discrimination, worker's rights, consumerism, advertising, whistle-blowing, product safety, responsibility to the environment, as well as compassionate and fair responsibility to society. This is a statewide Guaranteed Transfer course in the GT-AH3 category. GT-AH3

PHI 2014 - Philosophy of Religion: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 214 Focuses on the critical examination of the fundamental concepts, ideas and implications of religion. Includes the nature of God, the varieties of religious experience, argument concerning God`s existence, the problem of evil, faith and reason, religion and human destiny, and the connection between religion and ethics. This course is one of the statewide Guaranteed Transfer courses, GT-AH3.

PHI 2018 - Environmental Ethics: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 218 Critically analyzes theories of value of the natural world. Topics include the relation between scientific and moral principles; theories of the moral worth of persons, animals, plants and other natural objects;

historical, religious and cultural influences on conceptions of nature; alternative accounts of human relationships and responsibilities to nature, including deep ecology and eco-feminism; and the connection between moral and political values and economic policies. This course is one of the statewide Guaranteed Transfer courses, GT-AH3.

PHI 2020 - Philosophy of-Death and Dying: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 220 Explores the major philosophical questions surrounding death and dying: the metaphysical arguments for and against the existence of a soul and life after bodily death; the epistemological assessment of arguments for the soul and life after death; the ethical justifications taken on positions such as rational suicide and physician assisted suicide, as well as a focus on philosophy's existentialist contribution to questions about the meaning of life and the meaning of death. This course is one of the statewide Guaranteed Transfer courses. GT-AH3.

PHI 2075 - Special Topics

Credit(s): 0-12
Formerly PHI 275 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

Physical Therapist Assistant

PTA 1010 - Basic Patient Care in Physical Therapy

Credit(s): 5
Lecture Hour(s): 2
Vocational Lab Hour(s): 4.50
Prerequisite(s): Program Admission
Formerly PTA 110 Examines the basic patient care skills for the healthcare practitioner enabling understanding and demonstration of skills that include positioning, body mechanics, transfers, range of motion, palpation, vital signs, aseptic techniques, bandaging, medical terminology, activities of daily living (ADLs), wheelchair management, architectural barriers, and gait training.

PTA 1015 - Principles and Practices of Physical Therapy

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Program admission
Formerly PTA 115 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 1020 - Modalities in Physical Therapy

Credit(s): 5
Lecture Hour(s): 2
Vocational Lab Hour(s): 4.50
Prerequisite(s): PTA 1010.

Formerly PTA 120 Examines the theory and principles of physical therapy modalities. This course includes therapeutic heat and cold, traction, hydrotherapy, and light therapies.

PTA 1024 - Rehab Principles of Medical I

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Program admission
Formerly PTA 124 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

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): Program admission
Formerly PTA 131 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 - Rehab Principles of Medical II

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Program admission
Formerly PTA 134 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

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): Program admission
Formerly PTA 135 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

Credit(s): 5
Lecture Hour(s): 2
Vocational Lab Hour(s): 4.5
Prerequisite(s): HPR 1017, Program Admission.

Formerly PTA 140 Focuses on the science of human motion, theories of biomechanics and muscle/joint structure and function. Emphasizes basic principles of therapeutic exercise and their application to specific body regions. A laboratory experience that includes the application of kinesiology and exercise principles is integrated in the learning experience.

PTA 1041 - Professional Communications II

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): PTA 1031.
Formerly PTA 141 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 1075-1077 - Special Topics

Credit(s): 0-12
Formerly PTA 175-177 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

PTA 2005 - Psychosocial Issues in Health Care

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Program admission
Formerly PTA 205 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 and Management

Credit(s): 5
Lecture Hour(s): 2
Vocational Lab Hour(s): 4.5
Prerequisite(s): PTA 1020, PTA 1040.
Formerly PTA 230 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 and Management Techniques

Credit(s): 5
Lecture Hour(s): 2
Vocational Lab Hour(s): 4.50
Prerequisite(s): PTA 1020 and PTA 1040
Formerly PTA 240 Examines the theory and principles of physical therapy with an introduction to assessment, management techniques and advanced physical therapy procedures as they relate to neurologic, cardiac, and pulmonary conditions.

PTA 2051 - Professional Communications III

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): PTA 1041.
Formerly PTA 251 Advances development and application of the written and oral communication skills utilized in healthcare and physical therapy workplace settings.

PTA 2075 - Special Topics

Credit(s): 0-12
Formerly PTA 275 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

PTA 2078 - PTA Seminar

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Successful completion of all previous PTA courses, department approval required
Formerly PTA 278 Provides a summary of all coursework, Internships and prepares the student for transition into the workforce as an entry level PTA. It includes a comprehensive review and mock exam in preparation for the national PTA exam, employment benefits, licensing, state practice act review, professional development, employment opportunities and community service.

PTA 2080 - PTA Internship I

Credit(s): 4
Internship Hour(s): 12
Prerequisite(s): PTA 1020, PTA 1040
Formerly PTA 280 Focuses on 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 will provide supervision.

PTA 2081 - PTA Internship II

Credit(s): 5
Internship Hour(s): 15
Prerequisite(s): Successful completion of all prevous courses, department approval required
Formerly PTA 281 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

Credit(s): 5
Internship Hour(s): 15
Prerequisite(s): Successful completion of all previous PTA courses, department approval required
Formerly PTA 282 Incorporates advanced clinical experience providing hands on patient practicum skills and techniques. Students will 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 will present an in-service on a physical therapy-related topic.

Physics

PHY 1075-1077 - Special Topics

Credit(s): 0-12
Formerly PHY 175-177 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

PHY 1105 - Conceptual Physics with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly PHY 105 Focuses on mechanics, heat, properties of matter, electricity and magnetism, light and modern physics. Incorporates laboratory experience. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 1107 - Energy Science & Technology with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): MAT 0300 with a grade of S/C or better.
Formerly PHY 107 Explores the science of energy and energy technologies, with a focus on renewable energy resources and clean technologies. It provides a background in the physics of energy, energy transfer and the current state of technology. Students will evaluate the future utilization of renewable technologies. Activities may include investigating conservation of energy, mechanical, electrical, heat and fluid power systems; energy transfer and loss; understanding energy audits; testing solar collectors and wind generators; and investigating hydrogen fuel cells. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 1111 - Physics: Algebra-Based I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 0300.
Formerly PHY 111 Explores the physical world through reasoning, mathematics and experimentation. Examines kinematics, force, circular motion, energy, momentum, torque, rotational dynamics, simple harmonic motion, temperature, heat and thermodynamics. The concepts and theories presented are explored through demonstrations and hands-on experiments. It is a general physics course that is recommended for all of the health sciences and all other interested students. Students entering engineering or one of the advanced sciences should register for PHY 211. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 1112 - Physics: Algebra-Based II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 0300.

Formerly PHY 112 Expands upon PHY 1111and explores sound waves, electric fields, electric circuits, magnetic fields, light, optics and modern physics. Explores the concepts and theories presented in class through demonstrations and hands-on experiments. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 2075 - Special Topics

Credit(s): 0-12
Formerly PHY 275 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

PHY 2111 - Physics: Calculus Based I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 2410, ENG 1021.
Formerly PHY 211 Explores the physical world through reasoning, mathematics and experimentation. Covers kinematics, force, gravity, energy, momentum, torque, rotational dynamics and fluids, and may include thermodynamics. The concepts and theories presented in class are explored through demonstrations and hands-on experiments. This first semester calculus-based physics course is recommended for students entering engineering or one of the advanced sciences. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 2112 - Physics: Calculus-Based II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 2410, ENG 1021.
Formerly PHY 212 Expands upon PHY 2111and examines waves, electric fields, electric circuits, magnetic fields, light and optics, and modern physics. The concepts and theories presented in class are explored through demonstrations and hands-on experiments. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 2113 - Physics III: Calculus Based Modern Physics

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): MAT 2410, ENG 1021.
Formerly PHY 213 Expands upon PHY 2112and explores 20th-century advances in physics. Topics may include special and general relativity, quantum theory, atomic physics, solid state physics, nuclear physics, semiconductor physics and cosmology.

Political Science

POS 1011 - American Government: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly POS 111 Includes the background of the US Constitution, the philosophy of American government, general principles of the Constitution, federalism and civil liberties. Examines public opinion and citizen participation, political parties, interest groups and the electoral process, and the structure and functions of the national government. This course is one of the statewide Guaranteed Transfer courses, GT-SS1.

POS 1025 - American State and Local Government: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly POS 125 Emphasizes 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. This course is one of the statewide Guaranteed Transfer courses, GT-SS1.

POS 1075 - Special Topics

Credit(s): 0-12
Formerly POS 175 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

POS 2020 - Introduction to Political Science: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly POS 105 Focuses on a survey of the discipline of political science, including political philosophy and ideology, democratic and nondemocratic governments and processes, and international relations. This course is one of the statewide Guaranteed Transfer courses, GT-SS1.

POS 2075 - Special Topics

Credit(s): 0-12
Formerly POS 275 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

Printing Technology

PRT 1001 - Introduction to Printing Technology

Credit(s): 1
Lecture Hour(s): 1
Formerly PRT 101 Reviews the development of graphic communications, past and present. It includes an overview of the history of printing and publishing, processes, terminology, materials and the importance of printing in contemporary society, and safety issues in the printing lab.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

PRT 1012 - Beginning Offset Press

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly PRT 112 Introduces fundamental understanding of the offset presses, including delivery, printing head and operation. Covers using the presses with an ink and water fountain solution for a simple job.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

PRT 1013 - Intermediate Offset Press

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly PRT 113 Introduces the student to the T-Head presses and the quick-copy system, while presenting more detailed information on small presses. The course also instructs students on pressure settings and adjustments, registration techniques and multicolor registering for print jobs.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

PRT 1014 - Paper Management and Estimating

Credit(s): 3
Lecture Hour(s): 3
Formerly PRT 114 Introduces the different facets of paper management and estimating while students prepare and produce small production jobs. This course also teaches students how to estimate paper, press and production times.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

Process Technology

PRO 1000 - Introduction to Process Technology

Credit(s): 4
Lecture Hour(s): 4
Formerly PRO 100 Provides an overview or introduction into the field of process operations within the process industry. The course will introduce the roles and responsibilities of process technicians, the environment in which they work, and the equipment and systems in which they operate.

PRO 1100 - Safety, Health and Environment

Credit(s): 3
Lecture Hour(s): 3
Formerly PRO 110 Provides an introduction to the field of safety, health and environmental concerns within the process industry. Within this course, you will be introduced to various types of plant hazards, safety and environmental systems and equipment, and the regulations under which processing plants are governed.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

Psychiatric Technician

PTE 1010 - Intro to Behavioral Health Care and Wellness

Credit(s): 3
Lecture Hour(s): 3

Formerly PTE 110 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 1011 - Essential Concepts of Care

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): Program admission required
Formerly PTE 111 Identifies core concepts including role, function, and criticial thinking skills needed in psychiatry. Examines medications and treatments for common and special mental disorders population. Enables the student to understand mental illness as a continuum.

PTE 1015 - Core Concepts for Advanced Psychiatric Technician

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): Program admission required.
Formerly PTE 115 Introduces the concepts of nursing process, critical thinking, function, role, and responsibility of a psychiatric technician. Reviews medication administration, parenteral administration, and drug calculation.

PTE 1017 - Theoretical Concepts of Psychiatric Care II

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): PTE 1010
Formerly PTE 117 Explores psychiatric problems common to four (4) special populations: children/adolescents, developmentally disabled individuals, aging persons and forensic clients. The student will learn how to recognize and intervene with problems common to these four groups.

PTE 1018 - Psychiatric Management Principles

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): Admission into the Psychiatric Technician program, PTE 1017, PTE 1071.
Corequisite(s): PTE 1072.
Formerly PTE 118 Capstone: Explores principles of psychiatric unit management and professional behaviors in psychiatric care. Self-care issues and job-seeking skills are also discussed.

PTE 1020 - Application of Behavioral Health Care & Wellness

Credit(s): 5
Lecture Hour(s): 3
Vocational Lab Hour(s): 3
Prerequisite(s): PTE 1010
Formerly PTE 120 Explores basic etiology, symptoms, and interventions for common behavioral and mental health disorders. Provides the opportunity for students to experience the mileu of a behavioral health care setting while providing basic care to clients experiencing common behavioral and mental health issues.

PTE 1070 - Clinical Concepts of Psychiatric Care I

Credit(s): 2
Vocational Lab Hour(s): 3
Prerequisite(s): Program admission
Formerly PTE 170 Provides clinical application of theory and principles presented in PTE 116 through supervised clinical practice in a psychiatric care setting.

PTE 1071 - Clinical Concepts of Psychiatric Care II

Credit(s): 3
Vocational Lab Hour(s): 4.50
Prerequisite(s): Admission into the Psychiatric Technician program, PTE 1016 , PTE 1070, or permission of instructor.
Corequisite(s): PTE 1017.
Formerly PTE 171 Provides clinical application of theory and principles presented in PTE 1017through supervised clinical practice in a psychiatric care setting.

PTE 1072 - Psychiatric Management Clinical

Credit(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): Admission into the Psychiatric Technician program, PTE 1070, PTE 1071.
Corequisite(s): PTE 1018.
Formerly PTE 172 Synthesizes knowledge from prerequisite courses and provides clinical application of theory presented in PTE 1018.

PTE 2075 - Special Topics

Credit(s): 0-12
Formerly PTE 275 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

Psychology

PSY 1001 - General Psychology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 101 Focuses on the scientific study of behavior including motivation, emotion, physiological psychology, stress and coping, research methods, consciousness, sensation, perception, learning and memory. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 1002 - General Psychology II: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 102 Focuses on the scientific study of behavior including cognition, language, intelligence, psychological assessment, personality, abnormal psychology, therapy, lifespan development and social psychology. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 1003 - Workgroup Psychology

Credit(s): 3
Lecture Hour(s): 3
Introduces the psychology of workgroups in the modern workplace. Emphasizes team dynamics, social diversity issues, team building, interpersonal communication skills, goal setting, time and resource management, and consensus decision making.

PSY 1005 - Psychology of Workplace Relationships

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 100 Focuses on interactions among people their conflicts, cooperative efforts and group relationships. Examines why beliefs, attitudes and behaviors cause relationship problems in our personal lives and in work-related situations. Emphasizes the analysis of human behavior, the application of prevention strategies, and resolution of the behavior.

PSY 1010 - Career Development

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 110 Focuses on developing recognition of career potential. This course also covers tools used to make realistic decisions concerning educational and occupational objectives.

PSY 1017 - Parenting

Credit(s): 1
Lecture Hour(s): 1
Formerly PSY 117 Focuses on effective techniques for working with children with emphasis on setting expectations, consideration of individual differences, satisfactory communication and effective parent-child relationships.

PSY 1075-1077 - Special Topics

Credit(s): 0-12
Formerly PSY 175-177 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

PSY 1075-1077 - Special Topics

Credit(s): 0-12
Formerly PSY 175-177 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

PSY 2000 - Research Methodology

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): Successful completion of PSY 1001 or PSY 1002.
Formerly PSY 200 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 2104 - Relationships: Challenges and Choices

Credit(s): 1
Lecture Hour(s): 1
Enables the student to preserve and enhance couple relationships by understanding the role of gender differences, conflict patterns, communication skills, problem solving, meaning of commitment, fun and friendship.

PSY 2105 - Psychology of Gender: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 205 Examines gender comparisons in work, courtship, family life and sexual behavior throughout the lifespan. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2107 - Human Sexuality: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 217 Surveys physiological, psychological and psychosocial aspects of human sexuality. Topics include relationships, sexual identity and sexual health. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2112 - Introduction to Addictive Behavior

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): ENG 1021.
Formerly PSY 229 Focuses on addictive behavior and its effect on individuals, families and society.

PSY 2220 - Dynamics of Racism and Prejudice

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 250 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: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 226 Focuses on the behavior of humans in social settings, including attitudes, aggression, conformity, cooperation and competition, prejudice and interpersonal attraction. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2222 - Psychology of Death and Dying: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 227 Examines the philosophies of life and death, emphasizing dying, death, mourning and the consideration of one's own death. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2331 - Positive Psychology: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 231 explore strengths-based research, concepts of happiness, helpfulness and resiliency. The research and theories about human nature will go beyond simply not being mentally ill as a form of mental health, which will include optimism, post-traumatic growth, and how to increase emotional, psychological and social functioning. Overall, this course will be focused on understanding one's own sense of life satisfaction and how to further improve well-being. This course is approved as part of the Colorado statewide Guaranteed transfer curriculum: GT: SS3.

PSY 2333 - Health Psychology: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 240 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. This is a statewide Guaranteed Transfer course in the GT-SS3 category. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2440 - Human Growth and Development: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 235 Examines human development from conception through death, emphasizing physical, cognitive, emotional and psychosocial factors. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2441 - Child Development: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 238 Focuses on the growth and development of the individual from conception through childhood, emphasizing physical, cognitive, emotional and psychosocial factors. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2442 - Child and Adolescent Psychology

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 237 Explores human development from conception through adolescence, emphasizing physical cognitive, emotional and psychosocial factors.

PSY 2443 - Adolescent and Adult Psychology

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 239 Examines growth and development of the individual from adolescence to death, emphasizing physical, cognitive, emotional and psychosocial factors.

PSY 2444 - Educational Psychology

Credit(s): 3
Lecture Hour(s): 3

Formerly PSY 245 Focuses on the relationships between theory, research and practice in the areas of learning, child development, motivation and educational assessment.

PSY 2551 - Child Abuse and Neglect

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 247 Examines the causes and effects of physical, sexual and psychological abuse and neglect. Intervention and prevention strategies are emphasized.

PSY 2552 - Abnormal Psychology: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): PSY 1001 or Department Chair Approval.
Formerly PSY 249 Examines abnormal behavior and its classification, causes, treatment and prevention. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2770 - Intro to Forensic Psychology

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 207 Introduction to Forensic Psychology is a course in an overview of Forensic Psychology. As such it explores both current research and practice in five areas. These areas are police psychology, criminal psychology, victimology, correctional psychology and the interface of psychology and the courts. The course facilitates an understanding of the numerous careers related to forensic psychology, how to prepare for them and current research and practice in each of the five broad areas of forensic psychology.

PSY 2771 - Psychology of Personality: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 265 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 of psychology. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2772 - Stress Reduction with Biofeedback

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 267 Focuses on the biological and psychological basis of stress and the detrimental effects it may have on health. Emphasizes learning and applying stress reduction skills that are monitored with simple biofeedback instruments.

PSY 2773 - Organizational Psychology

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 268 Provides a comprehensive study of psychological principles and theories as applied to

organizational behavior. Topics include motivation, job satisfaction, conflict supervision, human relations and stress management.

PSY 2774 - Psychology of Leadership

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of PSY 1001 or PSY 1002.
Formerly PSY 269 Studies and applies the theories and techniques of leadership and group processes. In addition, introduces leadership skills and experiences with applications in group and community settings.

Public Service

PSV 2030 - Introduction to Civic Leadership

Credit(s): 3
Lecture Hour(s): 3
Formerly PSV 230 Enables the student to develop a critical understanding of public leadership through the study of pertinent models, theories and research.

Radio and Television

RTV 1000 - Introduction to Electronic Media

Credit(s): 3
Lecture Hour(s): 3
Formerly RTV 100 Focuses on the study of the market demands involving national, local and international uses of electronic media.

RTV 1002 - Beginning Television

Credit(s): 3
Vocational Lab Hour(s): 4.5
Formerly RTV 102 Focuses on principles and techniques of television production in theory and the approach of studio and production. Emphasizes producing television programs, beginning with a concept through script to actual studio production, pre-production and post-production.

RTV 1003 - Writing for TV and Radio

Credit(s): 3
Lecture Hour(s): 3
Formerly RTV 103 Explores writing techniques for television and radio emphasizing professional techniques, format and style.

RTV 1005 - Basic Video Production

Credit(s): 3
Vocational Lab Hour(s): 4.5
Prerequisite(s): RTV 1002.

Formerly RTV 208 Introduces basic videotape production and editing on linear and nonlinear 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 nonlinear editors.

RTV 1006 - Principles of Audio

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Prerequisite(s): RTV 1002.
Formerly RTV 108 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 1075 - Special Topics

Credit(s): 0-12
Formerly RTV 175 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

RTV 1082 - Internship Radio STA/Audio Production

Credit(s): 4
Internship Hour(s): 12
Prerequisite(s): Department Chair Approval.
Formerly RTV 182 Provides experience in a commercial radio station or an allied industry.

RTV 1083 - Internship Tv Studio/Video Production Co.

Credit(s): 4
Internship Hour(s): 12
Prerequisite(s): Department Chair Approval.
Formerly RTV 183 Provides experience in a commercial television station or an allied industry.

RTV 2002 - Advanced Television Production

Credit(s): 3
Vocational Lab Hour(s): 4.5
Prerequisite(s): RTV 1005.
Formerly RTV 212 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 multicamera production. Examines use of effects and chroming. Includes laws and ethics governing the television broadcast industry and Institutional Television.

RTV 2010 - Video Field Production

Credit(s): 3
Vocational Lab Hour(s): 4.50
Prerequisite(s): Department Chair Approval.
Formerly RTV 269 Prepares students for production of professional-quality video programming. Students will be afforded the opportunity to attain proficiency in single-camera remote videography, as well as post-production editing and recording engineering.

RTV 2075 - Special Topics

Credit(s): 0-12
Formerly RTV 275 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

RTV 2202 - Advanced Television Studio Production

Credit(s): 3
Vocational Lab Hour(s): 4.50
Prerequisite(s): RTV 1005
Formerly RTV 217 Focuses on principles and techniques of television production and direction in a laboratory setting using commercial television broadcast equipment for broadcast and institutional video productions.

Radiologic Technology

RTE 1001 - Introduction to Radiography

Credit(s): 2
Lecture Hour(s): 2
Formerly RTE 101 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

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): RTE 1001.
Corequisite(s): RTE 1021, RTE 1031, RTE 1041, RTE 1081.
Formerly RTE 111 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 - Radiologic Procedures I

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Prerequisite(s): RTE 1001
Formerly RTE 121 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 - Radiologic Procedures II

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Prerequisite(s): RTE 1021.

Formerly RTE 122 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 1031 - Radiographic Pathology and Image Evaluation I

Credit(s): 1.50
Lecture Hour(s): 1.50
Prerequisite(s): RTE 1001.
Formerly RTE 131 Provides a detailed anatomic discussion of the respiratory, digestive, genitourinary systems and related medical terminology. The course will also cover the details of bony anatomy including bone structure, pathology and arthrology.

RTE 1032 - Radiographic Pathology and Image Evaluation II

Credit(s): 1.50
Lecture Hour(s): 1.50
Prerequisite(s): RTE 1031.
Formerly RTE 132 Provides a detailed anatomic/pathologic discussion of the spine, circulatory system, nervous system and skull and related medical terminology.

RTE 1041 - Radiographic Equipment/Imaging I

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Program admission, RTE 1001.
Formerly RTE 141 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

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): RTE 1041.
Formerly RTE 142 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 - Radiographic Internship I

Credit(s): 5
Internship Hour(s): 15
Prerequisite(s): Program admission, RTE 1001.
Formerly RTE 181 Introduces the clinical education experience at the clinical education center. The student applies knowledge learned in the classroom to the actual practice of radiography. 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 - Radiographic Internship II

Credit(s): 5
Internship Hour(s): 15

Prerequisite(s): RTE 1081.
Formerly RTE 182 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 - Radiographic Internship III

Credit(s): 7
Internship Hour(s): 21
Prerequisite(s): RTE 1082.
Formerly RTE 183 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

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): RTE 1022.
Formerly RTE 221 Introduces advanced imaging techniques including radiography of the cranium, facial bones and special radiographic procedures. These concepts are combined with the basic oral communication techniques necessary for the professional radiographer.

RTE 2031 - Radiation Biology/Protection

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): RTE 1042.
Formerly RTE 231 Provides the basic knowledge and understanding of the biologic effects of ionizing radiation and radiation protection and safety.

RTE 2055 - Multiplanar Sectional Imaging

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Radiologic Technology student or imaging professional or permission of instructor.
Formerly RTE 255 Offers a course designed to increase knowledge in multiplanar/multimodality sectional anatomy for imaging professionals, radiologic technology students and other interested health care professionals. Correlative studies of line drawings, cadaverous photographs, MRI and CT images are thoroughly studied.

RTE 2056 - Bone Densitometry

Credit(s): 2
Lecture Hour(s): 2
Formerly RTE 256 Offers an in-depth study of bone densitometry equipment, scanning and interpretation that will prepare the student for the American Registry of Radiologic Technologist certification examination in bone densitometry.

RTE 2075 - Special Topics

Credit(s): 0-12
Formerly RTE 275 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

RTE 2081 - Radiographic Internship IV

Credit(s): 8
Internship Hour(s): 24
Prerequisite(s): RTE 1083.
Formerly RTE 281 Introduces the student to the radiographic specialty areas of pediatrics, geriatrics, the outpatient clinic, as well as increasing proficiency in general radiography.

RTE 2082 - Radiographic Internship V

Credit(s): 8
Internship Hour(s): 24
Prerequisite(s): RTE 2081
Formerly RTE 282 Introduces the student to the radiographic specialty areas of pediatrics, geriatrics, the outpatient clinic, portable and trauma radiography, as well as increasing proficiency in general radiography.

RTE 2084 - Internship

Credit(s): 4
Internship Hour(s): 12
Prerequisite(s): Registered with the American Registry of Radiologic Technologists.
Formerly RTE 284 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.

RTE 2086 - Advanced Clinical Specialty II

Credit(s): 6
Internship Hour(s): 18
Prerequisite(s): Registered with the American Registry of Radiologic Technologists.
Formerly RTE 286 Provides the student with supervised hands-on training in advanced field of medical imaging. Allows the student to gain the clinical experience necessary to work in the specified area of advanced practice.

RTE 2089 - Capstone

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): All core curriculum or permission of instructor.
Corequisite(s): RTE 2082.
Formerly RTE 289 Prepares the radiology technology student to effectively search for a job in radiography and sit for the American Registry of Radiologic Technologists examination.

RTE 2091 - Professional Development

Credit(s): 3
Internship Hour(s): 9
Prerequisite(s): Registrant must be registered or registry eligible Radiologic Technologist and approval of department chair.
Formerly RTE 291 To be determined by the individual instructor. A Course Description will be developed for each course and documented within the course syllabus.

RTE 3011 - Sectional Anatomy for Medical Imaging

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): AAS in Radiologic Technology and ARRT Registered.
Formerly RTE 311 Identifies anatomy in various imaging planes of advanced modalities. Compares normal anatomy with gross pathology on advanced cross-sectional images. Evaluation of anatomy and pathology will include head, spine, thorax, abdomen/pelvis and extremities.

RTE 3012 - IV Certificate for Contrast Medium

Credit(s): 1
Lecture Hour(s): 0.50
Vocational Clinic Hour(s): 1

Prerequisite(s): AAS in Radiologic Technology and ARRT Registered.
Formerly RTE 312 Prepares the student to perform IV contrast administration including knowledge of arterial and venous anatomy, appropriate puncture sites, necessary equipment and supplies, understanding of different contrast media, injectors and administration safety.

RTE 3021 - Theory and Application of MR Imaging I

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): AAS in Radiologic Technology and ARRT Registered.
Formerly RTE 321 Applies the fundamental principles of MRI in order to perform clinical MRI examinations of the human body with special consideration to image production, quality control, terminology, basic procedural steps and MRI equipment and safety.

RTE 3031 - MRI Protocols and Procedures

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): AAS in Radiologic Technology and ARRT Registered.
Formerly RTE 331 Develops the knowledge necessary to perform procedures for imaging various anatomical structures utilizing MRI. It provides instruction on routine parameter selection, patient positioning, coil selection and application and anatomy and pathologies demonstrated on MR images.

RTE 3041 - Theory and Application of CT Imaging

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): AAS in Radiologic Technology and ARRT Registered.
Formerly RTE 341 Applies the fundamental and advanced principles of Computed Tomography (CT) in order to perform clinical CT examinations of the human body with special consideration to image production, quality control, terminology, basic procedural steps and MRI equipment and safety.

RTE 3051 - CT Protocols and Procedures

Credit(s): 2
Lecture Hour(s): 2

Prerequisite(s): AAS in Radiologic Technology and ARRT Registered.
Formerly RTE 351 Covers the skill and knowledge necessary to perform supplemental procedures for imaging various anatomical structures including the head, spine, chest, abdomen, pelvis and extremities utilizing Computed Tomography. It provides instruction on gross pathological conditions demonstrated on CT images.

RTE 3081 - Internship: MRI I

Credit(s): 3
Internship Hour(s): 9
Prerequisite(s): AAS in Radiologic Technology and ARRT Registered.
Formerly RTE 381 Provides supervised hands-on training in MR imaging exams. The Internship allows the student to gain clinical experience and develop proficiency in MRI.

RTE 3082 - Internship: CT I

Credit(s): 4
Internship Hour(s): 12
Prerequisite(s): AAS in Radiologic Technology and ARRT Registered.
Formerly RTE 382 Provides supervised hands-on training in Computed Tomography exams. The Internship allows the student to gain clinical experience and develop proficiency in CT.

RTE 4021 - Theory and Application of MR Imaging II

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): RTE 3021.
Formerly RTE 421 Examines in-depth knowledge of designing MRI pulse sequences, data manipulation, artifacts and quality control and quality assurance procedures. Special consideration will be given to methods to shorten scan time, k-space filling and reconstruction, Fast Fourier Transform and image transfer and storage systems used in healthcare facilities.

RTE 4031 - Advanced MRI Protocols and Procedures

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): RTE 3031.
Formerly RTE 431 Examines specialized advancements in MRI. Emphasis will be placed on the heart and vasculature, functional imaging, contrast agents and their uses, enterography, pelvic run-off and breast imaging.

RTE 4051 - Advanced CT Protocols and Procedures

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): RTE 3051.
Formerly RTE 451 Provides the skill and knowledge necessary to perform advanced specialty procedures for imaging various anatomical structures utilizing Computed Tomography. It distinguishes vascular anatomy and incorporates contrast media injections and contraindication into complex imaging studies.

RTE 4061 - Leadership in Medical Imaging

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): MRI or CT Program Admission.
Formerly RTE 461 Examines concepts and skills needed for leadership roles in Medical Imaging. It prepares the student with communication, time management, supervision, task delegation, conflict management and performance assessment skills.

RTE 4062 - Teaching Methodologies in Medical Imaging Education

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): MRI or CT Program Admission.
Formerly RTE 462 Provides a general overview of the concepts and theory of Medical Imaging education. It introduces current theories of teaching adult learners in the Imaging Sciences, objective development of active learning activities, classroom assessment techniques and delivering course content through distance-learning formats.

RTE 4081 - Internship: MRI II

Credit(s): 7
Internship Hour(s): 21
Prerequisite(s): RTE 3081.
Formerly RTE 481 Provides continued hands-on training for the student to perform supervised exams, gain clinical experience and develop proficiency in MRI.

RTE 4082 - Internship: CT II

Credit(s): 7
Internship Hour(s): 21
Prerequisite(s): RTE 3082.
Formerly RTE 482 Provides continued hands-on training for the student to perform supervised exams, gain clinical experience and develop proficiency in CT.

Range Management

RAM 2005 - Range Management

Credit(s): 4
Lecture Hour(s): 4
Formerly RAM 205 Presents the historical and current status of the range livestock industry. Management principles for private and public rangelands, range plant identification and range plant communities are covered.

Real Estate

REE 1075 - Special Topics

Credit(s): 0-12
Formerly REE 175 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

REE 2001 - Real Estate Brokers I

Credit(s): 6
Lecture Hour(s): 6
Formerly REE 201 Enables the student, in conjunction with REE 2002 - Real Estate Brokers II, to meet the educational requirements of the Colorado Real Estate Commission for a Colorado Real Estate Brokers' license. This course includes real estate law and practice, practical applications, and current legal issues.

REE 2002 - Real Estate Brokers II

Credit(s): 6
Lecture Hour(s): 6
Formerly REE 202 Enables the student, in conjunction with REE 2001 - Real Estate Brokers I, to meet the educational requirements of the Colorado Real Estate Commission for a Colorado Real Estate Brokers' license. This course includes Colorado contracts and regulations, closings, and recordkeeping and trust accounts.

REE 2075 - Special Topics

Credit(s): 0-12
Formerly REE 275 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

Respiratory Care

RCA 1005 - Introduction to Respiratory Care

Credit(s): 1
Lecture Hour(s): 1
Formerly RCA 105 Introduces the principles and practices of Respiratory Therapy, to include the study of: the profession's history, current and future roles of the respiratory therapist, working cohesively with other professional organizations, quality care and evidence-based practice, patient safety, effective communication with patients, patient health records, principles of infection control, and implications of legal and ethical practices.

RCA 1010 - Pharmacology of Respiratory Therapy

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Department approval required
Formerly RCA 110 Introduces pharmacology associated with respiratory therapy, to include the study and application of prescribed medications for the indications, administration, adverse reactions and calculations; a study of specific topics include patient education of medication delivery devices, patient monitoring devices, utilization techniques, and the standards for therapeutic efficacy in relation to asthma, chronic obstructive pulmonary disease, and smoking cessation.

RCA 1032 - Basic Techniques in Respiratory Care II

Credit(s): 5
Lecture Hour(s): 3
Vocational Lab Hour(s): 3
Prerequisite(s): RCA 1041 or consent of the instructor
Formerly RCA 132 Introduces the principles and practices of respiratory therapy, to include the study and application of aerosol therapy for medication delivery, airway clearance, and lung expansion techniques to promote bronchial hygiene for patients with cardiopulmonary disease pathologies.

RCA 1041 - Basic Techniques in Respiratory Care

Credit(s): 5
Lecture Hour(s): 2
Vocational Lab Hour(s): 4.5
Prerequisite(s): Program admission
Formerly RCA 141 Introduces the principles and practices of respiratory therapy; including the study and application of infection control, conducting a patient centered interview, performing a cardiopulmonary physical assessment, identifying normal and abnormal structures on a thoracic radiograph, the application of medical gases to the cardiopulmonary patient, and the application of high flow oxygen therapy to the cardiopulmonary patient.

RCA 1051 - Cardiopulmonary Anatomy and Physiology

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Department Approval Required
Formerly RCA 151 Examines the cardiopulmonary anatomy and physiology related to respiratory therapy. This course also includes the study and analysis of the functional interrelationships between the pulmonary and cardiovascular systems.

RCA 1053 - Cardiopulmonary Disease and Pathology

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Program admission.
Formerly RCA 153 Covers the pathological abnormalities and clinical manifestations associated with cardiopulmonary diseases. This course includes the study of patient assessment, treatment modalities, and management for both chronic and acute cardiopulmonary diseases.

RCA 1056 - Application of Science in Respiratory Care

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to the program.
Formerly RCA 156 Applying the basic concepts of chemistry and physics in relation to the practices of Respiratory Therapy. Interpretation of laboratory data collected from an arterial and/or venous blood sample for identifying a patient's homeostasis with oxygenation and ventilation to maintain a normal acid-base balance. Applying an index of O2 calculation to determine how gases are exchanged and transported from the atmosphere to the body for the assessment of the cardiopulmonary patient.

RCA 1065 - Pharmacology of Cardiopulmonary Care

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Program admission.
Formerly RCA 165 Focuses on a study of the principles of pharmacology and the pharmacologic properties and application of drugs commonly employed in the treatment of cardiopulmonary disease.

RCA 1066 - Monitoring and Diagnostics of the Cardiopulmonary Patient I

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): Program admission.
Formerly RCA 166 Provides the student an introduction to the monitoring and diagnostics for the cardiopulmonary patient, to include an analysis of the various clinical procedures, laboratory tests, and monitoring devices.

RCA 2030 - Critical Care I

Credit(s): 2
Vocational Lab Hour(s): 3
Prerequisite(s): RCA 1053 or consent of instructor.
Formerly RCA 230 Focuses on the care of critically ill patients. Includes advanced pulmonary physiology and pathophysiology, assessment and monitoring of acute and chronic respiratory failure, mechanical ventilation and emergency respiratory care. Incorporates a laboratory portion that enables the student to develop skills essential for the assessment and treatment of the critically ill.

RCA 2035 - Mechanical Ventilation I

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Prerequisite(s): Department approval required
Formerly RCA 235 Introduces the principles and practices of invasive and non-invasive mechanical ventilation, to include the study of respiratory failure and physiological effects of mechanical ventilation. This course covers the management of equipment for various types of mechanical ventilator systems.

RCA 2036 - Mechanical Ventilation II

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Prerequisite(s): Department approval required. **Elaborates on the principles and practices of mechanical ventilation in high-risk situations, to include the study of ventilator graphics, management of patient asynchrony with ventilator support, and long-term mechanical ventilation.**
Formerly RCA 236 Elaborates on the principles and practices of mechanical ventilation in high-risk situations, to include the study of ventilator graphics, management of patient asynchrony with ventilator support, and long-term mechanical ventilation.

RCA 2046 - Neonatal and Pediatric Respiratory Care

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Department approval required
Formerly RCA 246 Introduces the theory and principles of respiratory therapy unique to pediatric and neonatology. This course examines fetal development, prenatal and antenatal assessment, and high risk delivery. Including the analysis of anatomy and physiology, clinical assessment, therapeutic modalities, and cardiopulmonary disorders for neonatal and pediatric patients.

RCA 2051 - Critical Care II

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Program admission.
Formerly RCA 251 Focuses on selected topic areas in critical care. Includes both technical and management concerns in the intensive care setting.

RCA 2056 - Pediatric and Neonatal Care

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Program admission.
Formerly RCA 256 Covers aspects of fetal development, neonatology and pediatrics. Cardiopulmonary disorders, respiratory therapeutics, special procedures, labor and delivery will be covered. Students enrolled in this class will also be certified in pediatric advanced life support.

RCA 2065 - Professional Development

Credit(s): 2
Lecture Hour(s): 2
Corequisite(s): RCA 2083 or consent of instructor.
Formerly RCA 265 Reviews the respiratory therapy concepts, theory, and therapeutic applications covered within the program curriculum to prepare for the national credential examination, job placement, and state licensure requirements.

RCA 2066 - Advanced Monitoring and Diagnostics of the Cardiopulmonary Patient II

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): Program admission.
Formerly RCA 266 Provides the student with an advanced opportunity for analysis and the monitoring and diagnosis of the cardiopulmonary patient, to include current medical diagnostic procedures, laboratory testing, and advance monitoring equipment.

RCA 2070 - Clinical I

Credit(s): 4.5
Vocational Clinic Hour(s): 13.5

Prerequisite(s): Department approval required.
Formerly RCA 270 Serves as the first patient care internship and focuses on the care and analysis of the noncritical patient. Includes procedures presented in RCA 131 and RCA 132.

RCA 2071 - Clinical II

Credit(s): 8
Vocational Clinic Hour(s): 24

Prerequisite(s): Department approval required.
Formerly RCA 271 Serves as the second patient care internship and focuses on the care and analysis of the critically ill patient. Rotations into specialty areas are carried out as the schedule permits.

RCA 2072 - Clinical III

Credit(s): 8
Vocational Clinic Hour(s): 24

Prerequisite(s): Department approval required.
Formerly RCA 272 Offers the clinical practicum required for the program.

RCA 2075 - Special Topics

Credit(s): 0-12
Formerly RCA 275 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

RCA 2080 - Internship I

Credit(s): 4.50
Internship Hour(s): 13.50
Prerequisite(s): RCA 1041, RCA 1032, or instructor's permission.
Formerly RCA 280 Focuses on the care and analysis of the noncritical patient. Procedures include those presented in RCA 1041and RCA 1032.

RCA 2081 - Internship II

Credit(s): 7.50
Internship Hour(s): 22.50
Prerequisite(s): RCA 2080 or instructor's permission.
Formerly RCA 281 Focuses on the care and analysis of the critically ill patient. Rotations into specialty areas are carried out as the schedule permits.

RCA 2083 - Internship III

Credit(s): 7.50
Internship Hour(s): 22.50
Prerequisite(s): RCA 2081 or instructor's permission.
Formerly RCA 283 Continues to address the care and analysis of the critically ill patient and specialty rotations. Attempts to more closely evaluate the student's ability to manifest critical judgments in solving clinical problems and understanding professional/departmental activities.

RCA 4000 - Current Topics in Pulmonary Disease

Credit(s): 3
Lecture Hour(s): 3
Formerly RCA 400 Analyze current issues related to respiratory disease, including pathophysiology, management, and outcomes.

RCA 4001 - Sleep Medicine

Credit(s): 3
Lecture Hour(s): 3

Formerly RCA 401 Develops a working knowledge in sleep medicine for health care professionals by reviewing and identifying diagnostic procedures, therapeutic interventions, and sleep disorders.

RCA 4002 - Advanced Concepts in Respiratory Therapy

Credit(s): 3
Lecture Hour(s): 3
Formerly RCA 402 Evaluates and analyzes current monitoring and diagnostic procedures for the cardiopulmonary patient in the acute and non-acute care settings with an emphasis on quality control, correlation of patient data, application of technology, and analysis of therapeutic protocols and procedures.

RCA 4078 - Senior Seminar

Credit(s): 2
Lecture Hour(s): 2
Formerly RCA 478 Senior seminar for respiratory care creating a senior project that applies knowledge and concepts through the use of problem-based learning methods in the research and evaluation of industry best practices.

Science

SCI 1055 - Integrated Science I

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly SCI 155 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. Course is for elementary education majors only; both SCI 155 & SCI 1056required. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

SCI 1056 - Integrated Science II

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly SCI 156 Examines earth and biological systems, living and nonliving environments, through the application of fundamental energy and matter concepts. These systems and concepts will be explored in hands-on laboratory experiments. Course is for elementary education majors only; both SCI 1055& SCI 156 required. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

SCI 1075-1077 - Special Topics

Credit(s): 0-12
Formerly SCI 175-177 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

SCI 1105 - Science in Society: GT-SC2

Credit(s): 3
Lecture Hour(s): 3

Prerequisite(s): MAT 0300 with a grade of S/C or better.
Formerly SCI 105 Examines issues relating to the way science affects society. Students will investigate issues in information technology, the environment, physics and astronomy, biology, medicine and the interaction of science with politics. The class will focus on gathering MAT 2561accurate scientific information and applying critical thinking skills and the scientific method to analyze how science plays both positive and negative roles in society. Emphasis will be on student research, inquiry and analysis of science-related issues. This course is one of the statewide Guaranteed Transfer courses, GT-SC2.

Small Business Management

SBM 1001 - Starting a Small Business

Credit(s): 1
Lecture Hour(s): 1
Formerly SBM 101 Provides a brief overview of various topics related to starting a small business. Some topics are types of businesses, location, image, insurance, permits and licenses.

SBM 1021 - Small Business Planning I

Credit(s): 9
Lecture Hour(s): 9
Formerly SBM 121 Provides business owners systematic instruction to give them the tools to make sound business decisions based on the fields of study in small business management. This course guides the student in the collection of necessary information to implement a computerized record keeping system and to prepare a business plan. Discussions will include computer terminology, balance sheet concepts, accounting principles, computerized account reports, legal structures of a business, the basics of contract law, basic human resource management and the business plan components.

SBM 1022 - Small Business Planning II

Credit(s): 9
Lecture Hour(s): 9
Formerly SBM 122 Guides the student in the collection of necessary information to implement a computerized recordkeeping system and to prepare a business plan. Discussions will include computer terminology, balance sheet concepts, accounting principles, computerized account reports, legal structures of a business, the basics of contract law, basic human resource management and the business plan components. Focuses on implementing a computerized record keeping system.

SBM 1031 - Records and Computerization I

Credit(s): 9
Lecture Hour(s): 9
Formerly SBM 131 Guides the student in the collection of necessary information to implement a computerized recordkeeping system for the small business owner/operator. Discussion will included computer terminology, application software, balance sheet concepts, accounting principles, computerized accounting reports and business plan components.

SBM 1032 - Records and Computerization II

Credit(s): 9
Lecture Hour(s): 9
Formerly SBM 132 Covers the implementation of a computerized recordkeeping system for the small business owner/operator. Emphasis will be placed on the application and maintenance of an accurate set of computerized financial records, use of a filing system and compiling a business plan. This course is a continuation of SBM 1031.

SBM 1041 - Financial Analysis/Planning I

Credit(s): 9
Lecture Hour(s): 9
Formerly SBM 141 Covers how actual enterprise cost analysis is calculated to facilitate the development of whole business projected cash flow statements. All facets of record keeping and updating of data will be emphasized, including refining and maintaining of a current accounting system. This course includes the review and revision of business planning goals and objectives.

SBM 1042 - Financial Analysis/Planning II

Credit(s): 9
Lecture Hour(s): 9
Formerly SBM 142 Covers business analysis through the development of accurate cost and market value accrual balance sheets for the beginning and ending period for the small business owner/operator. Emphasis will be on the measurement and analysis of changes between the two balance sheets. Analysis will include the preparation of an accrual income statement. Financial ratios will be generated to understand their importance to business analysis. Data generated from an established record keeping system will provided the basis for the development of these accrual financial statements.

SBM 1051 - Marketing and Risk Management I

Credit(s): 9
Lecture Hour(s): 9
Formerly SBM 151 Emphasizes the identification of the strengths and weaknesses of the business and applying them in the development of plans for the business. Includes the development of marketing goals and objectives and the development of budgets, including marketing, into the total operating budget and activities of the business. Provides a review of existing financial trends and activities for further analysis of the small business, measuring past and present performance, and developing risk management plans.

SBM 1052 - Marketing and Risk Management II

Credit(s): 9
Lecture Hour(s): 9
Formerly SBM 152 Continues from SBM 1051and provides more in-depth processes and planning to strengthen the operator's business through evaluation and planning based on the strengths and weaknesses of the business. The business operator will develop appropriate business, Marketing and Risk Management goals and objectives and be ready to initiate their implementation.

SBM 1053 - Marketing, Risk Management and E-Commerce I

Credit(s): 9
Lecture Hour(s): 9
Formerly SBM 153 Introduces the development of webpages using structured design to document layout. This course provides the student with hands-on, practical application in creating and maintaining a webpage for small business

owners. May include such concepts as webpage layout, text manipulation hyperlinks, graphics, graphics formats, data tables and file downloading requirements, development of the basic marketing plan, defining your market, listing your page with search engines, and working with multimedia and the website.

SBM 1054 - Marketing, Risk Management and E-Commerce II

Credit(s): 9
Lecture Hour(s): 9
Formerly SBM 154 Introduces the development of webpages using structured design to document layout. This course is a continued study in e-commerce and marketing for small business owners. It provides the student with hands on, practical application in creating and maintaining a webpage for small business owners.

SBM 1075 - Special Topics

Credit(s): 0-12
Formerly SBM 175 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

SBM 2075 - Special Topics

Credit(s): 0-12
Formerly SBM 275 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

Social Work

SWK 1000 - Introduction to Social Work

Credit(s): 3
Lecture Hour(s): 3
Formerly SWK 100 Introduces students to the philosophy of the social work profession including the knowledge, values, ethics, roles and skills inherent to generalist social work.

SWK 1060 - Introduction to Alcohol and Drugs

Credit(s): 3
Lecture Hour(s): 3
Formerly SWK 106 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 1075 - Special Topics

Credit(s): 0-12
Formerly SWK 175 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

SWK 1075-1077 - Special Topics

Credit(s): 0-12
Formerly SWK 175-177 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

SWK 2010 - Human Behavior in the Social Environment I

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of PSY 1001 and SOC 1001 .
Prerequisite(s)/Corequisite(s): SWK 1000.
Formerly SWK 201 Focuses on the person in environment throughout the lifespan with an examination of the relationship between biological, psychological, social, spiritual and cultural systems.

SWK 2020 - Human Behavior in the Social Environment II

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of SWK 2010
Formerly SWK 202 Focus in this course is on an understanding and analysis of larger social systems which include the family, groups, communities and organizations. Emphasis on social systems as an organizing theoretical framework for understanding social functioning and change.

SWK 2050 - Social Welfare in the United States

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): SWK 1000 (concurrency allowed)
Prerequisite(s)/Corequisite(s): SWK 1000.
Formerly SWK 205 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.

Sociology

SOC 1001 - Introduction to Sociology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 101 Examines the basic concepts, theories and principles of sociology as well as human culture, social groups, and the social issues of age, gender, class and race. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

SOC 1002 - Introduction to Sociology II: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 102 Examines social institutions and organizations from the macro perspective. Emphasizes issues of social change, demography, social movements, and conflicts and trends within education, religion, family, political and economic structures. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

SOC 1075-1077 - Special Topics

Credit(s): 0-12
Formerly SOC 175-177 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

SOC 2003 - Urban Socio-anthropology

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 203 Examines how cities and city life are shaped by cultural, social, political and economic forces operating at many different levels. Additionally, SOC 203 examines the history and theoretical roots of urban anthropology and sociology, ethnographic fieldwork in urban environment, and urban social organization in cross-cultural perspectives.

SOC 2005 - Sociology of Family Dynamics: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 205 Develops an understanding of marriage, family and kinship. It examines the family as an institution and how social, cultural and personal factors influence family relations. The stability and diversity of the family will be explored, along with current trends and some alternative lifestyles. This course is one of statewide Guaranteed Transfer courses, GT-SS3.

SOC 2007 - Environmenetal Sociology: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 207 Examination of humans and the environment from an ecological perspective. Focuses on industrial and economic growth versus sustainability, natural resources development and management, environmental values and social movements, and comparative perspectives on people's relationship to the environment. Review of the Green movement and other environmental movements and their impacts upon social dynamics, the environment and the evolution of social movements.

SOC 2015 - Contemporary Social Problems: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 215 Explores current social issues that result in societal problems. It focuses on such issues as civil liberties, gender discrimination, substance abuse, crime, poverty and social change. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

SOC 2016 - Sociology of Gender: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 216 Gives students the theoretical and factual background necessary to understand the phenomenon of gender stratification in American and other cultures. Students will be exposed to a history of gender stratification in human societies, theoretical explanations for this and insights into the consequences of gender differentiation in our world today. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

SOC 2018 - Sociology of Diversity: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 218 Explores the variety of intergroup relations regarding race, nationality, ethnicity, gender, sexual orientation and other diversity issues. Patterns of prejudice, discrimination and possible solutions to these issues will be addressed. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

SOC 2031 - The Sociology of Deviant Behavior: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 231 Examines the nature, identification, and explanation of deviant categories. Theories and philosophies, as well as methods of treatment related to deviancy, will also be considered. The course will study society's attempts to control, change and institutionalize those acts, individuals or groups that a population may deem unacceptable. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

SOC 2037 - Sociology of Death and Dying: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 237 Provides an opportunity to familiarize students and professionals with the needs and issues surrounding dying and death. This course will provide sociological, psychological, religious, historical and anthropological perspectives for interpreting contemporary American customs dealing with dying, death and bereavement. We will examine the professions associated with death and dying, such as hospice, funeral and crematory institutions, and medical care. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

SOC 2065 - Violence and Culture

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 265 Examines the concepts, relationships, organizations and research as they relate to violence in multiple cultural settings. SOC 265 assists in developing an understanding of societal and institutional causes of violence; explores resources for intervention and treatment; and provides service learning applications in violence assessment, treatment and victim assistance.

SOC 2075 - Special Topics

Credit(s): 0-12
Formerly SOC 275 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

SOC 2080 - Internship

Credit(s): 0-12
Internship Hour(s): 0-36
Prerequisite(s): Department Chair Approval.
Formerly SOC 280 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.

SOC 2089 - Capstone

Credit(s): 0-12
Internship Hour(s): 0-36
Prerequisite(s): Department Chair Approval.
Formerly SOC 289 Studies and applies the theories and techniques of leadership and group processes. In addition, SOC 289 introduces leadership skills and experiences with applications in group and community settings.

Spanish

SPA 1001 - Conversational Spanish I

Credit(s): 3
Lecture Hour(s): 3
Formerly SPA 101 Offers beginning students the skills necessary to understand and speak Spanish. The material includes basic vocabulary, grammar and expressions that are used in daily situations and in travel.

SPA 1002 - Conversational Spanish II

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of SPA 1001, or Department Chair Approval.
Formerly SPA 102 Offers students the skills necessary to understand and speak Spanish. The material continues to cover basic conversations patterns, expressions and grammar.

SPA 1009 - Spanish for Travellers

Credit(s): 2
Lecture Hour(s): 2
Formerly SPA 109 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

Credit(s): 5
Lecture Hour(s): 5
Formerly SPA 111 Develops students' interpretive, interpersonal and presentational communicative abilities in the language. Integrates these skills in the cultural contexts in which the language is used. Offers a foundation in the analysis of culture.

SPA 1012 - Spanish Language II

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): SPA 1011, or Department Chair Approval.
Formerly SPA 112 Expands students' interpretive, interpersonal and presentational communicative abilities in the language across the disciplines. Integrates these skills with the study of the cultures in which the language is used. Offers a foundation in the analysis of culture and develops intercultural communicative strategies.

SPA 1014 - Fast-track Spanish I and II

Credit(s): 5
Lecture Hour(s): 5
Formerly SPA 114 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

Credit(s): 3
Lecture Hour(s): 3
Formerly SPA 115 Introduces students to a working knowledge of the target language, cultural behaviors and values useful in various professional fields such as health care, law enforcement, bilingual education, business and others.

SPA 1075 - Special Topics

Credit(s): 0-12
Formerly SPA 175 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

SPA 1078 - Seminar

Credit(s): 0-12
Seminar Hour(s): 0-180
Formerly SPA 178 Provides students with an experiential learning opportunity.

SPA 2011 - Spanish Language III: GT-AH4

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of SPA 1012 or Department Chair Approval.
Formerly SPA 211 Continues SPA 1011 - Spanish Language Iand SPA 1012 - Spanish Language IIin the development of increased functional proficiency in listening, speaking, reading and writing the Spanish Language. Note: The order of the topics and the methodology will vary according to individual texts and instructors. This course is one of statewide Guaranteed Transfer courses, GT-AH4.

SPA 2012 - Spanish Language IV: GT-AH4

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of SPA 2011 or Department Chair Approval.
Formerly SPA 212 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. This is a statewide Guaranteed Transfer course in the GT-AH4 category. This course is one of statewide Guaranteed Transfer courses, GT-AH4.

SPA 2075 - Special Topics

Credit(s): 0-12
Formerly SPA 275 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

Sport Vehicle Technology

SVT 1001 - SVT Orientation and Safety

Credit(s): 1
Lecture Hour(s): 0.50
Vocational Lab Hour(s): 0.75
Corequisite(s): MAT 1140.
Formerly SVT 101 Designed as an orientation to the sport vehicle repair industry. Students receive an overview of job possibilities as well as learn various types of sport vehicle construction. Focuses on general sport vehicle repair and service shop safety procedures with an emphasis on personal and environmental safety issues. Students also learn the proper handling and disposal of hazardous materials. Names, uses and maintenance procedures for a variety of tools and equipment are addressed.

SVT 1002 - SVT Rolling Chassis

Credit(s): 3
Lecture Hour(s): 1.50
Vocational Lab Hour(s): 2.25
Prerequisite(s): SVT 1001.
Formerly SVT 102 Designed to introduce students to the major chassis components of motorcycles. This class will provide training in the basic servicing of motorcycle frames, suspension, tire, wheel and brake systems. Diagnostic procedure, routine maintenance, minor repair, adjustment and special tools will be studied.

SVT 1003 - SVT Electrical Theory

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): SVT 1002.
Formerly SVT 103 Introduces automotive electricity and includes basic electrical theory, circuit designs and wiring methods. Focuses on multimeter usage and wiring diagrams.

SVT 1004 - 2 Stroke Engines

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): SVT 1003.
Formerly SVT 104 Introduction to basic two-stroke engine theory, operation and repair.

SVT 1005 - 4 Stroke Engines

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): SVT 1001.
Formerly SVT 105 Introduction to basic four-stroke engine theory, operation and repair.

SVT 1006 - SVT Electrical Repair

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): SVT 1005.
Formerly SVT 106 Designed to expose students to the thought process required to correctly diagnose sport vehicle electrical systems, as well as provide hands-on training to allow for learning of proper repair techniques.

SVT 1007 - SVT Drive Systems

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): SVT 1006.
Formerly SVT 107 Designed to introduce students to drive components used on modern sport vehicles, including transmission assemblies, clutch components, chain and belt drive systems.

SVT 1009 - SVT Snow/ATV/PWC

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): SVT 1007.
Formerly SVT 109 Designed to train students in the various unique aspects of snowmobile, personal watercraft and ATV repair and maintenances.

SVT 1060 - Basic Motorcycle Repair I

Credit(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): SVT 1009.
Formerly SVT 160 Designed to expose current and prospective entry-level motorcycle technicians to basic motorcycle maintenance and repair. Focus will be placed on routine and preventive maintenance and producing. This class is the first in a series of classes designed to produce a novice or apprentice-level mechanic. Topics covered in the class include basic safety, hand tool and shop procedure. One objective is to make the learner more familiar with mechanical concepts and more confident in their own ability. Course study may be tailored for each student's specific area of need or interest.

SVT 1061 - Basic Motorcycle Repair II

Credit(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): SVT 1060.
Formerly SVT 165 Designed to build upon concepts and practices learned in SVT 1060and expose current and prospective motorcycle mechanics to basic motorcycle maintenance and repair. Focus will be placed on routine and preventative maintenance. Topics covered will study of motorcycle frame, suspension, tire and wheels. One objective is to make the learner more familiar with mechanical concepts and more confident in their own ability. Course study may be tailored for each student's specific area of need or interest.

SVT 2001 - Adv. Rolling Chassis

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Prerequisite(s): SVT 1002, SVT 1003, SVT 1004, SVT 1005, SVT 1006, SVT 1007, SVT 1009, Department Chair Approval.
Formerly SVT 201 Designed to build on previous learning and focus students skills as related to the major chassis components of motorcycles. This class will provide advanced training in the servicing and repair of motorcycle frames, suspension, tire, wheel and brake systems. Diagnostic procedure, routine maintenance, major repair, adjustment and special tools will be studied. Hands-on lab activity and actual line work will be the focus of this advanced curriculum.

SVT 2002 - Adv. SVT Electrical Syst.

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Prerequisite(s): SVT 1002, SVT 1003, SVT 1004, SVT 1005, SVT 1006, SVT 1007, SVT 1009, Department Chair Approval.
Formerly SVT 202 Advanced repair and troubleshooting of sport vehicle electrical systems with an emphasis on ignition and charging system diagnosis and repair techniques.

SVT 2003 - Adv. 2/4 Stroke Engines

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Prerequisite(s): SVT 1002, SVT 1003, SVT 1004, SVT 1005, SVT 1006, SVT 1007, SVT 1009, Department Chair Approval.
Formerly SVT 203 Focuses on lecture and related laboratory experiences in the diagnosis and necessary corrective actions of sport vehicle two- and four-stroke engine performance factors. Additionally, repair and renewal procedures for sport vehicles are thoroughly explored.

SVT 2004 - Simulated Shop Operations

Credit(s): 6
Vocational Lab Hour(s): 9
Prerequisite(s): SVT 1002, SVT 1003, SVT 1004, SVT 1005, SVT 1006, SVT 1007, SVT 1009, Department Chair Approval.
Formerly SVT 204 Provides necessary training in general shop operations, including documentation for basic business requirements, basic accounting techniques, shop insurance requirements, safety regulations and customer relations. Provides necessary training in sport vehicle repair operation/shop format study, including training in general vehicle diagnosis, repair, follow-up inspection and performance analysis of sport vehicles.

SVT 2080 - SVT Intership

Credit(s): 6
Internship Hour(s): 18
Prerequisite(s): SVT 1002, SVT 1003, SVT 1004, SVT 1005, SVT 1006, SVT 1007, SVT 1009, Department Chair Approval.
Formerly SVT 205 Focuses on student working at an approved job site related to the sport vehicle industry. The student will complete tasks and meet practical objectives as assigning by the employer and agreed upon by the student and Instructor. An on-the-job learning experience at an approved sport vehicle-related business.

Surgical Technology

STE 1002 - Intro to Surgical Technology

Credit(s): 6
Lecture Hour(s): 6
Prerequisite(s): Program Admittance
Formerly STE 102 Introduces the principles and practices of surgical technology including standards of conduct, professional practice, communication, physical, psychological, social and spiritual needs of the surgical patient, death and dying, special populations, physical environment, safety standards, all-hazards preparedness, biomedical science, asepsis and sterile technique, hemostasis, emergency situations, surgical pharmacology and anesthesia, wound healing, sutures, needles, stapling devices and surgical instrumentation, equipment, and supplies. Perioperative technical skills of the surgical technologist will be demonstrated.

STE 1003 - Introduction to Surgical Technology Lab

Credit(s): 4
Vocational Lab Hour(s): 8
Prerequisite(s): Program Admittance
Formerly STE 103 Introduces hands-on skills in a mock operating room environment for the preoperative phase of surgical technology that includes scrubbing, gowning and gloving, assisting team members, creating and organizing a sterile field, setting up instrumentation on the mayo stand, surgical case management, operative routines, patient transport, patient positioning, prepping, and draping, as well as learning procedures for counting instruments, sponges, needles, sharps, and other items on the sterile field.

STE 1005 - Pharmacology for the Surgical Technologist

Credit(s): 2
Vocational Lab Hour(s): 4
Prerequisite(s): Program admittance
Formerly STE 105 Discuss relevant knowledge as it pertains to surgical pharmacology including the metric system, pharmacology theory, drugs and aspects of anesthesia.

STE 1011 - Surgical Procedures and Case Management

Credit(s): 6
Lecture Hour(s): 6
Prerequisite(s): STE 1002
Formerly STE 111 Identifies the anatomy, physiology, pathology, and terminology, as well as specific variations in the preoperative, intraoperative, and postoperative care related to general, obstetric, gynecologic, ophthalmic, otorhinolaryngologic, oral, maxillary, plastic and reconstructive, genitourinary, orthopedic, cardiothoracic, peripheral vascular, and neuro surgery. Focus will also be placed on diagnostic procedures and tests, operating room set-up according to the surgical procedure, patient positioning, prepping, and draping, instrumentation, equipment, supplies and drugs, procedural steps, purpose and expected outcomes and possible complications.

STE 1033 - Surgical Instruments Lab I

Credit(s): 1.5
Vocational Lab Hour(s): 3
Prerequisite(s): Program admittance.
Formerly STE 133 Introduces the history and materials used in the manufacture of surgical instruments, as well as the

methods used to maintain, clean, and sterilize surgical instrumentation and equipment. Students will learn supplies, equipment, and the names, category, and use of instrumentation used in general, obstetric and gynecologic, otorhinolaryngology, oral, maxillofacial, plastic, reconstructive and ophthalmic surgical specialties. This course is the first of two courses.

STE 1034 - Surgical Instruments Lab II

Credit(s): 1.5
Vocational Lab Hour(s): 3
Prerequisite(s): STE 1002, STE 1003
Formerly STE 134 Introduces the history and materials used in the manufacture of surgical instruments, as well as the methods used to maintain, clean, and sterilize surgical instrumentation and equipment. Introduces supplies, equipment, and the names, category, and use of instrumentation used for genitourinary, orthopedic, cardiothoracic, peripheral vascular, and neurologic surgical specialties.

STE 1051 - Surgical Procedures & Case Management Lab

Credit(s): 4.5
Vocational Lab Hour(s): 9
Prerequisite(s): STE 1002, STE 1003, STE 1033
Formerly STE 151 Introduces surgical case management and the skills required for the surgical technologist to perform in the first and second scrub role in a simulated surgical environment, as it relates to general, obstetric, gynecologic, ophthalmic, otorhinolaryngologic, oral, maxillofacial, plastic, genitourinary, orthopedic, cardiothoracic, peripheral vascular, and neurologic surgical specialties.

STE 2069 - CST Exam Review Course

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): STE 2081.
Formerly STE 279, then STE 2079 Prepares students for the National Certification Exam administered by The National Board for Surgical Technology and Surgical Assisting (NBSTSA) by introducing test taking skills and strategies for success. Students will review major concepts in the surgical technology program in preparation for the CST examination.

STE 2075 - Special Topics

Credit(s): 0-12
Formerly STE 275 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

STE 2081 - Surgical Technology Clinical Internship I

Credit(s): 6
Internship Hour(s): 18
Prerequisite(s): STE 111, STE 112, STE 131, STE 141.
Formerly STE 281 Provides clinical hands-on experience for student to perform surgical technology duties in the first-scrub, second-scrub, and observation role during any given surgical procedure with proficiency and increased complexity while progressing towards entry-level graduate achievement. Clinical experience will be documented by procedure, date and student role while verifying case counts throughout the surgical rotation as defined by accreditation standards through a total of 120 cases. This is the first of three surgical technology clinical Internships.

STE 2082 - Surgical Technology Clinical Internship II

Credit(s): 6
Internship Hour(s): 18
Prerequisite(s): STE 2081.
Formerly STE 282 Provides clinical hands-on experience for student to perform surgical technology duties in the first-scrub, second-scrub, and observation role during any given surgical procedure with proficiency and increased complexity while progressing towards entry-level graduate achievement. Clinical experience will be documented by procedure, date and student role while verifying case counts throughout the surgical rotation as defined by accreditation standards through a total of 120 cases. This is the second of three surgical technology clinical Internships.

STE 2083 - Surgical Technology Clinical Internship III

Credit(s): 6
Internship Hour(s): 18
Prerequisite(s): STE 2082.
Formerly STE 283 Provides clinical hands-on experience for student to perform surgical technology duties in the first-scrub, second-scrub, and observation role during any given surgical procedure with proficiency and increased complexity while progressing towards entry-level graduate achievement. Clinical experience will be documented by procedure, date and student role while verifying case counts throughout the surgical rotation as defined by accreditation standards through a total of 120 cases. This is the third of three surgical technology clinical Internships.

STE 2089 - Surgical Technology Capstone

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): STE 2082, STE 2069
Formerly STE 289 Outlines the skills needed in obtaining and keeping a job. Students will learn how to develop a personal marketing plan, set short and long term goals, manage targeted job searches, fill out paper and electronic applications, write a cover letter and resume, and practice mock interviews especially tailored to surgical technology. Students will also continue reviewing major concepts in the surgical technology program in preparation for the CST examination and take a final practice exam.

Theater

THE 1005 - Theatre Appreciation: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly THE 105 Includes discussions, workshops and lectures designed to discover, analyze and evaluate all aspects of the theatre experience: scripts, acting, directing, staging, history, criticism and theory. This course is one of the statewide Guaranteed Transfer courses, GT-AH1.

THE 1011 - Acting I

Credit(s): 3
Lecture Hour(s): 3
Formerly THE 111 Covers basic acting techniques and approaches, including scene study, improvisation and script analysis. It includes practical application through classroom performance.

THE 1012 - Acting II

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of THE 1011, or Department Chair Approval.
Formerly THE 112 Continues to explore basic acting techniques and approaches including scene study, improvisation and intermediate script analysis. It includes practical application through classroom performance.

THE 1016 - Technical Theatre

Credit(s): 3
Lecture Hour(s): 3
Formerly THE 116 Introduces hands-on methods of constructing and painting scenery and properties and operating stage lighting. Students also learn the proper procedures of using shop equipment and serving on stage crews.

THE 1031 - Theatre Production I

Credit(s): 3
Lecture Hour(s): 3
Formerly THE 131 Allows students to put into practice theories of theatre production. Participation in set construction, scenic artistry, costuming, lighting, sound, acting, stage managing and administration is available.

THE 1032 - Theatre Production II

Credit(s): 3
Lecture Hour(s): 3
Formerly THE 132 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 1075 - Special Topics

Credit(s): 0-12
Formerly THE 175 Provides the student with a vehicle to pursue in-depth exploration of Special Topics of interest.

THE 1075-1077 - Special Topics

Credit(s): 0-12
Formerly THE 175-177 Provides the student with a vehicle to pursue in-depth exploration of Special Topics of interest.

THE 2011 - Development of Theatre Greek-Renaissance: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly THE 211 Surveys the history and evolution of drama from ancient Greece to the Renaissance, emphasizing all aspects of the art from period values to analysis of dramatic literature and performance. This course is one of the statewide Guaranteed Transfer courses, GT-AH1.

THE 2012 - Development of Theatre Restoration to Modern: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly THE 212 Surveys the history and evolution of drama from the Renaissance to the present, emphasizing all aspects of the art from period values to the analysis of dramatic literature and performance. This course is one of the statewide Guaranteed Transfer courses, GT-AH1.

THE 2015 - Playwriting: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly THE 215 Gives students the opportunity to learn and practice playwriting techniques, thereby improving creative writing skills. Elements of dramatic structure, dialogue, styles and theatrical practices are emphasized. This course is one of the statewide Guaranteed Transfer courses, GT-AH1.

THE 2020 - Directing I

Credit(s): 3
Lecture Hour(s): 3
Formerly THE 220 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 2075 - Special Topics

Credit(s): 0-12
Formerly THE 275 Explores current topics, issues and activities related to one or more aspects of the named discipline.

THE 2083 - Internship

Credit(s): 0-12
Internship Hour(s): 0-36
Prerequisite(s): Department Chair Approval.
Formerly THE 283 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.

Unmanned Aircraft Systems

UAS 1040 - Unmanned Aircraft Systems Flight and Control

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Formerly UAS 140 Introduces principles of flight and control as applied to Unmanned Aeronautical Vehicles (UAVs)/Unmanned Aeronautical Systems (UAS). This course includes principles of flight, mission planning, systems control, and safety of personnel, safety in the operational environment, and compliance with regulations and procedures. Human factors analysis focusing on crew resource management is also introduced.

UAS 1050 - Unmanned Aircraft Systems and Safety: UAS Foundations

Credit(s): 3
Lecture Hour(s): 3
Formerly UAS 150 Provides an understanding of the capabilities and limitations of Unmanned Aircraft Systems (UAS) technologies to including the hardware and software configurations and gain a holistic view of concerns facing UAS integration into the National Airspace System.

UAS 1051 - Unmanned Aircraft Systems and Safety: UAS Applications

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Prerequisite(s): UAS 1040 and UAS 1050
Formerly UAS 151 Provides an understanding of how Unmanned Aircraft Systems (UAS) are used to accomplish a variety of tasks in complex environments and how remote pilots apply UAS technology for commercial, scientific, and governmental purposes while respecting both physical and regulatory limitations. The course provides a foundation of professionalism and ethics applicable to remote pilots.

UAS 1052 - Unmanned Aircraft Systems and Safety: UAS Personnel

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): UAS 1040 and UAS 1050
Formerly UAS 152 Provides an understanding of limits and skills employed by remote pilots in identifying and mitigating errors. Human error and skills used to detect and stop errors during the day-to-day execution of remote pilot tasks are addressed. This course surveys the concepts of decision-making bias, stress, and methods for safely identifying and mitigating risk while making decisions.

Upholstery

UPH 1000 - Basic Upholstery Techniques

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly UPH 100 Covers the upholstery industry: safety, familiarization with tools and materials, sewing, tacking, layout and pattern work.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

UPH 1001 - Auto Upholstery I

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Prerequisite(s): UPH 1000 or Department Chair Approval.
Formerly UPH 101 Covers auto seat upholstery, including removal and replacement, teardown, correct use of materials, cutting and stretching.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

UPH 1002 - Auto Upholstery II

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Prerequisite(s): UPH 1001 or Department Chair Approval.
Formerly UPH 102 Continues UPH 1001, emphasizing skill development. Carpet, trim, convertible tops, tonneau covers and convertible boots are course components.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

UPH 1003 - Auto Upholstery III

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Prerequisite(s): UPH 1002 or Department Chair Approval.
Formerly UPH 103 Introduces repair and/or replacement of armrests, carpet, wind lace, door panels, headliner, convertible tops, tonneau covers and convertible boots.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

UPH 1004 - Furniture Upholstery I

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly UPH 104 Introduces the mechanics and upholstering of reclining household furniture. Completion of upholstery of a reclining chair is required.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

UPH 1005 - Furniture Upholstery II

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly UPH 105 Provides instruction in layout, cut, sewing and application of final covers on pillow type household furniture. Recovering of one pillow-back chair is required.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

UPH 1006 - Furniture Upholstery III

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3

Formerly UPH 106 Includes reupholstering larger pieces of household furniture such as couches or loveseats. Completion of upholstery of a couch or loveseat is required.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

UPH 2075 - Special Topics

Credit(s): 0-12
Formerly UPH 275 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

Veterinary Technology

VET 1002 - Veterinary Medical Terminology

Credit(s): 1
Lecture Hour(s): 1
Formerly VET 102 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 and 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.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

VET 1016 - Humane Treatment and Handling of Animals

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly VET 116 Focused upon animal welfare and humane treatment during handling and restraint, behavior, safety, equipment choice and typical clinical procedures.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

VET 1020 - Office Procedures and Relations

Credit(s): 2
Lecture Hour(s): 2
Formerly VET 120 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.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

Welding

WEL 1000 - Safety for Welders

Credit(s): 1
Lecture Hour(s): 1
Formerly WEL 100 Covers the hazards of welding on health and safety.

WEL 1001 - Allied Cutting Processes

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Formerly WEL 101 Covers setting up equipment and performing cutting and gouging operations utilizing the oxyacetylene, air carbon arc, exothermic, and plasma arc cutting processes. This course will also provide an introduction to blueprint reading.

WEL 1002 - Oxy-fuel Joining Processes

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.5
Formerly WEL 102 Covers Oxy-fuel joining operations.

WEL 1003 - Basic Shielded Metal Arc I

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1002.
Formerly WEL 103 Covers Shielded Metal Arc Welding (SMAW) operation utilizing E-XX10 electrodes.

WEL 1004 - Basic Shielded Metal Arc II

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1003.
Formerly WEL 104 Covers Shielded Metal Arc Welding (SMAW) operation utilizing E-XX18 electrodes.

WEL 1006 - Blueprint Reading for Welders and Fitters

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Prerequisite(s): WEL 1001 or WEL 1002
Formerly WEL 106 Covers interpretation and creation of weld symbols and blueprints used in metal fabrication.

WEL 1010 - Advanced Shielded Metal Arc I

Credit(s): 4
Lecture Hour(s): 4
Formerly WEL 110 Covers Shielded Metal Arc Welding (SMAW) operations utilizing a variety of electrodes and advanced joint designs.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

WEL 1011 - Advanced Shielded Metal Arc II

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Formerly WEL 111 Covers Shielded Metal Arc Welding (SMAW) operations utilizing various electrodes and welding codes and standards.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

WEL 1015 - Autobody Welding & Cutting

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Formerly WEL 115 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 1024 - Gas Tungsten Arc Welding I

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.5
Formerly WEL 124 Covers Gas Tungsten Arc Welding (GTAW) operations in various positions and joint designs.

WEL 1025 - Introduction to Gas Metal Arc Welding

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1024.
Formerly WEL 125 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 1041 - Introduction to Multi Process Welding

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Formerly WEL 141 Covers welding in the 1F and 1G positions on various joint configurations using the SMAW

(stick), GMAW (mig), GTAW (tig) and the FCAW (flux core) welding process on carbon steel; adjusting parameters and operating equipment, utilizing the various filler materials for each process. Layout procedures will be introduced and practiced, along with welding safety, industry standard soft skills and AWS filler metal classification and selection. Basic math, measuring, computer skills and blueprint reading will be introduced.

WEL 1042 - Basic Multi Process Welding

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1041.
Formerly WEL 142 Covers welding in the 2F and 2G positions on various joint configurations using the SMAW (stick), GMAW (mig), GTAW (tig) and the FCAW (flux core) welding process on carbon steel, adjusting parameters and operating equipment utilizing the various filler materials for each process. Layout procedures, safety, blueprint reading skills and weld symbol identification will be practiced during this course.

WEL 1043 - Intermediate Multi Process Welding

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1042.
Formerly WEL 143 Covers welding in the 3FU and 3GU positions on various joint configurations using the SMAW (stick), GMAW (mig), GTAW (tig) and the FCAW (flux core) welding process on carbon steel, adjusting operating parameters and operating equipment utilizing the various filler materials for each process. Basic metallurgy will be presented.

WEL 1044 - Advanced Multi Process Welding

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1043.
Formerly WEL 144 Covers welding in the 4F and 4G positions on various joint configurations using the SMAW (stick), GMAW (mig), GTAW (tig) and the FCAW (flux core) welding process on carbon steel, adjusting operating parameters and operating equipment utilizing the various filler materials for each process. Resume writing and interview skills will be presented and practiced. Advanced blueprint reading will be focused on including study of complex print reading and weld symbols.

WEL 1050 - AWS Qualification Testing

Credit(s): 1
Lecture Hour(s): 1
Formerly WEL 150 Provides students with the opportunity to complete a welding qualification test in accordance with an American Welding Society code or specification.

WEL 1075-1077 - Special Topics

Credit(s): 0-12
Formerly WEL 175-177 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

WEL 2001 - Gas Metal Arc Welding I

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Formerly WEL 201 Covers Gas Metal Arc Welding (GMAW) operations on carbon steel utilizing various positions and joint designs.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

WEL 2002 - Gas Metal Arc Welding II

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Formerly WEL 202 Covers Gas Metal Arc Welding (GMAW) operations utilizing various base metals, positions, and joint designs.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

WEL 2024 - Gas Tungsten Arc Welding II

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.5
Prerequisite(s): WEL 1024, WEL 1025.
Formerly WEL 224 Covers Gas Tungsten Arc Welding (GTAW) operations utilizing a variety of base metals and advanced joint designs.

WEL 2025 - Advanced Gas Metal Arc Welding

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1024, WEL 1025.
Formerly WEL 225 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

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1003.
Formerly WEL 230 Covers pipe welding operations utilizing the Shielded Metal Arc Welding (SMAW) process in a variety of positions on carbon steel.

WEL 2033 - 2G-Horizontal Pipe A.P.I.

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1004 or equivalent.
Formerly WEL 233 Instruction in safety, theory and practical applications in joint fit-up, design and welding pipe in the 2-G horizontal position. Welding in accordance with the American Petroleum Institute Pipe Code using the SMAW process with E-XX10 type electrodes.

WEL 2034 - 5G-Vertical Down A.P.I.

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 2033.
Formerly WEL 234 Instruction in safety, theory and practical applications in joint fit-up, design and welding pipe in the 5-G Vertical down position. Welding in accordance with the American Petroleum Institute Pipe Code using the SMAW process with E-XX10 type electrodes.

WEL 2035 - 6G-45 Down A.P.I.

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 2034.
Formerly WEL 235 Instruction in safety, theory and practical applications in joint fit-up, design and welding pipe in the 6-G 45 down position. Welding in accordance with the American Petroleum Institute Pipe Code using the SMAW process with E-XX10 type electrodes.

WEL 2039 - 2G-Horizontal Pipe A.S.M.E.

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 2033.
Formerly WEL 239 Instruction in safety, theory and practical applications in joint fit-up, design and welding pipe in the 2-G Horizontal position. Welding in accordance with the American Society of Mechanical Engineers Pipe Code using the GTAW process and SMAW process with E-XX18 and E-XX10 type electrodes.

WEL 2041 - 5G-Verticial Up A.S.M.E.

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 2039.
Formerly WEL 241 Instruction in safety, theory and practical applications in joint fit-up, design and welding pipe in the 5-G Vertical up position. Welding in accordance with the American Society of Mechanical Engineers Pipe Code using the GTAW process and SMAW process with E-XX18 and E-XX10 type electrodes.

WEL 2042 - 6G-45 All Sizes Pipe

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 2041.
Formerly WEL 242 Instruction in safety, theory and practical applications in joint fit-up, design and welding pipe in the 6-G 45 Uphill position. Welding in accordance with the American Society of Mechanical Engineers Pipe Code using the GTAW process and SMAW process with E-XX18 and E-XX10 type electrodes.

WEL 2043 - Testing All Sizes Pipe

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Formerly WEL 243 Testing with different sizes of pipe to the American Petroleum Institute Pipe Code and American Society of Mechanical Engineers codes in all positions 2G, 5G, 6G with 2 3/8-inch pipe and 2-inch pipe.

WEL 2048 - Pipe Layout

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Formerly WEL 248 Using pipe template layout procedures and drawing procedures, perform cutting on pipe. Performs layout such as Y-fittings, laterals, full size tees, elbows, orange peel, bull plug, reducers, reducing tees and branch pipe.

WEL 2050 - Layout and Fabrication

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1002.
Formerly WEL 250 Develops welding and associated skills in metal fabrication.

WEL 2051 - Design, Layout and Fabrication

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1002, WEL 1024, WEL 2050.
Formerly WEL 251 Develops advanced welding and associated skills in the use of drawings and blueprints in planning. Includes designing and layout projects.

WEL 2063 - Applied Metal Properties

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Formerly WEL 263 Introduces the study of metal properties, hardness testing, heat treatment, cold working microscopic examination and application of common commercial alloys in industry.

WEL 2075-2077 - Special Topics

Credit(s): 0-12
Formerly WEL 275-277 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

Women and Gender Studies

WST 2000 - Introduction to Women's Studies: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly WST 200 Examines the nature and function of women in society from an interdisciplinary perspective, focusing on the similarity and diversity of women`s experience over time and across cultures. The course will examine topics such as sex role, socialization, political and philosophical perspectives on women`s issues, and women`s accomplishments in history, art, literature, science, health issues and the family. Students will gain an awareness of the limitations of traditional scholarship on women and gain a means of practical application of the new scholarship on women`s roles and nature. This course is one of the statewide Guaranteed Transfer Courses, GT-SS3.

WST 2075 - Special Topics

Credit(s): 0-12
Formerly WST 275 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

Other Courses

CCR 1075-1077 - College Composition and Reading

Credit(s): 1
Vocational Lab Hour(s): 1.50
Formerly CCR 175-177 Topics covered in the course include those defined in CCR 0092and/or any foundational skills needed by the student. Any student enrolled in CCR 091 is required to co-enroll in CCR 0092. Developmental Grading

COM 1075-1077 - Special Topics

Credit(s): 0-12
Formerly COM 175-177 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

COM 1105 - Career Communication

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 105 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.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

COM 1300 - Communication and Popular Culture: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level.
Formerly COM 130 Engages students in four key methodological approaches taken by Communication Studies scholars as a means to empower students with the critical skills to understand popular culture texts more mindfully. Students will place the history of popular culture within a broader context of U.S. history, analyze a variety of texts that fall into the category of "arts and humanities", and engage in methods of critical thinking. GT-AH1

COM 2062 - Communicating with Impossible People

Credit(s): 1
Lecture Hour(s): 1
Formerly COM 262 Introduces participants to the concepts regarding communication with "impossible" people and techniques to deal with them more effectively. Emphasizes active participation in skill-building activities.

COM 2063 - Conflict Resolution

Credit(s): 1
Lecture Hour(s): 1
Formerly COM 263 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

Credit(s): 1
Lecture Hour(s): 1
Formerly COM 264 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 2068 - Problem Solving

Credit(s): 1
Lecture Hour(s): 1
Formerly COM 268 Focuses on solving problems in our personal and professional lives and developing the ability to

think and act creatively in responding to a variety of situations. Introduces several different perspectives for group and individual problem solving and explores real situations and simulations.

COM 2069 - Leadership

Credit(s): 1
Lecture Hour(s): 1
Formerly COM 269 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 2075-2077 - Special Topics

Credit(s): 0-12
Formerly COM 275-277 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

COM 2080 - Internship

Credit(s): Variable 1-12
Internship Hour(s): Variable 3-36
Prerequisite(s): Department approval required
Formerly COM 280 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.

COM 2085 - Independent Study

Credit(s): Variable 0-12
Lecture Hour(s): Variable 0-12
Prerequisite(s): Department approval required.
Formerly COM 285 Meets the individual needs of students. Students engage in intensive study or research under the direction of a qualified instructor.

COM 2089 - Capstone

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Must Have nine credits completed with a grade of "C" or higher towards the Certificate of Professional Communication or approval of the English & communication Department Chair.
Formerly COM 289 Provides a demonstrated culmination of learning within a given program of study.

COM 2220 - Group Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 217 Examines group communication theories with an emphasis on leadership and group behaviors. The course provides opportunities for group participation. GT-SS3

COM 2250 - Organizational Communication

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 225 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 2270 - Gender Communications

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at ENG 1021 level or consent of instructor.
Formerly COM 215 Examines contemporary theories and research in gendered communication. The course will involve reading and discussion in areas of gender differences in self-perception, social and media images of men and women, language usage and nonverbal behavior differences among genders. Relevant concepts include verbal communication, nonverbal communication, context, language, perception, and conflict.

COM 2300 - Intercultural Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 220 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. This is a statewide Guaranteed Transfer course in the GT-SS3 category.

COM 2400 - Argumentation and Debate

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 230 Introduces the student to the theory of argumentation, including reasoning, evidence, refutation, critical thinking, and extemporaneous speaking. The course includes practice in preparation and oral analysis of selected arguments and styles of debating.

EGT 2075 - Special Topics

Credit(s): 0-12
Formerly EGT 275 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

EGT 2200 - Civil/Survey Drafting I

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Prerequisite(s): CAD 2400.
Formerly EGT 143 Focuses on Civil and Survey drafting skills necessary to produce document sets of land surveys/plats, legal descriptions, site layout, plan, profile & alignments, and contour maps.

EGT 2202 - Civil/Survey Drafting II

Credit(s): 3
Lecture Hour(s): 1

Vocational Lab Hour(s): 3
Prerequisite(s): CAD 2400.
Formerly EGT 243 Focuses on advanced civil and survey drafting skills. Students will create computer-aided drawings using traverses, legal descriptions, horizontal and vertical curves, land sections, and coordinates. Emphasizes field note interpretation.

EGT 2305 - Geometric Dimension & Tolerance

Credit(s): 3
Lecture Hour(s): 3
Formerly EGT 205 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.

EIC 1075 - Special Topics

Credit(s): 0-12
Formerly EIC 175 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

EIC 1101 - Job Training & Safety

Credit(s): 3
Lecture Hour(s): 3
Formerly EIC 101 Studies first aid, CDL, basic use and care of personal protective equipment, use and care of climbing equipment, daily inspection and basic use of motorized equipment.

EIC 2075 - Special Topics

Credit(s): 0-12
Formerly EIC 275 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

FMT 1001 - Custodial Techniques

Credit(s): 4
Lecture Hour(s): 4
Formerly FMT 101 Focuses on products and techniques of maintaining commercial or industrial buildings. Covers health standards and issues.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

FMT 1101 - Housekeeping

Credit(s): 1.50
Lecture Hour(s): 1
Vocational Lab Hour(s): 0.75
Formerly FMT 111 Introduces components and practices that provide the part-time custodian with the basic knowledge to effectively perform all fob-related work assignments in general housekeeping.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

FMT 1103 - Cleaning Chemicals

Credit(s): 1
Lecture Hour(s): 1
Formerly FMT 250 Using chemicals safely is the focus of this course. How to select the proper cleaning chemicals, cleaning agents and disinfectants is taught. OHSA standards are included.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

FMT 1201 - Facilities Maintenance - Electricity

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Formerly FMT 102 Focuses on electrical fundamentals as applied to residential and commercial facilities maintenance. Covers repair, service and maintenance of electrical systems and codes.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

FMT 1801 - Job Survival Skills

Credit(s): 1
Lecture Hour(s): 1
Formerly FMT 150 Learn job survival skills that will give you a competitive edge in the workplace. This course of instruction will provide the necessary skills to obtain and keep a job in the custodial trades. Tools taught will be stepping stones for advancement on the job. Topics covered include self-esteem, ethics, responsibility, leadership equity/diversity, communication skills, time management, workplace etiquette, how to deal with the unexpected, and resumes/interviews.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

FMT 1804 - Custodian Personnel Management

Credit(s): 1.50
Lecture Hour(s): 1.50
Formerly FMT 128 Trains school custodians in basic personnel management and emphasizes leadership and team-building skills for the first-time manager.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

HHP 1030 - Reiki Level One

Credit(s): 1
Lecture Hour(s): 1

Explores the traditional Usui use of Reiki. Covers the history and development of Reiki work, beginning in Japan, to Hawaii, to the US, and later Europe on the fundamental beliefs and the dynamics of the Reiki process. Enables each student to receive Reiki attunements to prepare for the Reiki energy work. Each class member gives and receives a Reiki hands-on treatment session.

HHP 1075 - Special Topics

Credit(s): 0-12
Formerly HHP 175-177 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

HHP 2046 - Second Degree Reiki

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): HHP 1030. Program chair approval.
Teaches the learning and meaning of the three traditional Usui symbols. Incorporates in-depth discussion about application of the three symbols. Students learn about the necessary preparation of a Reiki therapist in offering treatments. One attunement is given to each student. Each member gives and receives a Reiki treatment session, utilizing the three Reiki symbols. Long-distance and mental Reiki processes are learned. Reiki Therapist Certification available upon completion.

HHP 2075-2077 - Special Topics

Credit(s): 0-12
Formerly HHP 275-277 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

MGD 1001 - Introduction to Computer Graphics

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly MGD 101 Introduces the student to the computer system and software used to develop graphics. The student will learn the hardware and software components for publication and multimedia production through execution in various vector, raster, page layout and multimedia programs. Students will be introduced to career opportunities within graphics fields.

MGD 1002 - Introduction to Multimedia

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly MGD 102 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 1006 - Creativity and Visual Thinking

Credit(s): 3
Art Studio Hour(s): 6
Formerly MGD 106 Introduces the visual and oral skills necessary to analyze works art and design, articulate complex

ideas, then present the solution cogently in 2D and 3D projects and presentation skill building. The underlying philosophy of what we see, how we see and what we do with it is the major concern of this class.

MGD 1007 - History of Design

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Department Chair Approval.
Formerly MGD 107 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 1011 - Adobe Photoshop I

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly MGD 111 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

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly MGD 112 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

Credit(s): 3
Vocational Lab Hour(s): 4.5
Formerly MGD 114 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 1013 - Quark Xpress

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly MGD 114 Introduces students to QuarkXPress, a digital page layout tool. Students learn how to assemble, organize, manipulate and manage text and graphics to produce a high-quality publication. Class discussions and independent projects supplement hands-on classroom work.

MGD 1015 - Typography & Layout

Credit(s): 3
Vocational Lab Hour(s): 4.50

Formerly MGD 105 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

Credit(s): 3
Lecture Hour(s): 3
Formerly MGD 117 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.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

MGD 1033 - Graphic Design I

Credit(s): 3
Vocational Lab Hour(s): 4.50
Prerequisite(s): MGD 1015 and MGD 1011 or MGD 1013, or Department Chair Approval.
Formerly MGD 133 Focuses upon the study of design layout and conceptual elements concerning graphic design projects such as posters, advertisements, logos and brochures.

MGD 1037 - Illustration I

Credit(s): 3
Vocational Lab Hour(s): 4.50
Prerequisite(s): Department Chair Approval.
Formerly MGD 207 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 1041 - Web Design I

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly MGD 141 Introduces website planning, design and creation using industry standards-based website development tools. Screen-based color theory, web aesthetics, use of graphics editors and intuitive interface design are explored.

MGD 1043 - Motion Graphic Design I: (Software)

Credit(s): 3
Vocational Lab Hour(s): 4.5
Formerly MGD 143 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 1063 - Sound Design I

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly MGD 163 Explores the use of sound in multimedia production and audio storytelling. Students examine the principles of recording. Classes focus on how sound can enhance interactive productions and improve computer presentations. Students learn how to use the computer as a full audio editing studio.

MGD 1064 - Digital Video Editing I

Credit(s): 3
Vocational Lab Hour(s): 4.5
Formerly MGD 164 Introduces to digital nonlinear 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 1067 - Game Design I

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Prerequisite(s): Department Chair Approval.
Formerly MGD 167 Introduces students to game design from conceptual development and functionality, through production of a virtual world prototype. Students examine such things as character registration, in-betweens, inking and clean up used for creating real-time game environments. Storytelling and visual metaphor development are emphasized.

MGD 1075-1077 - Special Topics

Credit(s): 0-12
Formerly MGD 175-177 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

MGD 1403 - Quicktime Technologies

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Introduces students to current QuickTime technologies for Web applications. Students will prepare panoramic and object QTVR content, streaming audio and video in QuickTime format. Students will publish digitized video and audio in HTML Web pages on a local server.

MGD 2002 - Point of Purchase Packaging Design

Credit(s): 3
Vocational Lab Hour(s): 4.50
Prerequisite(s): MGD 1033 concurrently, or MGD 1015, MGD 1012.
Formerly MGD 202 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

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Prerequisite(s): Instructor approval.
Formerly MGD 211 Develops and reinforces image composition techniques learned in MGD 1011 - Adobe Photoshop I. Fundamentals are continuously reinforced as new design techniques are introduced.

MGD 2021 - Computer Graphics I

Credit(s): 3
Vocational Lab Hour(s): 4.50
Prerequisite(s): CIS 110, equivalent assessment test score, or Department Chair Approval.
Formerly MGD 221 Introduces the process of generating computer design.

MGD 2022 - Computer Graphics II

Credit(s): 3
Art Studio Hour(s): 6
Prerequisite(s): MGD 2021 or instructor's approval.
Formerly MGD 222 Continues MGD 2021with advanced problems in generating computer design for graphics application, emphasizing production of individual fine art pieces.

MGD 2027 - Marcomm Practices

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): JOU 1005, or Department Chair Approval
Formerly MGD 227 Explores techniques and approaches in the practice of marketing communications (marcomm), including advertising, branding, direct marketing, packaging, promotion, publicity, sponsorship, public relations, sales, online marketing, social media marketing and more. Focuses on understanding the relationships between the different components of marketing communications to achieve maximum message effect.

MGD 2033 - Graphic Design II

Credit(s): 3
Vocational Lab Hour(s): 4.50
Prerequisite(s): MGD 1033.
Formerly MGD 233 Continues instruction in idea development for advanced graphic design.

MGD 2041 - Web Design II

Credit(s): 3
Vocational Lab Hour(s): 4.50
Prerequisite(s): MGD 1041, or department chair approval.
Formerly MGD 241 Expands on previously learned fundamentals of HTML introducing cascading style sheets, DHTML, Java Scripts and CGI forms. Color usage and interface design principles are emphasized in this course. In this course we'll examine websites that employ more complex structures, optimal site architecture and navigation necessary for larger and more complex sites.

MGD 2042 - Web Architecture: Open Source Design

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly MGD 242 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. Topics may include current content management platforms such as WordPress and Drupal, how to identifying web scripting languages, and an overview of open source programming such as PHP and MySQL.

MGD 2043 - Web Motion Graphic Design II

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Prerequisite(s): MGD 1043.
Formerly MGD 243 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 websites. Website justification of motion graphics will be stressed, appraised and weighed.

MGD 2056 - Graphic Design Production

Credit(s): 3
Vocational Lab Hour(s): 4.50
Prerequisite(s): MGD 1033
Formerly MGD 256 Provides an opportunity to combine several draw and paint applications into one design and layout class. Students will explore advanced techniques in creating and designing computer art.

MGD 2064 - Digital Video Editing II

Credit(s): 3
Vocational Lab Hour(s): 4.5
Prerequisite(s): MGD 1064
Formerly MGD 264 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 2067 - Game Design II

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Prerequisite(s): MGD 1067.
Formerly MGD 267 Explores more advanced features of game design. Students examine such things as integration of mainline code, subroutines and interrupts into game structure. I/O structure, playtesting and distribution are emphasized.

MGD 2068 - Business for Creatives

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021 or ENG 1031
Formerly MGD 268 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 2075-2077 - Special Topics

Credit(s): 0-12
Formerly MGD 275-277 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

MGD 2080 - Internship

Credit(s): 3
Internship Hour(s): 9
Prerequisite(s): Department Chair Approval.
Formerly MGD 280 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

Credit(s): 3
Internship Hour(s): 9
Prerequisite(s): Department Chair Approval.
Formerly MGD 289 A demonstrated culmination of learning within a given program of study.

WTG 1000 - Introduction to Wind Industry

Credit(s): 3
Lecture Hour(s): 3
Formerly WTG 100 Introduces students to the wind power generation industry. Topics covered will include physics of wind energy, various sizes and types of wind turbines, reading wind maps for finding the best wind locations. Students will also engage in discussions of the impact of the wind industry on social, environmental, economic and political issues.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

WTG 1075 - Special Topics

Credit(s): 0-12
Formerly WTG 175 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

Campus Locations

Pueblo Campus - Serving Pueblo County
900 W. Orman Ave.
Pueblo, CO 81004

719.549.3200
Toll-free 888.642.6017

Fremont Campus - Serving Fremont and Custer counties
51320 West Highway 50
Cañon City, CO 81212
719.296.6100

Southwest Campus (Serving Archuleta, Dolores, La Plata, Montezuma and San Juan counties)
33057 Highway 160
Mancos, CO 81328
970.564.6200

Durango Site
Durango High School
2320 Main Avenue
Durango, CO 81301
970.385.2000

Bayfield Site
110 E. South St.
Bayfield, CO 81122
970.385.2070

Programs of Study (A-Z)

Accounting, AAS

CIP 52.0302

See list of Department Chairs on the Personnel page.

Program Description

The Accounting program offers training in theory and practice of modern accounting. It places emphasis on reasoning to make logical accounting policy decisions. Learn to use state-of-the-art equipment and software used in the industry. Gain valuable on-the-job training through the internship experience.

Career Options

The AAS in Accounting prepares you for a career in entry-level accounting or upper-level bookkeeping positions.

Total Credits: 61

Semester One, Fall (16 credits)

MAT 1160 - Financial Mathematics

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 112 Covers topics including pricing, taxes, insurance, interest, annuities, amortization, investments using financial calculators and spreadsheets.

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ACC 1021 - Accounting Principles I

Credit(s): 4
Lecture Hour(s): 4
Formerly ACC 121 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.

BUS 1015 - Introduction to Business

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 115 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.

ENP 1005 - Introduction to Entrepreneurship

Credit(s): 3
Lecture Hour(s): 3
Formerly ENP 105 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.

CIS 1018 - Intro to PC Applications

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 118 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.

Semester Two, Spring (16 credits)

ACC 1022 - Accounting Principles II

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): ACC 1021
Formerly ACC 122 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

Credit(s): 3
Vocational Lab Hour(s): 4.50
Prerequisite(s): ACC 1022
Formerly ACC 125 Introduces the capabilities of computer applications in accounting. Includes solving accounting problems of a financial nature and hardware and software controls.

BUS 2016 - Legal Environment of Business

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 216 Emphasizes public law, regulation of business, ethical considerations, and various relationships existing within society, government, and business. Specific attention is devoted to economic regulation, social regulation, regulation and laws impacting labor-management issues and environmental concerns. Students develop an understanding of the role of law in social, political, and economic change.

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

ACC 1035 - Spreadsheet Applications for Accounting

Credit(s): 3
Lecture Hour(s): 3
Formerly ACC 135 Introduces spreadsheets as an accounting tool in the application of fundamental accounting concepts, problem-solving, and decision-making skills.

Semester Three, Fall (13 credits)

ECO 2001 - Principles of Macroeconomics: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly ECO 201 Focuses on the study of the American economy, stressing the interrelationships among household, business and government sectors. Explores saving and investment decisions, unemployment, inflation, national income

accounting, taxing and spending policies, the limits of the market and government, public choice theory, the Federal Reserve System, money and banking, and international trade.

ECO 2002 - Principles of Microeconomics: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly ECO 202 Studies the firm, the nature of cost and how these relate to the economy as a whole. Analyzes economic models of the consumer, perfect competition, monopoly, oligopoly and monopolistic competition. Explores economic issues including market power, population growth, positive and negative externalities, income distribution, poverty and welfare, discrimination, and international economic interdependence.

ACC 2011 - Intermediate Accounting I

Credit(s): 4
Lecture Hour(s): 4
Formerly ACC 211 Focuses on comprehensive analysis of generally accepted accounting principles (GAAP), accounting theory, concepts and financial reporting principles for public corporations. It is the first of a two-course sequence in financial accounting and is designed primarily for accounting and finance majors. Focuses on the preparation and analysis of business information relevant and useful to external users of financial reports. Explores the theories, principles and practices surveyed in Accounting Principles and critically examines real-world financial analysis and reporting issues.

BUS 1016 - Personal Finance

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 116 Surveys the basic personal financial needs of most individuals. Emphasizes the basics of budgeting and buying, saving and borrowing money, the intricacies of home ownership, income tax and investments, and the wise use of insurance, wills and trusts.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

Semester Four, Spring (16 credits)

BUS 2026 - Business Statistics

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 226 Focuses on statistical study, descriptive statistics, probability, and the binominal distribution, index numbers, time series, decision theory, confidence intervals, linear regression and correlation. Intended for the business major.

ACC 1038 - Payroll and Sales Tax

Credit(s): 3
Lecture Hour(s): 3
Formerly ACC 138 Introduces laws pertaining to payroll and sales taxes including record keeping rules; preparation of various federal, state and local forms for reporting payroll and sales taxes; and computerized payroll procedures.

ACC 1031 - Income Tax

Credit(s): 3
Lecture Hour(s): 3
Formerly ACC 131 Introduces basic concepts of federal income taxation and tax administration with emphasis on taxation of individuals and sole proprietorships.

ACC 2012 - Intermediate Accounting II

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): ACC 2011
Formerly ACC 212 Focuses on the theoretical and practical aspects of accounting for long-term liabilities, stockholders' equity, investments, pensions and leases. Includes income tax allocation, financial statement analysis, cash flow statements and accounting methods changes.

ACC 2087 - Cooperative Education

Credit(s): 3
Internship Hour(s): 9
Formerly ACC 287 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.

MAN 2016 - Small Business Management

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): MAT 1140
Formerly MAN 216 Examines the elements necessary for the successful formation of a new small business. It is also designed 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

Credit(s): 3
Lecture Hour(s): 3
Formerly MAN 226 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.

Advanced Emergency Medical Technician

See list of Department Chairs on the Personnel page.

Career Opportunities

The EMS program prepares you for a career in the pre-hospital health care field as an Emergency Medical Technician at either the Basic, Intermediate, or Paramedic level. Career opportunities include ambulance service, fire service,

tactical EMS, critical care transport, and emergency department technician. If you graduate with an AAS degree, you have additional career opportunities in administration and management in the pre-hospital field.

Program Requirements

Entrance Requirements

To enroll in the EMT, EMT-Intermediate, or Paramedic programs, you must be at least 18 years of age, have all current immunizations, and be able to meet the requirements of the Colorado Department of Public Health and Environment EMTS Division Functional EMT Job Description. For enrollment into the AEMT program you must be a current EMT in Colorado. For the Paramedic program, you must have a current Colorado EMT certification, an EMT IV endorsement, successfully complete all pre-screening examinations, and prerequisites, and obtain department approval.

Total Credits: 10

AEMT Option Requirements

Prerequisite Courses for Program Admission **Credit(s): 10**

EMS 1125 - AEMT Fundamentals

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): Acceptance into the AEMT Program.
Formerly EMS 131 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 1129 - AEMT Pharmacology

Credit(s): 1
Lecture Hour(s): 0.50
Vocational Lab Hour(s): 0.75
Prerequisite(s): Acceptance into the AEMT Program.
Formerly EMS 129 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 1127 - AEMT Special Considerations

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Prerequisite(s): Acceptance into the AEMT Program.
Formerly EMS 127 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 1133 - AEMT Medical Emergencies

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): Acceptance into the AEMT Program.
Formerly EMS 133 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 - AEMT Trauma Emergencies

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): Acceptance into the AEMT Program.
Formerly EMS 135 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 1071 - AEMT Clinical Internship

Credit(s): 2
Internship Hour(s): 6
Prerequisite(s): Acceptance into the AEMT Program.
Formerly EMS 171 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.

Advanced Emergency Medical Technology AAS

Program Description

See list of Department Chairs on the Personnel page.

This program prepares students with the knowledge and skills needed for employment in a health care facility or in prehospital patient care. It will also prepare students to continue their education in more advanced careers in EMS, nursing and other health care fields. Upon successful completion of the CNA, EMT, and AEMT portions of the

program, students will be eligible to take the certifying exams, and with successful Completion of the exam, may apply for state certification at that level of training.

All Health & Public Safety programs have essential functions you must be able to perform for you to be successful in the program and career.

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.

Career Information

Career opportunities include ambulance service, skilled nursing facilities, critical care transport, and emergency department technician. If you graduate with an AAS degree, you have additional career opportunities in administrative and management in the pre-hospital field.

Total Program Credits -- 64

All courses must be completed with a grade of "C" or higher.

Total Credits: 64

First (13 credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

PSY 2440 - Human Growth and Development: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 235 Examines human development from conception through death, emphasizing physical, cognitive, emotional and psychosocial factors. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

NUA 1001 - Nurse Aide Health Care Skills

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Formerly NUA 101 Prepares the student to perform the fundamental skills of the nurse aide. Basic nursing skills, communication 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 Aid Clinical Experience

Credit(s): 1
Vocational Clinic Hour(s): 1.5

Formerly NUA 170 Applies knowledge and skill gained in NUA 101 to patient care. Pass/fail grading (F).

HPR 1011 - CPR for Professionals: Professional Rescuer

Credit(s): 0.50
Lecture Hour(s): 0.50
Formerly HPR 102 Meets the requirement for American Red Cross Professional Rescuer CPR or American Heart Association Basic Life Support for those who work in emergency services, healthcare 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.

Second (14 credits)

HPR 1039 - Medical Terminology

Credit(s): 2
Lecture Hour(s): 2
Formerly HPR 139 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.

EMS 1015 - Emergency Medical Responder

Credit(s): 3
Lecture Hour(s): 3
Formerly EMS 115 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.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

MAT 1260 - Introduction to Statistics: GT-MA1

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 135 Explores and applies data presentation and summarization, introduction to probability concepts and distributions, statistical inference estimation, hypothesis testing, comparison of populations, correlation and regression. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

Third (12 credits)

EMS 1021 - EMT Fundamentals

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly EMS 121 Introduces the Emergency Medical Technician (EMT) student to prehospital 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

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Prerequisite(s): EMS 1021. EMS 1070.
Formerly EMS 122 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

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): EMS 1021.
Formerly EMS 123 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

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): EMS 1021.
Formerly EMS 124 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 1070 - EMT Clinical

Credit(s): 1
Vocational Lab Hour(s): 1.50
Formerly EMS 170 Provides the EMT student with the clinical experience required for initial certification and some renewal processes.

Fourth (12 credits)

BIO 2101 - Human Anatomy and Physiology I with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 201 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, nervous and endocrine systems. Includes a mandatory hands-on laboratory experience covering experimentation, microscopy, observations and dissection. This is the first semester of a two-semester sequence.

BIO 2102 - Human Anatomy and Physiology II with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 202 Focuses on the integrated study of the human body and the histology, anatomy, and physiology of the following systems and topics: cardiovascular, hematology, lymphatic and immune, urinary, fluid and electrolyte control, digestive, nutrition, respiratory, reproductive and development. Includes a mandatory hands-on laboratory experience involving experimentation, microscopy, observations and dissection. This is the second semester of a two-semester sequence.

HPR 1050 - Basic EKG Interpretation

Credit(s): 2
Lecture Hour(s): 2
Formerly HPR 190 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.

EMS 1080 - EMT Clinical Internship

Credit(s): 2
Internship Hour(s): 6
Formerly EMS 180 Provides the Emergency Medical Technician (EMT) with a supervised clinical learning experience that goes beyond the initial EMT requirements for the State of Colorado Department of Health. Enables the student to work with an assigned preceptor for 90 hours of clinical experience to develop an understanding of the role and responsibilities of the EMT-Basic.

Fifth (13 credits)

EMS 1127 - AEMT Special Considerations

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Prerequisite(s): Acceptance into the AEMT Program.
Formerly EMS 127 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 - AEMT Pharmacology

Credit(s): 1
Lecture Hour(s): 0.50
Vocational Lab Hour(s): 0.75
Prerequisite(s): Acceptance into the AEMT Program.
Formerly EMS 129 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

Credit(s): 2
Lecture Hour(s): .25
Vocational Lab Hour(s): 1.9
Vocational Clinic Hour(s): 1

Prerequisite(s): Current Colorado Certification as EMT or Department Chair Approval
Formerly EMS 132 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 1125 - AEMT Fundamentals

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): Acceptance into the AEMT Program.
Formerly EMS 131 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 1133 - AEMT Medical Emergencies

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): Acceptance into the AEMT Program.
Formerly EMS 133 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 - AEMT Trauma Emergencies

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): Acceptance into the AEMT Program.
Formerly EMS 135 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 1071 - AEMT Clinical Internship

Credit(s): 2
Internship Hour(s): 6
Prerequisite(s): Acceptance into the AEMT Program.
Formerly EMS 171 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.

Notes

[1] Successful completion of courses, student is eligible to sit for Nurse Aide Certification exam

[2] Successful completioon of courses, student is eligible to sit for the EMT certification exam

[3] Successful completion of courses, student is elgibile to sit for the Advanced EMT certification exam

Advanced Paramedic Practitioner BAS

Program Description

See list of Department Chairs on the Personnel page.

PCC's Advanced Paramedic Practitioner Bachelor of Applied Science is designed for certified paramedics who have completed an Associate Degree in Emergency Medical Services or Paramedicine from an accredited college and wish to continue their education and obtain a Bachelor of Applied Science degree.

This program provides a student centered on-line learning environment meant to enhance career opportunities. Students will engage in self-directed learning activities and gain specialized knowledge in critical care, community and behavioral paramedicine.

Career Information

The Advanced Paramedic Practitioner degree opportunities may include working as a critical care paramedic, a community paramedic and in behavioral health in a variety of settings including mental health facilities, drug rehab, hospitals, clinics and in community paramedic programs.

The Advanced Paramedic Practitioner BAS program admission requirements and application are posted on Pueblo Community College EMS BAS webpage.

Total Program Credits -- 120

Students will receive 65 credits from AAS degree and earn 55 BAS credits. All program students must have a minimum of 30 PCC institutional credits.

Students may apply to start the program any semester.

Total Credits: 120

First (16 credits)

MAT 1260 - Introduction to Statistics: GT-MA1

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 135 Explores and applies data presentation and summarization, introduction to probability concepts and distributions, statistical inference estimation, hypothesis testing, comparison of populations, correlation and regression. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

BIO 2116 - Human Pathophysiology

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): BIO 2101, BIO 2102
Formerly BIO 216 Focuses on the alterations in physiological, cellular and biochemical processes, the associated homeostatic response, and the manifestations of disease. Prior knowledge of cellular biology, anatomy and physiology is essential for the study of pathophysiology.

SOC 2031 - The Sociology of Deviant Behavior: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 231 Examines the nature, identification, and explanation of deviant categories. Theories and philosophies, as well as methods of treatment related to deviancy, will also be considered. The course will study society's attempts to control, change and institutionalize those acts, individuals or groups that a population may deem unacceptable. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

HPR 3001 - Communications in Health Care

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to BAS program
Formerly HPR 301 Develops professional written and oral communication plans to ensure effective patient-centered outcomes between health care professionals, patients and caregivers.

HPR 4011 - Leadership and Management in Health Professions

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to BAS program
Formerly HPR 411 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.

OR

HPR 4038 - Pedagogy in Health Professions

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to BAS program
Formerly HPR 468 Provides a general overview of the concepts and theory relative to education in health professions. The course will introduce concepts in developing outcome centered objectives, syllabus, lesson planning, content delivery, test construction, and assessing student learning. The course explores various learning styles and technology available for delivery of course content.

Second (12 credits)

HPR 4003 - Critical Review of Healthcare Research

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to BAS program

Formerly HPR 403 Teaches how to evaluate and analyze published literature using a scientific approach to develop medical best practices, formulates and research clinical questions to effectively participate in medical discussions.

EMS 3012 - Trauma Informed Care and Assessment

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to the Advanced Paramedic Practitioner BAS program
SOC 2031
Formerly EMS 312 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 3011 - Motivational Interviewing for EMS

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s):
Admission to the Advanced Paramedic Practitioner BAS program

SOC 2031

Formerly EMS 311 Introduces the Motivational Interviewing (MI) concept as a client-centered and conversational method of communication designed to assist helping professionals to address clients' ambivalence to change.

EMS 3010 - Clinical Assessment and De-escalation Techniques

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to the Advanced Paramedic Practitioner BAS program
Formerly EMS 310 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.

Third (14 credits)

HPR 3010 - Quality Improvement in Health Care

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to BAS program
Formerly HPR 310 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.

EMS 4025 - Fundamentals of Advanced Paramedic Practice

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): Admission to the Advanced Paramedic Practitioner BAS program
Formerly EMS 425 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 4033 - Advanced Paramedic Medical Care

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): Admission to the Advanced Paramedic Practitioner BAS program
Formerly EMS 433 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

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to the Advanced Paramedic Practitioner BAS program
Formerly EMS 435 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.

Fourth (13 credits)

EMS 3030 - Community Advocacy and Outreach

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to the Advanced Paramedic Practitioner BAS program
Formerly EMS 330 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

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to the Advanced Paramedic Practitioner BAS program
Formerly EMS 331 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 4030 - Care and Prevention Development Strategies

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to the Advanced Paramedic Practitioner BAS program
Formerly EMS 430 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 4089 - Capstone

Credit(s): 4
Internship Hour(s): 12
Prerequisite(s): Admission to the Advanced Paramedic Practitioner BAS program
Formerly EMS 489 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.

[1] Courses taught in the first 8 weeks of the semester

[2] Courses taught in the second 8 weeks of the semester

Air Conditioning Mini-Certificate

CIP 47.0604

See list of Department Chairs on the Personnel page.

To enter the automotive collision or automotive service program, you must successfully complete any CCR course or qualifying placement score or exemption.

Entrance into the program involves a screening and selection process. You can obtain an application and information by calling the Automotive Department at 719.549.3354.

Career Opportunities

The Automotive Service Technology program prepares you for a range of careers in automotive maintenance and repair.

Program Description

This program teaches you to perform general maintenance, as well as to diagnose and repair electrical, engine, transmission, suspension, brake and air conditioning systems. The program has met the National Institute for Automotive Technicians Education Foundation (NATEF) accreditation in the areas of Automatic Transmissions & Transaxles, Brakes, Electrical/Electronic Systems, Engine Performance, Engine Repair, Heating & Air Conditioning and Suspension & Steering. We also offer Automotive Services courses for students in the Concurrent Enrollment Program at Pueblo Community College, Cañon City High School, and PCC Southwest Campus in Mancos. We encourage you to take the Automotive Service Excellence (ASE) certification tests while enrolled at PCC. We offer a paid apprenticeship for high school students through the Automotive Youth Education System (AYES).

As a student in the program, you will become a member of the Skills USA club and participate in a number of leadership activities and competitions.

Program Requirements

Entrance Requirements:
Admissions to the Automotive Service Technology program is by application only. For admission requirements, please go to MT-129 and see the department chair.

Total Credits: 6

Certificate Requirements

ASE 2064 - Introduction Automotive Heating and Air Conditioning

Credit(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 264 Covers basic operation of heating and air conditioning components. This course meets MLR/AST/MAST requirements.

ASE 2065 - Heating and Air Conditioning Systems

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Formerly ASE 265 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)

Credit(s): 1
Internship Hour(s): 3
Formerly ASE 282 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 (FAST) Fundamental Automotive Systems Training (Chrysler) or others as required by the program track.

Anthropology, AA (with Designation)

CIP 24.010

See list of Department Chairs on the Personnel page.

Career Opportunities

The Associate of Arts Degree with Designation in Anthropology prepares students to transfer as a junior to a four-year institution in Colorado in order to pursue a bachelor's degree in anthropology. A degree in anthropology offers many career and educational opportunities. Careers in anthropology include museum education, field and medical research, higher-education teaching, public health, environmental assessment, community studies coordination, ethnic and cultural studies and field studies in archaeology.

Program Description

Anthropology is the study of the evolution of human society, life and culture. Specifically, anthropology answers the questions of how people lived, what they thought and how they interacted with their particular environment. Studying how societies have developed and changed from the past to the present, anthropology provides a critical understanding of the world today and how the future world may evolve.

Program Requirements

In addition to the requirements listed below, you must:

a. Earn a minimum of 60 semester hours of course work

b. Earn a minimum of 15 graded semester hours at PCC
c. Earn a minimum of "C" in all coursework for the degree

Consult with a PCC Arts and Sciences advisor or transfer advisor to find out which Colorado Statewide Guaranteed Transfer Courses (GT Pathways) or elective courses meet the degree requirements of the four-year college to which you plan to transfer.

To earn an AA degree with Designation in Anthropology, you must complete at least 60 college-level credits, as described below:

Total Credits: 60

** Refer to CCCS Guaranteed Transfer (GT) - Pathways Courses for a full list of all GT Pathway Courses*

General Education Core Requirements (32-33 Credits)

(Written) Communication (6 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

or

- ENG 1022 - English Composition II: GT-CP2 **Credit(s): 3** and a GT Pathways Writing course (GT-CO3) *

Mathematics (3-4 Credits)

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

University of Colorado Denver

- University of Colorado Denver requires either: MAT 1260 **or** MAT 1340

Western State Colorado University

- Western State Colorado University requires MAT 1340

Natural and Physical Sciences (8 Credits)

- Select two GT Pathway (GT-SC1) *

Arts and Humanities (6 Credits)

Select two GT Pathway courses from any category:

- Arts and Humanities (GT-AH1) *
- Literature and Humanities (GT-AH2) *
- Ways of Thinking (GT-AH3) *
- Foreign Languages (GT-AH4) *

Social and Behavioral Sciences (6 Credits)

(Select two GT Pathway courses from any category):

- Economics or Political Systems: (GT-SS1) *
- Geography (GT-SS2) *
- Human Behavior, Culture, or Social Frameworks: (GT-SS3) *

History (3 Credits)

- Select one GT Pathways History course (GT- HI1) *

Additional Required Anthropology Courses (22 Credits)

Please Note: Additional ANT courses beyond the four courses (13 credit hours) identified above may not count toward the Anthropology major at the receiving 4-year institutions.

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

or

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

ANT 1001 - Cultural Anthropology: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly ANT 101 Studies human cultural patterns and learned behavior including linguistics, social and political organization, religion, culture and personality, culture change, and applied anthropology.

ANT 1003 - Introduction to Archaeology: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly ANT 107 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. This is a statewide Guaranteed Transfer course in the GT-SS3 category. GT-SS3

ANT 1005 - Biological Anthropology with Laboratory: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly ANT 111 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. This is a statewide Guaranteed Transfer course in the GT-SC1 category. GT-SC1

Arts and Humanities (3 Credits)

Select one GT Pathway course from any category:

- Arts and Humanities (GT-AH1) *
- Literature and Humanities (GT-AH2) *
- Ways of Thinking (GT-AH3) *
- Foreign Languages (GT-AH4

ANT course (3 Credits)

- Select one additional GT Pathway course: Social and Behavioral Science (GT-SS3) *

Social and Behavioral Sciences (3 Credits)

(Select on GT Pathway course from any category):

- Geography (GT-SS2) *
- Human Behavior, Culture, or Social Frameworks: (GT-SS3) *

Electives (5-6 Credits)

Determined by transferring institution

Transfer Degrees

This degree transfers to the following Colorado public four-year institutions of higher education:

- Colorado State University-Ft. Collins (B.A. Anthropology)
- Fort Lewis College (B.A. Anthropology)
- Metropolitan State University of Denver (B.A. Anthropology)
- University of Colorado, Boulder (B.A. Anthropology)
- University of Colorado, Colorado Springs (B.A. Anthropology)
- University of Colorado, Denver (B.A. Anthropology)
- University of Northern Colorado (B.A. Anthropology)
- Western State Colorado University (B.A. Anthropology)

Applied Technology, AAS

CIP 41.9999

See list of Department Chairs on the Personnel page.

Program Description

PCC offers the AAS degree in Applied Technology as part of a statewide consortium of community colleges and Area Vocational Technical Schools (AVTS) consortium and other Colorado public community colleges.

To attain the degree, you must complete the technical course work for a state-approved Career and Technical Education Certificate at one of the following AVTS's: Delta Montrose Area Vocational Technical Center, Emily Griffith Opportunity School, San Juan Basin Area Vocational Technical School and T.H. Pickens Technical Center.

You will complete the general education and other degree requirements at PCC. Course work from the AVTS will be credited to your transcript when you complete the requirements of both institutions.

Program Requirements

You must comply with the regulations and requirements related to admissions and attendance at each institution.

Minimum Requirements for This Degree Include:

a. Minimum of 60 credit hours of course work.
b. Cumulative GPA of 2.0 **or** higher.
c. General Education course of 15-18 semester hours
d. Additional requirements of at least 42 semester hours:
   * From an individual program with current state approval a one of four AVTS's
   * If the program certificate is less than 42 semester hours, then the program certificate hours plus elective credit hours from Pueblo Community College will be used for the total of at least 42 semester hours
e. Minimum of 15 semester credits earned at Pueblo Community College.

Total Credits: 60

Degree Requirements

AVTS Certificate (42-45 Credits)

General Education Courses (15-18 Credits)

The below general education courses must be selected from the general education courses listed in the AGS, AA or AS general education sections of this catalog.

- English/Speech **Credit(s): 3**
- Humanities **Credit(s): 3**
- Mathematics **Credit(s): 3**
- Natural Science **Credit(s): 3**
- Social Science **Credit(s): 3**

Art History, AA (with Designation)

CIP 24.0101

See list of Department Chairs on the Personnel page.

Career Opportunities

The Associate of Arts (AA) Degree with Designation in Art History prepares the student to transfer as a junior to a four-year institution in Colorado in order to pursue a Bachelor of Arts (BA) or Bachelor of Fine Arts (BFA) degree in Art or Art History. Students who opt for the Bachelor of Arts in Art History can choose to work in several occupational fields including museums, galleries, government, research and academia. Once a BA or BFA is completed, students may pursue a higher or graduate degree in Art, if interested.

Program Description

This program introduces the student to the field of Art History and includes the course work to meet general education requirements that are common to all Colorado four-year institutions, as well a specific courses in various subfields of Art History. Upon transfer, students from Pueblo Community College who have earned the Associate of Arts (AA) Degree with Designation in Art History will be ready to complete the last half of a BA or BFA in Art History at a four-year institution.

Program Requirements

Refer to the course requirements listed below. Some courses may have prerequisites of lower level classes or assessment scores. Refer to the course descriptions for these prerequisites.

Total Credits: 60

** Refer to CCCS Guaranteed Transfer (GT) - Pathways Courses for a full list of all GT Pathway Courses*

General Education Core Requirements (31-32 Credits)

(Written) Communication (6 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

or

- ENG 1022 - English Composition II: GT-CP2 **Credit(s): 3** and a GT Pathways Approved (GT-CO3) *

Mathematics (3 Credits)

- Select one GT Pathways Mathematics course (GT-MA1) *, prefer MAT 1240: Mathematics for the Liberal Arts

Natural and Physical Sciences (7 or 8 Credits)

- Select two GT Pathways Natural and Physical Sciences courses (GT-SC1, GT-SC2) *. One of these courses must include a laboratory component (GT-SC1) *

Arts and Humanities (6 Credits)

- Select two GT Pathways Arts and Humanities Courses from any category (GT-AH1, GT-AH2, GT-AH3, GTAH4) *, **EXCEPT** those courses listed in the additional required courses section below.

Social and Behavioral Sciences (6 Credits)

- Select two GT Pathways Social and Behavioral courses from any category (GT-SS1, GT-SS2, GT- SS3) *

History (3 Credits)

- Select one GT Pathways History Course (GT-HI1) *

Additional Required Art History Courses (18 Credits)

ART 1111 - Art History Ancient to Medieval: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly ART 111 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

ART 1112 - Art History Renaissance to Modern: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly ART 112 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

ART 1201 - Drawing I

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 121 Investigates the various approaches and media that students need to develop drawing skills and visual perception.

ART 1002 - Visual Concepts 2-D Design

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 131 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

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 132 Introduces the fundamentals of three-dimensional design, form, and space. The course applies the elements and principles of design to three-dimensional problems.

ART 1113 - Art History

Credit(s): 3
Lecture Hour(s): 3
Formerly ART 207 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

Electives (10-11 Credits)

Determined by transferring institution;

Note: Students planning to transfer to Colorado State University-Fort Collins will be required to complete a 200-level foreign language for completion of the BA in Art History.

Transfer Degrees

This degree transfers to the following Colorado Public Four-Year institutions of higher education:

- Colorado Mesa University (B.F.A. Art, Art History concentration)
- Colorado State University-Ft. Collins (B.A. Art, Art History concentration)
- Colorado State University-Pueblo (B.A. Art; Art History Emphasis
- Metropolitan State University of Denver (B.A. Art History, Theory, and Criticism)
- University of Colorado, Boulder (B.A. Art History)
- University of Colorado, Colorado Springs (B.A. Visual and Performing Arts, Art History option)
- University of Colorado, Denver (B.A. Fine Arts, Art History emphasis)
- University of Northern Colorado (B.A. Art and Design, Art History emphasis)
- Western State Colorado University (B.A. Art, Art History and Theory emphasis)

Associate Degree Nursing

See list of Department Chairs on the Personnel page.

Program Description

The Associate Degree Nursing (ADN) program teaches you skills of direct patient care that you can apply in any healthcare setting. It offers theoretical and applied instruction in classrooms, simulated laboratories, and clinical settings. It integrates education in adult, gerontological, obstetric, pediatric, and psychiatric-mental health nursing. Your clinical learning will take place in diverse types of institutions.

The Nursing program has a selective and limited admission policy. The application is available online at Pueblo Community College Nursing from **March 1 to May 19 2023 for Fall of 2023 admission**. All Health & Public Safety programs have essential functions to help you be successful in the program and career. **In progress grades will be accepted, however course must show in progress at time of application, and be completed in Spring semester.**

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.

Career Information

The ADN program prepares you to provide safe, therapeutic, and competent nursing care in hospitals and other healthcare settings. You may also work as an entry level patient-care manager.

Total Credits: 71.5

General Education and Program Prerequisites

First (12 credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

BIO 1111 - General College Biology I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): ENG 1021
Formerly BIO 111 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.

HPR 1010 - Dietary Nutrition

Credit(s): 1
Lecture Hour(s): 1
Formerly HPR 108 Studies the basic nutritional principles in clinical practice in health care. The course will cover factors which influence the nutritional status of individuals, methods of nutritional assessment and support, and diet modification for specific disease states.

PSY 2440 - Human Growth and Development: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 235 Examines human development from conception through death, emphasizing physical, cognitive, emotional and psychosocial factors. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

Second (12 credits)

BIO 2101 - Human Anatomy and Physiology I with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 201 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, nervous and endocrine systems. Includes a mandatory hands-on laboratory experience covering experimentation, microscopy, observations and dissection. This is the first semester of a two-semester sequence.

BIO 2102 - Human Anatomy and Physiology II with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 202 Focuses on the integrated study of the human body and the histology, anatomy, and physiology of the following systems and topics: cardiovascular, hematology, lymphatic and immune, urinary, fluid and electrolyte control, digestive, nutrition, respiratory, reproductive and development. Includes a mandatory hands-on laboratory experience involving experimentation, microscopy, observations and dissection. This is the second semester of a two-semester sequence.

BIO 2104 - Microbiology with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 204 Designed for health science majors. Examines microorganisms with an emphasis on their structure, development, physiology, classification and identification. The laboratory experience includes culturing, identifying and controlling microorganisms with an emphasis on their role in infectious disease.

1 Course must be completed within 10 years of entrance into the program

Program Course Schedule (First Year)

Apply to the Program – April 1 to May 21 2022 For Fall 2022, online at Pueblo Community College Nursing

Application Admission Requirements:

Complete NUA 101 Certified Nurse Aide Health Care Skills, or the Nurse Aide coursework within the Colorado Community College System (CCCS) or have an Active Colorado CNA certificate. (If Nursing Assistant Certificate is obtained through a private company or an out-of-state institution, student must obtain an Active Colorado CNA Certificate). Nurse Aide certificate must be in good standing without stipulation. Nurse Aide courses must be completed within seven (7) years of entry into PCC Nursing program. If the applicant is a current Colorado Certified Nurse Aide, in good standing there is no time limit.

Third (13 credits)

NUR 1009 - Fundamentals of Nursing

Credit(s): 6
Lecture Hour(s): 2
Vocational Lab Hour(s): 6
Vocational Clinic Hour(s): 6

Prerequisite(s): Admission to Nursing or Psychiatric Technician programs.
Corequisite(s): Nursing: NUR 1012, HPR 1010, MAT 1120. Psych Tech: NUR 1012.
Formerly NUR 109 Introduces the fundamental concepts necessary for safe, patient-centered nursing care to a diverse

patient population while integrating legal and ethical responsibilities of the nurse. Introduces caring, critical thinking, the nursing process, quality improvement and communication used when interacting with patients and members of the interdisciplinary team, and relates evidence-based nursing practice. Application of knowledge and skills occurs in the nursing skills laboratory and a variety of clinical settings providing care to stable patients with common health alterations.

NUR 1012 - Basic Concepts of Pharmacology

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Admission to Nursing or Psychiatric Technician programs.
Corequisite(s): Nursing: NUR 1009, HPR 1010, MAT 1120; Psych Tech: NUR 1009.
Formerly NUR 112 Overview of the basic principles of pharmacology including major drug classifications and prototypes of commonly used medications. Principles of medication administration include aspects of best practice for safe, quality, patient-centered care. Central points include safety, quality improvement factors in the administration of medications, patient teaching and variations encountered when administering medications to diverse patient populations across the lifespan.

NUR 1001 - Pharmacology Calculations

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): Admission to Practical Nurse Program.
Formerly NUR 101 Prepares nurse to provide safe, patient-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.

BIO 2116 - Human Pathophysiology

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): BIO 2101, BIO 2102
Formerly BIO 216 Focuses on the alterations in physiological, cellular and biochemical processes, the associated homeostatic response, and the manifestations of disease. Prior knowledge of cellular biology, anatomy and physiology is essential for the study of pathophysiology.

Fourth (13 credits)

NUR 1006 - Med-Surg Nursing Concepts

Credit(s): 7
Lecture Hour(s): 3.40
Vocational Lab Hour(s): 0.90
Vocational Clinic Hour(s): 9.90

Prerequisite(s): Admission to Nursing Program and completion of preceding required program course work or permission of the program director.
Corequisite(s): NUR 1050 or permission of the program director.
Formerly NUR 106 NUR106 is the first medical/surgical nursing course. Building on NUR 1009, this course provides

for the acquisition of basic medical/surgical nursing theory, as well as application of mental health concepts, communication, collaboration, caring, and critical thinking/clinical reasoning necessary for safe, patient-centered care to a developmentally and culturally diverse adult patient population experiencing various medical/surgical interventions. Incorporates evidence-based practice, quality improvement, professional standards, and legal and ethical responsibilities of the nurse. Application of knowledge and skills occurs in the nursing skills laboratory and a variety of clinical settings.

NUR 1050 - Maternal-Child Nursing

Credit(s): 6
Lecture Hour(s): 3.30
Vocational Lab Hour(s): 2.10
Vocational Clinic Hour(s): 6

Prerequisite(s): Admission to Nursing program and completion of preceding required program course work or permission of the program director.
Corequisite(s): NUR 1006 or permission of the program director.
Formerly NUR 150 Nursing 150 provides for the acquisition of maternal/child nursing theory, as well as application of mental health concepts, communication, collaboration, caring, and critical thinking/clinical reasoning necessary for safe, family-centered nursing care to childbearing families and children that is developmentally and culturally appropriate. Incorporates evidence-based practice, standards of practice, quality improvement, and legal and ethical responsibilities of the nurse. Application of knowledge and skills occurs in the nursing skills laboratory and in a variety of maternal/child and pediatric clinical settings.

First Summer (4 credits)

Optional

NUR 1069 - Transition into Practical Nursing

Credit(s): 4
Lecture Hour(s): 2
Vocational Clinic Hour(s): 6

Prerequisite(s): Admission to Nursing program and completion of preceding required program course work or program director permission.
Formerly NUR 169 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.

Program Course Schedule (Second Year)

Fifth (12.5 credits)

NUR 2006 - Advanced Concepts of Medical-Surgical Nursing I

Credit(s): 6.50
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Vocational Clinic Hour(s): 9

Prerequisite(s): Admission to Nursing program and successful completion of preceding Nursing program course work or permission of the program director.
Corequisite(s): NUR 2012 or permission of the program director.
Formerly NUR 206 NUR 206 builds on NUR 1006focusing on advanced concepts of nursing applied to care of patients with high acuity medical/surgical conditions. Builds on medical/surgical nursing theory, mental health concepts, communication, collaboration, caring, and critical thinking/clinical reasoning necessary for safe, patient-centered nursing care to developmentally and culturally diverse adult patients. Incorporates evidence-based practice, quality improvement, professional standards, and legal and ethical responsibilities of the professional nurse as applied in a variety of healthcare settings. Application of knowledge and skills occurs in the nursing skills laboratory and in a variety of clinical settings.

NUR 2011 - Psychiatric-Mental Health Nursing

Credit(s): 4
Lecture Hour(s): 2.70
Vocational Clinic Hour(s): 3.90

Prerequisite(s): Admission to Nursing program and successful completion of preceding Nursing program course work or permission of the program director.
Corequisite(s): NUR 2012 or permission of program director.
Formerly NUR 211 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

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Admission to Nursing program and successful completion of preceding required program course work or permission of the program director.
Corequisite(s): NUR 2011 or permission of the program director.
Formerly NUR 212 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.

Sixth (9 credits)

NUR 2016 - Advanced Concepts of Medical Surgical Nursing II

Credit(s): 5
Lecture Hour(s): 2.30
Vocational Clinic Hour(s): 8.10

Prerequisite(s): Admission to Nursing program and successful completion of preceding program course work or permission of the program director.
Corequisite(s): NUR 2006 and NUR 2012 or permission of the program director.
Formerly NUR 216 Nursing 216 is a continuation of Nursing 206, focusing on complex medical/surgical conditions of the high acuity patient. Builds on medical/surgical nursing theory, mental health concepts, communication, collaboration, caring, and critical thinking/clinical reasoning necessary for safe, patient-centered nursing care to developmentally and culturally diverse adult patients experiencing high acuity medical/surgical conditions.

Incorporates evidence-based practice, quality improvement, professional standards, and legal and ethical responsibilities of the professional nurse as applied in the acute care and high acuity settings. Application of knowledge and skills occurs in a variety of clinical settings.

NUR 2030 - Transition to Professional Nursing Practice

Credit(s): 4
Lecture Hour(s): 1.60
Vocational Clinic Hour(s): 7.20

Prerequisite(s): Admission to Nursing program and successful completion of preceding program course work or permission of the program director.
Corequisite(s): NUR 2016 or permission of the program director.
Formerly NUR 230 Nursing 230 is a Seminar and practice Capstone course that provides an integrative experience applying all dimensions of the professional nurse in the care of diverse patient populations across a variety of healthcare settings. All major concepts of the nursing program are addressed. Leadership and the management of multiple patients are emphasized. Application of knowledge and skills occurs in the clinical setting to facilitate an effective transition from student to registered professional nurse.

Automatic Transmissions Mini-Certificate

CIP 47.0604

See list of Department Chairs on the Personnel page.

To enter the automotive collision or automotive service program, you must successfully complete any CCR course or qualifying placement score or exemption.

Entrance into the program involves a screening and selection process. You can obtain an application and information by calling the Automotive Department at 719.549.3354.

Career Opportunities

The Automotive Service Technology program prepares you for a range of careers in automotive maintenance and repair.

Program Description

This program teaches you to perform general maintenance, as well as to diagnose and repair electrical, engine, transmission, suspension, brake and air conditioning systems. The program has met the National Institute for Automotive Technicians Education Foundation (NATEF) accreditation in the areas of Automatic Transmissions & Transaxles, Brakes, Electrical/Electronic Systems, Engine Performance, Engine Repair, Heating & Air Conditioning and Suspension & Steering. We also offer Automotive Services courses for students in the Concurrent Enrollment Program at Pueblo Community College, Cañon City High School, and PCC Southwest Campus in Mancos. We encourage you to take the Automotive Service Excellence (ASE) certification tests while enrolled at PCC. We offer a paid apprenticeship for high school students through the Automotive Youth Education System (AYES).

As a student in the program, you will become a member of the Skills USA club and participate in a number of leadership activities and competitions.

Program Requirements

Entrance Requirements:
Admissions to the Automotive Service Technology program is by application only. For admission requirements, please go to MT-129 and see the department chair.

Total Credits: 6

Certificate Requirements

ASE 2050 - Automatic Transmission/Transaxle Service

Credit(s): 1
Lecture Hour(s): 1
Formerly ASE 250 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 and Transaxle Repair

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly ASE 251 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 2052 - Advanced Automatic Transmissions/Transaxles

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 252 Covers the diagnosis, repair, and rebuild of automatic transmissions and transaxles including the hydraulic, electronic, and mechanical components. This course meets MAST requirements.

Bachelor of Science in Nursing

See list of Department Chairs on the Personnel page.

The PCC RN to BSN Program is designed for licensed Registered Nurses who have completed an Associate Degree in Nursing (ADN) in a nationally accredited nursing program and for students enrolled in an accredited ADN program who are in their final semester and on track to graduate. The RN to BSN provides a student centered online learning environment meant to enhance career opportunities for RNs who wish to continue their education and obtain a Bachelor of Science Degree in Nursing (BSN).

Career Information

The BSN program prepares RNs to navigate the competitive nursing work arena through the integration of current knowledge, research, and information literacy, application of information management technology, demonstration of

leadership skills, and advocacy at local, state, national and global levels for patients and for the nursing profession with regard to healthcare policy. BSN prepared nurses are able to meet the increasing professional challenges of healthcare in all settings.

Application/Admission

- The BSN program may be started in the Fall or Spring semesters. The application is open year round, and can be found online at Pueblo Community College Nursing
- Students must have graduated from an accredited Associate Degree in Nursing program or be on track to complete the final semester of the ADN.
- Submission of unofficial ADN transcripts is required.

Program

- 120 credits comprise the PCC Bachelor of Science in Nursing degree.
- Block transfer accepted of up to 71.5 credits from accredited ADN Program
- Unencumbered RN License & Current BLS/CPR required for NUR 409 and NUR 410
- 18 General Education credits are required
- 30.5 credits of baccalaureate nursing coursework complete the program

Graduation

- Students may use a combination of transcribed credits and bachelor level course work to obtain the 120 required credits. Transferred BSN courses will be evaluated individually for applicability to the PCC RN to BSN Program.
- The granting of the BSN degree from PCC requires a minimum of 30 credits completed at the college.
- If electives are necessary to achieve the 30 graded credits at PCC they must be taken at the 300/400 level.

BSN applicants should arrange an advising appointment with the PCC Nursing Department.

Please call 719-549-3409.

Total Credits: 120

First (9 credits)

MAT 1260 - Introduction to Statistics: GT-MA1

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 135 Explores and applies data presentation and summarization, introduction to probability concepts and distributions, statistical inference estimation, hypothesis testing, comparison of populations, correlation and regression. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

GT-HI1 - History Course **Credit(s): 3**

Second (9 credits)

- GT-AH1, AH2, AH3, or AH4 - Arts & Humanities Courses **Credit(s): 6**
- GT-SS1, SS2, SS3 - Social Sciences **Credit(s): 3**

BSN Core Curriculum Fall Start

Fall (6 credits)

NUR 3001 - Integration into Baccalaureate Nursing Practice

Credit(s): 3
Lecture Hour(s): 3
Formerly NUR 301 Explores professional nursing practice at the baccalaureate level. Focus is on knowledge and understanding of the professional nursing standards and the nursing role at a baccalaureate level.

NUR 3002 - Trends in Nursing Practice

Credit(s): 3
Lecture Hour(s): 3
Formerly NUR 302 Examines current issues that nurses encounter in the health care environment including their roles and responsibilities within the nursing profession.

Spring (6 credits)

NUR 3003 - Nursing Research / Evidence Based Practice

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): NUR 3001, NUR 3002, MAT 1260
Formerly NUR 303 Analyzes concepts associated with nursing research, collection, and analysis of data with emphasis on integration of evidenced-based practice within nursing. The course develops the skills for critiquing published research.

AND

NUR 3004 - Informatics / Healthcare Technology

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): NUR 3001, NUR 3002
Formerly NUR 304 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

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): NUR 3001, NUR 3002
Formerly NUR 305 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

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): NUR 3001, NUR 3002
Formerly NUR 306 Focuses on optimizing health for the aging client within the framework of the nursing process. Emphasis is on supporting the unique needs of the aging population.

NUR 3007 - Behavioral Health

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): NUR 3001 , NUR 3002
Formerly NUR 307 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.

Summer (3 credits)

NUR 3004 - Informatics / Healthcare Technology

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): NUR 3001, NUR 3002
Formerly NUR 304 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

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): NUR 3001, NUR 3002
Formerly NUR 305 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

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): NUR 3001, NUR 3002
Formerly NUR 306 Focuses on optimizing health for the aging client within the framework of the nursing process. Emphasis is on supporting the unique needs of the aging population.

NUR 3007 - Behavioral Health

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): NUR 3001 , NUR 3002
Formerly NUR 307 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.

Fall Semester (6.5 credits)

NUR 4008 - Legal and Ethical Issues Related to Professional Nursing Practice

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): NUR 3001, NUR 3002
Formerly NUR 408 Emphasizes the ethical and legal obligations of professional nursing practice. The focus is on values clarification, ethical theory, and ethical decision making models. Additionally, legal issues related to healthcare will be explored.

NUR 4009 - Leadership in the Nursing Profession

Credit(s): 3.5
Lecture Hour(s): 2.75
Vocational Clinic Hour(s): 1.5

Prerequisite(s): NUR 3001, NUR 3002, RN license
Formerly NUR 409 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.

Spring (9 credits)

NUR 4010 - Community Health Nursing/Practicum

Credit(s): 6
Lecture Hour(s): 4.5
Vocational Clinic Hour(s): 3

Prerequisite(s): NUR 3001, NUR 3002, RN license
Formerly NUR 410 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

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): NUR 3001, NUR 3002, RN license
Formerly NUR 411 Integrates theory into practice by building on previous concepts and knowledge.

Notes

1 Prerequisites to all subsequent 300 & 400 level BSN courses

2 Unencumbered RN license required

3 Pre-requisite course MAT 135 required

Note: Accepted applicants are required to complete a background check and drug screen prior to registering for NUR 409 and NUR 410, as both courses have a required practicum at a clinical site.

A felony, loss of license, administrative disciplinary proceeding for negligence, malpractice, recklessness, or willful or intentional misconduct may prohibit entrance into or continuation with the program.

Barbering Certificate

CIP 12.0402

See list of Department Chairs on the Personnel page.

Career Opportunities

The Cosmetology program prepares students for careers in cosmetology, hairstyling, esthetics (facial care) and manicure (nail care). Students will receive the specialized training necessary to be prepared for a successful career with limitless opportunities for both men and women. Students learn the skills to keep pace with the fashion world and stand ready to meet the constantly changing demands of one of today's largest-growing service industries. Those opportunities can provide both part-time and full-time employment in specialty areas.

Program Description

The Cosmetology program teaches students job entry skills, customer communication and shop procedures. Instruction includes professional ethics, bacteriology, shampoo and rinses, color theory, hair coloring techniques, permanent waving, hairstyling, hair cutting, manicures, pedicures, facials, makeup, OSHA regulations, sanitation, safety and Colorado laws. Clinical practice involves working on the public under supervision and parallels, as close as possible, actual shop procedures in order to prepare students for working in the field.

Total Credits: 53

Certificate Requirements

General Education Requirement (3 Credits)

- Choose one Arts & Humanities **Credit(s): 3**

Core Requirements (50 Credits)

BAR 1003 - Introduction to Hair & Scalp

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly BAR 103 Introduces various types of hair, scalp treatments and shampoos. Focuses on recognition and treatment of disorders of hair and scalp, product knowledge and proper massage techniques to help control these disorders and cleanse the hair and scalp. Covers terminology dealing with hair structure scalp and hair disorders. Training is provided in a lab or classroom setting.

BAR 1007 - Introduction to Shaving, Honing & Stropping

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly BAR 107 Introduces the general principles of shaving to include hair texture, grain of the beard and analysis of the skin. Theory is combined with the practical application of proper shaving procedures and cutting strokes used on the face.

BAR 1008 - Intermediate Shaving, Honing & Stropping

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly BAR 108 Focuses on theory and practical training related to mustache and beard designing and trimming. Practical applications are incorporated in specialized classes or in a supervised salon.

BAR 1066 - Introduction to Facial Massages & Skin Care

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly BAR 166 Emphasizes basic understanding of facial massage manipulations and the study of skin in both practical and theory applications. Covers the benefits derived from proper facial massage and a good skin care routine.

BAR 1067 - Intermediate Facial Massage & Skin Care

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly BAR 167 Focuses on practical application dealing with anatomy, skin disorders, skin types and facial shapes. Students help patrons select proper skin care treatments

BAR 2007 - Advanced Shaving, Honing & Stropping

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly BAR 207 Focuses on advanced training in shaving, honing and stropping. Practical and theory application is completed in specialized classes or supervised clinical training. Student will be prepared for State Board license exam.

BAR 2066 - Advanced Facial Massage & Skin Care

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly BAR 266 Emphasizes anatomy, skin disorders, skin types and facial shapes. Students guide patrons on selection of proper skin care treatments. Covers student preparation for State Board licensing examination on theory and practical procedures.

COS 1050 - Laws, Rules and Regulations

Credit(s): 1
Lecture Hour(s): 1
Formerly COS 150 Provides instruction on the laws, rules and regulations and how they govern the cosmetology and barber industry, as well as the effects they have on the student, licensed individual, salons and school owners.

COS 1060 - Introduction to Disinfection, Sanitation & Safety

Credit(s): 2
Vocational Clinic Hour(s): 4

Formerly COS 160 Introduces the various methods of disinfection, sanitation and safety as used in the cosmetology industry. Includes classroom study of bacteriology and the terminology dealing with cosmetology.

COS 1061 - Intermediate I: Disinfection, Sanitation & Safety

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly COS 161 Focuses on the theory and daily practice of proper methods of disinfection, sanitation and safety procedures as related to all phases of cosmetology. Covers terminology and training of disinfection, sanitation and safety procedures. Also includes customer service in a supervised salon (clinical) setting or specialized class.

COS 2050 - Management, Ethics, Interpersonal Skills & Salesmanship

Credit(s): 1
Lecture Hour(s): 1
Formerly COS 250 Emphasizes the importance of salon management and the knowledge and skills necessary to build a successful business. Focuses on the importance of interpersonal skills and basic techniques in salesmanship and customer services. Integrates job readiness skills and professional ethics.

COS 2060 - Intermediate II: Disinfection, Sanitation & Safety

Credit(s): 2
Vocational Clinic Hour(s): 4

Formerly COS 260 Provides continued study of theory and practice of proper methods of sterilization, disinfection, sanitation and safety procedures as related to all phases of the industry. Covers terminology and training of disinfection, sanitation and safety procedures. The individual responsibility to provide a safe work environment is practiced.

COS 2061 - Advanced Disinfection, Sanitation & Safety

Credit(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): COS 1061.
Formerly COS 261 Provides advanced training on decontamination and safety practices in a supervised salon and/or classroom setting. Examines advanced techniques that prepare the student for employment. Includes student preparation for the State Board Licensing Examination in decontamination and safety for all aspects of the industry. Study of OSHA requirements for schools and salon are done in a theory or practical setting.

Basic Fire Science Mini-Certificate

CIP 43.0203

See list of Department Chairs on the Personnel page.

Career Opportunities

The Fire Science Technology program prepares students for entry-level positions in the fire service industry.

Certificate Program Description

The Fire Science Technology Certificate Programs vary in semester hours. These programs are designed to prepare individuals who have little or no firefighting experience for entry-level positions in the fire service industry, as well as special training for advancement for those already in the fire service. Most of the classes in the certificates related to structural firefighting can be applied to the Fire Science Associate of Applied Science Degree offered by Pueblo Community College.

Program Requirements

Entrance Requirements:

Successful completion of any CCR course or qualifying placement score or exemption.

Graduation Requirements:

The Fire Science Technology Certificate Program requires 21 credits for completion.

A grade of "C" or higher is required in each course

Total Credits: 9

Certificate Requirements

ALSO SEE WILDLAND FIREFIGHTER

FST 1002 - Principles/Emergency Services

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 102 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

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 103 Explores the theories and fundamentals of how and why fires start, spread and are controlled.

FST 1009 - Occupational Safety & Health

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 109 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.

Basic Firefighter - Structural (Fire Academy)

Program Description

See list of Department Chairs on the Personnel page.

The Fire Science Technology is an Associate of Applied Science (AAS) degree designed to meet the needs of fire protection and safety personnel. The program will prepare you for a career in fire science or a related field. Courses are offered through traditional classroom instruction, independent study, and hands on training in conjunction with local fire departments.

Career Information

The Fire Science Technology program prepares students for entry level positions in the fire service industry.

Total Credits: Variable

Basic Fire Science (9 credits)

FST 1002 - Principles/Emergency Services

Credit(s): 3
Lecture Hour(s): 3

Formerly FST 102 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

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 103 Explores the theories and fundamentals of how and why fires start, spread and are controlled.

FST 1009 - Occupational Safety & Health

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 109 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.

Fire Investigator I (9 credits)

FST 1003 - Fire Behavior & Combustion

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 103 Explores the theories and fundamentals of how and why fires start, spread and are controlled.

FST 2005 - Fire Investigation I

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 205 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 firesetter, and types of fire causes.

FST 2052 - Fire Investigation II

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 252 Provides the student with advanced technical knowledge on rule of law, fire scene analysis, fire behavior, evidence collection and preservation, scene documentation, case preparation, and testifying.

Firefighter I (12 credits)

FST 1000 - Firefighter I

Credit(s): 9
Lecture Hour(s): 6
Vocational Lab Hour(s): 4.50
Formerly FST 100 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 using IFSTA Essentials.

FST 1007 - Hazardous Materials Operations (Level I)

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 107 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.

Vehicle Extrication (3 credits)

FST 1026 - Vehicle Extrication Awareness Level

Credit(s): 1
Vocational Lab Hour(s): 1.50
Formerly FST 126 Provides the student with entry level knowledge and skills to safely operate at the scene of a vehicle/machinery extrication. Training in this course represents the minimum level of training needed to respond to a vehicle extrication incident.

FST 1027 - Vehicle Extrication Operations Level

Credit(s): 2
Lecture Hour(s): 0.50
Vocational Lab Hour(s): 2.25
Formerly FST 127 Expands and refines the objectives of FST 1026. Students shall be capable of hazard recognition, equipment use and techniques necessary to operate safely and effectively at incidents involving persons injured or entrapped in a vehicle or machinery.

Fire Officer I (12 credits)

FST 2001 - Instructional Methodology

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 201 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 2006 - Fire Co Superv and Leadership

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 206 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 2053 - NIMS

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): FST 2002.
Formerly FST 253 Focuses on the National Incident Management System, including fire ground management and resource management. Multiagency coordination systems are discussed; organization preparedness for large scale emergencies, communication and information are addressed. The course concludes with a review of the National Response Plan.

FST 2055 - Fire Service Management

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 255 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.

Basic Firefighter - Structural (Fire Academy) (16 credits)

FST 1008 - Firefighter Professional Preparation

Credit(s): 1
Lecture Hour(s): 1
Formerly FST 108 Articulates strategies for creating success in a career as a Firefighter. This course discusses requirements in professionalism, emergency response in a multicultural environment, the psychological rigors and stressors typical of the vocation, and use of potential resources to attain career goals and plans.

FST 1000 - Firefighter I

Credit(s): 9
Lecture Hour(s): 6
Vocational Lab Hour(s): 4.50
Formerly FST 100 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 using IFSTA Essentials.

FST 1007 - Hazardous Materials Operations (Level I)

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 107 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 1060 - Candidate Physical Abilities Test Prep

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly FST 160 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.

Fire Prevention & Public Education (14 credits)

FST 1006 - Fire Prevention

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 106 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 1050 - Introduction to Fire Prevention Education

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 150 Focuses on conducting prevention and education needs assessment, targeting audiences; development and delivery of prevention and education programs. Includes methods of conducting fire prevention and safety inspections.

FST 2004 - Principles of Code Enforcement

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 204 To provide the students with the fundamental knowledge of the role of code enforcement in a comprehensive fire prevention program.

FST 2008 - Fire Plans Review and Acceptance Testing

Credit(s): 2
Lecture Hour(s): 2
Formerly FST 208 Instructs the student on how to review building plans submitted to a fire department, acceptance testing procedures, implementation of a fire inspection program, and how to deal effectively with the public for fire prevention and education activities.

FST 2009 - Fire Protection Systems

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 209 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.

Basic Wildland Firefighter Mini-Certificate

CIP 43.0299

See list of Department Chairs on the Personnel page.

Career Opportunities

The Wildland Firefighter Certificate will prepare students for a career with local and state fire departments and federal land management agencies (US Forest Service, etc.). Additionally, this certificate is designed for individuals with a general interest in wildland fire suppression; volunteer firefighters who would like to expand their knowledge and career opportunities; and currently enrolled students with an interest in supplementing their degrees.

Program Description

The Wildland Firefighter Program will provide students with a solid foundation in theory and application of wildland fire suppression concepts. This certificate will also provide training that exceeds the minimum requirements for prospective wildland firefighters as established by the National Fire Protection Association and the National Wildfire Coordinating Group.

Program Requirements

Entrance Requirements:

Successful completion of any CCR course or qualifying placement score or exemption.

Graduation Requirements:

Successful completion of all course work with a grade of "C" or better.

Total Credits: 3

FSW 1000 - S-190 Introduction to Wildland Fire Behavior

Credit(s): 1
Lecture Hour(s): 1
Formerly FSW 100 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 FSW 1001 - S-130 Firefighting Training.

FSW 1001 - S-130 Firefighting Training

Credit(s): 2
Lecture Hour(s): 0.50
Vocational Lab Hour(s): 2.25
Formerly FSW 101 Provides entry-level firefighter skills. A version of the L-180, Human Factors on the Fire line, is included as part of the course. Credit should be issued for S-130.

Behavioral Health AAS

Behavioral Health

See list of Department Chairs on the Personnel page.

Program Description

The Behavioral Health (BHP) program is a degree option for those who are interested in human behavior especially in a clinical or health related settings. During the program, students will study behavioral health concepts related to addiction and substance abuse, counseling, group dynamics and human development. The Behavior health program will also cover current trends, best practices and up-to-date research findings. If you wish to pursue a bachelor's degree after earning your AGS you can take advantage of a smooth transfer to University of Colorado, Colorado Springs (UCCS) BA in Human Services.

Graduates from the behavioral health program can look forward to a rapidly growing job market that has several options.

Career Information

A behavior health specialist is a professional who works with people who have disabilities or problems with behavior and learning impairment in a variety of settings ranging from residential to outpatient, including but not limited to department of corrections, youth residential facilities, hospitals and outpatient facilities.

- Behavioral health technician
- Case manager
- Peer support worker
- Community health worker
- Family support worker
- Respite car worker
- Paraprofessional counselor
- Social service liaison

Total Credits: 65

Certified Addiction Counselor I (CAC I) courses are offered fall only. Certified Addiction Counselor II (CAC II) courses are offered spring and summer only. **Note: Students must complete all CAC I courses before completing CAC II courses.**

1st Spring (16 credits)

AAA 1009 - Advanced Academic Achievement

Credit(s): 3
Lecture Hour(s): 3
Formerly AAA 109 Examines theories and practices associated with successful learning to enhance college success. Recommended for new and returning students, this course study areas including education and career planning, effective communication, personal management, critical and creative thinking, development of community and awareness of diversity, leadership, and techniques for successful academic performance.

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

PSY 1001 - General Psychology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 101 Focuses on the scientific study of behavior including motivation, emotion, physiological psychology, stress and coping, research methods, consciousness, sensation, perception, learning and memory. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

BIO 1006 - Basic Anatomy and Physiology

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly BIO 106 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, Paramedic Program, and the Medical Office Technology Program.

1st Summer (7 credits)

HPR 1038 - Intro to Medical Terminology

Credit(s): 1
Lecture Hour(s): 1
Formerly HPR 138 Introduces the student to the structure of medical terms with emphasis on using and combining the most common prefixes, roots and suffixes. Includes terms related to major body systems, oncology and psychiatry, as well as clinical laboratory and diagnostic procedures and imaging. Class structure provides accepted pronunciation of terms and relative use in the healthcare setting.

SOC 1001 - Introduction to Sociology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 101 Examines the basic concepts, theories and principles of sociology as well as human culture, social groups, and the social issues of age, gender, class and race. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2440 - Human Growth and Development: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 235 Examines human development from conception through death, emphasizing physical, cognitive, emotional and psychosocial factors. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

Fall (18.5 credits)

PTE 1010 - Intro to Behavioral Health Care and Wellness

Credit(s): 3
Lecture Hour(s): 3
Formerly PTE 110 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.

COM 2063 - Conflict Resolution

Credit(s): 1
Lecture Hour(s): 1
Formerly COM 263 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.

HPR 1008 - Law & Ethics for Health Professions

Credit(s): 2
Lecture Hour(s): 2
Formerly HPR 106 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.

SOC 2031 - The Sociology of Deviant Behavior: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 231 Examines the nature, identification, and explanation of deviant categories. Theories and

philosophies, as well as methods of treatment related to deviancy, will also be considered. The course will study society's attempts to control, change and institutionalize those acts, individuals or groups that a population may deem unacceptable. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

CSL 2046 - Professional Ethics I

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): High School diploma or equivalent.
Formerly CSL 245 This course focuses on ethical issues specific to the practice of addiction counseling and on jurisprudence, which is the law and the practice of psychotherapy in Colorado. The class will cover the Colorado Mental Health Practice Act and introduce the student to the regulatory system and the role of DORA (Dept. of Regulatory Agencies) and DBH (Division of Behavioral Health) in the development and credentialing of the addiction counselor. There will be emphasis on developing ethical decision making skills, knowledge of confidentiality and the prohibited activities in the Mental Health Practice Act. Students will become familiar with the NAADAC Code of Ethics and acquire the tools for ethical and legal practice.

CSL 2051 - Pharmacology I for Addiction Counselors

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): High School diploma or equivalent.
Formerly CSL 251 This class will provide a solid base of knowledge about the drugs of abuse, including what is happening in human physiology and behaviors, and will enhance the ability of the counselor to offer treatment services in a manner that respects gender, race and ethnicity, sexual orientation, cultural, familial, systemic and socioeconomic diversity.

CSL 2068 - Addictions Counseling Skills

Credit(s): 1.50
Lecture Hour(s): 1.50
Prerequisite(s): High School diploma or equivalent.
Formerly CSL 268 This class will provide a framework and counseling model for working with clients with substance abuse or dependence. This course will teach the counseling skills needed to help clients process their information and move toward the change process. The models utilized in this class are client-centered, counselor-directed therapy using a motivational style and spirit.

CSL 2061 - Client Records Management

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): High School diploma or equivalent.
Formerly CSL 260 This class will provide the counselor with an understanding of the clinical record and the continuum of client care that the record documents and tracks. The class presents screening, assessment and evaluation, diagnosis, ASAM patient placement criteria, treatment planning, progress note completion, documentation requirements and discharge planning. It emphasizes the confidentiality of the client record and includes releases of information, mandatory disclosure and informed consent among others.

CSL 2065 - Culturally Informed Treatment

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): High School diploma or equivalent.
Formerly CSL 265 This class will provide a basic foundation for understanding how cultural competence, awareness and sensitivity can improve quality of care and increase positive outcomes. Cultural variables to be considered will include age, gender, sexual orientation, religious affiliation, language, educational level, physical ability, economic status and social class as well as racial and ethnic backgrounds. This course is intended to provide participants with basic skills to recognize and respect the behavior, ideas, attitudes, values, beliefs, customs, language, rituals, ceremonies and practices characteristic of diverse groups of people. Course design will include definitions and descriptions of culture including concepts of assimilation and acculturation. Exercises will involve self-examination and discussion of the evolution of one's own personal beliefs, values and attitudes.

CSL 2050 - Motivational Interviewing I

Credit(s): 1.5
Lecture Hour(s): 1.5
Prerequisite(s): CSL 2068
Formerly CSL 250 Provides the opportunity for students to learn both the model of Motivational Interviewing as well as the underlying Stages of Development model. Discussion of the populations of clients where these models have proven most effective will be discussed. Student opportunity for skills practice during class that includes skill sets specific to each stage of client readiness will be used. Presentation of assessment instruments to evaluate client readiness for change.

CSL 2054 - Trauma Informed Care

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): High School Diploma or equivalent
Formerly CSL 254 Covers the concept of trauma?informed care, an approach being adopted within human services based upon an increased awareness of the ways trauma impacts functioning. Course will define what trauma informed care is and ways a traditional treatment setting can be modified to increase the sense of safety experienced by clients. Participants will learn how to incorporate trauma?informed practices into treatment with diverse populations, such as military veterans, women, and people with co?occurring disorders.

CSL 2069 - Principles of Addiction

Credit(s): 1.50
Lecture Hour(s): 1.50
Prerequisite(s): High School diploma or equivalent.
Formerly CSL 269 Focuses on the major theories of addiction in an historical and theoretical context. Includes an elaboration on NIDA's Principles of Drug Addiction Treatment. This class meets the principles of addictions training requirement for the Counselor I level of the Colorado Alcohol and Drug Abuse Program.

2nd Spring (17.5 credits)

PSY 2552 - Abnormal Psychology: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): PSY 1001 or Department Chair Approval.

Formerly PSY 249 Examines abnormal behavior and its classification, causes, treatment and prevention. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PTE 1017 - Theoretical Concepts of Psychiatric Care II

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): PTE 1010
Formerly PTE 117 Explores psychiatric problems common to four (4) special populations: children/adolescents, developmentally disabled individuals, aging persons and forensic clients. The student will learn how to recognize and intervene with problems common to these four groups.

PTE 1020 - Application of Behavioral Health Care & Wellness

Credit(s): 5
Lecture Hour(s): 3
Vocational Lab Hour(s): 3
Prerequisite(s): PTE 1010
Formerly PTE 120 Explores basic etiology, symptoms, and interventions for common behavioral and mental health disorders. Provides the opportunity for students to experience the mileu of a behavioral health care setting while providing basic care to clients experiencing common behavioral and mental health issues.

SOC 2018 - Sociology of Diversity: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 218 Explores the variety of intergroup relations regarding race, nationality, ethnicity, gender, sexual orientation and other diversity issues. Patterns of prejudice, discrimination and possible solutions to these issues will be addressed. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

CSL 2055 - Infectious Diseases for Addiction Counselors

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): High School diploma or equivalent.
Formerly CSL 255 This class will help prepare addiction professionals to identify diseases frequently associated with drug abuse, determine client risk for infection, educate clients about disease prevention and treatment options, and assist clients in obtaining appropriate treatment as needed. This class will enhance the ability of the counselor to offer treatment services in a manner that respects gender, race and ethnicity, sexual orientation, cultural, familial, systemic and socioeconomic diversity.

CSL 2052 - Pharmacology II for Counselors

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): High school diploma or equivalent
Formerly CSL 252 Focuses on the pharmacology of alcohol and drugs such as stimulants, nicotine, cannabis, hallucinogens, designer drugs, over the counter medications, and medications for psychiatric illnesses. When combined with CSL 251, this course meets the pharmacology training requirement for the Counselor II level of the Colorado Alcohol and Drug Abuse Program.

CSL 2058 - Group Counseling Skills

Credit(s): 1.5
Lecture Hour(s): 1.5
Prerequisite(s): CSL 2068
Formerly CSL 258 Provides students with the skills that allow one therapist to facilitate a group process that help a number of clients simultaneously, and provides positive peer support and pressure for recovery. This class will help the student understand the use of group therapy and be able to demonstrate the skills necessary to facilitate a therapy group. The class will focus on group process and discuss diversity within groups, as well as challenges for group leaders.

CSL 2059 - Advanced Professional and Ethical Practice

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): CSL 2046
Formerly CSL 259 Addresses organizational ethics and practices, individual provider ethics and practices, and guidelines for setting up a private practice. Topics will include Office of Behavioral Health (OBH) licensing rules; OBH behavioral health rules and regulations; practice standards and guidelines; Department of Regulatory Agencies (DORA) and the Mental Health Practice Act; the purpose of and the need for written policies and procedures; professional competencies, boundaries and ethical relationships; reporting violations; employee drug testing; liability insurance; clinical versus administrative supervision; the ethical delivery of culturally-responsive care and trauma-informed care; and the need for professional self-care plan. This course will build on Ethical Practice in Addiction Treatment course.

2nd Summer (7 credits)

CSL 2053 - Cognitive Behavior Therapy

Credit(s): 1
Lecture Hour(s): 1
Formerly CSL 253 Opportunity for students to learn the model of Cognitive Behavior Therapy as it applies to addiction. Discussion of the populations of clients where this model has proven most effective. Opportunity for skills practice during class that includes clincial feeback. Minimum of 14 contact hours.

MAT 1260 - Introduction to Statistics: GT-MA1

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 135 Explores and applies data presentation and summarization, introduction to probability concepts and distributions, statistical inference estimation, hypothesis testing, comparison of populations, correlation and regression. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

CSL 2048 - Clinical Assessment & Treatment Planning

Credit(s): 1
Lecture Hour(s): 1
Formerly CSL 248 Covers the differences between screening and assessment and use of assessment instruments. In this course components of the clinical assessment include a biopsychosocial interview, assessing risk for self-harm, identifying cultural needs and supports, problem domains, determining stage of readiness for change and strengths of the client. Stages of treatment and systems of care will be covered along with facets of treatment planning.

CSL 2056 - Co-occurring Disorders

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): High School Diploma or equivalent
Formerly CSL 256 Presents the basics of working with clients with co-occurring mental health and substance abuse disorders. This class will address clinical assessment, treatment philosophy, strategies, and guidelines to provide integrated treatment with co?occurring disorders. It will include an introduction to the diagnostic criteria for the mental disorders most often seen with substance use disorders. The essential values, attitudes, and competencies of the counselor working with this population are discussed.

1 Indicates Guaranteed Transfer course (GT)

2 Indicates program core course

3 Requires departmental approval

4 CAC I courses

5 CAC II courses

Biology, AS (with Designation)

CIP 24.0199

See list of Department Chairs on the Personnel page.

Career Opportunities

The Associate of Science (AS) Degree with Designation in Biology prepares the student to transfer as a junior to a four-year institution in Colorado in order to pursue a Bachelor of Science (BS) degree in Biology. Students who opt for the Bachelor of Science in Biology can choose to work in numerous occupational fields of science or medicine. Once a BS is completed, many students will pursue a higher or graduate degree in Biology.

Program Description

This program introduces the student to the discipline of Biology includes the course work to meet general education requirements that are common to all Colorado four-year institutions, as well a specific courses in various subfields of Biology. Upon transfer, students from Pueblo Community College who have earned the Associate of Science (AS) Degree with Designation in Biology will be ready to complete the last half of a BS in Biology at a four-year institution.

Program Requirements

Refer to the course descriptions listed below. Some courses may have prerequisites of lower level classes or assessment scores. Refer to the course descriptions for these prerequisites.

Total Credits: 60

** Refer to CCCS Guaranteed Transfer (GT) - Pathways Courses for a full list of all GT Pathway Courses*

General Education Core Requirements (36 Credits)

Written Communication (6 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

or

- ENG 1022 - English Composition II: GT-CP2 **Credit(s): 3 and** a GT Pathways Advanced Writing Course (GT--CO3) *

Mathematics (5 Credits)

MAT 2410 - Calculus I: GT-MA1

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): MAT 1420.
Formerly MAT 201 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. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

Natural and Physical Sciences (10 Credits)

BIO 1111 - General College Biology I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): ENG 1021
Formerly BIO 111 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.

CHE 1111 - General College Chemistry I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4

Academic Lab Hour(s): 2
Prerequisite(s): MAT 1340, CHE 1011.
Corequisite(s): ENG 1021.
Formerly CHE 111 Focuses on basic chemistry and measurement, matter, chemical formulas, reactions and equations, stoichiometry. This course covers the development of atomic theory culminating in the use of quantum numbers to determine electron configurations of atoms, and the relationship of electron configuration to chemical bond theory. The course includes gases, liquids, and solids and problem-solving skills are emphasized through laboratory experiments.

Arts and Humanities (6 Credits)

- Select two GT Pathways Arts and Humanities courses from any category (GT-AH1, GT-AH2, GT-AH3, GT-AH4) *

Social and Behavioral Sciences (6 Credits)

- Select two GT Pathways Social and Behavioral courses from any category (GT-SS1, GT-SS2, GT-SS3) *

History (3 Credits)

- Select one GT Pathways History Course (GT-HI1) *

Additional Required Science Courses (20 Credits)

Note: If these credits are not required for the major at a receiving 4-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

BIO 1112 - General College Biology II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Corequisite(s): ENG 1021.
Formerly BIO 112 A continuation of Biology I. Includes ecology, evolution, classification, structure, and function in plants and animals. This course includes laboratory experience.

CHE 1112 - General College Chemistry II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): CHE 1111, ENG 1021.
Formerly CHE 112 Presents concepts in the areas of solution properties, chemical kinetics, chemical equilibrium, acid-base and ionic equilibrium, thermodynamics, and electrochemistry. This course emphasizes problem solving skills and descriptive contents for these topics. Laboratory experiments demonstrate qualitative and quantitative analytical techniques.

PHY 1111 - Physics: Algebra-Based I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 0300.
Formerly PHY 111 Explores the physical world through reasoning, mathematics and experimentation. Examines kinematics, force, circular motion, energy, momentum, torque, rotational dynamics, simple harmonic motion, temperature, heat and thermodynamics. The concepts and theories presented are explored through demonstrations and hands-on experiments. It is a general physics course that is recommended for all of the health sciences and all other interested students. Students entering engineering or one of the advanced sciences should register for PHY 211. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 1112 - Physics: Algebra-Based II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 0300.
Formerly PHY 112 Expands upon PHY 1111and explores sound waves, electric fields, electric circuits, magnetic fields, light, optics and modern physics. Explores the concepts and theories presented in class through demonstrations and hands-on experiments. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

Electives (4 Credits)

Determined by transferring institution

Transfer Degrees

This degree transfers to the following Colorado Public Four-Year institutions of higher education:

- Adams State University (B.S. Biology, Cellular and Molecular Biology, Organismal Biology, and Wildlife Biology emphasis)
- Colorado Mesa University (B.S. Biological Sciences, Biology concentration)
- Colorado State University-Ft. Collins (B.S. Biological Sciences)
- Colorado State University-Pueblo (B.S. Biology)
- Fort Lewis College (B.S. Biology, General Biology option)
- Metropolitan State University of Denver (B.S. Biology)
- University of Colorado, Boulder (B.A. Ecology and Evolutionary Biology)
- University of Colorado, Colorado Springs (B.S. Biology)
- University of Colorado, Denver (B.S. Biology)
- University of Northern Colorado (B.S. Biological Sciences, Cell and Molecular Biology, Ecology and Evolutionary Biology, Pre-Health and Biomedical Sciences emphasis)
- Western State Colorado University (B.A. Biology, Cell Biology/Pre-medicine, Environmental Biology and Ecology, General Biology, Pre-allied Health emphasis)

Bookkeeping Certificate

CIP 52.0302

Career Opportunities

The bookkeeping certificate prepares you for a career in entry-level accounting or upper- level bookkeeping positions.

Program Description

The Bookkeeping Certificate focuses on the role of accounting basics in business and management to prepare students for an entry-level position in Bookkeeping, Payroll, Accounting, and Auditing (clerks). Students will encounter real-world scenarios used in payroll, tax, and computerized accounting along with the use of bookkeeping software. Students will use accounting information resources and systems, and present conclusions based on accounting and business data. Additionally, students will use ledgers, journals, and worksheets to complete formal, informal, and quantitative accounting tasks.

Total Credits: 29

Certificate Requirements

General Requirement (3 Credits)

MAT 1160 - Financial Mathematics

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 112 Covers topics including pricing, taxes, insurance, interest, annuities, amortization, investments using financial calculators and spreadsheets.

Core Curriculum Requirements (26 credits)

ACC 1038 - Payroll and Sales Tax

Credit(s): 3
Lecture Hour(s): 3
Formerly ACC 138 Introduces laws pertaining to payroll and sales taxes including record keeping rules; preparation of various federal, state and local forms for reporting payroll and sales taxes; and computerized payroll procedures.

ACC 1021 - Accounting Principles I

Credit(s): 4
Lecture Hour(s): 4
Formerly ACC 121 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

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): ACC 1021
Formerly ACC 122 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

Credit(s): 3
Vocational Lab Hour(s): 4.50
Prerequisite(s): ACC 1022
Formerly ACC 125 Introduces the capabilities of computer applications in accounting. Includes solving accounting problems of a financial nature and hardware and software controls.

BUS 1015 - Introduction to Business

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 115 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.

ENP 1005 - Introduction to Entrepreneurship

Credit(s): 3
Lecture Hour(s): 3
Formerly ENP 105 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.

BUS 2016 - Legal Environment of Business

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 216 Emphasizes public law, regulation of business, ethical considerations, and various relationships existing within society, government, and business. Specific attention is devoted to economic regulation, social regulation, regulation and laws impacting labor-management issues and environmental concerns. Students develop an understanding of the role of law in social, political, and economic change.

CIS 1018 - Intro to PC Applications

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 118 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.

ACC 1035 - Spreadsheet Applications for Accounting

Credit(s): 3
Lecture Hour(s): 3
Formerly ACC 135 Introduces spreadsheets as an accounting tool in the application of fundamental accounting concepts, problem-solving, and decision-making skills.

Broadcasting & Production Technology Certificate

CIP 09.0702

See list of Department Chairs on the Personnel page.

Career Opportunities

Careers in Media Communications are in demand and PCC offers an affordable way for students to begin their education. Some of the exciting career options within this field include: Graphic Designers; Web Developers; Broadcast Technicians; Film Video Editors; and Advertising & Promotion Managers.

Program Description

The Media Communications program teaches students to think critically and develop skills in Web Design, Graphic Design, Advertising, Videography, News Writing, and TV-Radio Production. Courses provide a solid foundation in these areas through a combination of lecture and hands on applications. There are multiple labs with state of the art equipment and software for your area of emphasis. The Media Communications program provides a high technical skill attainment in this changing field of communication. Students have multiple options to pursue. The AAS degrees with emphases in Graphic Design and Web Design offer advanced technical skills in these areas. Certificates provide basic skill sets to enhance an existing degree or occupation. The AGS degree provides a transfer option to a four year university. If interested in this option, please refer to the Transferring Credits section of the catalog.

Total Credits: 27

Certificate Requirements

JOU 1005 - Introduction to Mass Media: GT SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly JOU 105 Places the mass media in a historical and cultural perspective, considering the validity, integrity and influence of the media in a democracy. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

MGD 1002 - Introduction to Multimedia

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly MGD 102 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 1011 - Adobe Photoshop I

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly MGD 111 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 1043 - Motion Graphic Design I: (Software)

Credit(s): 3
Vocational Lab Hour(s): 4.5
Formerly MGD 143 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 1064 - Digital Video Editing I

Credit(s): 3
Vocational Lab Hour(s): 4.5
Formerly MGD 164 Introduces to digital nonlinear 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 2064 - Digital Video Editing II

Credit(s): 3
Vocational Lab Hour(s): 4.5
Prerequisite(s): MGD 1064
Formerly MGD 264 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 1041 - Web Design I

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly MGD 141 Introduces website planning, design and creation using industry standards-based website development tools. Screen-based color theory, web aesthetics, use of graphics editors and intuitive interface design are explored.

RTV 1002 - Beginning Television

Credit(s): 3
Vocational Lab Hour(s): 4.5

Formerly RTV 102 Focuses on principles and techniques of television production in theory and the approach of studio and production. Emphasizes producing television programs, beginning with a concept through script to actual studio production, pre-production and post-production.

CNG 1024 - Networking I: Network +

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 124 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.

Business Fundamentals Certificate

CIP 52.0201

See list of Department Chairs on the Personnel page.

Career Opportunities

The AAS and Certificate programs prepare you for entry level positions in marketing, management or sales; they also give you the skills you need to open your own business.

Program Description

You will study management from three perspectives: marketing, management and economics. Marketing studies offer specific training in sales, advertising, promotion and marketing. Management studies offer a generalized perspective with broad applications in the business world. Economic studies give you a basic understanding of economics and its relationship to other disciplines.

The Business Fundamentals Certificate program prepares you for an entry-level position in business or for starting your own small business. You can apply all course work for this certificate to the AAS Degree in Business Management.

Total Credits: 25

Certificate Requirements

ACC 1015 - Payroll Accounting

Credit(s): 3
Lecture Hour(s): 3
Formerly ACC 115 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.

OR

ACC 1031 - Income Tax

Credit(s): 3
Lecture Hour(s): 3
Formerly ACC 131 Introduces basic concepts of federal income taxation and tax administration with emphasis on taxation of individuals and sole proprietorships.

OR

ACC 1038 - Payroll and Sales Tax

Credit(s): 3
Lecture Hour(s): 3
Formerly ACC 138 Introduces laws pertaining to payroll and sales taxes including record keeping rules; preparation of various federal, state and local forms for reporting payroll and sales taxes; and computerized payroll procedures.

ACC 1021 - Accounting Principles I

Credit(s): 4
Lecture Hour(s): 4
Formerly ACC 121 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.

BUS 2016 - Legal Environment of Business

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 216 Emphasizes public law, regulation of business, ethical considerations, and various relationships existing within society, government, and business. Specific attention is devoted to economic regulation, social regulation, regulation and laws impacting labor-management issues and environmental concerns. Students develop an understanding of the role of law in social, political, and economic change.

BUS 2017 - Business Communication & Report Writing

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 217 Emphasizes effective business writing and covers letters, memoranda, reports, application letters and resumes. Includes the fundamentals of business communication and an introduction to international communication.

CHOOSE 4 COURSES BELOW (12 Credits)

BUS 1002 - Entrepreneurial Operations

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 102 Explores the essential requirements for starting and operating a business. This course covers basic concepts of business law, marketing, finance and operations. It guides the development of an effective business plan and prepares students to launch and sustain their own businesses.

BUS 1015 - Introduction to Business

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 115 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.

CIS 1018 - Intro to PC Applications

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 118 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.

ENP 1005 - Introduction to Entrepreneurship

Credit(s): 3
Lecture Hour(s): 3
Formerly ENP 105 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.

MAN 1028 - Human Relations in Organizations

Credit(s): 3
Lecture Hour(s): 3
Formerly MAN 128 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

Credit(s): 3
Lecture Hour(s): 3
Formerly MAN 200 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

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): MAT 1140
Formerly MAN 216 Examines the elements necessary for the successful formation of a new small business. It is also

designed 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

Credit(s): 3
Lecture Hour(s): 3
Formerly MAN 226 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.

Business Management Certificate

CIP 52.0201

See list of Department Chairs on the Personnel page.

Program Description

The AAS and Certificate programs prepare you for entry level positions in marketing, management or sales; they also give you the skills you need to open your own business.

Total Credits: 31

Semester 1 (15 credits)

CIS 1018 - Intro to PC Applications

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 118 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.

ACC 1035 - Spreadsheet Applications for Accounting

Credit(s): 3
Lecture Hour(s): 3
Formerly ACC 135 Introduces spreadsheets as an accounting tool in the application of fundamental accounting concepts, problem-solving, and decision-making skills.

BUS 1015 - Introduction to Business

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 115 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.

ENP 1005 - Introduction to Entrepreneurship

Credit(s): 3
Lecture Hour(s): 3
Formerly ENP 105 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.

ACC 1031 - Income Tax

Credit(s): 3
Lecture Hour(s): 3
Formerly ACC 131 Introduces basic concepts of federal income taxation and tax administration with emphasis on taxation of individuals and sole proprietorships.

ACC 1038 - Payroll and Sales Tax

Credit(s): 3
Lecture Hour(s): 3
Formerly ACC 138 Introduces laws pertaining to payroll and sales taxes including record keeping rules; preparation of various federal, state and local forms for reporting payroll and sales taxes; and computerized payroll procedures.

MAR 2016 - Principles of Marketing

Credit(s): 3
Lecture Hour(s): 3
Formerly MAR 216 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.

MAT 1160 - Financial Mathematics

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 112 Covers topics including pricing, taxes, insurance, interest, annuities, amortization, investments using financial calculators and spreadsheets.

Semester 2 (16 credits)

ACC 1021 - Accounting Principles I

Credit(s): 4
Lecture Hour(s): 4
Formerly ACC 121 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.

BUS 2016 - Legal Environment of Business

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 216 Emphasizes public law, regulation of business, ethical considerations, and various relationships existing within society, government, and business. Specific attention is devoted to economic regulation, social regulation, regulation and laws impacting labor-management issues and environmental concerns. Students develop an understanding of the role of law in social, political, and economic change.

ECO 2001 - Principles of Macroeconomics: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly ECO 201 Focuses on the study of the American economy, stressing the interrelationships among household, business and government sectors. Explores saving and investment decisions, unemployment, inflation, national income accounting, taxing and spending policies, the limits of the market and government, public choice theory, the Federal Reserve System, money and banking, and international trade.

BUS 1016 - Personal Finance

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 116 Surveys the basic personal financial needs of most individuals. Emphasizes the basics of budgeting and buying, saving and borrowing money, the intricacies of home ownership, income tax and investments, and the wise use of insurance, wills and trusts.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

MAN 2026 - Principles of Management

Credit(s): 3
Lecture Hour(s): 3
Formerly MAN 226 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.

Business Management, AAS

See list of Department Chairs on the Personnel page.

Program Description

The Business Management AAS degree provides the basic skills needed for management positions. Students learn principles of management. They also gain practical skills as they engage with the business world.

Career Options

The Business Management program prepares students for careers in entry-level positions in Marketing, Management, Sales, and Entrepreneurship (opening your own business).

Total Credits: 62

Semester One, Fall (15 credits)

BUS 1015 - Introduction to Business

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 115 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.

ENP 1005 - Introduction to Entrepreneurship

Credit(s): 3
Lecture Hour(s): 3
Formerly ENP 105 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.

CIS 1018 - Intro to PC Applications

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 118 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.

ACC 1035 - Spreadsheet Applications for Accounting

Credit(s): 3
Lecture Hour(s): 3
Formerly ACC 135 Introduces spreadsheets as an accounting tool in the application of fundamental accounting concepts, problem-solving, and decision-making skills.

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1031 - Technical Writing I

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 131, then ENG 1020 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.

MAT 1160 - Financial Mathematics

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 112 Covers topics including pricing, taxes, insurance, interest, annuities, amortization, investments using financial calculators and spreadsheets.

Semester Two, Spring (17 credits)

ACC 1021 - Accounting Principles I

Credit(s): 4
Lecture Hour(s): 4
Formerly ACC 121 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

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): ACC 1021
Formerly ACC 122 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.

ECO 2001 - Principles of Macroeconomics: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly ECO 201 Focuses on the study of the American economy, stressing the interrelationships among household, business and government sectors. Explores saving and investment decisions, unemployment, inflation, national income accounting, taxing and spending policies, the limits of the market and government, public choice theory, the Federal Reserve System, money and banking, and international trade.

ECO 2002 - Principles of Microeconomics: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly ECO 202 Studies the firm, the nature of cost and how these relate to the economy as a whole. Analyzes economic models of the consumer, perfect competition, monopoly, oligopoly and monopolistic competition. Explores

economic issues including market power, population growth, positive and negative externalities, income distribution, poverty and welfare, discrimination, and international economic interdependence.

AAA 1009 - Advanced Academic Achievement

Credit(s): 3
Lecture Hour(s): 3
Formerly AAA 109 Examines theories and practices associated with successful learning to enhance college success. Recommended for new and returning students, this course study areas including education and career planning, effective communication, personal management, critical and creative thinking, development of community and awareness of diversity, leadership, and techniques for successful academic performance.

- Any communications (COM) course **Credit(s): 3**

Summer Semester Option

Enroll in any courses found on this page that would reduce the course load for other semesters.

Semester Three, Fall (15 credits)

BUS 2016 - Legal Environment of Business

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 216 Emphasizes public law, regulation of business, ethical considerations, and various relationships existing within society, government, and business. Specific attention is devoted to economic regulation, social regulation, regulation and laws impacting labor-management issues and environmental concerns. Students develop an understanding of the role of law in social, political, and economic change.

ENP 2006 - Entrepreneurship Legal Issues

Credit(s): 3
Lecture Hour(s): 3
Formerly ENP 206 Explores legal issues related to business entities including sole proprietorship, general partnerships, limited partnerships, and corporations. This course reviews articles of incorporation and the filing process, employment law, property, landlord tenant rights and duties, and business insurance.

BUS 2017 - Business Communication & Report Writing

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 217 Emphasizes effective business writing and covers letters, memoranda, reports, application letters and resumes. Includes the fundamentals of business communication and an introduction to international communication.

MAN 1028 - Human Relations in Organizations

Credit(s): 3
Lecture Hour(s): 3
Formerly MAN 128 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 2024 - Leadership

Credit(s): 3
Lecture Hour(s): 3
Formerly MAN 224 Focuses on the leadership skills for contemporary organizations. Covers development and communication a shared vision to motivate and empower employees to manage conflict, to negotiate, and to develop teams.

BUS 1016 - Personal Finance

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 116 Surveys the basic personal financial needs of most individuals. Emphasizes the basics of budgeting and buying, saving and borrowing money, the intricacies of home ownership, income tax and investments, and the wise use of insurance, wills and trusts.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

ENP 2007 - Entrepreneurship Financial Topics

Credit(s): 3
Lecture Hour(s): 3
Formerly ENP 207 Will cover topics such as financial planning for entrepreneurs, understanding tax considerations, understanding financial documents, financial ratio analysis, cash flow management, cost of capital and budgeting, raising capital, valuation, risk assessment, and venture exits.

Semester Four, Spring (15 credits)

ACC 1025 - Computerized Accounting

Credit(s): 3
Vocational Lab Hour(s): 4.50
Prerequisite(s): ACC 1022
Formerly ACC 125 Introduces the capabilities of computer applications in accounting. Includes solving accounting problems of a financial nature and hardware and software controls.

ACC 1038 - Payroll and Sales Tax

Credit(s): 3
Lecture Hour(s): 3
Formerly ACC 138 Introduces laws pertaining to payroll and sales taxes including record keeping rules; preparation of various federal, state and local forms for reporting payroll and sales taxes; and computerized payroll procedures.

BUS 2026 - Business Statistics

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 226 Focuses on statistical study, descriptive statistics, probability, and the binominal distribution, index numbers, time series, decision theory, confidence intervals, linear regression and correlation. Intended for the business major.

MAN 2026 - Principles of Management

Credit(s): 3
Lecture Hour(s): 3
Formerly MAN 226 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.

MAR 2016 - Principles of Marketing

Credit(s): 3
Lecture Hour(s): 3
Formerly MAR 216 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.

ENP 2005 - Marketing for the Entrepreneur

Credit(s): 3
Lecture Hour(s): 3
Formerly ENP 205 Covers marketing strategies to launch and sustain an entrepreneurial venture. This course will include topics on marketing entrepreneurial ventures utilizing innovative and financially responsible marketing strategies. This course will help students to develop an understanding of entrepreneurial marketing goals and objectives. The course covers marketing principles and electronic marketing.

PSV 2030 - Introduction to Civic Leadership

Credit(s): 3
Lecture Hour(s): 3
Formerly PSV 230 Enables the student to develop a critical understanding of public leadership through the study of pertinent models, theories and research.

Business Office Professional

See list of Department Chairs on the Personnel page.

Program Description

Prepares students for a career as an office professional in a variety of fields and industries. You will learn state-of-the-art technology, develop computerized or payroll skills, learn top-notch interpersonal (or group) communication skills and/or human resource management skills, develop a strong business understanding and report writing skills, and learn to solve problems creatively. As a student preparing to enter the workforce, there is the opportunity to gain relevant experience through internships or enhance your knowledge of personal finance.

Total Credits: 24

Certificate Requirements

ACC 1025 - Computerized Accounting

Credit(s): 3
Vocational Lab Hour(s): 4.50
Prerequisite(s): ACC 1022
Formerly ACC 125 Introduces the capabilities of computer applications in accounting. Includes solving accounting problems of a financial nature and hardware and software controls.

OR

ACC 1038 - Payroll and Sales Tax

Credit(s): 3
Lecture Hour(s): 3
Formerly ACC 138 Introduces laws pertaining to payroll and sales taxes including record keeping rules; preparation of various federal, state and local forms for reporting payroll and sales taxes; and computerized payroll procedures.

ACC 1035 - Spreadsheet Applications for Accounting

Credit(s): 3
Lecture Hour(s): 3
Formerly ACC 135 Introduces spreadsheets as an accounting tool in the application of fundamental accounting concepts, problem-solving, and decision-making skills.

BUS 1015 - Introduction to Business

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 115 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 2017 - Business Communication & Report Writing

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 217 Emphasizes effective business writing and covers letters, memoranda, reports, application letters and resumes. Includes the fundamentals of business communication and an introduction to international communication.

CIS 1018 - Intro to PC Applications

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50

Formerly CIS 118 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.

BTE 2087 - Cooperative Education/Internship

Credit(s): 0.50-6
Cooperative Education Hour(s): 0.75-9
Prerequisite(s): Department Chair Approval.
Formerly BTE 287 Provides students with the opportunity to supplement course work with practical work experience related to their educational program and occupational objectives. Students are placed at approved work sites that are related to their program of study. They work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor/coordinator.

OR

BUS 1016 - Personal Finance

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 116 Surveys the basic personal financial needs of most individuals. Emphasizes the basics of budgeting and buying, saving and borrowing money, the intricacies of home ownership, income tax and investments, and the wise use of insurance, wills and trusts.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

MAN 1028 - Human Relations in Organizations

Credit(s): 3
Lecture Hour(s): 3
Formerly MAN 128 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.

OR

MAN 2000 - Human Resource Management I

Credit(s): 3
Lecture Hour(s): 3
Formerly MAN 200 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.

COM 2220 - Group Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 217 Examines group communication theories with an emphasis on leadership and group behaviors. The course provides opportunities for group participation. GT-SS3

OR

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

Business Ownership AAS

See list of Department Chairs on the Personnel page.

Program Description

The Business Management program (AAS Degree and Certificates) prepares students for entry level positions in Marketing, Management, Sales, and Entrepreneurship. These offerings also provide opportunities for individuals working within the industry to up-skill and advance their careers. The (AA) in Business Management prepares students to transfer to bachelor's degree programs in Business Management. Per the statewide articulation agreement, students can complete fundamental courses at PCC and transfer to complete a Bachelor's Degree with a specific emphasis.

Total Credits: 61

General Education Requirements (15 credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1031 - Technical Writing I

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 131, then ENG 1020 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.

MAT 1160 - Financial Mathematics

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 112 Covers topics including pricing, taxes, insurance, interest, annuities, amortization, investments using financial calculators and spreadsheets.

ECO 2001 - Principles of Macroeconomics: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly ECO 201 Focuses on the study of the American economy, stressing the interrelationships among household, business and government sectors. Explores saving and investment decisions, unemployment, inflation, national income accounting, taxing and spending policies, the limits of the market and government, public choice theory, the Federal Reserve System, money and banking, and international trade.

CIS 1018 - Intro to PC Applications

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 118 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.

AAA 1009 - Advanced Academic Achievement

Credit(s): 3
Lecture Hour(s): 3
Formerly AAA 109 Examines theories and practices associated with successful learning to enhance college success. Recommended for new and returning students, this course study areas including education and career planning, effective communication, personal management, critical and creative thinking, development of community and awareness of diversity, leadership, and techniques for successful academic performance.

- Any Communications Course(s) **Credit(s): 3**

Core Curriculum Requirements (31 credits)

ACC 1021 - Accounting Principles I

Credit(s): 4
Lecture Hour(s): 4
Formerly ACC 121 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 1035 - Spreadsheet Applications for Accounting

Credit(s): 3
Lecture Hour(s): 3
Formerly ACC 135 Introduces spreadsheets as an accounting tool in the application of fundamental accounting concepts, problem-solving, and decision-making skills.

BUS 2017 - Business Communication & Report Writing

Credit(s): 3
Lecture Hour(s): 3

Formerly BUS 217 Emphasizes effective business writing and covers letters, memoranda, reports, application letters and resumes. Includes the fundamentals of business communication and an introduction to international communication.

ENP 1005 - Introduction to Entrepreneurship

Credit(s): 3
Lecture Hour(s): 3
Formerly ENP 105 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.

ENP 1006 - Entrepreneurship Opportunity Analysis/Feasibility Study

Credit(s): 3
Lecture Hour(s): 3
Formerly ENP 106 Determines if a business venture is feasible based on personal, professional, and financial goals. This course will help to identify and analyze the present climate for business ideas through an industry analysis, target market analysis, competitive analysis, and financial analysis.

ENP 2005 - Marketing for the Entrepreneur

Credit(s): 3
Lecture Hour(s): 3
Formerly ENP 205 Covers marketing strategies to launch and sustain an entrepreneurial venture. This course will include topics on marketing entrepreneurial ventures utilizing innovative and financially responsible marketing strategies. This course will help students to develop an understanding of entrepreneurial marketing goals and objectives. The course covers marketing principles and electronic marketing.

ENP 2006 - Entrepreneurship Legal Issues

Credit(s): 3
Lecture Hour(s): 3
Formerly ENP 206 Explores legal issues related to business entities including sole proprietorship, general partnerships, limited partnerships, and corporations. This course reviews articles of incorporation and the filing process, employment law, property, landlord tenant rights and duties, and business insurance.

ENP 2007 - Entrepreneurship Financial Topics

Credit(s): 3
Lecture Hour(s): 3
Formerly ENP 207 Will cover topics such as financial planning for entrepreneurs, understanding tax considerations, understanding financial documents, financial ratio analysis, cash flow management, cost of capital and budgeting, raising capital, valuation, risk assessment, and venture exits.

ENP 2009 - Entrepreneurship Business Plan

Credit(s): 3
Lecture Hour(s): 3
Formerly ENP 209 Guides students through the evaluation of a business concept. This course will include writing a

comprehensive business plan. This course explores both traditional and lean business planning as a means to establish strategic vision and direction for a business. This course assesses the strengths and weaknesses of a business concept. This course will include identifying external and environmental factors related to business ownership and evaluating various resources available for funding small businesses.

MAN 2026 - Principles of Management

Credit(s): 3
Lecture Hour(s): 3
Formerly MAN 226 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.

CTE Focused Elective Options (15 credits)

Students will choose courses within a specific discipline to gain content knowledge of a specific industry, e.g., Business, Culinary Arts, Automotive, Welding, Cosmetogloy, etc. **Credit(s): 15**

Business Ownership Certificate

See list of Department Chairs on the Personnel page.

Program Description

The Business Management program (AAS Degree and Certificates) prepares students for entry level positions in Marketing, Management, Sales, and Entrepreneurship. These offerings also provide opportunities for individuals working within the industry to up-skill and advance their careers. The (AA) in Business Management prepares students to transfer to bachelor's degree programs in Business Management. Per the statewide articulation agreement, students can complete fundamental courses at PCC and transfer to complete a Bachelor's Degree with a specific emphasis.

Total Credits: 18

Certificate Requirements (18 credits)

ENP 1005 - Introduction to Entrepreneurship

Credit(s): 3
Lecture Hour(s): 3
Formerly ENP 105 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.

ENP 1006 - Entrepreneurship Opportunity Analysis/Feasibility Study

Credit(s): 3
Lecture Hour(s): 3

Formerly ENP 106 Determines if a business venture is feasible based on personal, professional, and financial goals. This course will help to identify and analyze the present climate for business ideas through an industry analysis, target market analysis, competitive analysis, and financial analysis.

ENP 2005 - Marketing for the Entrepreneur

Credit(s): 3
Lecture Hour(s): 3
Formerly ENP 205 Covers marketing strategies to launch and sustain an entrepreneurial venture. This course will include topics on marketing entrepreneurial ventures utilizing innovative and financially responsible marketing strategies. This course will help students to develop an understanding of entrepreneurial marketing goals and objectives. The course covers marketing principles and electronic marketing.

ENP 2006 - Entrepreneurship Legal Issues

Credit(s): 3
Lecture Hour(s): 3
Formerly ENP 206 Explores legal issues related to business entities including sole proprietorship, general partnerships, limited partnerships, and corporations. This course reviews articles of incorporation and the filing process, employment law, property, landlord tenant rights and duties, and business insurance.

ENP 2007 - Entrepreneurship Financial Topics

Credit(s): 3
Lecture Hour(s): 3
Formerly ENP 207 Will cover topics such as financial planning for entrepreneurs, understanding tax considerations, understanding financial documents, financial ratio analysis, cash flow management, cost of capital and budgeting, raising capital, valuation, risk assessment, and venture exits.

ENP 2009 - Entrepreneurship Business Plan

Credit(s): 3
Lecture Hour(s): 3
Formerly ENP 209 Guides students through the evaluation of a business concept. This course will include writing a comprehensive business plan. This course explores both traditional and lean business planning as a means to establish strategic vision and direction for a business. This course assesses the strengths and weaknesses of a business concept. This course will include identifying external and environmental factors related to business ownership and evaluating various resources available for funding small businesses.

Business, AA (with Designation)

CIP 24.0101

See list of Department Chairs on the Personnel page.

Career Opportunities

The Associate of Arts Degree with Designation in Business prepares students to transfer to a bachelor's degree business program.

Program Description

Students who complete an AA degree and the prescribed curriculum in the articulation agreement and are admitted (with no academic deficiencies that require additional coursework) to a receiving institution participating in this agreement are guaranteed the following:

Junior standing with no more than 60 remaining credits to meet the graduation requirements for a bachelor's degree in the degree program covered by this articulation agreement. Completion of the curriculum prescribed within this statewide articulation agreement does not guarantee admission to a participating receiving institution.

Program Requirements

Students must meet all admission and application requirements at the receiving institution including the submission of all required documentation stated deadlines. In addition to the requirements listed below, you must:

a. Earn a minimum of 60 semester hours of course work
b. Earn a minimum of 15 graded semester hours at PCC
c. Earn a minimum of "C" in all coursework for the degree

Consult with a PCC Business advisor or transfer advisor to find out which Colorado Statewide Guaranteed Transfer Courses (GT Pathways) or elective courses meet the degree requirements of the four-year college to which you plan to transfer.

To earn an AA degree with Designation in Business, you must complete at least 60 college-level credits, as described below:

Total Credits: 60

** Refer to CCCS Guaranteed Transfer (GT) - Pathways Courses for a full list of all GT Pathway Courses*

General Education Core Requirements (37 Credits)

Communication (6 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

Mathematics (8 Credits)

MAT 1340 - College Algebra: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 0300.
Formerly MAT 121 Explores topics including intermediate algebra, equations, and inequalities, functions and their graphs, exponential and logarithmic functions, linear and nonlinear systems, selection of topics from among graphing of the conic sections, introduction to sequences and series permutations and combinations, the binomial theorem and theory of equations. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

or

MAT 1320 - Finite Mathematics: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 0300 or Equivalent Test Score.
Formerly MAT 123 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. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 1400 - Survey of Calculus: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 1340 or see Basic Skills Assessment
Formerly MAT 125 Includes derivatives, integrals, and their applications, with attention restricted to algebraic, exponential, and logarithmic functions for business, life science and/or social science majors.. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

Natural and Physical Sciences (8 Credits)

- Select two GT Pathways Natural and Physical Sciences courses (GT-SC1 **or** GT-SC2), one must be with laboratory (GT-SC1) *

Arts and Humanities (6 Credits)

(Select two courses from any category):

- Arts and Expression: Select from a GT Pathways Arts and Expression course (GT-AH1) *
- Literature and Humanities: Select from a GT Pathways Literature and Humanities course (GT-AH2) *
- Ways of Thinking: Select from a GT Pathways Ways of Thinking course (GT-AH3) *
- Foreign Languages: Select from a GT Pathways Foreign Languages course (GT-AH4) *

Social and Behavioral Sciences (6 Credits)

ECO 2001 - Principles of Macroeconomics: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly ECO 201 Focuses on the study of the American economy, stressing the interrelationships among household, business and government sectors. Explores saving and investment decisions, unemployment, inflation, national income accounting, taxing and spending policies, the limits of the market and government, public choice theory, the Federal Reserve System, money and banking, and international trade.

ECO 2002 - Principles of Microeconomics: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly ECO 202 Studies the firm, the nature of cost and how these relate to the economy as a whole. Analyzes economic models of the consumer, perfect competition, monopoly, oligopoly and monopolistic competition. Explores economic issues including market power, population growth, positive and negative externalities, income distribution, poverty and welfare, discrimination, and international economic interdependence.

History (3 Credits)

- Select one GT Pathways History course (GT-HI1) *

Additional Required Courses (23 Credits)

ACC 1021 - Accounting Principles I

Credit(s): 4
Lecture Hour(s): 4
Formerly ACC 121 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

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): ACC 1021
Formerly ACC 122 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.

BUS 1015 - Introduction to Business

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 115 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 2016 - Legal Environment of Business

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 216 Emphasizes public law, regulation of business, ethical considerations, and various relationships existing within society, government, and business. Specific attention is devoted to economic regulation, social regulation, regulation and laws impacting labor-management issues and environmental concerns. Students develop an understanding of the role of law in social, political, and economic change.

BUS 2017 - Business Communication & Report Writing

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 217 Emphasizes effective business writing and covers letters, memoranda, reports, application letters and resumes. Includes the fundamentals of business communication and an introduction to international communication.

BUS 2026 - Business Statistics

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 226 Focuses on statistical study, descriptive statistics, probability, and the binominal distribution, index numbers, time series, decision theory, confidence intervals, linear regression and correlation. Intended for the business major.

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

Transfer Degrees

This degree transfers to the following Colorado public four-year institutions of higher education:

- Adams State University (B.A. Business Administration, emphasis in in Advertising, Business Teacher Education, General Business or International Business; B.S. Business Administration, emphasis in Accounting, Agribusiness, Economics, Finance, General Business, Health Care Administration, Management, Management Information Systems, Marketing, or Small Business Management)
- Colorado Mesa University (Bachelor of Business Administration (B.B.A.) concentrations in Business Economics, Emerging Markets, Energy Management/Landman, Entrepreneurship, Finance, Hospitality Management, Human Resource management, Information Systems, Insurance, Management, Managerial Informatics, or Marketing)
- Colorado Mountain College (as four-year institution) (B.S. Business Administration)

- Colorado State University-Ft. Collins (B.S. Business Administration)
- Colorado State University – Global Campus (B.S. Accounting, Business management, Healthcare Administration and management, Human Resource Management, Information Technology Management, Management Information Systems and Business Analytics, Marketing, Project Management)
- Colorado State University-Pueblo (B.S. Business Administration, majors in Management, Accounting, or Economics)
- Fort Lewis College (B.A. Business Administration, Business Administration option)
- Metropolitan State University of Denver (B.S. Accounting, Computer Information Systems, Finance, Management, Marketing
- University of Colorado, Boulder (B.S. Business Administration)
- University of Colorado, Colorado Springs (B.S. Business, emphasis in Accounting, Business Administration, Finance, Human Resources Management, Information Systems, International Business, Management, Marketing PGA Golf Management, Service Management, or Sport Management)
- University of Colorado, Denver (B.S. Business Administration, emphasis in Accounting, Finance, Financial Management, Human Resources Management, Information Systems, International Business, Management, or Marketing)
- University of Northern Colorado (B.S. Business Administration, all emphasis)
- Western State Colorado University (B.A. Business Administration)

CAD/CAM Mini-Certificate

CIP 48.0503

See list of Department Chairs on the Personnel page.

This is a NIMS Accredited program

Program Description

Students will start their career in Machining Technology by building a strong foundation in machining by learning to use various tools, such as hand tools, manual machines and grinding tools. Students develop introductory skills in print reading. They are also taught how to use CAD CAM software, which enables students to create two-dimensional drawings and gain experience with computer-aided manufacturer software. Learning G&M Code for manual CNC (Computer Numerical Control) programming is a focus, as well as setup and operations of CNC equipment.

Work experience may be converted to college credit through credit-by-portfolio or credit-by-challenge.

Total Credits: 10

Certificate Requirements

MAC 2043 - Mastercam

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Formerly MAC 243 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 2041 - CAD CAM 2D Lab

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly MAC 241 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 remachining operations. Coursework will primarily focus on 2D geometry projects.

CAD 2455 - Solidworks/Mechanical

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly CAD 255 Introduces parametric feature-based solid modeling 3D concepts to build confidence in 3D thinking and progresses to three-dimensional parameters. The student learns to construct, modify, and manage complex parts in 3D space as well as to produce 2D drawings from the 3D models.

Chemistry, AS (with Designation)

CIP 24.0199

See list of Department Chairs on the Personnel page.

Career Opportunities

The Associate of Science (AS) Degree with Designation in Chemistry prepares the student to transfer as a junior to a four-year institution in Colorado in order to pursue a Bachelor of Science (BS) degree in Chemistry. Students who opt for the Bachelor of Science in Chemistry can choose to work in numerous occupational fields of science or medicine. Once a BS is completed, many students will pursue a higher or graduate degree in Chemistry.

Program Description

This program introduces the student to the discipline of Chemistry includes the course work to meet general education requirements that are common to all Colorado four-year institutions, as well a specific courses in various subfields of Chemistry. Upon transfer, students from Pueblo Community College who have earned the Associate of Science (AS) Degree with Designation in Chemistry will be ready to complete the last half of a BS in Chemistry at a four-year institution.

Program Requirements

Refer to the course requirements listed below. Some courses may have prerequisites of lower level classes or assessment scores. Refer to the course descriptions for these prerequisites.

Total Credits: 60

** Refer to CCCS Guaranteed Transfer (GT) - Pathways Courses for a full list of all GT Pathway Courses*

General Education Core Requirements (30 Credits)

Written Communication (6 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

or

- ENG 1022 - English Composition II: GT-CP2 **Credit(s): 3 and** a GT Pathways Advanced Writing Course (GT-CO3) *

Mathematics (5 Credits)

MAT 2410 - Calculus I: GT-MA1

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): MAT 1420.
Formerly MAT 201 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. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

Natural and Physical Sciences (10 Credits)

CHE 1111 - General College Chemistry I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 1340, CHE 1011.
Corequisite(s): ENG 1021.

Formerly CHE 111 Focuses on basic chemistry and measurement, matter, chemical formulas, reactions and equations, stoichiometry. This course covers the development of atomic theory culminating in the use of quantum numbers to determine electron configurations of atoms, and the relationship of electron configuration to chemical bond theory. The course includes gases, liquids, and solids and problem-solving skills are emphasized through laboratory experiments.

CHE 1112 - General College Chemistry II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): CHE 1111, ENG 1021.
Formerly CHE 112 Presents concepts in the areas of solution properties, chemical kinetics, chemical equilibrium, acid-base and ionic equilibrium, thermodynamics, and electrochemistry. This course emphasizes problem solving skills and descriptive contents for these topics. Laboratory experiments demonstrate qualitative and quantitative analytical techniques.

Arts and Humanities (3 Credits)

(See note below)

- Select one GT Pathways Arts and Humanities course from any category (GT-AH1, GT-AH2, GT-AH3, GT-AH4) *

Social and Behavioral Sciences (3 Credits)

(See note below)

- Select one GT Pathways Social and Behavioral course from any category (GT-SS1, GT-SS2, GT-SS3) *

History (3 Credits)

- Select one GT Pathways History Course (GT-HI1) *

Additional Required Science and Mathematics Courses (29 Credits)

MAT 2420 - Calculus II: GT-MA1

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): MAT 2410.
Formerly MAT 202 Continues the study of single variable calculus which will include techniques of integration, polar coordinates, analytic geometry, improper integrals and infinite series. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2430 - Calculus III: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 2420.

Formerly MAT 203 Focuses the traditional subject matter of the Calculus. Topics include vectors, vector-valued functions, and multivariable calculus including partial derivatives, multiple integrals, line integrals and application. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

PHY 2111 - Physics: Calculus Based I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 2410, ENG 1021.
Formerly PHY 211 Explores the physical world through reasoning, mathematics and experimentation. Covers kinematics, force, gravity, energy, momentum, torque, rotational dynamics and fluids, and may include thermodynamics. The concepts and theories presented in class are explored through demonstrations and hands-on experiments. This first semester calculus-based physics course is recommended for students entering engineering or one of the advanced sciences. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 2112 - Physics: Calculus-Based II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 2410, ENG 1021.
Formerly PHY 212 Expands upon PHY 2111and examines waves, electric fields, electric circuits, magnetic fields, light and optics, and modern physics. The concepts and theories presented in class are explored through demonstrations and hands-on experiments. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

CHE 2111 - Organic Chemistry I with Lab

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): Successful completion of CHE 1112 with a grace of "C" or better.
Formerly CHE 211 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, reaction mechanisms such as SN1, SN2, E1 and E2. Laboratory experiments demonstrate the above concepts plus the laboratory techniques associated with organic chemistry.

CHE 2112 - Organic Chemistry II with Lab

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): Successful completion of CHE 2111 with a grade of "C" or better.
Formerly CHE 212 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 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.

Elective (1 Credit)

Determined by transferring institution

Transfer Degrees

Note: This statewide transfer articulation agreement in Chemistry does not fulfill requirements for the GT Pathways general education curriculum or the Associate of Science degree prior to transfer; however, this agreement does guarantee a student, if admitted, junior standing and completion of the bachelor's degree within an additional 60 semester hours at the receiving institution.

Completion of the receiving institution's lower division general education requirements is fulfilled only under the condition that one GT Pathways-approved course in arts and humanities (AH1, AH2, AH3, or AH4) and one GT Pathways-approved course in social and behavioral sciences (SS1, SS2, or SS3) are successfully completed at the receiving institution within the first 30 hours or 12 calendar months.

Students transferring to a four-year college/university under this Chemistry agreement are encouraged to 'reverse' transfer the one GT Pathways course in arts and humanities and the one GT Pathways course in social and behavioral sciences back to PCC in order to complete the GT Pathways general education program and to earn their Associate of Science degree with a Chemistry designation.

Lecture and laboratory portions of organic chemistry, CHE 2111 and CHE 2112, must not be taken in an online delivery format.

This degree transfers to the following Colorado Public Four-Year institutions of higher education:

- Adams State University (B.S. Chemistry)
- Colorado Mesa University (B.S. Chemistry)
- Colorado State University-Ft. Collins (B.S. Chemistry)
- Colorado State University-Pueblo (B.S. Chemistry)
- Fort Lewis College (B.S. Chemistry, Chemistry option)
- Metropolitan State University of Denver (B.A./B.S. Chemistry)
- University of Colorado, Boulder (B.A. Chemistry)
- University of Colorado, Colorado Springs (B.A./B.S. Chemistry)
- University of Colorado, Denver (B.S. Chemistry)
- University of Northern Colorado (B.S. Chemistry, Biochemistry, Chemistry, Forensic Science, Industrial Chemistry, Pre-Health emphasis)
- Western State Colorado University (B.A. Chemistry, General Chemistry, Biochemistry emphasis)

CNC Mini-Certificate

CIP 48.0503

See list of Department Chairs on the Personnel page.

This is a NIMS Accredited program

Program Description

Students will start their career in Machining Technology by building a strong foundation in machining by learning to use various tools, such as hand tools, manual machines and grinding tools. Students develop introductory skills in print reading. They are also taught how to use CAD CAM software, which enables students to create two-dimensional

drawings and gain experience with computer-aided manufacturer software. Learning G&M Code for manual CNC (Computer Numerical Control) programming is a focus, as well as setup and operations of CNC equipment.

Work experience may be converted to college credit through credit-by-portfolio or credit-by-challenge.

Total Credits: 12

Certificate Requirements

MAC 2003 - Introduction to CNC Operations

Credit(s): 6
Lecture Hour(s): 2
Vocational Lab Hour(s): 6
Formerly MAC 203 Introduces basic writing and editing of CNC programs. G&M codes, math, speeds feeds, production processes including basic process controls, simple fixturing, and documentation associated with manufacturing will be covered.

MAC 2008 - CNC Operations II

Credit(s): 6
Lecture Hour(s): 2
Vocational Lab Hour(s): 6
Formerly MAC 208 Further develops skills in writing and editing advanced CNC programs. G&M codes, math, speeds deeds, production processes including multi-part, process controls, fixturing, and documentation associated with manufacturing will be covered.

Communication, AA (with Designation)

CIP 24.0101

See list of Department Chairs on the Personnel page.

Career Opportunities

The Associate of Arts (AA) Degree with Designation in Communication prepares the student to transfer as a junior to a four-year institution in Colorado in order to pursue a Bachelor of Arts (BA) degree in Communication. Students who opt for the Bachelor of Arts in Communication can choose to work in several occupational fields, including business, advertising, education, media, journalism or public relations. Once a BA is completed, students may pursue a higher or graduate degree in Communication, if interested.

Program Description

This program introduces the student to the discipline of Communication and includes the course work to meet general education requirements that are common to all Colorado four-year institutions, as well a specific courses in various subfields of Communication. Upon transfer, students from Pueblo Community College who have earned the Associate of Arts (AA) Degree with Designation in Communication will be ready to complete the last half of a BA in Communication at a four-year institution.

Program Requirements

Refer to the course requirements listed below. Some courses may have prerequisites of lower level classes or assessment scores. Refer to the course descriptions for these prerequisites.

Total Credits: 60

** Refer to CCCS Guaranteed Transfer (GT) - Pathways Courses for a full list of all GT Pathway Courses*

General Education Core Requirements (31 Credits)

(Written) Communication (6 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

or

- ENG 1022 - English Composition II: GT-CP2 **Credit(s): 3** and a GT Pathways Advanced Writing Course (GT-CO3) *

Mathematics (3 Credits)

- Select one GT Pathways Mathematics course (GTMA1) *, prefer MAT 1240: Mathematics for the Liberal Arts

Natural and Physical Sciences (7 Credits)

- Select two GT Pathways Natural and Physical Sciences courses (GT-SC1, GT-SC2) *. At least one of these courses must include a laboratory component (GT-SC1) *

Arts and Humanities (6 Credits)

- Select two GT Pathways Arts and Humanities courses from any category (GT-AH1, GT-AH2, GT-AH3, GT-AH4) *

Social and Behavioral Sciences (6 Credits)

COM 2300 - Intercultural Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 220 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. This is a statewide Guaranteed Transfer course in the GT-SS3 category.

- select one other GT Pathways Social and Behavioral course from any category (GT-SS1, GT-SS2, GT-SS3) *

History (3 Credits)

- Select one GT Pathways History Course (GT-HI1) *

Additional Required Communication Courses (18 Credits)

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

COM 2220 - Group Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 217 Examines group communication theories with an emphasis on leadership and group behaviors. The course provides opportunities for group participation. GT-SS3

- Select one three-credit course with a COM prefix **Credit(s): 3**

Select two GT Pathways courses from either: (6 Credits)

- History (GT-HI1) *, **or** Social and Behavioral Sciences (GT-SS1, GT-SS2, **or** GT-SS3) *

Electives (11 Credits)

Determined by transferring institution

Transfer Degrees

This degree transfers to the following Colorado Public Four-Year institutions of higher education:

- Colorado State University-Ft. Collins (B.A. Communication Studies)
- Colorado State University-Global Campus (B.S. Communication)
- Metropolitan State University of Denver (B.A. Speech Communication, Organizational Communication emphasis)
- University of Colorado, Boulder (B.A. Communication)
- University of Colorado, Colorado Springs (B.A.
- Communication, General Communication Studies emphasis)
- University of Colorado, Denver (B.A. Communication)
- University of Northern Colorado (B.A. Communication Studies)
- Western State Colorado University (B.A. Communication Arts, Communication emphasis)

Computed Tomography, BAS

CIP 51.0911

See list of Department Chairs on the Personnel page.

Career Opportunities

The BAS in Radiologic Technology program prepares students for careers in Computed Tomography (CT) or Magnetic Resonance Imaging (MRI), Leadership and Teaching in Medical Imaging.

Program Description

The BAS in Radiologic Technology program teaches students to perform Computed Tomography (CT) exams or Magnetic Resonance Imaging (MRI) exams as well as how to lead or teach others in the Medical Imaging Department. It provides students with an additional imaging modality and prepares them to take on leadership roles in the imaging department in health care facilities.

Program Requirements

Entrance Requirements:

Applicants must hold an associate's degree and be a registered radiologic technologist with the American Registry of Radiologic Technologists (ARRT).

Graduation Requirements:

Must complete 120 credits including didactic and clinical components of the program.

Total Credits: 120

Curriculum Requirements (43 Credits)

First Year-Fall Semester

BIO 2101 - Human Anatomy and Physiology I with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 201 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, nervous and endocrine systems. Includes a mandatory hands-on laboratory experience covering experimentation, microscopy, observations and dissection. This is the first semester of a two-semester sequence.

BIO 2102 - Human Anatomy and Physiology II with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 202 Focuses on the integrated study of the human body and the histology, anatomy, and physiology of the following systems and topics: cardiovascular, hematology, lymphatic and immune, urinary, fluid and electrolyte control, digestive, nutrition, respiratory, reproductive and development. Includes a mandatory hands-on laboratory experience involving experimentation, microscopy, observations and dissection. This is the second semester of a two-semester sequence.

PHY 1105 - Conceptual Physics with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly PHY 105 Focuses on mechanics, heat, properties of matter, electricity and magnetism, light and modern physics. Incorporates laboratory experience. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

First Year-Spring Semester

ENG 1031 - Technical Writing I

Credit(s): 3
Lecture Hour(s): 3

Formerly ENG 131, then ENG 1020 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.

RTE 3011 - Sectional Anatomy for Medical Imaging

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): AAS in Radiologic Technology and ARRT Registered.
Formerly RTE 311 Identifies anatomy in various imaging planes of advanced modalities. Compares normal anatomy with gross pathology on advanced cross-sectional images. Evaluation of anatomy and pathology will include head, spine, thorax, abdomen/pelvis and extremities.

RTE 3012 - IV Certificate for Contrast Medium

Credit(s): 1
Lecture Hour(s): 0.50
Vocational Clinic Hour(s): 1

Prerequisite(s): AAS in Radiologic Technology and ARRT Registered.
Formerly RTE 312 Prepares the student to perform IV contrast administration including knowledge of arterial and venous anatomy, appropriate puncture sites, necessary equipment and supplies, understanding of different contrast media, injectors and administration safety.

RTE 3041 - Theory and Application of CT Imaging

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): AAS in Radiologic Technology and ARRT Registered.
Formerly RTE 341 Applies the fundamental and advanced principles of Computed Tomography (CT) in order to perform clinical CT examinations of the human body with special consideration to image production, quality control, terminology, basic procedural steps and MRI equipment and safety.

RTE 3051 - CT Protocols and Procedures

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): AAS in Radiologic Technology and ARRT Registered.
Formerly RTE 351 Covers the skill and knowledge necessary to perform supplemental procedures for imaging various anatomical structures including the head, spine, chest, abdomen, pelvis and extremities utilizing Computed Tomography. It provides instruction on gross pathological conditions demonstrated on CT images.

Summer Semester

RTE 3082 - Internship: CT I

Credit(s): 4
Internship Hour(s): 12
Prerequisite(s): AAS in Radiologic Technology and ARRT Registered.
Formerly RTE 382 Provides supervised hands-on training in Computed Tomography exams. The Internship allows the student to gain clinical experience and develop proficiency in CT.

RTE 4051 - Advanced CT Protocols and Procedures

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): RTE 3051.
Formerly RTE 451 Provides the skill and knowledge necessary to perform advanced specialty procedures for imaging various anatomical structures utilizing Computed Tomography. It distinguishes vascular anatomy and incorporates contrast media injections and contraindication into complex imaging studies.

Second Year-Fall Semester

MAN 2025 - Managerial Finance

Credit(s): 3
Lecture Hour(s): 3
Formerly MAN 225 Examines the concepts and techniques used to analyze financial accounting information for managerial planning, decision making and control. The focus of the course is on decision-making relating to the areas of budgets, forecasts, cost volume production, ROI and financial statements.

RTE 4061 - Leadership in Medical Imaging

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): MRI or CT Program Admission.
Formerly RTE 461 Examines concepts and skills needed for leadership roles in Medical Imaging. It prepares the student with communication, time management, supervision, task delegation, conflict management and performance assessment skills.

or

RTE 4062 - Teaching Methodologies in Medical Imaging Education

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): MRI or CT Program Admission.
Formerly RTE 462 Provides a general overview of the concepts and theory of Medical Imaging education. It introduces current theories of teaching adult learners in the Imaging Sciences, objective development of active learning activities, classroom assessment techniques and delivering course content through distance-learning formats.

RTE 4082 - Internship: CT II

Credit(s): 7
Internship Hour(s): 21
Prerequisite(s): RTE 3082.
Formerly RTE 482 Provides continued hands-on training for the student to perform supervised exams, gain clinical experience and develop proficiency in CT.

Computer Information Systems, AGS (with Transfer Articulation Agreement)

CIP 11.0101

See list of Department Chairs on the Personnel page.

Career Opportunities

The AGS degree with an emphasis in Computer Information Systems prepares you to transfer to a university to continue studies in Computer Science or Computer Information Systems.

Program Description

The CIS program teaches you basic networking, programming and database technologies, as well as technical aspects of the Internet and data communications. The Associate of General Studies Degree with an emphasis in Computer Information Systems prepares you to transfer to a university as a junior to pursue a bachelor's degree in Computer Science or Computer Information Systems. Please check with the university of your choice to assure transferability of all courses.

Total Credits: 60

General Education Course Requirements (30 Credits)

Written and Oral Communication (9 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

Mathematics (4 Credits)

MAT 1340 - College Algebra: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 0300.
Formerly MAT 121 Explores topics including intermediate algebra, equations, and inequalities, functions and their graphs, exponential and logarithmic functions, linear and nonlinear systems, selection of topics from among graphing of the conic sections, introduction to sequences and series permutations and combinations, the binomial theorem and theory of equations. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

Physical & Life Sciences (8 Credits)

Courses with Required Lab:

Choose two courses:

ANT 1001 - Cultural Anthropology: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly ANT 101 Studies human cultural patterns and learned behavior including linguistics, social and political organization, religion, culture and personality, culture change, and applied anthropology.

AST 1110 - Astronomy I With Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly AST 101 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 - Astronomy II with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): AST 1110.
Formerly AST 102 Emphasizes the structure and life cycle of the stars, the sun, galaxies, and the universe as a whole, including cosmology and relativity. Stellar phenomena including white dwarves, black holes will be explored. Incorporates laboratory experience.

BIO 1005 - Science of Biology with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly BIO 105 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 - as is the impact of biological science on society. Includes laboratory experiences. Designed for non-science majors.

BIO 1111 - General College Biology I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): ENG 1021
Formerly BIO 111 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 - General College Biology II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Corequisite(s): ENG 1021.
Formerly BIO 112 A continuation of Biology I. Includes ecology, evolution, classification, structure, and function in plants and animals. This course includes laboratory experience.

BIO 2101 - Human Anatomy and Physiology I with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 201 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, nervous and endocrine systems. Includes a mandatory hands-on laboratory experience covering experimentation, microscopy, observations and dissection. This is the first semester of a two-semester sequence.

BIO 2102 - Human Anatomy and Physiology II with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 202 Focuses on the integrated study of the human body and the histology, anatomy, and physiology of the following systems and topics: cardiovascular, hematology, lymphatic and immune, urinary, fluid and electrolyte control, digestive, nutrition, respiratory, reproductive and development. Includes a mandatory hands-on laboratory experience involving experimentation, microscopy, observations and dissection. This is the second semester of a two-semester sequence.

BIO 2104 - Microbiology with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.

Formerly BIO 204 Designed for health science majors. Examines microorganisms with an emphasis on their structure, development, physiology, classification and identification. The laboratory experience includes culturing, identifying and controlling microorganisms with an emphasis on their role in infectious disease.

CHE 1011 - Introduction to Chemistry I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 0300.
Formerly CHE 101 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: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): CHE 1011.
Formerly CHE 102 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 1005 - Chemistry in Context with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Formerly CHE 105 Covers the study of measurements, matter, molecules, atoms, chemical bonding, nomenclature, energy, acids, bases, and nutrition. Course work examines chemistry in the modern world and surveys the current knowledge as well as the conceptual framework of the discipline. Chemistry as a science is explored, as is the impact of chemistry on society. This course includes laboratory experience and is designed for non-science majors.

CHE 1111 - General College Chemistry I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 1340, CHE 1011.
Corequisite(s): ENG 1021.
Formerly CHE 111 Focuses on basic chemistry and measurement, matter, chemical formulas, reactions and equations, stoichiometry. This course covers the development of atomic theory culminating in the use of quantum numbers to determine electron configurations of atoms, and the relationship of electron configuration to chemical bond theory. The course includes gases, liquids, and solids and problem-solving skills are emphasized through laboratory experiments.

CHE 1112 - General College Chemistry II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): CHE 1111, ENG 1021.
Formerly CHE 112 Presents concepts in the areas of solution properties, chemical kinetics, chemical equilibrium, acid-base and ionic equilibrium, thermodynamics, and electrochemistry. This course emphasizes problem solving skills and descriptive contents for these topics. Laboratory experiments demonstrate qualitative and quantitative analytical techniques.

ENV 1111 - Environmental Science with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly ENV 101 Provides an introduction to the basic concepts of ecology and the relationship between environmental problems and biological systems. Includes interdisciplinary discussions on biology, chemistry, geology, energy, natural resources, pollution and environmental protection. Using a holistic approach, students will study how the foundations of natural sciences interconnect with the environment. This course includes laboratory experience.

GEO 1011 - Physical Geography: Landforms with Lab: GT-SCI

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly GEO 111 Introduces students to 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. The course incorporates an integrated process of lectures, discussion and laboratory assignments.

GEO 1012 - Physical Geography: Weather and Climate with Lab: GT-SCI

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly GEO 112 Introduces the principles of meteorology, climatology, world vegetation patterns and world regional climate classification. The course includes investigating the geographic factors which influence climate, such as topography, location, elevation, winds and latitude.

GEY 1111 - Physical Geology with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly GEY 111 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: GT-SC1

Credit(s): 4
Lecture Hour(s): 3

Academic Lab Hour(s): 2
Formerly GEY 112 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: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): MAT 0300 with a grade of S/C or better.
Formerly GEY 135 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.

MET 1050 - General Meteorology: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly MET 150 Provides an introduction to general meteorology and atmospheric sciences. It includes the composition and structure of the atmosphere and characteristics that affect the atmosphere, such as temperature, pressure and moisture. Additionally, the development of weather systems such as storm systems, hurricanes, weather fronts and cloud development will also be examined. Finally, concepts of climatology will be stressed. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 1105 - Conceptual Physics with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly PHY 105 Focuses on mechanics, heat, properties of matter, electricity and magnetism, light and modern physics. Incorporates laboratory experience. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 1107 - Energy Science & Technology with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): MAT 0300 with a grade of S/C or better.
Formerly PHY 107 Explores the science of energy and energy technologies, with a focus on renewable energy resources and clean technologies. It provides a background in the physics of energy, energy transfer and the current state of technology. Students will evaluate the future utilization of renewable technologies. Activities may include investigating conservation of energy, mechanical, electrical, heat and fluid power systems; energy transfer and loss; understanding energy audits; testing solar collectors and wind generators; and investigating hydrogen fuel cells. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 1111 - Physics: Algebra-Based I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 0300.
Formerly PHY 111 Explores the physical world through reasoning, mathematics and experimentation. Examines kinematics, force, circular motion, energy, momentum, torque, rotational dynamics, simple harmonic motion, temperature, heat and thermodynamics. The concepts and theories presented are explored through demonstrations and hands-on experiments. It is a general physics course that is recommended for all of the health sciences and all other interested students. Students entering engineering or one of the advanced sciences should register for PHY 211. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 1112 - Physics: Algebra-Based II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 0300.
Formerly PHY 112 Expands upon PHY 1111and explores sound waves, electric fields, electric circuits, magnetic fields, light, optics and modern physics. Explores the concepts and theories presented in class through demonstrations and hands-on experiments. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 2111 - Physics: Calculus Based I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 2410, ENG 1021.
Formerly PHY 211 Explores the physical world through reasoning, mathematics and experimentation. Covers kinematics, force, gravity, energy, momentum, torque, rotational dynamics and fluids, and may include thermodynamics. The concepts and theories presented in class are explored through demonstrations and hands-on experiments. This first semester calculus-based physics course is recommended for students entering engineering or one of the advanced sciences. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 2112 - Physics: Calculus-Based II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 2410, ENG 1021.
Formerly PHY 212 Expands upon PHY 2111and examines waves, electric fields, electric circuits, magnetic fields, light and optics, and modern physics. The concepts and theories presented in class are explored through demonstrations and hands-on experiments. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

SCI 1055 - Integrated Science I

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly SCI 155 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. Course is for elementary education majors only; both SCI 155 & SCI 1056required. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

SCI 1056 - Integrated Science II

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly SCI 156 Examines earth and biological systems, living and nonliving environments, through the application of fundamental energy and matter concepts. These systems and concepts will be explored in hands-on laboratory experiments. Course is for elementary education majors only; both SCI 1055& SCI 156 required. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

Social Sciences (6 Credits)

ECO 2001 - Principles of Macroeconomics: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly ECO 201 Focuses on the study of the American economy, stressing the interrelationships among household, business and government sectors. Explores saving and investment decisions, unemployment, inflation, national income accounting, taxing and spending policies, the limits of the market and government, public choice theory, the Federal Reserve System, money and banking, and international trade.

ECO 2002 - Principles of Microeconomics: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly ECO 202 Studies the firm, the nature of cost and how these relate to the economy as a whole. Analyzes economic models of the consumer, perfect competition, monopoly, oligopoly and monopolistic competition. Explores economic issues including market power, population growth, positive and negative externalities, income distribution, poverty and welfare, discrimination, and international economic interdependence.

Choose One Course from the Following (3 Credits)

Arts and Expression

ART 1110 - Art Appreciation: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly ART 110 Introduces the cultural significance of the visual arts, including media, processes, techniques, traditions, and terminology. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

ART 1111 - Art History Ancient to Medieval: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly ART 111 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

ART 1112 - Art History Renaissance to Modern: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly ART 112 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

ART 1113 - Art History

Credit(s): 3
Lecture Hour(s): 3
Formerly ART 207 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

MUS 1020 - Music Appreciation: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly MUS 120 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

MUS 1021 - Music History Medieval Thru Classical Period: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly MUS 121 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

MUS 1022 - Music History Early Romantic Period to the Present: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly MUS 122 Provides an 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

MUS 1025 - History of Jazz: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly MUS 125 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

THE 1005 - Theatre Appreciation: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly THE 105 Includes discussions, workshops and lectures designed to discover, analyze and evaluate all aspects of the theatre experience: scripts, acting, directing, staging, history, criticism and theory. This course is one of the statewide Guaranteed Transfer courses, GT-AH1.

THE 2011 - Development of Theatre Greek-Renaissance: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly THE 211 Surveys the history and evolution of drama from ancient Greece to the Renaissance, emphasizing all aspects of the art from period values to analysis of dramatic literature and performance. This course is one of the statewide Guaranteed Transfer courses, GT-AH1.

THE 2012 - Development of Theatre Restoration to Modern: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly THE 212 Surveys the history and evolution of drama from the Renaissance to the present, emphasizing all aspects of the art from period values to the analysis of dramatic literature and performance. This course is one of the statewide Guaranteed Transfer courses, GT-AH1.

THE 2015 - Playwriting: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly THE 215 Gives students the opportunity to learn and practice playwriting techniques, thereby improving creative writing skills. Elements of dramatic structure, dialogue, styles and theatrical practices are emphasized. This course is one of the statewide Guaranteed Transfer courses, GT-AH1.

Literature and Humanities

HUM 1003 - Introduction to Film Art: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Formerly HUM 103 Studies the relationships among film's stylistic systems, narrative systems and audience reception. Students view, discuss and critically analyze a variety of films which represent a variety of genres and themes. The course incorporates the vocabulary of stylistic systems (for instance, cinematography and editing) and narrative systems (for instance, story structure and character motivation) as both relate to the kinds of meanings a film conveys. This course is approved as part of the Colorado Statewide Guaranteed transfer curriculum: GT:AH2.

HUM 1015 - World Mythology: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Formerly HUM 115 Introduces students to a multidisciplinary approach to world mythology. Common themes are illustrated and connected to religion, philosophy, art, literature, music and contemporary culture. In addition, students will study various ways of interpreting myth. This course is one of the statewide Guaranteed Transfer courses. GT-AH2.

HUM 1021 - Humanities: Early Civilization: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Formerly HUM 121 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 prehistoric to the early medieval era. This course is one of the statewide Guaranteed Transfer courses. GT-AH2.

HUM 1022 - Humanities: Medieval - Modern: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Formerly HUM 122 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. This is a statewide Guaranteed Transfer course in the GT-AH2 category. GT-AH2

HUM 1023 - Humanities: Modern World: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Formerly HUM 123 Examines the cultures of the 17th through the 20th centuries by focusing on the interrelationships of the arts, ideas, and history. Considers the influences of industrialism, scientific development and non-European peoples. This course is one of the statewide Guaranteed Transfer courses. GT-AH2.

LIT 1015 - Introduction to Literature I: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly LIT 115 Introduces students to fiction, poetry and drama. Emphasizes active and responsive reading. This course is one of the statewide Guaranteed Transfer courses, GT-AH2.

LIT 2001 - World Literature to 1600: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): ENG 1021.
Formerly LIT 201 Examines significant writings in world literature from the ancients through the Renaissance. Emphasizes careful readings and understanding of the works and their cultural backgrounds. This course is one of the statewide Guaranteed Transfer courses, GT-AH2.

LIT 2002 - World Literature After 1600: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): ENG 1021.
Formerly LIT 202 Examines significant writings in world literature from the 17th century to the present. Emphasizes careful reading and understanding of the works and their cultural backgrounds. This course is one of the statewide Guaranteed Transfer courses, GT-AH2.

LIT 2005 - Race. Ethnicity, and Culture in U.S. Literature: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Formerly LIT 205 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. This is a statewide Guaranteed Transfer course in the GT-AH2 category. GT-AH2

LIT 2011 - American Literature to Civil War: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): ENG 1021.
Formerly LIT 211 Provides an overview of American literature from the Native American through the 19th-century Romantics. It explores ideas, historical and social contexts, themes and literary characteristics of works in various genres by major writers. This course is one of the statewide Guaranteed Transfer courses, GT-AH2.

LIT 2012 - American Literature After Civil War: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): ENG 1021.
Formerly LIT 212 Provides an overview of American literature from the mid-19th century to the present. It explores ideas, historical and social contexts, themes and literary characteristics of works in various genres by major writers. This course is one of the statewide Guaranteed Transfer courses, GT-AH2.

LIT 2025 - Introduction to Shakespeare: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at ENG 1021 level or consent of instructor.
Formerly LIT 225 Explores a selection of works by William Shakespeare. It focuses on careful reading and interpretation of the plays and poems, includes pertinent information about Elizabethan England, and examines formal as well as thematic elements of the selected works. This course is one of the statewide Guaranteed Transfer courses. GT-AH2.

LIT 2046 - Literature of Women: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Formerly LIT 246 Examines the techniques and themes in literature by and about women by examining women's issues from various genres. This course is one of the statewide Guaranteed Transfer courses, GT-AH2.

Ways of Thinking

PHI 1011 - Introduction to Philosophy: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 111 ompletion with a minimum C? grade guarantees transfer and application of credit in this GT Pathways category.

PHI 1012 - Ethics: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 112 Examines human life, experience and thought in order to discover and develop the principles and values for pursuing a more fulfilled existence. Theories designed to justify ethical judgments are applied to a selection of contemporary personal and social issues. This course is one of the statewide Guaranteed Transfer courses, GT-AH3.

PHI 1013 - Logic: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 113 Studies effective thinking using language-oriented logic. Provides tools and develops skills for creative and critical thinking. Emphasizes the development of decision-making and problem-solving. This course is one of the statewide Guaranteed Transfer courses, GT-AH3.

PHI 1014 - Comparative Religions: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 114 Introduces students to the major world religions from both the Eastern and Western world such as Hinduism, Buddhism, Confucianism, Taoism, Zoroastrianism, Judaism, Christianity, Islam, Bahand influential preliterate traditions. Utilizes religious studies methods (historical, sociological, legal, psychological and phenomenological) 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. This course is one of the statewide Guaranteed Transfer courses, GT-AH3.

PHI 2014 - Philosophy of Religion: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 214 Focuses on the critical examination of the fundamental concepts, ideas and implications of religion. Includes the nature of God, the varieties of religious experience, argument concerning God`s existence, the problem of evil, faith and reason, religion and human destiny, and the connection between religion and ethics. This course is one of the statewide Guaranteed Transfer courses, GT-AH3.

PHI 2018 - Environmental Ethics: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 218 Critically analyzes theories of value of the natural world. Topics include the relation between scientific and moral principles; theories of the moral worth of persons, animals, plants and other natural objects; historical, religious and cultural influences on conceptions of nature; alternative accounts of human relationships and responsibilities to nature, including deep ecology and eco-feminism; and the connection between moral and political values and economic policies. This course is one of the statewide Guaranteed Transfer courses, GT-AH3.

PHI 2020 - Philosophy of-Death and Dying: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 220 Explores the major philosophical questions surrounding death and dying: the metaphysical arguments for and against the existence of a soul and life after bodily death; the epistemological assessment of arguments for the soul and life after death; the ethical justifications taken on positions such as rational suicide and physician assisted suicide, as well as a focus on philosophy's existentialist contribution to questions about the meaning of life and the meaning of death. This course is one of the statewide Guaranteed Transfer courses. GT-AH3.

Core Curriculum Requirements (27 Credits)

CIS 1015 - Introduction to Computer Information Systems

Credit(s): 3
Lecture Hour(s): 3
Formerly CIS 115 Focuses on an overview of the needs for and roles of computer information systems. Emphasizes computer requirements in organizations, history, hardware functions, programming, systems development and computer operations. Introduces computer applications.

CIS 1018 - Intro to PC Applications

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 118 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.

CNG 1020 - A+ Certification Preparation

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Formerly CNG 120 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 1024 - Networking I: Network +

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50

Formerly CNG 124 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.

CSC 1020 - Problem Solving with Java

Credit(s): 3
Lecture Hour(s): 3
Formerly CSC 120 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 1060 - Computer Science I: (Language)

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Prerequisite(s): CSC 1020.
Formerly CSC 160 Introduces students to the discipline of computer science. Covers algorithm development, data representation, logical expressions, sub-programs and input/output operations using a structured programming language. Requires intensive lab work outside of class time.

CSC 1061 - Computer Science II: (Language)

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Prerequisite(s): CSC 1060 or instructor approval.
Formerly CSC 161 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 2067 - Object-Oriented Analysis and Design

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): CSC 1060, Computer Science I
Formerly CSC 267 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.

Electives (3 Credits)

(Choose from List)

AAA 1009 - Advanced Academic Achievement

Credit(s): 3
Lecture Hour(s): 3
Formerly AAA 109 Examines theories and practices associated with successful learning to enhance college success. Recommended for new and returning students, this course study areas including education and career planning, effective communication, personal management, critical and creative thinking, development of community and awareness of diversity, leadership, and techniques for successful academic performance.

or

BUS 2017 - Business Communication & Report Writing

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 217 Emphasizes effective business writing and covers letters, memoranda, reports, application letters and resumes. Includes the fundamentals of business communication and an introduction to international communication.

or

BUS 2026 - Business Statistics

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 226 Focuses on statistical study, descriptive statistics, probability, and the binominal distribution, index numbers, time series, decision theory, confidence intervals, linear regression and correlation. Intended for the business major.

or

MAN 2026 - Principles of Management

Credit(s): 3
Lecture Hour(s): 3
Formerly MAN 226 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.

or

MAT 1400 - Survey of Calculus: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 1340 or see Basic Skills Assessment
Formerly MAT 125 Includes derivatives, integrals, and their applications, with attention restricted to algebraic, exponential, and logarithmic functions for business, life science and/or social science majors.. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

Computer Science, DwD

See list of Department Chairs on the Personnel page.

Total Credits: 60

General Education Course Requirements (36 credits)

Written and Oral Communication (6 credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

Mathematics (5 Credits)

MAT 2410 - Calculus I: GT-MA1

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): MAT 1420.
Formerly MAT 201 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. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

Natural and Physical Sciences (10 credits)

- Choose a CCCS GT-SC1 (5 credits)
- Choose a CCCS GT-SC1 (5 credits)

Arts and Humanities (6 credits)

- Choose a CCCS GT-AH1, AH2, AH3, or AH4 (3 credits)
- Choose a CCCS GT-AH1, AH2, AH3, or AH4 (3 credits)

Social Sciences (6 credits)

- Choose a CCCS GT-SS1, SS2, SS3 (3 credits)
- Choose a CCCS GT-SS1, SS2, SS3 (3 credits)

History (3 credits)

- Choose a CCCS GT-HI1 (3 credits)

Select 24 Elective Credits from the Below (24 credits)

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

CSC 1019 - Introduction to Programming

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CSC 119 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 Java

Credit(s): 3
Lecture Hour(s): 3
Formerly CSC 120 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 1060 - Computer Science I: (Language)

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Prerequisite(s): CSC 1020.
Formerly CSC 160 Introduces students to the discipline of computer science. Covers algorithm development, data representation, logical expressions, sub-programs and input/output operations using a structured programming language. Requires intensive lab work outside of class time.

CSC 2030 - C Programming: Platform

Credit(s): 3
Lecture Hour(s): 3

Formerly CSC 230 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 2040 - Java Programming

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CSC 240 Introduces the Java programming language and covers basic graphics, events/procedures, user interface and libraries. Enables the student to write and execute a variety of Java programs. Incorporates Java Applets into HTML.

CSC 2041 - Advanced Java Programming

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Prerequisite(s): CSC 2040 or instructor approval.
Formerly CSC 241 Continues the study of the Java programming language. Covers advanced programming topics including multithreading, network/Internet programming, database programming and JavaBeans. Enables the student to write advanced, large and complex programs.

MAT 2420 - Calculus II: GT-MA1

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): MAT 2410.
Formerly MAT 202 Continues the study of single variable calculus which will include techniques of integration, polar coordinates, analytic geometry, improper integrals and infinite series. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2430 - Calculus III: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 2420.
Formerly MAT 203 Focuses the traditional subject matter of the Calculus. Topics include vectors, vector-valued functions, and multivariable calculus including partial derivatives, multiple integrals, line integrals and application. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2540 - Linear Algebra

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of MAT 2410 with a grade of C or better.
Formerly MAT 255 Explores vector spaces, matrices, linear transformations, matrix representation, eigenvalues and eigenvectors.

Choose one CCCS GT-SC1 (4 credits)

Construction Technician Basic Mini-Certificate

CIP 46.0000

See list of Department Chairs on the Personnel page.

Career Opportunities

The Construction Technology program prepares students for entry-level careers in construction, including carpentry, roofing, concrete work, painting, drywall, and insulation.

Program Description

The Construction Technology Program prepares students to apply basic, technical knowledge and skills in building trades and construction. This includes building, inspecting, and the maintenance of structures and related properties. Training involves using construction equipment safely; blueprint reading; building codes; construction mathematical skills (such as measurements); framing; and other related applications. Students have opportunities to visit construction sites and meet professionals working within the industry. Students gain exposure to multiple career options within the industry.

Total Credits: 15

Certificate Requirements

CAR 1000 - Introduction to Carpentry

Credit(s): 1
Lecture Hour(s): 1
Formerly CAR 100 Provides a basic introduction to construction work for all crafts. This course specifically applies to construction sites.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

CAR 1001 - Basic Safety

Credit(s): 1
Lecture Hour(s): 1
Formerly CAR 101 An overview of safety concerns and procedures in the construction field.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

CAR 1002 - Hand and Power Tools

Credit(s): 1
Lecture Hour(s): .25

Vocational Lab Hour(s): 1.12
Formerly CAR 102 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 1005 - Job Site Layout and Blueprint Reading

Credit(s): 1
Lecture Hour(s): 0.50
Vocational Lab Hour(s): 0.75
Formerly CAR 105 Introduces blueprint reading and how they apply to the construction site. Includes in-depth introduction to site layout (materials and methods).

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

CAR 1021 - Floor Framing

Credit(s): 1
Lecture Hour(s): 0.25
Vocational Lab Hour(s): 1.12
Formerly CAR 121 Covers framing basics as well as the procedures for laying out and constructing a wood floor using common lumber as well as engineered building materials.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

CAR 1022 - Wall Framing

Credit(s): 1
Lecture Hour(s): 0.25
Vocational Lab Hour(s): 1.12
Formerly CAR 122 Focuses on the procedures for laying out and framing walls and ceilings, including roughing-in door and window openings, construction corners and partition Ts, bracing walls and ceilings, and applying sheathing.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

CAR 1023 - Roof Framing

Credit(s): 1
Lecture Hour(s): 0.25
Vocational Lab Hour(s): 1.12
Formerly CAR 123 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.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

CAR 1070 - Clinical: Construction Lab I

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly CAR 170 Continues to build upon the principles that are expected to be understood by students in the construction discipline.

CAR 1071 - Clinical: Construction Lab I

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly CAR 171 Continues to build upon the principles that are expected to be understood by students in the construction discipline.

CAR 1075-1077 - Special Topics

Credit(s): 0-12
Formerly CAR 175-177 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

Elective Courses (3 Credits)

(Select 3 credit hours)

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

or

COM 2063 - Conflict Resolution

Credit(s): 1
Lecture Hour(s): 1
Formerly COM 263 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

Credit(s): 1
Lecture Hour(s): 1
Formerly COM 264 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

Credit(s): 1
Lecture Hour(s): 1

Formerly COM 269 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.

Cosmetology Barber Crossover

See list of Department Chairs on the Personnel page.

The Barbering Crossover Certificate is designed for Licensed Cosmetologists to learn the remaining skills that Barbers know they can carry a dual license in the State of Colorado. The program includes techniques in men's hair cutting, men's facials, shaving, OSHA regulations, sanitation, safety and Colorado laws. Clinical practice involves working on manikins and the public under supervision and parallels, as close as possible, actual shop procedures in order to prepare students for working in the field.

Total Credits: 3

COS

Students wnting to obtain a Barbering License by completing the Barbering Crossover Certificate will have to have their Cosmetology License.

Core Curriculum Summer Semester (3 credits)

BAR 1007 - Introduction to Shaving, Honing & Stropping

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly BAR 107 Introduces the general principles of shaving to include hair texture, grain of the beard and analysis of the skin. Theory is combined with the practical application of proper shaving procedures and cutting strokes used on the face.

BAR 1008 - Intermediate Shaving, Honing & Stropping

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly BAR 108 Focuses on theory and practical training related to mustache and beard designing and trimming. Practical applications are incorporated in specialized classes or in a supervised salon.

BAR 2007 - Advanced Shaving, Honing & Stropping

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly BAR 207 Focuses on advanced training in shaving, honing and stropping. Practical and theory application is completed in specialized classes or supervised clinical training. Student will be prepared for State Board license exam.

Cosmetology Certificate

CIP 12.0401

See list of Department Chairs on the Personnel page.

Career Opportunities

The Cosmetology program prepares students for careers in cosmetology, hairstyling, esthetics (facial care) and manicure (nail care). Students will receive the specialized training necessary to be prepared for a successful career with limitless opportunities for both men and women. Students learn the skills to keep pace with the fashion world and stand ready to meet the constantly changing demands of one of today's largest-growing service industries. Those opportunities can provide both part-time and full-time employment in specialty areas.

Program Description

The Cosmetology program teaches students job entry skills, customer communication and shop procedures. Instruction includes professional ethics, bacteriology, shampoo and rinses, color theory, hair coloring techniques, permanent waving, hairstyling, hair cutting, manicures, pedicures, facials, makeup, OSHA regulations, sanitation, safety and Colorado laws. Clinical practice involves working on the public under supervision and parallels, as close as possible, actual shop procedures in order to prepare students for working in the field.

- Cosmetology degree or certificate – This program provides training in hair, skin and nail care services. Instruction is provided in hair cutting, hair styling, hair coloring, chemical texture services, skin care, waxing services, make-up application and nail care needs.

Total Credits: 56

Certificate Requirements

Core Requirements (53 Credits)

COS 1003 - Shampoo/Rinses/Conditioners I

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly COS 103 Introduces various types of scalp treatments and shampoos. Enables student to recognize and treat disorders of hair and scalp. Covers product knowledge and proper massage techniques to help control disorders and to cleanse the hair and scalp. Includes terminology dealing with hair structure, scalp and hair disorders. Provides training in a lab or classroom setting.

COS 1010 - Introduction to Hair Coloring

Credit(s): 2
Vocational Clinic Hour(s): 4

Formerly COS 110 Provides theory pertaining to the law of color, theory of color, chemistry of color, product knowledge and analysis of hair and scalp. Covers basic techniques and procedures for the application of hair coloring.

COS 1011 - Intermediate: Hair Coloring

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 1010.
Formerly COS 111 Focuses on theory and practical application of color products, formulations of color, level and shades of color. Examines techniques in a specialized class or in a supervised salon setting.

COS 1020 - Introduction to Hair Cutting

Credit(s): 2
Vocational Clinic Hour(s): 4

Formerly COS 120 Introduction to the theory relevant to patron protection, angles, elevations and the analysis of hair textures as related to hair cutting. Covers the proper use and care of hair-cutting implements. Focuses on basic hair-cutting techniques using all cutting implements, disinfection and sanitation procedures as they relate to haircutting.

COS 1021 - Intermediate I: Haircutting

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 120.
Formerly COS 121 Focuses on theory related to facial shapes, head and body forms to determine the clients appropriate haircut. Incorporates practical applications of hair cutting techniques in specialized classes or in the supervised salon (clinical setting).

COS 1030 - Introduction to Hair Styling

Credit(s): 2
Vocational Clinic Hour(s): 4

Formerly COS 130 Combines theory with the practical application of roller placement, shaping, pin curls, finger waves, air forming iron curling, soft pressing and hard pressing.

COS 1031 - Intermediate I: Hair Styling

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 1030.
Formerly COS 131 Focuses on the accepted methods of styling hair, air forming roller sets, finger waves pin curls braiding and hair pressing.

COS 1040 - Introduction to Chemical Texture

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly COS 140 Introduces a combination of theory and practice focusing on the analysis of hair and scalp, proper equipment and product knowledge. Includes basic techniques in permanent waving and chemical relaxing. Provides training in a classroom or lab setting on mannequins or live models.

COS 1041 - Intermediate I: Chemical Texture

Credit(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): COS 1040.
Formerly COS 141 Emphasizes theory and practical application of permanent waves and chemical relaxers in specialized classes or a supervised salon setting. Enables the student to practice different wrapping techniques required by trend styles.

COS 1050 - Laws, Rules and Regulations

Credit(s): 1
Lecture Hour(s): 1
Formerly COS 150 Provides instruction on the laws, rules and regulations and how they govern the cosmetology and barber industry, as well as the effects they have on the student, licensed individual, salons and school owners.

COS 2003 - Shampoo/Rinses/Conditioners II

Credit(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): COS 1003.
Formerly COS 203 Provides theory and practical training in shampoos, rinses and conditioners. Examines advanced techniques to prepare the student for employment. Includes preparation for the State Board Licensing Examination in shampoos, rinses and conditioners.

COS 2010 - Intermediate II: Hair Coloring

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 1010.
Formerly COS 210 Provides continued instruction in the theory and practical application of color products, formulations of color, level and shades of color. Enables students to practice techniques in a specialized class or in a supervised salon setting.

COS 2011 - Advanced Hair Coloring

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 1011.
Formerly COS 211 Provides continued instruction on advanced theory and practical techniques in hair coloring.

Focuses on the recognition of color problems and color correction procedures. Covers advanced techniques and product knowledge to prepare the student for employment. Prepares the student for the State Board Licensing Examination pertaining to hair coloring.

COS 2020 - Intermediate II: Haircutting

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 1020.
Formerly COS 220 Provides continued instruction in the theory related to facial shapes, head and body forms to determine the client's appropriate haircut. Incorporates practical applications of haircutting techniques.

COS 2021 - Advanced Hair Cutting

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 1021.
Formerly COS 221 Focuses on advanced cutting techniques using all the cutting tools. Emphasizes current fashion trends. Includes student preparation for the State Licensure examination.

COS 2030 - Intermediate II: Hair Styling

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 1030.
Formerly COS 230 Provides continued instruction on accepted methods of styling hair, air forming, roll set, finger waves and hair pressing. Examines techniques in specialized classes or in a supervised salon setting.

COS 2031 - Advanced Hair Styling

Credit(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): COS 1031.
Formerly COS 231 Focuses on theory and advanced techniques in all phases of hair styling to prepare the student for employment. Training is a combination of supervised salon (clinical) work and specialized classes. Includes student preparation for the State Board Licensing Examination relating to hairstyling.

COS 2040 - Intermediate II: Chemical Texture

Credit(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): COS 1040.
Formerly COS 240 Provides continued instruction in the theory and practical application of permanent waves and chemical relaxers in specialized classes or a supervised salon setting. Enables students to practice different wrapping techniques required by trend styles.

COS 2041 - Advanced Chemical Texture

Credit(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): COS 1041.
Formerly COS 241 Focuses on advanced techniques to prepare the student for employment and the changes in current industry standards. Instruction is provided in specialized classes or supervised salon (clinical) setting. Includes student preparation for the State Board Licensing Examination pertaining to permanent waves and chemical relaxers.

COS 2050 - Management, Ethics, Interpersonal Skills & Salesmanship

Credit(s): 1
Lecture Hour(s): 1
Formerly COS 250 Emphasizes the importance of salon management and the knowledge and skills necessary to build a successful business. Focuses on the importance of interpersonal skills and basic techniques in salesmanship and customer services. Integrates job readiness skills and professional ethics.

EST 1010 - Introduction to Facials and Skin Care

Credit(s): 3
Vocational Clinic Hour(s): 6

Formerly EST 110 Provides a basic understanding of massage manipulations when providing facials, the study of skin in both theory and practical applications, and benefits derived from proper facial and good skin care routines. Training is conducted in a classroom or lab setting using mannequins or models.

EST 1011 - Intermediate Facials & Skin Care

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): EST 1010.
Formerly EST 111 Covers theory and practical application pertaining to anatomy, skin disorders, skin types and facial shapes. Students help patrons to select the proper skin care treatment. Practical and theory application can be done in specialized classes or supervised salon (clinical) setting using models or customer service.

EST 2010 - Advanced Massage & Skin Care

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): EST 1011.
Formerly EST 210 Provides the student with advanced techniques in massage, skin care and lash/brow tinting. Theory and practical procedures ready the student for employment. Instruction is provided in specialized classes or in a supervised salon (clinical) setting. Student preparation for State Board Licensing Examination.

EST 2011 - Facial Make-up

Credit(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): EST 1010.
Formerly EST 211 Provides instruction on cosmetics and their functions. The importance of color theory, facial types and skin tones as they relate to facial makeup. Instruction from the basic makeup application to the corrective makeup procedure is taught. Disinfection and sanitation is taught as it pertains to all aspects of makeup.

EST 2012 - Hair Removal

Credit(s): 3
Vocational Clinic Hour(s): 6

Prerequisite(s): EST 1010.
Formerly EST 212 Provides in-depth study and practice of hair removal and the practice of patron protection and safety. Training for general waxing and body waxing procedures are provided. Demonstration of disinfection and sanitation as it pertains to Colorado rules and regulations will be practiced.

NAT 1008 - Introduction of Manicuring/Pedicures/Artificial Nails

Credit(s): 3
Vocational Clinic Hour(s): 6

Formerly NAT 108 Provides a basic introduction into the proper use of implements used in manicures, pedicures and artificial nails. Theory and practical application of proper set-up, safety, sanitation, nail shapes, anatomy, product knowledge and terminology dealing with manicures, pedicures and artificial nails is covered. Training is done in a classroom or lab setting using models or other techniques.

NAT 1058 - Intermediate Manicuring/Pedicures/Artificial Nails

Credit(s): 2
Vocational Clinic Hour(s): 4

Formerly NAT 158 Presents theory and practical application dealing with different types of manicures, pedicures and massage techniques. Theory and practical application of procedures, products, nail shapes and maintenance of artificial nails is covered. Students learn to recognize different nail disorders and their proper treatment. Training is done in a specialized class or in supervised salon (clinical) setting, using models or customer service.

NAT 1059 - Intermediate Manicuring/Pedicures/Artificial Nails II

Credit(s): 2
Vocational Clinic Hour(s): 4

Formerly NAT 159 Presents theory and practical application dealing with different types of manicures, pedicures and massage techniques. Theory and practical application of procedures, products, nail shapes and maintenance of artificial nails is covered. Students learn to recognize different nail disorders and their proper treatment. Training is done in a specialized class or in supervised salon (clinical) setting, using models or customer service.

NAT 2008 - Advanced Manicuring/Pedicures/Artificial Nails

Credit(s): 4
Vocational Clinic Hour(s): 8

Formerly NAT 208 Provides advanced theory and practical application of manicures, pedicures and nail art techniques. Theory and advanced practical techniques of silk wraps, tip overlays, acrylics and product knowledge to ready the student for employment is presented. Instruction is provided in specialized classes or in supervised salon (clinical) setting using models or customer service. Student preparation for state board licensing examination pertaining to manicures and pedicures is covered.

Elective

Art and Humanities (3 Credits)

Recommended:

ART 1110 - Art Appreciation: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly ART 110 Introduces the cultural significance of the visual arts, including media, processes, techniques, traditions, and terminology. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

ART 1205 - Drawing for the Graphic Novel

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 122 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 1002 - Visual Concepts 2-D Design

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 131 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

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 132 Introduces the fundamentals of three-dimensional design, form, and space. The course applies the elements and principles of design to three-dimensional problems.

ART 1604 - Jewelry and Metalwork I

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 133 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 1401 - Digital Photography I

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 139 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.

or

ART 1703 - Ceramics I

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 161 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.

Cosmetology, AAS

CIP 12.0401

See list of Department Chairs on the Personnel page.

Career Opportunities

The Cosmetology program prepares students for careers in cosmetology, hairstyling, esthetics (facial care) and manicure (nail care). Students will receive the specialized training necessary to be prepared for a successful career with limitless opportunities for both men and women. Students learn the skills to keep pace with the fashion world and stand ready to meet the constantly changing demands of one of today's largest-growing service industries. Those opportunities can provide both part-time and full-time employment in specialty areas.

Program Description

The Cosmetology program teaches students job entry skills, customer communication and shop procedures. Instruction includes professional ethics, bacteriology, shampoo and rinses, color theory, hair coloring techniques, permanent waving, hairstyling, hair cutting, manicures, pedicures, facials, makeup, OSHA regulations, sanitation, safety and Colorado laws. Clinical practice involves working on the public under supervision and parallels, as close as possible, actual shop procedures in order to prepare students for working in the field. Students can choose from the following:

- Cosmetology degree or certificate – This program provides training in hair, skin and nail care services. Instruction is provided in hair cutting, hair styling, hair coloring, chemical texture services, skin care, waxing services, make-up application and nail care needs.
- Hairstylist certificate – This certificate program provides training in hair care. Instruction is provided in hair cutting, hair styling, hair coloring and chemical textures services.

- Manicurist certificate – This certificate program provides training in nail care. Instruction is provided in manicuring, pedicure, nail design extensions and nail artistry.
- Esthetician certificate – This certificate program provides training in facial care.

Program Requirements:

Successful completion of any CCR course or qualifying placement score or exemption.

Total Credits: 68

Degree Requirements

General Education Requirements (15 Credits)

English (3 Credits)

Recommended:

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

or

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

Math (3 Credits)

Recommended:

MAT 1140 - Career Math

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 107 Covers material designed for career technical or general studies students who need to study particular mathematical topics. Topics may include measurement, algebra, geometry, trigonometry, graphs and/or finance. These are presented on an introductory level and the emphasis is on applications.

or

MAT 1150 - Technical Mathematics

Credit(s): 4
Lecture Hour(s): 4
Formerly MAT 108 Covers material designed for career technical or general studies students who need to study particular mathematical topics. Topics may include measurement, algebra, geometry, trigonometry, graphs and/or finance. These are presented at an introductory level and the emphasis is on applications.

or

MAT 1240 - Mathematics for the Liberal Arts: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 1001 concurrency allowed, or see Basic Skills Assessment
Formerly MAT 120 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. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

Art and Humanities (9 Credits)

Recommended:

ART 1110 - Art Appreciation: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly ART 110 Introduces the cultural significance of the visual arts, including media, processes, techniques, traditions, and terminology. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

ART 1205 - Drawing for the Graphic Novel

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 122 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 1002 - Visual Concepts 2-D Design

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 131 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

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 132 Introduces the fundamentals of three-dimensional design, form, and space. The course applies the elements and principles of design to three-dimensional problems.

ART 1604 - Jewelry and Metalwork I

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 133 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 1401 - Digital Photography I

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 139 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.

or

ART 1703 - Ceramics I

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 161 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.

Core Requirements (53 Credits)

COS 1003 - Shampoo/Rinses/Conditioners I

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly COS 103 Introduces various types of scalp treatments and shampoos. Enables student to recognize and treat disorders of hair and scalp. Covers product knowledge and proper massage techniques to help control disorders and to cleanse the hair and scalp. Includes terminology dealing with hair structure, scalp and hair disorders. Provides training in a lab or classroom setting.

COS 1010 - Introduction to Hair Coloring

Credit(s): 2
Vocational Clinic Hour(s): 4

Formerly COS 110 Provides theory pertaining to the law of color, theory of color, chemistry of color, product knowledge and analysis of hair and scalp. Covers basic techniques and procedures for the application of hair coloring.

COS 1011 - Intermediate: Hair Coloring

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 1010.
Formerly COS 111 Focuses on theory and practical application of color products, formulations of color, level and shades of color. Examines techniques in a specialized class or in a supervised salon setting.

COS 1020 - Introduction to Hair Cutting

Credit(s): 2
Vocational Clinic Hour(s): 4

Formerly COS 120 Introduction to the theory relevant to patron protection, angles, elevations and the analysis of hair textures as related to hair cutting. Covers the proper use and care of hair-cutting implements. Focuses on basic hair-cutting techniques using all cutting implements, disinfection and sanitation procedures as they relate to haircutting.

COS 1021 - Intermediate I: Haircutting

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 120.
Formerly COS 121 Focuses on theory related to facial shapes, head and body forms to determine the clients appropriate haircut. Incorporates practical applications of hair cutting techniques in specialized classes or in the supervised salon (clinical setting).

COS 1030 - Introduction to Hair Styling

Credit(s): 2
Vocational Clinic Hour(s): 4

Formerly COS 130 Combines theory with the practical application of roller placement, shaping, pin curls, finger waves, air forming iron curling, soft pressing and hard pressing.

COS 1031 - Intermediate I: Hair Styling

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 1030.
Formerly COS 131 Focuses on the accepted methods of styling hair, air forming roller sets, finger waves pin curls braiding and hair pressing.

COS 1040 - Introduction to Chemical Texture

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly COS 140 Introduces a combination of theory and practice focusing on the analysis of hair and scalp, proper equipment and product knowledge. Includes basic techniques in permanent waving and chemical relaxing. Provides training in a classroom or lab setting on mannequins or live models.

COS 1041 - Intermediate I: Chemical Texture

Credit(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): COS 1040.
Formerly COS 141 Emphasizes theory and practical application of permanent waves and chemical relaxers in specialized classes or a supervised salon setting. Enables the student to practice different wrapping techniques required by trend styles.

COS 1050 - Laws, Rules and Regulations

Credit(s): 1
Lecture Hour(s): 1
Formerly COS 150 Provides instruction on the laws, rules and regulations and how they govern the cosmetology and barber industry, as well as the effects they have on the student, licensed individual, salons and school owners.

COS 2003 - Shampoo/Rinses/Conditioners II

Credit(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): COS 1003.
Formerly COS 203 Provides theory and practical training in shampoos, rinses and conditioners. Examines advanced techniques to prepare the student for employment. Includes preparation for the State Board Licensing Examination in shampoos, rinses and conditioners.

COS 2010 - Intermediate II: Hair Coloring

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 1010.
Formerly COS 210 Provides continued instruction in the theory and practical application of color products, formulations of color, level and shades of color. Enables students to practice techniques in a specialized class or in a supervised salon setting.

COS 2011 - Advanced Hair Coloring

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 1011.
Formerly COS 211 Provides continued instruction on advanced theory and practical techniques in hair coloring.

Focuses on the recognition of color problems and color correction procedures. Covers advanced techniques and product knowledge to prepare the student for employment. Prepares the student for the State Board Licensing Examination pertaining to hair coloring.

COS 2020 - Intermediate II: Haircutting

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 1020.
Formerly COS 220 Provides continued instruction in the theory related to facial shapes, head and body forms to determine the client's appropriate haircut. Incorporates practical applications of haircutting techniques.

COS 2021 - Advanced Hair Cutting

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 1021.
Formerly COS 221 Focuses on advanced cutting techniques using all the cutting tools. Emphasizes current fashion trends. Includes student preparation for the State Licensure examination.

COS 2030 - Intermediate II: Hair Styling

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 1030.
Formerly COS 230 Provides continued instruction on accepted methods of styling hair, air forming, roll set, finger waves and hair pressing. Examines techniques in specialized classes or in a supervised salon setting.

COS 2031 - Advanced Hair Styling

Credit(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): COS 1031.
Formerly COS 231 Focuses on theory and advanced techniques in all phases of hair styling to prepare the student for employment. Training is a combination of supervised salon (clinical) work and specialized classes. Includes student preparation for the State Board Licensing Examination relating to hairstyling.

COS 2040 - Intermediate II: Chemical Texture

Credit(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): COS 1040.
Formerly COS 240 Provides continued instruction in the theory and practical application of permanent waves and chemical relaxers in specialized classes or a supervised salon setting. Enables students to practice different wrapping techniques required by trend styles.

COS 2041 - Advanced Chemical Texture

Credit(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): COS 1041.
Formerly COS 241 Focuses on advanced techniques to prepare the student for employment and the changes in current industry standards. Instruction is provided in specialized classes or supervised salon (clinical) setting. Includes student preparation for the State Board Licensing Examination pertaining to permanent waves and chemical relaxers.

COS 2050 - Management, Ethics, Interpersonal Skills & Salesmanship

Credit(s): 1
Lecture Hour(s): 1
Formerly COS 250 Emphasizes the importance of salon management and the knowledge and skills necessary to build a successful business. Focuses on the importance of interpersonal skills and basic techniques in salesmanship and customer services. Integrates job readiness skills and professional ethics.

EST 1010 - Introduction to Facials and Skin Care

Credit(s): 3
Vocational Clinic Hour(s): 6

Formerly EST 110 Provides a basic understanding of massage manipulations when providing facials, the study of skin in both theory and practical applications, and benefits derived from proper facial and good skin care routines. Training is conducted in a classroom or lab setting using mannequins or models.

EST 1011 - Intermediate Facials & Skin Care

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): EST 1010.
Formerly EST 111 Covers theory and practical application pertaining to anatomy, skin disorders, skin types and facial shapes. Students help patrons to select the proper skin care treatment. Practical and theory application can be done in specialized classes or supervised salon (clinical) setting using models or customer service.

EST 2010 - Advanced Massage & Skin Care

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): EST 1011.
Formerly EST 210 Provides the student with advanced techniques in massage, skin care and lash/brow tinting. Theory and practical procedures ready the student for employment. Instruction is provided in specialized classes or in a supervised salon (clinical) setting. Student preparation for State Board Licensing Examination.

EST 2011 - Facial Make-up

Credit(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): EST 1010.
Formerly EST 211 Provides instruction on cosmetics and their functions. The importance of color theory, facial types and skin tones as they relate to facial makeup. Instruction from the basic makeup application to the corrective makeup procedure is taught. Disinfection and sanitation is taught as it pertains to all aspects of makeup.

EST 2012 - Hair Removal

Credit(s): 3
Vocational Clinic Hour(s): 6

Prerequisite(s): EST 1010.
Formerly EST 212 Provides in-depth study and practice of hair removal and the practice of patron protection and safety. Training for general waxing and body waxing procedures are provided. Demonstration of disinfection and sanitation as it pertains to Colorado rules and regulations will be practiced.

NAT 1008 - Introduction of Manicuring/Pedicures/Artificial Nails

Credit(s): 3
Vocational Clinic Hour(s): 6

Formerly NAT 108 Provides a basic introduction into the proper use of implements used in manicures, pedicures and artificial nails. Theory and practical application of proper set-up, safety, sanitation, nail shapes, anatomy, product knowledge and terminology dealing with manicures, pedicures and artificial nails is covered. Training is done in a classroom or lab setting using models or other techniques.

NAT 1058 - Intermediate Manicuring/Pedicures/Artificial Nails

Credit(s): 2
Vocational Clinic Hour(s): 4

Formerly NAT 158 Presents theory and practical application dealing with different types of manicures, pedicures and massage techniques. Theory and practical application of procedures, products, nail shapes and maintenance of artificial nails is covered. Students learn to recognize different nail disorders and their proper treatment. Training is done in a specialized class or in supervised salon (clinical) setting, using models or customer service.

NAT 1059 - Intermediate Manicuring/Pedicures/Artificial Nails II

Credit(s): 2
Vocational Clinic Hour(s): 4

Formerly NAT 159 Presents theory and practical application dealing with different types of manicures, pedicures and massage techniques. Theory and practical application of procedures, products, nail shapes and maintenance of artificial nails is covered. Students learn to recognize different nail disorders and their proper treatment. Training is done in a specialized class or in supervised salon (clinical) setting, using models or customer service.

NAT 2008 - Advanced Manicuring/Pedicures/Artificial Nails

Credit(s): 4
Vocational Clinic Hour(s): 8

Formerly NAT 208 Provides advanced theory and practical application of manicures, pedicures and nail art techniques. Theory and advanced practical techniques of silk wraps, tip overlays, acrylics and product knowledge to ready the student for employment is presented. Instruction is provided in specialized classes or in supervised salon (clinical) setting using models or customer service. Student preparation for state board licensing examination pertaining to manicures and pedicures is covered.

Criminal Justice, AA (with Designation)

CIP 24.0101

See list of Department Chairs on the Personnel page.

Career Opportunities

The Associate of Arts Degree with Designation in Criminal Justice prepares students to transfer as juniors to a four-year institution in Colorado to pursue a bachelor's degree in criminal justice. Graduates can seek a career in federal, state and local criminal justice agencies. This includes correctional institutions, juvenile corrections and varied treatment facilities, law enforcement agencies, courts, private security and forensic investigation work.

Program Description

Courses in the criminal justice degree provide an in-depth analysis of the three main components of the criminal justice system, law enforcement, the judicial system and corrections, with special emphasis on criminology, substantive criminal law and constitutional law. The AA degree coursework requires students learn reading and comprehension skills, written and verbal communication skills, and cultural diversity awareness.

Program Requirements

Students must meet all admission and application requirements at the receiving institution including the submission of all required documentation stated deadlines. In addition to the requirements listed below, you must:

a. Earn a minimum of 60 semester hours of course work
b. Earn a minimum of 15 graded semester hours at PCC
c. Earn a minimum of "C" in all coursework for the degree

Consult with a PCC Criminal Justice advisor or transfer advisor to find out which Colorado Statewide Guaranteed Transfer Courses (GT Pathways) or elective courses meet the degree requirements of the four-year college to which you plan to transfer. To earn an AA degree with Designation in Business, you must complete at least 60 college-level credits, as described below:

Disclaimer

If you have any prior arrests and/or drug/alcohol history, you should discuss this history with a Criminal Justice advisor prior to beginning courses toward this degree. Neither PCC nor the Criminal Justice Department or advisors will be held liable for your decision to continue in pursuit of the degree if you have such a history. Many criminal justice employers will not hire students with a past history of arrests or convictions regardless of the type of offense.

Your entrance into any criminal justice course of study, or your subsequent graduation, is no guarantee, explicit or implied, that you are employable in the criminal justice field.

Many criminal justice and related agencies require certain standards prospective employees must meet at the application stage. Job applications will ask if you have ever been arrested for any offense, either misdemeanor or felony. If you have, your prospective employer may deny your application. You may also be required to take psychological tests, lie detector tests, medical tests and physical fitness tests to determine if you are suited to a particular position.

Total Credits: 60

** Refer to CCCS Guaranteed Transfer (GT) - Pathways Courses for a full list of all GT Pathway Courses*

General Education Core Requirements (31-33 Credits)

(Written) Communication (6 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

or

- ENG 1022 - English Composition II: GT-CP2 **Credit(s): 3** and a GT Pathways Advanced Writing course (GT-CO3) *

Mathematics (3-4 Credits)

- One GT Pathways course (GT-MA1, prefer MAT 13: Introduction to Statistics, except:

University of Colorado

- University of Colorado - Colorado Springs **prefers** MAT 1240 - Mathematics for the Liberal Arts: GT-MA1;

Colorado Mesa University

- Colorado Mesa University **requires** either MAT 1240 - Mathematics for the Liberal Arts: GT-MA1 **or** MAT 1340 - College Algebra: GT-MA1;

University of Northern Colorado

- University of Northern Colorado **requires** MAT 1260 - Introduction to Statistics: GT-MA1

Natural and Physical Sciences (7-8 Credits)

- Select two GT Pathways Natural and Physical Sciences courses (GT-SC1 **or** GT-SC2) * At least one of these courses must include a laboratory component (GT-SC1) *

Arts & Humanities (6 Credits)

(Select two courses from two different categories):

- GT-AH1, GT-AH2, GT-AH3, GT-AH4 *

Social and Behavioral Sciences (6 Credits)

SOC 1001 - Introduction to Sociology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 101 Examines the basic concepts, theories and principles of sociology as well as human culture, social groups, and the social issues of age, gender, class and race. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

- select one additional GT Pathways Human Behavior, Culture, or Social Frameworks course (GT-SS3) *

History (3 Credits)

- Select one GT Pathways History course (GT-HI1) *

Additional Required Courses (27 Credits)

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3

Formerly COM 125 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. GT-SS3

CRJ 1010 - Intro to Criminal Justice: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): ENG 1021.
Formerly CRJ 110 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. This is a statewide Guaranteed Transfer course in the GT-SS3 category.

CRJ 1025 - Policing Systems

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): CRJ 1010.
Formerly CRJ 125 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 1045 - Correctional Process

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of CRJ 1010.
Formerly CRJ 145 Examines the history and total correctional process from law enforcement through the administration of justice, probation, prisons, correctional institutions and parole. Also examines the principles, theories, phenomena and problems of the crime, society and the criminal justice system from the perspective of criminology and the criminal justice system in general. Emphasizes the role of sociology and other interdisciplinary approaches to the field of corrections and society's response.

Choose Two Courses from the Following (6 Credits)

CRJ 1035 - Judicial Function

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of CRJ 1010.
Formerly CRJ 135 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 2005 - Principles of Criminal Law

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of CRJ 1010, CRJ 1025, CRJ 1035, CRJ 1045, and ENG 1021.
Prerequisite(s)/Corequisite(s): COM 1150 and ENG 1022.
Formerly CRJ 205 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 2030 - Criminology

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of CRJ 1010 and CRJ 1045.
Prerequisite(s)/Corequisite(s): COM 1150 and ENG 1021.
Formerly CRJ 230 Provides an introduction to the study of crime, understanding the causes of crime, and examines, theoretical frameworks and theories to explain criminal behavior. Within a social context, consideration is given to how theories have emerged and understand how social context contributes to explanations of crime. Examination of the nature of crime, crime victimization, crime patterns, types of crime, crime statistics, and criminal behavior is also included.

Choose Three Courses from the Following (9 Credits)

Note: 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 - Digital Forensics

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): CNG 1024.
Corequisite(s): CIS 2020.
Formerly CNG 258 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.

COM 2220 - Group Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 217 Examines group communication theories with an emphasis on leadership and group behaviors. The course provides opportunities for group participation. GT-SS3

POS 1011 - American Government: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly POS 111 Includes the background of the US Constitution, the philosophy of American government, general principles of the Constitution, federalism and civil liberties. Examines public opinion and citizen participation, political

parties, interest groups and the electoral process, and the structure and functions of the national government. This course is one of the statewide Guaranteed Transfer courses, GT-SS1.

POS 1025 - American State and Local Government: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly POS 125 Emphasizes 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. This course is one of the statewide Guaranteed Transfer courses, GT-SS1.

PSY 2770 - Intro to Forensic Psychology

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 207 Introduction to Forensic Psychology is a course in an overview of Forensic Psychology. As such it explores both current research and practice in five areas. These areas are police psychology, criminal psychology, victimology, correctional psychology and the interface of psychology and the courts. The course facilitates an understanding of the numerous careers related to forensic psychology, how to prepare for them and current research and practice in each of the five broad areas of forensic psychology.

PSY 2107 - Human Sexuality: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 217 Surveys physiological, psychological and psychosocial aspects of human sexuality. Topics include relationships, sexual identity and sexual health. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2221 - Social Psychology: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 226 Focuses on the behavior of humans in social settings, including attitudes, aggression, conformity, cooperation and competition, prejudice and interpersonal attraction. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2552 - Abnormal Psychology: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): PSY 1001 or Department Chair Approval.
Formerly PSY 249 Examines abnormal behavior and its classification, causes, treatment and prevention. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

SOC 2031 - The Sociology of Deviant Behavior: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 231 Examines the nature, identification, and explanation of deviant categories. Theories and philosophies, as well as methods of treatment related to deviancy, will also be considered. The course will study

society's attempts to control, change and institutionalize those acts, individuals or groups that a population may deem unacceptable. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

Electives (0-2 Credits)

Determined by transferring institution

Transfer Degrees

This degree transfers to the following Colorado public four-year institutions of higher education:

- Colorado Mesa University (B.A. Criminal Justice; Criminal Justice or Law Enforcement concentrations)
- Colorado State University – Global Campus (B.S. Criminal Justice and Law Enforcement Administration; B.S Human Services
- Metropolitan State University of Denver (B.S. Criminal Justice & Criminology)
- University of Colorado, Colorado Springs (B.A. Criminal Justice)
- University of Colorado, Denver (B.A. Criminal Justice)
- University of Northern Colorado (B.A. Criminal Justice)

Criminology, AA (CSU-P Transfer)

CIP 24.0102

See list of Department Chairs on the Personnel page.

Career Opportunities

The criminal justice program prepares you to transfer as a junior to a four-year institution to pursue a Bachelor of Science degree in sociology or criminal Justice, after which you can pursue a career in federal, state and local adult correctional institutions, juvenile corrections and treatment facilities, law enforcement, forensics, private security and private investigations.

Program Description

The criminal justice program provides an in-depth analysis of the three components of the criminal justice system (law enforcement, the judicial system and corrections) with special emphasis on criminology, substantive criminal law, procedural criminal law and constitutional law. It places a strong emphasis on reading and comprehension skills, written and verbal communication skills and empathic awareness of cultural diversity.

Disclaimer

If you have any prior arrests and/or drug/alcohol history, you should discuss this history with a Criminal Justice advisor prior to beginning courses toward this degree. Neither PCC nor the Criminal Justice Department or advisors will be held liable for your decision to continue in pursuit of the degree if you have such a history. Many criminal justice employers will not hire students with a past history of arrests or convictions regardless of typology of offense.

Your entrance into any criminal justice course of study, or your subsequent graduation, is no guarantee, explicit or implied, that you are employable in the criminal justice field. Further, if you cannot be placed and/or remain in the course CRJ 2080 - Cooperative Education/internship, after two good-faith attempts at placement, neither PCC nor its employees accept responsibility in respect to your inability to complete or meet fulfillment requirements of the degree.

Many criminal justice and related agencies require certain standards prospective employees must meet at the application stage. Job applications will ask if you have ever been arrested for any offense, either misdemeanor or felony. If you have, your prospective employer may deny your application. You may also be required to take psychological tests, lie detector tests, medical tests and physical fitness tests to determine if you are suited to a particular position.

Program Requirements

Entrance Requirements:

This is an open enrollment program.

Graduation Requirements:

A grade of "C" or higher is required in each course.

Total Credits: 60

General Education Core Requirements (39 Credits)

Communication (9 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

Mathematics (4 Credits)

MAT 1240 - Mathematics for the Liberal Arts: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 1001 concurrency allowed, or see Basic Skills Assessment
Formerly MAT 120 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. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

Natural and Physical Sciences (8 Credits)

Select two courses:

AST 1110 - Astronomy I With Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly AST 101 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 - Astronomy II with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): AST 1110.
Formerly AST 102 Emphasizes the structure and life cycle of the stars, the sun, galaxies, and the universe as a whole, including cosmology and relativity. Stellar phenomena including white dwarves, black holes will be explored. Incorporates laboratory experience.

BIO 1005 - Science of Biology with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly BIO 105 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 - as is the impact of biological science on society. Includes laboratory experiences. Designed for non-science majors.

BIO 1111 - General College Biology I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): ENG 1021
Formerly BIO 111 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 - General College Biology II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Corequisite(s): ENG 1021.
Formerly BIO 112 A continuation of Biology I. Includes ecology, evolution, classification, structure, and function in plants and animals. This course includes laboratory experience.

BIO 2101 - Human Anatomy and Physiology I with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 201 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, nervous and endocrine systems. Includes a mandatory hands-on laboratory experience covering experimentation, microscopy, observations and dissection. This is the first semester of a two-semester sequence.

BIO 2102 - Human Anatomy and Physiology II with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 202 Focuses on the integrated study of the human body and the histology, anatomy, and physiology of the following systems and topics: cardiovascular, hematology, lymphatic and immune, urinary, fluid and electrolyte control, digestive, nutrition, respiratory, reproductive and development. Includes a mandatory hands-on laboratory experience involving experimentation, microscopy, observations and dissection. This is the second semester of a two-semester sequence.

BIO 2104 - Microbiology with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 204 Designed for health science majors. Examines microorganisms with an emphasis on their structure, development, physiology, classification and identification. The laboratory experience includes culturing, identifying and controlling microorganisms with an emphasis on their role in infectious disease.

CHE 1011 - Introduction to Chemistry I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 0300.
Formerly CHE 101 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: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): CHE 1011.
Formerly CHE 102 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 1005 - Chemistry in Context with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Formerly CHE 105 Covers the study of measurements, matter, molecules, atoms, chemical bonding, nomenclature, energy, acids, bases, and nutrition. Course work examines chemistry in the modern world and surveys the current knowledge as well as the conceptual framework of the discipline. Chemistry as a science is explored, as is the impact of chemistry on society. This course includes laboratory experience and is designed for non-science majors.

CHE 1111 - General College Chemistry I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 1340, CHE 1011.
Corequisite(s): ENG 1021.
Formerly CHE 111 Focuses on basic chemistry and measurement, matter, chemical formulas, reactions and equations, stoichiometry. This course covers the development of atomic theory culminating in the use of quantum numbers to determine electron configurations of atoms, and the relationship of electron configuration to chemical bond theory. The course includes gases, liquids, and solids and problem-solving skills are emphasized through laboratory experiments.

CHE 1112 - General College Chemistry II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): CHE 1111, ENG 1021.
Formerly CHE 112 Presents concepts in the areas of solution properties, chemical kinetics, chemical equilibrium, acid-base and ionic equilibrium, thermodynamics, and electrochemistry. This course emphasizes problem solving skills and

descriptive contents for these topics. Laboratory experiments demonstrate qualitative and quantitative analytical techniques.

GEY 1111 - Physical Geology with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly GEY 111 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.

MET 1050 - General Meteorology: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly MET 150 Provides an introduction to general meteorology and atmospheric sciences. It includes the composition and structure of the atmosphere and characteristics that affect the atmosphere, such as temperature, pressure and moisture. Additionally, the development of weather systems such as storm systems, hurricanes, weather fronts and cloud development will also be examined. Finally, concepts of climatology will be stressed. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 1105 - Conceptual Physics with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly PHY 105 Focuses on mechanics, heat, properties of matter, electricity and magnetism, light and modern physics. Incorporates laboratory experience. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 1111 - Physics: Algebra-Based I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 0300.
Formerly PHY 111 Explores the physical world through reasoning, mathematics and experimentation. Examines kinematics, force, circular motion, energy, momentum, torque, rotational dynamics, simple harmonic motion, temperature, heat and thermodynamics. The concepts and theories presented are explored through demonstrations and hands-on experiments. It is a general physics course that is recommended for all of the health sciences and all other interested students. Students entering engineering or one of the advanced sciences should register for PHY 211. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 1112 - Physics: Algebra-Based II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 0300.
Formerly PHY 112 Expands upon PHY 1111and explores sound waves, electric fields, electric circuits, magnetic

fields, light, optics and modern physics. Explores the concepts and theories presented in class through demonstrations and hands-on experiments. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 2111 - Physics: Calculus Based I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 2410, ENG 1021.
Formerly PHY 211 Explores the physical world through reasoning, mathematics and experimentation. Covers kinematics, force, gravity, energy, momentum, torque, rotational dynamics and fluids, and may include thermodynamics. The concepts and theories presented in class are explored through demonstrations and hands-on experiments. This first semester calculus-based physics course is recommended for students entering engineering or one of the advanced sciences. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 2112 - Physics: Calculus-Based II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 2410, ENG 1021.
Formerly PHY 212 Expands upon PHY 2111and examines waves, electric fields, electric circuits, magnetic fields, light and optics, and modern physics. The concepts and theories presented in class are explored through demonstrations and hands-on experiments. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

Arts and Humanities (9 Credits)

Choose nine credits from two different disciplines.

ART 1110 - Art Appreciation: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly ART 110 Introduces the cultural significance of the visual arts, including media, processes, techniques, traditions, and terminology. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

ART 1111 - Art History Ancient to Medieval: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly ART 111 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

ART 1112 - Art History Renaissance to Modern: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly ART 112 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

ART 1113 - Art History

Credit(s): 3
Lecture Hour(s): 3
Formerly ART 207 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

HUM 1021 - Humanities: Early Civilization: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Formerly HUM 121 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 prehistoric to the early medieval era. This course is one of the statewide Guaranteed Transfer courses. GT-AH2.

HUM 1022 - Humanities: Medieval - Modern: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Formerly HUM 122 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. This is a statewide Guaranteed Transfer course in the GT-AH2 category. GT-AH2

HUM 1023 - Humanities: Modern World: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Formerly HUM 123 Examines the cultures of the 17th through the 20th centuries by focusing on the interrelationships of the arts, ideas, and history. Considers the influences of industrialism, scientific development and non-European peoples. This course is one of the statewide Guaranteed Transfer courses. GT-AH2.

LIT 1015 - Introduction to Literature I: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly LIT 115 Introduces students to fiction, poetry and drama. Emphasizes active and responsive reading. This course is one of the statewide Guaranteed Transfer courses, GT-AH2.

LIT 2001 - World Literature to 1600: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): ENG 1021.
Formerly LIT 201 Examines significant writings in world literature from the ancients through the Renaissance. Emphasizes careful readings and understanding of the works and their cultural backgrounds. This course is one of the statewide Guaranteed Transfer courses, GT-AH2.

LIT 2002 - World Literature After 1600: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): ENG 1021.
Formerly LIT 202 Examines significant writings in world literature from the 17th century to the present. Emphasizes careful reading and understanding of the works and their cultural backgrounds. This course is one of the statewide Guaranteed Transfer courses, GT-AH2.

LIT 2005 - Race. Ethnicity, and Culture in U.S. Literature: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Formerly LIT 205 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. This is a statewide Guaranteed Transfer course in the GT-AH2 category. GT-AH2

LIT 2011 - American Literature to Civil War: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): ENG 1021.
Formerly LIT 211 Provides an overview of American literature from the Native American through the 19th-century Romantics. It explores ideas, historical and social contexts, themes and literary characteristics of works in various genres by major writers. This course is one of the statewide Guaranteed Transfer courses, GT-AH2.

LIT 2012 - American Literature After Civil War: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): ENG 1021.
Formerly LIT 212 Provides an overview of American literature from the mid-19th century to the present. It explores ideas, historical and social contexts, themes and literary characteristics of works in various genres by major writers. This course is one of the statewide Guaranteed Transfer courses, GT-AH2.

MUS 1020 - Music Appreciation: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly MUS 120 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

MUS 1021 - Music History Medieval Thru Classical Period: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly MUS 121 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

MUS 1022 - Music History Early Romantic Period to the Present: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly MUS 122 Provides an 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

PHI 1011 - Introduction to Philosophy: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 111 ompletion with a minimum C? grade guarantees transfer and application of credit in this GT Pathways category.

PHI 1012 - Ethics: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 112 Examines human life, experience and thought in order to discover and develop the principles and values for pursuing a more fulfilled existence. Theories designed to justify ethical judgments are applied to a selection of contemporary personal and social issues. This course is one of the statewide Guaranteed Transfer courses, GT-AH3.

PHI 1013 - Logic: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 113 Studies effective thinking using language-oriented logic. Provides tools and develops skills for creative and critical thinking. Emphasizes the development of decision-making and problem-solving. This course is one of the statewide Guaranteed Transfer courses, GT-AH3.

PHI 1014 - Comparative Religions: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 114 Introduces students to the major world religions from both the Eastern and Western world such as Hinduism, Buddhism, Confucianism, Taoism, Zoroastrianism, Judaism, Christianity, Islam, Bahand influential preliterate traditions. Utilizes religious studies methods (historical, sociological, legal, psychological and phenomenological) 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. This course is one of the statewide Guaranteed Transfer courses, GT-AH3.

PHI 2014 - Philosophy of Religion: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 214 Focuses on the critical examination of the fundamental concepts, ideas and implications of religion. Includes the nature of God, the varieties of religious experience, argument concerning God`s existence, the problem of evil, faith and reason, religion and human destiny, and the connection between religion and ethics. This course is one of the statewide Guaranteed Transfer courses, GT-AH3.

SPA 2011 - Spanish Language III: GT-AH4

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of SPA 1012 or Department Chair Approval.
Formerly SPA 211 Continues SPA 1011 - Spanish Language Iand SPA 1012 - Spanish Language IIin the development of increased functional proficiency in listening, speaking, reading and writing the Spanish Language. Note: The order of the topics and the methodology will vary according to individual texts and instructors. This course is one of statewide Guaranteed Transfer courses, GT-AH4.

SPA 2012 - Spanish Language IV: GT-AH4

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of SPA 2011 or Department Chair Approval.
Formerly SPA 212 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. This is a statewide Guaranteed Transfer course in the GT-AH4 category. This course is one of statewide Guaranteed Transfer courses, GT-AH4.

THE 1005 - Theatre Appreciation: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly THE 105 Includes discussions, workshops and lectures designed to discover, analyze and evaluate all aspects of the theatre experience: scripts, acting, directing, staging, history, criticism and theory. This course is one of the statewide Guaranteed Transfer courses, GT-AH1.

THE 2011 - Development of Theatre Greek-Renaissance: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly THE 211 Surveys the history and evolution of drama from ancient Greece to the Renaissance, emphasizing all aspects of the art from period values to analysis of dramatic literature and performance. This course is one of the statewide Guaranteed Transfer courses, GT-AH1.

THE 2012 - Development of Theatre Restoration to Modern: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly THE 212 Surveys the history and evolution of drama from the Renaissance to the present, emphasizing all aspects of the art from period values to the analysis of dramatic literature and performance. This course is one of the statewide Guaranteed Transfer courses, GT-AH1.

Social and Behavioral Sciences (9 Credits)

Select nine credits in at least two categories, one of which must be History:

ANT 1001 - Cultural Anthropology: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly ANT 101 Studies human cultural patterns and learned behavior including linguistics, social and political organization, religion, culture and personality, culture change, and applied anthropology.

ANT 1005 - Biological Anthropology with Laboratory: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly ANT 111 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. This is a statewide Guaranteed Transfer course in the GT-SC1 category. GT-SC1

ECO 2001 - Principles of Macroeconomics: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly ECO 201 Focuses on the study of the American economy, stressing the interrelationships among household, business and government sectors. Explores saving and investment decisions, unemployment, inflation, national income accounting, taxing and spending policies, the limits of the market and government, public choice theory, the Federal Reserve System, money and banking, and international trade.

ECO 2002 - Principles of Microeconomics: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly ECO 202 Studies the firm, the nature of cost and how these relate to the economy as a whole. Analyzes economic models of the consumer, perfect competition, monopoly, oligopoly and monopolistic competition. Explores economic issues including market power, population growth, positive and negative externalities, income distribution, poverty and welfare, discrimination, and international economic interdependence.

GEO 1005 - World Regional Geography: GT-SS2

Credit(s): 3
Lecture Hour(s): 3
Formerly GEO 105 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. This is a statewide Guaranteed Transfer course in the GT-SS2 category.

GEO 1006 - Human Geography: GT-SS2

Credit(s): 3
Lecture Hour(s): 3
Formerly GEO 106 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. This is a statewide Guaranteed Transfer course in the GT-SS2 category. GT-SS2

HIS 1310 - Western Civilization: Antiquity-1650: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 101 Explores a number of events, peoples, groups, ideas, institutions and trends that have shaped western civilization from the prehistoric era to 1650. Reflects the multiple perspectives of gender, class, religion and ethnic groups. Focuses on developing, practicing and strengthening the skills historians use while constructing knowledge in this discipline. This course is one of the statewide Guaranteed Transfer courses, GT-HI1.

HIS 1320 - Western Civ: 1650-present: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 102 Explores a number of events, peoples, groups, ideas, institutions and trends that have shaped western civilization from 1650 to the present. Reflects the multiple perspectives of gender, class, religion and ethnic groups. Focuses on developing, practicing and strengthening the skills historians use while constructing knowledge in this discipline. This course is one of the statewide Guaranteed Transfer courses, GT-HI1.

HIS 1110 - The World: Antiquity-1500: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 111 Explores a number of peoples, groups, ideas, institutions and trends that have shaped world history from the prehistoric era to 1500. Reflects the multiple perspectives of gender, class, religion and ethnic groups in a broad global sense. Focuses on the common denominators among all people. This approach goes beyond political borders to provide a better appreciation for different cultures. Focuses on developing, practicing and strengthening the skills historians use while constructing knowledge in this discipline. This course is one of the statewide Guaranteed Transfer courses, GT-HI1.

HIS 1120 - The World: 1500-present: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 112 Explores a number of peoples, groups, ideas, institutions and trends that have shaped world history from 1500 to the present. Reflects the multiple perspectives of gender, class, religion and ethnic groups in a broad global sense. Focuses on the common denominators among all people. This approach goes beyond political borders to provide a better appreciation for different cultures. Focuses on developing, practicing and strengthening the skills historians use while constructing knowledge in this discipline. This course is one of the statewide Guaranteed Transfer courses, GT-HI1.

HIS 1210 - U.S. History to Reconstruction: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 121 Explores events, trends, peoples, groups, cultures, ideas and institutions in North America and United States history, including the multiple perspectives of gender, class and ethnicity, between the period when Native American Indians were the sole inhabitants of North America and the American Civil War. Focuses on developing, practicing and strengthening the skills historians use while constructing knowledge in the discipline. This course is one of the statewide Guaranteed Transfer courses, GT-HI1

HIS 1220 - U.S. History Since the Civil War: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 122 Explores events, trends, peoples, groups, cultures, ideas and institutions in United States history, including the multiple perspectives of gender, class and ethnicity, between the period of the American Civil War and the present. Focuses on developing, practicing and strengthening the skills historians use while constructing knowledge in the discipline. This course is one of the statewide Guaranteed Transfer courses, GT-HI1.

HIS 2015 - 20th Century World History: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 247 Investigates the major political, social and economic developments, international relationships, scientific breakthroughs, and cultural trends that have shaped the various global regions and nation-states from 1900 to the present. Emphasizes the interactions of global regions and nation-states. This course is one of the statewide Guaranteed Transfer courses, GT-HI1.

JOU 1005 - Introduction to Mass Media: GT SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly JOU 105 Places the mass media in a historical and cultural perspective, considering the validity, integrity and influence of the media in a democracy. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

POS 2020 - Introduction to Political Science: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly POS 105 Focuses on a survey of the discipline of political science, including political philosophy and ideology, democratic and nondemocratic governments and processes, and international relations. This course is one of the statewide Guaranteed Transfer courses, GT-SS1.

POS 1011 - American Government: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly POS 111 Includes the background of the US Constitution, the philosophy of American government, general principles of the Constitution, federalism and civil liberties. Examines public opinion and citizen participation, political parties, interest groups and the electoral process, and the structure and functions of the national government. This course is one of the statewide Guaranteed Transfer courses, GT-SS1.

PSY 1001 - General Psychology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 101 Focuses on the scientific study of behavior including motivation, emotion, physiological psychology, stress and coping, research methods, consciousness, sensation, perception, learning and memory. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 1002 - General Psychology II: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 102 Focuses on the scientific study of behavior including cognition, language, intelligence, psychological assessment, personality, abnormal psychology, therapy, lifespan development and social psychology. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2105 - Psychology of Gender: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 205 Examines gender comparisons in work, courtship, family life and sexual behavior throughout the lifespan. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2107 - Human Sexuality: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 217 Surveys physiological, psychological and psychosocial aspects of human sexuality. Topics include relationships, sexual identity and sexual health. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2221 - Social Psychology: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 226 Focuses on the behavior of humans in social settings, including attitudes, aggression, conformity, cooperation and competition, prejudice and interpersonal attraction. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2222 - Psychology of Death and Dying: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 227 Examines the philosophies of life and death, emphasizing dying, death, mourning and the consideration of one's own death. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2440 - Human Growth and Development: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 235 Examines human development from conception through death, emphasizing physical, cognitive, emotional and psychosocial factors. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2441 - Child Development: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 238 Focuses on the growth and development of the individual from conception through childhood, emphasizing physical, cognitive, emotional and psychosocial factors. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2552 - Abnormal Psychology: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): PSY 1001 or Department Chair Approval.
Formerly PSY 249 Examines abnormal behavior and its classification, causes, treatment and prevention. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

SOC 1001 - Introduction to Sociology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 101 Examines the basic concepts, theories and principles of sociology as well as human culture, social groups, and the social issues of age, gender, class and race. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

SOC 1002 - Introduction to Sociology II: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 102 Examines social institutions and organizations from the macro perspective. Emphasizes issues of social change, demography, social movements, and conflicts and trends within education, religion, family, political and economic structures. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

SOC 2005 - Sociology of Family Dynamics: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 205 Develops an understanding of marriage, family and kinship. It examines the family as an institution and how social, cultural and personal factors influence family relations. The stability and diversity of the family will be explored, along with current trends and some alternative lifestyles. This course is one of statewide Guaranteed Transfer courses, GT-SS3.

SOC 2015 - Contemporary Social Problems: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 215 Explores current social issues that result in societal problems. It focuses on such issues as civil liberties, gender discrimination, substance abuse, crime, poverty and social change. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

SOC 2016 - Sociology of Gender: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 216 Gives students the theoretical and factual background necessary to understand the phenomenon of gender stratification in American and other cultures. Students will be exposed to a history of gender stratification in human societies, theoretical explanations for this and insights into the consequences of gender differentiation in our world today. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

SOC 2031 - The Sociology of Deviant Behavior: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 231 Examines the nature, identification, and explanation of deviant categories. Theories and philosophies, as well as methods of treatment related to deviancy, will also be considered. The course will study society's attempts to control, change and institutionalize those acts, individuals or groups that a population may deem unacceptable. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

WST 2000 - Introduction to Women's Studies: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly WST 200 Examines the nature and function of women in society from an interdisciplinary perspective, focusing on the similarity and diversity of women`s experience over time and across cultures. The course will examine topics such as sex role, socialization, political and philosophical perspectives on women`s issues, and women`s accomplishments in history, art, literature, science, health issues and the family. Students will gain an awareness of the limitations of traditional scholarship on women and gain a means of practical application of the new scholarship on women`s roles and nature. This course is one of the statewide Guaranteed Transfer Courses, GT-SS3.

Core Curriculum Requirements (21 Credits)

CRJ 1010 - Intro to Criminal Justice: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): ENG 1021.
Formerly CRJ 110 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. This is a statewide Guaranteed Transfer course in the GT-SS3 category.

CRJ 1025 - Policing Systems

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): CRJ 1010.
Formerly CRJ 125 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 1035 - Judicial Function

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of CRJ 1010.
Formerly CRJ 135 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

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of CRJ 1010.
Formerly CRJ 145 Examines the history and total correctional process from law enforcement through the administration of justice, probation, prisons, correctional institutions and parole. Also examines the principles, theories, phenomena and problems of the crime, society and the criminal justice system from the perspective of criminology and the criminal justice system in general. Emphasizes the role of sociology and other interdisciplinary approaches to the field of corrections and society's response.

CRJ 2005 - Principles of Criminal Law

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of CRJ 1010, CRJ 1025, CRJ 1035, CRJ 1045, and ENG 1021.
Prerequisite(s)/Corequisite(s): COM 1150 and ENG 1022.
Formerly CRJ 205 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 2010 - Constitutional Law

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of CRJ 1010and CRJ 1035.
Prerequisite(s)/Corequisite(s): COM 1150and ENG 1021.
Formerly CRJ 210 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 2030 - Criminology

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of CRJ 1010 and CRJ 1045.
Prerequisite(s)/Corequisite(s): COM 1150 and ENG 1021.
Formerly CRJ 230 Provides an introduction to the study of crime, understanding the causes of crime, and examines, theoretical frameworks and theories to explain criminal behavior. Within a social context, consideration is given to how theories have emerged and understand how social context contributes to explanations of crime. Examination of the nature of crime, crime victimization, crime patterns, types of crime, crime statistics, and criminal behavior is also included.

Transfer Degrees

This degree transfers to the following Colorado public four-year institutions of higher education:

- Colorado State University Global (BS Criminal Justice and Law Enforcement Administration
- Colorado State University, Pueblo (Sociology with a Criminology emphasis)

Cyber Defense Certificate

CIP 11.0101

See list of Department Chairs on the Personnel page.

Career Opportunities

The CIS program prepares you for careers in computer science, computer networking and electronic commerce. The AAS Degree with an emphasis in local area networking prepares you to work as a network technician on small and large networks. You may also administer smaller networks as a System Administrator. The AGS Degree with an emphasis in Computer Information Systems prepares you to transfer to a university to continue studies in Computer Science or Computer Information Systems.

Program Description

The CIS program provides training in basic technical computer and networking skills. You will study computer networking, programming and database technologies along with classes that teach the technical aspects of the Internet and data communications. Note: Students interested in transferring to a baccalaureate program in Computer Information Systems should refer to the Transfer Degree section.

Total Credits: 28

Certificate Requirements

CSC 1020 - Problem Solving with Java

Credit(s): 3
Lecture Hour(s): 3
Formerly CSC 120 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 1019 - Introduction to Programming

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CSC 119 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.

CNG 1020 - A+ Certification Preparation

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Formerly CNG 120 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 1024 - Networking I: Network +

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 124 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 1031 - Principles of Information Assurance

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 131 Delivers a comprehensive overview of network security, including general security concepts. Communication Security is studied, including remote access, email, 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

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 133 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 1032 - Network Security Fundamentals

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 132 Examines the field of information security to prepare information systems students for their future roles as business decision-makers. The course presents a balance of the managerial and the technical aspects of information security. The concepts covered in this course should be helpful for students working towards the Certified Information Systems Security Professional (CISSP) certification.

CNG 1036 - Guide to Disaster Recovery

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Department Chair Approval.
Formerly CNG 136 Presents methods to identify vulnerabilities and take appropriate countermeasures to prevent and mitigate failure risks for an organization. It will take an enterprise-wide approach to developing a disaster recovery plan.

CIS 2020 - Fundamentals of Unix

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 220 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

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly CIS 223 Introduces students to the concepts of installing, configuring, and managing the Linux operating system. Topics covered include working with various desktops, use of filesystem commands, and management of user and group permissions.

CNG 2024 - Microsoft Windows Wireless Network

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Prerequisite(s): CNG 1004 or instructor approval.
Formerly CNG 224 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 2056 - Vulnerability Assessment I

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Prerequisite(s): CIS 2020, CNG 1024, and CNG 1032.
Formerly CNG 256 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.

Dental Hygiene, AAS

CIP 51.0602

See list of Department Chairs on the Personnel page.

Career Opportunities

The Dental Hygiene program prepares you for a career in a variety of professional settings. The most familiar setting is the private dental office, where hygienists perform critical services to detect and prevent diseases of the mouth. Beyond the private dental office, you can find employment in nursing homes and long-term care facilities, hospitals, corporate health facilities, school systems and public health clinics. You may also work as an educator or researcher.

Program Description

The AAS Degree prepares you to provide dental hygiene services to patients and educate them in aspects of preventive dentistry. In our on-campus clinic, you will provide preventive and therapeutic services for patients under the supervision of Dental Hygiene faculty.

In the traditional role of dental hygienist, training includes prophylaxis, patient data gathering for dental hygiene diagnosis and treatment planning, fluoride treatment, sealant application, radiographic examination and nutritional counseling. In the expanded role of the dental hygienist, training includes treatment of periodontally-involved patients and treatment of handicapped, institutionalized and other medically compromised patients. You also learn to perform local anesthesia and administer nitrous oxide.

Because of the high level of personal and professional responsibility required of a dental hygienist, you must have integrity, maturity, individual motivation, good interpersonal skills, excellent manual dexterity and a solid science and general studies academic background to be successful in this program. We are firmly committed to fostering your intellectual growth and to developing well-qualified dental hygienists with high professional standards and ethics.

The Mini-Certificate in Local Anesthesia and Nitrous Oxide/Oxygen Sedation provides you with knowledge of the theory and practice of local anesthesia and nitrous oxide/oxygen sedation. This program teaches you to administer local anesthetics and nitrous oxide proficiently and safely. The administration of local anesthesia and nitrous oxide/oxygen sedation may be performed by licensed dental hygienists under the Colorado State Dental Practice Act. You must be currently enrolled in the Dental Hygiene program to enter this program.

Program Requirements

Entrance Requirements:

You must complete a current Dental Hygiene program application and meet all minimum requirements and application timelines. The application is available through the Dental Hygiene program, at the PCC Dental Hygiene website or in Admissions & Records. You should seek advisement from program faculty for assistance with applications, minimum requirements and required general education courses for admissions. In addition, all students entering the program will need a current CPR card good for 2 years.

If you are an AAS Dental Hygiene student, you must complete all General Education/Related Requirements.

Note: All students are accepted provisionally pending completion of a criminal background check. Disclaimer: The Colorado Board of Dental Examiners requires a dental hygienist applying for licensure to answer questions concerning felony history, excessive use or abuse of controlled substances/alcoholic beverages (within the last five years) and any physical or mental condition that may affect the ability to practice dental hygiene. Other questions asked by the State Board pertain to an applicant's history of malpractice judgment and any disciplinary action by any government or

private agency. The PCC Department of Dental Hygiene assumes no responsibility for the denial of licensure by the Colorado State Board of Dental Examiners.

Total Credits: 92.5

*** Within five years of application**

Degree Requirements

General Education Requirements (28 Credits)

BIO 2101 - Human Anatomy and Physiology I with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 201 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, nervous and endocrine systems. Includes a mandatory hands-on laboratory experience covering experimentation, microscopy, observations and dissection. This is the first semester of a two-semester sequence.

BIO 2102 - Human Anatomy and Physiology II with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 202 Focuses on the integrated study of the human body and the histology, anatomy, and physiology of the following systems and topics: cardiovascular, hematology, lymphatic and immune, urinary, fluid and electrolyte control, digestive, nutrition, respiratory, reproductive and development. Includes a mandatory hands-on laboratory experience involving experimentation, microscopy, observations and dissection. This is the second semester of a two-semester sequence.

BIO 2104 - Microbiology with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 204 Designed for health science majors. Examines microorganisms with an emphasis on their structure, development, physiology, classification and identification. The laboratory experience includes culturing, identifying and controlling microorganisms with an emphasis on their role in infectious disease.

CHE 1009 - General, Organic, and Biochemistry

Credit(s): 4
Lecture Hour(s): 4
Formerly CHE 109 Focuses on fundamentals of inorganic, organic and biochemistry primarily for students in health science, non-science majors and/or students in the occupational and health related career areas. Includes the study of

measurement, atomic theory, chemical bonding, nomenclature, stoichiometry, solutions, acid and base chemistry, gas laws, condensed states of matter and nuclear chemistry, nomenclature of organic compounds, properties of different functional groups, nomenclature of various biological compounds, their properties and biological pathways. This course has no lab and may not be transferable.

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

PSY 1001 - General Psychology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 101 Focuses on the scientific study of behavior including motivation, emotion, physiological psychology, stress and coping, research methods, consciousness, sensation, perception, learning and memory. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

SOC 1001 - Introduction to Sociology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 101 Examines the basic concepts, theories and principles of sociology as well as human culture, social groups, and the social issues of age, gender, class and race. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

Core Curriculum Requirements (64.5 Credits)

First Year-Fall Semester (14 Credits)

DEH 1001 - Preclinical Dental Hygiene Lecture

Credit(s): 2
Vocational Lab Hour(s): 3
Prerequisite(s): Current enrollment in the Dental Hygiene program.
Formerly DEH 101 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 Care

Credit(s): 3
Vocational Clinic Hour(s): 6

Prerequisite(s): Current enrollment in the Dental Hygiene program.
Formerly DEH 102 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

Credit(s): 3
Lecture Hour(s): 2
Vocational Clinic Hour(s): 2

Prerequisite(s): Current enrollment in the Dental Hygiene program.
Formerly DEH 103 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

Credit(s): 3
Lecture Hour(s): 2
Vocational Clinic Hour(s): 2

Prerequisite(s): Current enrollment in the Dental Hygiene program.
Formerly DEH 104 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

Credit(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): Current enrollment in the Dental Hygiene program.
Formerly DEH 105 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 2002 - Applied Nutrition in Dentistry

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Current enrollment in the Dental Hygiene program.
Formerly DEH 202 Gives students a fundamental understanding of general nutrition with an emphasis on the

interrelationship between nutrition and dental health. Focuses on recognizing nutritional deficiencies and how to conduct and evaluate nutritional surveys on patients.

First Year-Spring Semester (13.5 Credits)

DEH 1011 - Dental and Medical Emergencies

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Current enrollment in Dental Hygiene program.
Formerly DEH 111 Introduces the management of emergency situations in the dental office setting. 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

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Current enrollment in Dental Hygiene program.
Formerly DEH 122 Introduces the principles of periodontics. Focuses on recognition of the tissues in health and disease, macro and microanatomy of the periodontium, and histopathology of periodontal diseases and other related gingival conditions. Provides the theory and discussion of periodontal assessment, etiology, epidemiology, inflammatory process/immune response, and the AAP classification system.

DEH 1023 - Head & Neck Anatomy

Credit(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): BIO 2101, BIO 2102, current enrollment in Dental Hygiene program.
Formerly DEH 123 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, lymphatic, glandular system, vascular supply, nervous system, and the oral cavity.

DEH 1026 - Dental Materials

Credit(s): 2
Lecture Hour(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): Current enrollment in Dental Hygiene program.
Formerly DEH 126 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 1053 - Clinical Theory of Dental Hygiene I

Credit(s): 2
Lecture Hour(s): 2

Prerequisite(s): Current enrollment in Dental Hygiene program.
Formerly DEH 153 Builds on the broad theoretical basis provided in DEH 1001and DEH 1002. Focuses on enhancing patient assessment skills, instrumentation and additional information on preventative and prophylactic clinical procedures.

DEH 1070 - Clinical Practice of Dental Hygiene I

Credit(s): 4.50
Vocational Clinic Hour(s): 9

Prerequisite(s): Current enrollment in Dental Hygiene program.
Formerly DEH 170 Provides clinical experience in patient skills assessment, instrumentation and additional preventative and prophylactic clinical procedures.

Second Year-Summer Semester (6 Credits)

DEH 1033 - Local Anesthesia

Credit(s): 2
Lecture Hour(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): DEH 1011, DEH 1023, current enrollment in Dental Hygiene program.
Formerly DEH 133 Provides a working knowledge of the theory and practice of local anesthesia as applied to the practice of dentistry/dental hygiene. Emphasizes mastery of the armamentarium and techniques of regional anesthesia. Covers the knowledge and skills necessary to administer local anesthetics proficiently and safely.

DEH 1034 - Advanced Clinical Skills

Credit(s): 1
Lecture Hour(s): 0.70
Vocational Clinic Hour(s): 0.60

Prerequisite(s): Current enrollment in Dental Hygiene program.
Formerly DEH 134 Focuses on dental hygiene theory and laboratory experiences with major topics related to advanced clinical skills, including advanced instrumentation fulcrums, root morphology, periodontal files, periodontal file sharpening, mini curettes, after five curettes, nabors probe, universal focus spray ultrasonics and scaling implants.

DEH 1038 - Nitrous Oxide/Oxygen Sedation

Credit(s): 1
Lecture Hour(s): 0.80
Vocational Clinic Hour(s): 0.40

Prerequisite(s): BIO 2101, BIO 2102, current enrollment in Dental Hygiene program.
Formerly DEH 138 Provides a working knowledge of the latest equipment and methods of nitrous oxide/oxygen sedation administration in the dental office.

DEH 1071 - Clinical Practice of Dental Hygiene I-A

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): Current enrollment in Dental Hygiene program.
Formerly DEH 171 Continues patient care sessions for the performance of traditional dental hygiene treatment. Enables the student to provide treatment to periodontally involved patients utilizing advanced instrumentation and power scaling.

Second Year Fall Semester (17 Credits)

DEH 1032 - Applied Pharmacology

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Current enrollment in Dental Hygiene program.
Formerly DEH 132 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 2004 - Community Dental Health I

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Current enrollment in Dental Hygiene program.
Formerly DEH 204 Course provides instruction in the concepts, methods and issues of dental public health. Emphasis is placed on evidence-based criteria for effective promotion and prevention of dental disease in the public health setting. Concepts of dental health education and program planning in the community setting are reinforced through case-based materials, including methods of assessment, planning, implementation and evaluation of effectiveness. Course activities will reinforce skills in speaking and writing effectively in preparation for the subsequent community dental health field experience course.

DEH 2013 - General and Oral Pathology

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Current enrollment in Dental Hygiene program.
Formerly DEH 213 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 2042 - Periodontics II

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): DEH 1022.
Formerly DEH 242 Continues to explore theoretical/clinical preparations with emphasis on dental hygiene process of care, treatment planning, nonsurgical 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

Credit(s): 2
Vocational Lab Hour(s): 3
Prerequisite(s): Current enrollment in Dental Hygiene program.
Formerly DEH 268 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

Credit(s): 6
Vocational Clinic Hour(s): 12

Prerequisite(s): Current enrollment in Dental Hygiene program.
Formerly DEH 270 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.

Second Year-Spring Semester (14 Credits)

DEH 2021 - Ethics and Practice Management

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Current enrollment in Dental Hygiene program.
Formerly DEH 221 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

Credit(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): DEH 2004.
Formerly DEH 225 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 2059 - Advanced Dental Hygiene Theory

Credit(s): 2
Lecture Hour(s): 2

Prerequisite(s): Current enrollment in Dental Hygiene program.
Formerly DEH 259 Focuses on the care of patients with special needs, such as physical and mental disabilities and systemic conditions. Emphasizes patient management and treatment considerations.

DEH 2071 - Clinical Practice of Dental Hygiene III

Credit(s): 6
Vocational Clinic Hour(s): 12

Prerequisite(s): Current enrollment in Dental Hygiene program.
Formerly DEH 271 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 extramural clinical sites for additional practice.

DEH 2082 - Periodontics III

Credit(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): DEH 1022.
Formerly DEH 282 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

Credit(s): 2
Vocational Lab Hour(s): 3
Prerequisite(s): Current enrollment in Dental Hygiene program.
Formerly DEH 285 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.

Optional Recommended Courses (2.5 Credits)

DEH 1036 - Clinical Dental Roentgenology

Credit(s): 0.50
Vocational Clinic Hour(s): 1

Prerequisite(s): Current enrollment in Dental Hygiene program.
Formerly DEH 136 Enhances clinical competence of basic radiographic principles including intra-oral, positioning techniques, exposure factors, bisecting technique, vertical bitewing survey and management of anatomical deviations.

DEH 2066 - National Boards Review

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Current enrollment in Dental Hygiene program.
Formerly DEH 266 Provides formal review sessions for second-year dental hygiene students preparing to sit for the National Board Examination.

Dental Hygiene, BAS

CIP 51.0602

See list of Department Chairs on the Personnel page.

Career Opportunities

This program prepares the licensed dental hygienist to academically expand their knowledge and career opportunities in the professions of education, program administration, public health, research or sales.

Program Description

This Bachelor of Applied Science Degree Completion Program is designed for licensed dental hygienists who have completed an associate degree from a regionally accredited institution that is also accredited by the Commission on Dental Accreditation. The goal of the Registered Dental Hygienist (RDH) to BASDH program is to work with each student to enhance knowledge and provide expanded career opportunities. Obtaining a BAS degree may also provide the lifelong learner the knowledge base to prepare them academically should they wish to pursue a master's degree for additional career opportunities.

Program Requirements

Entrance Requirements:

Students must complete a current Dental Hygiene BAS program application and meet all minimum program requirements and application timelines. The application is available on the Dental Hygiene BAS website. Applicants should also seek advisement from the program director for assistance with meeting all admission requirements. In addition, students must meet the following admissions requirements:

1. Graduate from a regionally accredited dental hygiene program that is also accredited by the Commission on Dental Accreditation.
2. Pass the National Board Dental Hygiene Exam.
3. Hold a current dental hygiene license in a US state.

Total Credits: 27

General Education Requirements (3 Credits)

MAT 1260 - Introduction to Statistics: GT-MA1

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 135 Explores and applies data presentation and summarization, introduction to probability concepts and distributions, statistical inference estimation, hypothesis testing, comparison of populations, correlation and regression. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

Curriculum Requirements (24 Credits)

First Fall Semester

HPR 4003 - Critical Review of Healthcare Research

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to BAS program

Formerly HPR 403 Teaches how to evaluate and analyze published literature using a scientific approach to develop medical best practices, formulates and research clinical questions to effectively participate in medical discussions.

DEH 3001 - Advanced Careers in Dental Hygiene

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to the program.
Formerly DEH 301 Provides an overview of the career options available to the dental hygienist with an advanced degree. In depth analysis of alternative careers to include: public health systems, dental hygiene education, research, sales and marketing, oral health policy and oral health care delivery systems.

First Spring Semester

DEH 3041 - Clinical Teaching Methodologies

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to the program.
Formerly DEH 341 This course provides students the opportunity to compare and contrast practical experience as it relates to dental hygiene clinical instruction. Students will apply teaching methodologies, psychomotor learning theories, feedback techniques and motivational strategies to direct student learning.

DEH 4055 - Topics in Dental Public Health

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): Admission to the program.
Formerly DEH 455 Provides a comprehensive overview in public health as it relates to the field of dentistry. Surveys and analyzes oral health services, community programs, disease prevention, policy, ethics and issues facing the profession today.

Second Fall Semester

DEH 3055 - Social and Behavioral Determinants of Oral Health

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission into the program.
Formerly DEH 355 Evaluate the complexity and interplay of social and physical environmental structures, economic systems and behavioral patterns that affect overall health with a focus on health services, health beliefs and their impact on health-related behavior choices.

HPR 4038 - Pedagogy in Health Professions

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to BAS program
Formerly HPR 468 Provides a general overview of the concepts and theory relative to education in health professions. The course will introduce concepts in developing outcome centered objectives, syllabus, lesson planning, content delivery, test construction, and assessing student learning. The course explores various learning styles and technology available for delivery of course content.

Second Spring Semester

DEH 4089 - Capstone: Dental Hygiene

Credit(s): 5
Seminar Hour(s): 5
Prerequisite(s): MAT 1260 and admission to the program.
Formerly DEH 489 Provides the student an opportunity to participate in a cumulative learning experience that integrates theory and applies previously learned knowledge and skill. The student will design, implement and evaluate a project related to their specific area of interest.

Electives if Needed for Institutional Credit

- Any 300 or 400 level HPR BAS course

Miscellaneous Information

[1] Course taught in the first eight weeks of the semester

[2] Course taught in the second eight weeks of the semester

Digital Video Editing Certificate

CIP 09.0702

See list of Department Chairs on the Personnel page.

Career Opportunities

Careers in Media Communications are in demand and PCC offers an affordable way for students to begin their education. Some of the exciting career options within this field include: Graphic Designers; Web Developers; Broadcast Technicians; Film Video Editors; and Advertising & Promotion Managers.

Program Description

The Media Communications program teaches students to think critically and develop skills in Web Design, Graphic Design, Advertising, Videography, News Writing, and TV-Radio Production. Courses provide a solid foundation in these areas through a combination of lecture and hands on applications. There are multiple labs with state of the art equipment and software for your area of emphasis. The Media Communications program provides a high technical skill attainment in this changing field of communication. Students have multiple options to pursue. The AAS degrees with emphases in Graphic Design and Web Design offer advanced technical skills in these areas. Certificates provide basic skill sets to enhance an existing degree or occupation. The AGS degree provides a transfer option to a four year university. If interested in this option, please refer to the Transferring Credits section of the catalog.

Total Credits: 18

Certificate Requirements

MGD 1002 - Introduction to Multimedia

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly MGD 102 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 1043 - Motion Graphic Design I: (Software)

Credit(s): 3
Vocational Lab Hour(s): 4.5
Formerly MGD 143 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 1064 - Digital Video Editing I

Credit(s): 3
Vocational Lab Hour(s): 4.5
Formerly MGD 164 Introduces to digital nonlinear 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 2064 - Digital Video Editing II

Credit(s): 3
Vocational Lab Hour(s): 4.5
Prerequisite(s): MGD 1064
Formerly MGD 264 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.

RTV 1002 - Beginning Television

Credit(s): 3
Vocational Lab Hour(s): 4.5
Formerly RTV 102 Focuses on principles and techniques of television production in theory and the approach of studio and production. Emphasizes producing television programs, beginning with a concept through script to actual studio production, pre-production and post-production.

RTV 1005 - Basic Video Production

Credit(s): 3
Vocational Lab Hour(s): 4.5
Prerequisite(s): RTV 1002.
Formerly RTV 208 Introduces basic videotape production and editing on linear and nonlinear 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 nonlinear editors.

Early Childhood Assistant Teacher Certificate

CIP 13.1210

See list of Department Chairs on the Personnel page.

Career Opportunities

The ECE program prepares you for a career in teaching children (birth to age 5). The program can also prepare you to become an Early Childhood Teacher or director in the field of Early Childhood Education.

Program Description

This program prepares you to become a productive, caring and responsible teacher. Classes emphasize child development skills in the areas of language, social, emotional, cognitive and physical development. Classes also focus on cultural diversity among children. You will become familiar with theories concerning child development and ECE, and you will participate in many group discussions and hands-on activities that you can apply in the preschool classroom. You will learn from qualified faculty members who believe in the success of each ECE student.

Program Requirements

Entrance Requirements:

You should demonstrate an interest in the care and well-being of young children. You must also be free from evidence of illness – mental and physical – and free from personal conduct which may be injurious to children as stated in the Colorado Rules and Regulations for Child Care Centers, section 7.702.51.

You must meet with an ECE faculty advisor before registering for ECE courses.

Note: Students interested in transferring to a baccalaureate program in Early Childhood Education or Elementary Education should refer to the Transfer Degree section.

Total Credits: 6

Certificate Requirements

ECE 1011 - Introduction to Early Childhood Education

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 101 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.

or

ECE 1031 - Guidance Strategies for Young Children

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 103 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.

Choose One Course Listed Below (3 Credits)

ECE 1111 - Infant and Toddler Theory and Practice

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 111 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. Focuses on birth through age 3.

ECE 1125 - Intro to Infant/Toddler Lab Techniques

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3

Formerly ECE 112 Includes a classroom Seminar and placement in an infant and/or toddler setting. The supervised placement provides the student with the opportunity to observe, practice appropriate interactions and develop effective guidance and nurturing techniques with infants and/or toddlers. Addresses ages prenatal through age 2.

ECE 2661 - Science/Math and the Young Child

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 125 Examines theories of cognitive development as a framework for conceptualizing the way young children acquire scientific and mathematical skills, concepts and abilities. Enables students to research and develop appropriate individual and group scientific/mathematical activities for young children.

ECE 2051 - Nutrition, Health and Safety

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 205 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 2621 - ECE Curriculum Development: Methods and Techniques

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of ECE 1011, ECE 1045, and ECE 1031.
Formerly ECE 220 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 and Cognition for the Young Child

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 225 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 8 years.

ECE 2641 - Creativity and the Young Child

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 226 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 8 years.

ECE 2381 - Ece Child Growth and Development

Credit(s): 3
Lecture Hour(s): 3

Prerequisite(s): Successful completion of ECE 1011 and ECE 1045.
Formerly ECE 238 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 2101 - Working with Parents, Families, and Community Systems

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 256 Examines personal attitudes regarding families, family values systems, and how personal attitudes affect parent-professional partnerships in the early childhood education program. This course covers communication, problem-solving and conflict resolution strategies. Effective activities and resources to support family involvement in the classroom will be created. This course addresses children ages birth through 8 years.

or

ECE 2601 - The Exceptional Child

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 260 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.

Early Childhood Director Certificate

CIP 13.1210

See list of Department Chairs on the Personnel page.

Career Opportunities

The ECE program prepares you for a career in teaching children (birth to age 5). The program can also prepare you to become an Early Childhood Teacher or director in the field of Early Childhood Education.

Program Description

This program prepares you to become a productive, caring and responsible teacher. Classes emphasize child development skills in the areas of language, social, emotional, cognitive and physical development. Classes also focus on cultural diversity among children. You will become familiar with theories concerning child development and ECE, and you will participate in many group discussions and hands-on activities that you can apply in the preschool classroom. You will learn from qualified faculty members who believe in the success of each ECE student.

Program Requirements

Entrance Requirements:

You should demonstrate an interest in the care and well-being of young children. You must also be free from evidence of illness – mental and physical – and free from personal conduct which may be injurious to children as stated in the Colorado Rules and Regulations for Child Care Centers, section 7.702.51.

You must meet with an ECE faculty advisor before registering for ECE courses.

Note: Students interested in transferring to a baccalaureate program in Early Childhood Education or Elementary Education should refer to the Transfer Degree section.

Total Credits: 30

Certificate Requirements

ECE 1011 - Introduction to Early Childhood Education

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 101 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 1045 - Introduction to Early Childhood Techniques

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly ECE 102 Focuses on a classroom Seminar and placement in a child care setting. The supervised placement provides the student with the opportunity to observe children, practice appropriate interactions and develop effective guidance and management techniques. Addresses ages birth through 8 years.

ECE 1031 - Guidance Strategies for Young Children

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 103 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 1111 - Infant and Toddler Theory and Practice

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 111 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. Focuses on birth through age 3.

ECE 2051 - Nutrition, Health and Safety

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 205 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 2621 - ECE Curriculum Development: Methods and Techniques

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of ECE 1011, ECE 1045, and ECE 1031.
Formerly ECE 220 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 2381 - Ece Child Growth and Development

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of ECE 1011 and ECE 1045.
Formerly ECE 238 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 and Education Programs

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of ECE 1011, ECE 1045, ECE 1031, ECE 2621, and ECE 2381.
Formerly ECE 240 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

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of ECE 1011, ECE 1045, ECE 1031, ECE 2621, and ECE 2381.
Formerly ECE 241 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

Credit(s): 3
Lecture Hour(s): 3

Formerly ECE 260 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.

Early Childhood Education, AAS

CIP 13.1210

See list of Department Chairs on the Personnel page.

Program Description

This program prepares you to become a productive, caring, and responsible teacher. Classes emphasize child development skills in the areas of language, social, emotional, cognitive, and physical development. Clsses also focus on culutral diversity among children. You will become familiar with theories concerning child development and ECE, and you will participate in many group discussions and hands-on activities that you can apply in the preschool classroom. You will learn from qualified faculty members who believe in the success of each ECE student.

Total Credits: 60

Degree Requirements

General Education Requirements (15 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

OR

ENG 1031 - Technical Writing I

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 131, then ENG 1020 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.

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.

Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

OR

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

MAT 1140 - Career Math

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 107 Covers material designed for career technical or general studies students who need to study particular mathematical topics. Topics may include measurement, algebra, geometry, trigonometry, graphs and/or finance. These are presented on an introductory level and the emphasis is on applications.

Core Curriculum Requirements (39 Credits)

ECE 1011 - Introduction to Early Childhood Education

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 101 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 1045 - Introduction to Early Childhood Techniques

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly ECE 102 Focuses on a classroom Seminar and placement in a child care setting. The supervised placement provides the student with the opportunity to observe children, practice appropriate interactions and develop effective guidance and management techniques. Addresses ages birth through 8 years.

ECE 1031 - Guidance Strategies for Young Children

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 103 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 1111 - Infant and Toddler Theory and Practice

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 111 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. Focuses on birth through age 3.

ECE 2051 - Nutrition, Health and Safety

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 205 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 2621 - ECE Curriculum Development: Methods and Techniques

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of ECE 1011, ECE 1045, and ECE 1031.
Formerly ECE 220 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 and Cognition for the Young Child

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 225 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 8 years.

ECE 2641 - Creativity and the Young Child

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 226 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 8 years.

ECE 2381 - Ece Child Growth and Development

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of ECE 1011 and ECE 1045.
Formerly ECE 238 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 and Education Programs

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of ECE 1011, ECE 1045, ECE 1031, ECE 2621, and ECE 2381.
Formerly ECE 240 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

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of ECE 1011, ECE 1045, ECE 1031, ECE 2621, and ECE 2381.
Formerly ECE 241 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

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 260 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 2088 - Practicum: Early Childhood Education

Credit(s): 3
Lecture Hour(s): 1
Practicum Hour(s): 4
Prerequisite(s): Successful completion of ECE 1011 and ECE 1045
Formerly ECE 288 Provides students with advanced field experience opportunities in early childhood education programs.

Electives (6 Credits)

Select two courses:

ECE 1125 - Intro to Infant/Toddler Lab Techniques

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly ECE 112 Includes a classroom Seminar and placement in an infant and/or toddler setting. The supervised placement provides the student with the opportunity to observe, practice appropriate interactions and develop effective guidance and nurturing techniques with infants and/or toddlers. Addresses ages prenatal through age 2.

ECE 2661 - Science/Math and the Young Child

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 125 Examines theories of cognitive development as a framework for conceptualizing the way young children acquire scientific and mathematical skills, concepts and abilities. Enables students to research and develop appropriate individual and group scientific/mathematical activities for young children.

ECE 2101 - Working with Parents, Families, and Community Systems

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 256 Examines personal attitudes regarding families, family values systems, and how personal attitudes affect parent-professional partnerships in the early childhood education program. This course covers communication, problem-solving and conflict resolution strategies. Effective activities and resources to support family involvement in the classroom will be created. This course addresses children ages birth through 8 years.

LIT 2055 - Children's Literature

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the Composition I level
Formerly LIT 255 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 GT:AH2

EDU 2211 - Introduction to Education

Credit(s): 3
Lecture Hour(s): 3
Formerly EDU 221 Focuses on the historical, social, political, philosophical, cultural and economic forces that shape the United States public school system. Includes current issues of educational reform, technology as it relates to education and considerations related to becoming a teacher in the state of Colorado. Special interest will be paid to the topic of diversity in the K-12 school system.

AAA 1009 - Advanced Academic Achievement

Credit(s): 3
Lecture Hour(s): 3
Formerly AAA 109 Examines theories and practices associated with successful learning to enhance college success. Recommended for new and returning students, this course study areas including education and career planning, effective communication, personal management, critical and creative thinking, development of community and awareness of diversity, leadership, and techniques for successful academic performance.

Early Childhood Teacher Certificate

CIP 13.1210

See list of Department Chairs on the Personnel page.

Career Opportunities

The ECE program prepares you for a career in teaching children (birth to age 5). The program can also prepare you to become an Early Childhood Teacher or director in the field of Early Childhood Education.

Program Description

This program prepares you to become a productive, caring and responsible teacher. Classes emphasize child development skills in the areas of language, social, emotional, cognitive and physical development. Classes also focus on cultural diversity among children. You will become familiar with theories concerning child development and ECE, and you will participate in many group discussions and hands-on activities that you can apply in the preschool classroom. You will learn from qualified faculty members who believe in the success of each ECE student.

Program Requirements

Entrance Requirements:

You should demonstrate an interest in the care and well-being of young children. You must also be free from evidence of illness – mental and physical – and free from personal conduct which may be injurious to children as stated in the Colorado Rules and Regulations for Child Care Centers, section 7.702.51.

You must meet with an ECE faculty advisor before registering for ECE courses.

Note: Students interested in transferring to a baccalaureate program in Early Childhood Education or Elementary Education should refer to the Transfer Degree section.

Total Credits: 18

Certificate Requirements

ECE 1011 - Introduction to Early Childhood Education

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 101 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 1045 - Introduction to Early Childhood Techniques

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly ECE 102 Focuses on a classroom Seminar and placement in a child care setting. The supervised placement

provides the student with the opportunity to observe children, practice appropriate interactions and develop effective guidance and management techniques. Addresses ages birth through 8 years.

ECE 1031 - Guidance Strategies for Young Children

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 103 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 1111 - Infant and Toddler Theory and Practice

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 111 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. Focuses on birth through age 3.

ECE 2621 - ECE Curriculum Development: Methods and Techniques

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of ECE 1011, ECE 1045, and ECE 1031.
Formerly ECE 220 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 2381 - Ece Child Growth and Development

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of ECE 1011 and ECE 1045.
Formerly ECE 238 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.

Early Childhood Teacher Education, AA (with Designation)

CIP 24.0101

See list of Department Chairs on the Personnel page.

Career Opportunities

The Early Childhood Education (ECE) program prepares you for a career in teaching children (birth to age 5). The program can also prepare you to become an early childhood teacher or director in the field of early childhood education.

Program Description

This program prepares you to become a productive, caring and responsible teacher. Classes emphasize child development skills in the areas of language, social, emotional, cognitive and physical development. Classes also focus on cultural diversity among children. You will become familiar with theories concerning child development and ECE, and you will participate in many group discussions and hands-on activities that you can apply in the preschool classroom. You will learn from qualified faculty members who believe in the success of each ECE student.

Before beginning to take classes, you must meet with PCC's Teacher Education faculty advisor to plan a course of study and to examine the list of approved credits for each four-year institution in Colorado.

Program Requirements

Entrance Requirements:

You should demonstrate an interest in the care and well-being of young children. You must also be free from evidence of illness – mental and physical – and free from personal conduct which may be injurious to children as stated in the Colorado Rules and Regulations for Child Care Centers, section 7.702.51.

Total Credits: 60

General Education Core Requirements (33 Credits)

Written Communication (6 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

Mathematics (4 Credits)

MAT 1240 - Mathematics for the Liberal Arts: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 1001 concurrency allowed, or see Basic Skills Assessment
Formerly MAT 120 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. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

Natural and Physical Sciences (8 Credits)

SCI 1055 - Integrated Science I

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly SCI 155 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. Course is for elementary education majors only; both SCI 155 & SCI 1056required. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

SCI 1056 - Integrated Science II

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly SCI 156 Examines earth and biological systems, living and nonliving environments, through the application of fundamental energy and matter concepts. These systems and concepts will be explored in hands-on laboratory experiments. Course is for elementary education majors only; both SCI 1055& SCI 156 required. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

Arts and Humanities (6 Credits)

ART 1110 - Art Appreciation: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly ART 110 Introduces the cultural significance of the visual arts, including media, processes, techniques, traditions, and terminology. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

or

MUS 1020 - Music Appreciation: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly MUS 120 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

or

THE 1005 - Theatre Appreciation: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly THE 105 Includes discussions, workshops and lectures designed to discover, analyze and evaluate all aspects of the theatre experience: scripts, acting, directing, staging, history, criticism and theory. This course is one of the statewide Guaranteed Transfer courses, GT-AH1.

LIT 1015 - Introduction to Literature I: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly LIT 115 Introduces students to fiction, poetry and drama. Emphasizes active and responsive reading. This course is one of the statewide Guaranteed Transfer courses, GT-AH2.

or

LIT 2025 - Introduction to Shakespeare: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at ENG 1021 level or consent of instructor.
Formerly LIT 225 Explores a selection of works by William Shakespeare. It focuses on careful reading and interpretation of the plays and poems, includes pertinent information about Elizabethan England, and examines formal as well as thematic elements of the selected works. This course is one of the statewide Guaranteed Transfer courses. GT-AH2.

Social and Behavioral Sciences (6 Credits)

GEO 1005 - World Regional Geography: GT-SS2

Credit(s): 3
Lecture Hour(s): 3
Formerly GEO 105 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. This is a statewide Guaranteed Transfer course in the GT-SS2 category.

PSY 1001 - General Psychology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 101 Focuses on the scientific study of behavior including motivation, emotion, physiological psychology, stress and coping, research methods, consciousness, sensation, perception, learning and memory. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

History (3 Credits)

HIS 1210 - U.S. History to Reconstruction: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 121 Explores events, trends, peoples, groups, cultures, ideas and institutions in North America and United States history, including the multiple perspectives of gender, class and ethnicity, between the period when Native American Indians were the sole inhabitants of North America and the American Civil War. Focuses on developing, practicing and strengthening the skills historians use while constructing knowledge in the discipline. This course is one of the statewide Guaranteed Transfer courses, GT-HI1

or

HIS 1220 - U.S. History Since the Civil War: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 122 Explores events, trends, peoples, groups, cultures, ideas and institutions in United States history, including the multiple perspectives of gender, class and ethnicity, between the period of the American Civil War and the present. Focuses on developing, practicing and strengthening the skills historians use while constructing knowledge in the discipline. This course is one of the statewide Guaranteed Transfer courses, GT-HI1.

Additional Required Courses (18 Credits)

ECE 1011 - Introduction to Early Childhood Education

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 101 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 1045 - Introduction to Early Childhood Techniques

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly ECE 102 Focuses on a classroom Seminar and placement in a child care setting. The supervised placement provides the student with the opportunity to observe children, practice appropriate interactions and develop effective guidance and management techniques. Addresses ages birth through 8 years.

ECE 1031 - Guidance Strategies for Young Children

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 103 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 2621 - ECE Curriculum Development: Methods and Techniques

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of ECE 1011, ECE 1045, and ECE 1031.
Formerly ECE 220 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 2381 - Ece Child Growth and Development

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of ECE 1011 and ECE 1045.
Formerly ECE 238 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 2101 - Working with Parents, Families, and Community Systems

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 256 Examines personal attitudes regarding families, family values systems, and how personal attitudes affect parent-professional partnerships in the early childhood education program. This course covers communication, problem-solving and conflict resolution strategies. Effective activities and resources to support family involvement in the classroom will be created. This course addresses children ages birth through 8 years.

Electives (6 Credits)

Determined by transferring institution

Transfer Degrees

This degree transfers to the following Colorado public four-year institutions of higher education:

- Adams State University (B.A. Early Childhood Education)
- Colorado Mesa University (B.A. Early Childhood Education – Early Childhood Special Education)
- Colorado State University-Fort Collins, (B.S. Early Childhood Education)
- Colorado State University-Pueblo (B.S., Early Childhood Education)
- Fort Lewis College (B.A. Early Childhood Education)
- Metropolitan State University of Denver (B.A. Early Childhood Education)
- University of Colorado, Denver (B.A. Education and Human Development - Early Childhood)
- University of Northern Colorado (B.A. Early Childhood Teacher Education (Birth-Grade 3)

Economics, AA (with Designation)

CIP 24.0101

See list of Department Chairs on the Personnel page.

Career Opportunities

The Associate of Arts Degree with Designation in Economics prepares students to transfer as a junior to a four-year institution in Colorado in order to pursue a bachelor's degree in economics. Bachelor degree curriculums allow students to prepare for graduate school, for teaching careers, or for employment in areas that require economic analysis, such as actuarial science, investment banking, finance or statistics. Students would also be prepared to work in commercial banks, finance companies and insurance companies.

Program Description

The Associate of Arts Degree with Designation in Economics is designed for students who want to transfer to a four-year college or university to pursue a baccalaureate degree in economics. Completion of the AA degree completes the first two years of an economics bachelor's degree and guarantees transfer at junior standing with no more than 60 remaining credits to meet the graduation requirements for a bachelor's degree in economics.

Program Requirements

In addition to the requirements listed below, you must:

1. Earn a minimum of 60 semester hours of course work
2. Earn a minimum of 15 graded semester hours at PCC
3. Earn a minimum of "C" in all coursework for the degree

Consult with a PCC business advisor or transfer advisor to find out which Colorado Statewide Guaranteed Transfer Courses (GT Pathways) or elective courses meet the degree requirements of the four-year college to which you plan to transfer.

To earn an AA degree with Designation in Economics, you must complete at least 60 college-level credits, as described below:

Total Credits: 60

** Refer to CCCS Guaranteed Transfer (GT) - Pathways Courses for a full list of all GT Pathway Courses*

General Education Core Requirements (37 Credits)

(Written) Communication (6 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

Mathematics (5 Credits)

MAT 2410 - Calculus I: GT-MA1

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): MAT 1420.
Formerly MAT 201 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. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

Natural and Physical Sciences (8 Credits)

- Select two GT Pathways Natural and Physical Sciences courses (GT-SC1 **or** GT-SC2), one must be a laboratory (GT-SC1) *

Arts and Humanities (9 Credits)

(Select three courses from any category):

- GT-AH1, GT-AH2, GT-AH3, GT-AH4 *

Social and Behavioral Sciences (6 Credits)

ECO 2001 - Principles of Macroeconomics: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly ECO 201 Focuses on the study of the American economy, stressing the interrelationships among household, business and government sectors. Explores saving and investment decisions, unemployment, inflation, national income accounting, taxing and spending policies, the limits of the market and government, public choice theory, the Federal Reserve System, money and banking, and international trade.

ECO 2002 - Principles of Microeconomics: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly ECO 202 Studies the firm, the nature of cost and how these relate to the economy as a whole. Analyzes economic models of the consumer, perfect competition, monopoly, oligopoly and monopolistic competition. Explores economic issues including market power, population growth, positive and negative externalities, income distribution, poverty and welfare, discrimination, and international economic interdependence.

History (3 Credits)

- Select one GT Pathways History course (GT-HI1) *

Additional Required Courses (3 Credits)

MAT 1260 - Introduction to Statistics: GT-MA1

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 135 Explores and applies data presentation and summarization, introduction to probability concepts and distributions, statistical inference estimation, hypothesis testing, comparison of populations, correlation and regression. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

Electives (20 Credits)

Determined by transferring institution

Transfer Degrees

This degree transfers to the following Colorado public four-year institutions of higher education:

- Adams State University (B.S. Business Administration; Economics emphasis)
- Colorado State University-Fort Collins (B.A. Economics)
- Fort Lewis College – (B.A. Economics; Economics option)
- Metropolitan State University of Denver (B.A. Economics)
- University of Colorado, Boulder (B.A. Economics)
- University of Colorado, Colorado Springs (B.A. Economics)
- University of Colorado, Denver (B.A. Economics)
- University of Northern Colorado (B.A. Economics)
- Western State Colorado University (B.A. Economics)

Electromechanical Technology Certificate

CIP 15.0303

See list of Department Chairs on the Personnel page.

Career Opportunities

The AAS degree in Industrial Electronics Technology prepares you for a career as an electronics technician, an electromechanical technician, a semiconductor manufacturing technician or an electromechanical field service technician.

Program Description

This program develops essential skills for maintaining the complex electromechanical systems found in modern automated manufacturing facilities. After completing a core of courses in math, physics, fundamental analog and digital electronics, robotics and programmable logic controllers, you will branch off into one of two optional tracks. The electromechanical option emphasizes a broader range of skills, including print reading, motors and controls, and mechanical components. In addition to the two AAS degree options, several certificate options are also available.

Program Requirements

Entrance Requirements:

You should have good basic reading, language and math competencies. High school algebra and physics are recommended but not required. Refresher classes are available.

Total Credits: 29

Certificate Requirements

ELT 1206 - Fundamentals of DC/AC

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Corequisite(s): ELT 1207.
Formerly ELT 106 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 - Industrial Electronics

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Corequisite(s): ELT 1206.
Formerly ELT 107 Provides a basic knowledge of generators, motors and the solid state devices and digital techniques used for industrial control applications.

ELT 2252 - Motors and Controls

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly ELT 252 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. 68 contact hours.

ELT 2357 - Sensors and Transducers

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Prerequisite(s): ELT 1001 , ELT 1206.
Formerly ELT 257 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. 68 contact hours.

ELT 2358 - Programmable Logic Controllers

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly ELT 258 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 2089 - Capstone: Automated Systems

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly ELT 289 Enables the student to plan, construct and evaluate a modified flexible manufacturing system using a programmable logic controller, industrial computer, robot and work cell peripherals. Addresses safety and emergency control procedures throughout this course.

MAC 2056 - Industrial Components

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly MAC 256 Covers common mechanical components used on industrial equipment. It is designed to assist maintenance staff in removal, installation and maintenance of plant equipment. It includes safety, fits, threads, bearings, fasteners, and hardware, lubrication, assembly and the use of hand tools.

MTE 2320 - Fluid Power Control

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly MTE 238 Introduces fluid power application in industry and various types of industrial control devices used in modern manufacturing equipment and machinery. Enables the student to produce the graphics required to incorporate these items into a mechanical design.

WEL 1002 - Oxy-fuel Joining Processes

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.5
Formerly WEL 102 Covers Oxy-fuel joining operations.

or

WEL 1024 - Gas Tungsten Arc Welding I

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.5
Formerly WEL 124 Covers Gas Tungsten Arc Welding (GTAW) operations in various positions and joint designs.

Electromechanical Technology, AAS

CIP 15.0303

See list of Department Chairs on the Personnel page.

Career Opportunities

The AAS degree in Industrial Electronics Technology prepares you for a career as an electronics technician, an electromechanical technician, a semiconductor manufacturing technician or an electromechanical field service technician.

Program Description

This program develops essential skills for maintaining the complex electromechanical systems found in modern automated manufacturing facilities. After completing a core of courses in math, physics, fundamental analog and digital electronics, robotics and programmable logic controllers, you will branch off into one of two optional tracks. The electromechanical option emphasizes a broader range of skills, including print reading, motors and controls, and mechanical components. In addition to the two AAS degree options, several certificate options are also available.

Program Requirements

Entrance Requirements:

You should have good basic reading, language and math competencies. High school algebra and physics are recommended but not required. Refresher classes are available.

Total Credits: 64

Degree Requirements

General Education Requirements (15 Credits)

CIS 1010 - Intro to Computing Technology (Device)

Credit(s): 1
Vocational Lab Hour(s): 1

Formerly CIS 110 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.

COM 2063 - Conflict Resolution

Credit(s): 1
Lecture Hour(s): 1
Formerly COM 263 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.

or

- Any 1 credit hour COM class offered in the fall semester

ENG 1031 - Technical Writing I

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 131, then ENG 1020 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.

MAT 1150 - Technical Mathematics

Credit(s): 4
Lecture Hour(s): 4
Formerly MAT 108 Covers material designed for career technical or general studies students who need to study particular mathematical topics. Topics may include measurement, algebra, geometry, trigonometry, graphs and/or finance. These are presented at an introductory level and the emphasis is on applications.

PHY 1105 - Conceptual Physics with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly PHY 105 Focuses on mechanics, heat, properties of matter, electricity and magnetism, light and modern physics. Incorporates laboratory experience. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

SOC 1001 - Introduction to Sociology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 101 Examines the basic concepts, theories and principles of sociology as well as human culture, social groups, and the social issues of age, gender, class and race. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

or

- Any Social/Behavior Science-Arts/Humanities Course

Common Core Requirements (46 Credits)

ELT 1206 - Fundamentals of DC/AC

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Corequisite(s): ELT 1207.
Formerly ELT 106 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 - Industrial Electronics

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Corequisite(s): ELT 1206.
Formerly ELT 107 Provides a basic knowledge of generators, motors and the solid state devices and digital techniques used for industrial control applications.

ELT 2252 - Motors and Controls

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly ELT 252 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. 68 contact hours.

ELT 2254 - Industrial Wiring

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly ELT 254 Focuses on the required and recommended practice for industrial wiring. The National Electrical Code is applied to industrial power and control wiring. Covers specification and installation of wiring, conduit, enclosures and termination components in lecture and applied during lab.

ELT 2357 - Sensors and Transducers

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Prerequisite(s): ELT 1001 , ELT 1206.
Formerly ELT 257 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. 68 contact hours.

ELT 2358 - Programmable Logic Controllers

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly ELT 258 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

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Prerequisite(s): ELT 2358.
Formerly ELT 259 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 2080 - Internship

Credit(s): 1-12
Internship Hour(s): 3-36
Formerly ELT 280 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 2089 - Capstone: Automated Systems

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly ELT 289 Enables the student to plan, construct and evaluate a modified flexible manufacturing system using a programmable logic controller, industrial computer, robot and work cell peripherals. Addresses safety and emergency control procedures throughout this course.

MAC 1005 - Introduction to Machining Technology

Credit(s): 4
Lecture Hour(s): 1.50
Vocational Lab Hour(s): 3.75
Formerly MAC 105 Introduces the student to the changing era of machining technology, emphasizing terminology, referencing and applications related to manufacturing environments. The fundamental use of bench tools, layout procedures, materials, precision measuring tools, machining processes, drilling and cut-off machines and other machining/manufacturing processes will be stressed. Skill competencies and standards will be identified. Use of the Machinery's Handbook will be strictly required and particular competencies may require performance evaluations.

MAC 2056 - Industrial Components

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly MAC 256 Covers common mechanical components used on industrial equipment. It is designed to assist maintenance staff in removal, installation and maintenance of plant equipment. It includes safety, fits, threads, bearings, fasteners, and hardware, lubrication, assembly and the use of hand tools.

MAC 2065 - Mechanical Component II

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly MAC 265 Covers common mechanical components used on industrial equipment. It is designed to assist maintenance staff in removal, installation and maintenance of plant equipment. It includes coupling, vibration, shafting, keys and keyways, belts and chain drives, gears and gear drive, and seals.

MTE 1102 - Safety Manufacturing Environment

Credit(s): 1
Lecture Hour(s): 1
Formerly MTE 105 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 2320 - Fluid Power Control

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly MTE 238 Introduces fluid power application in industry and various types of industrial control devices used in modern manufacturing equipment and machinery. Enables the student to produce the graphics required to incorporate these items into a mechanical design.

WEL 1002 - Oxy-fuel Joining Processes

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.5
Formerly WEL 102 Covers Oxy-fuel joining operations.

or

WEL 1024 - Gas Tungsten Arc Welding I

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.5
Formerly WEL 124 Covers Gas Tungsten Arc Welding (GTAW) operations in various positions and joint designs.

Electives (3 Credits)

(Select one class)

CAD 1101 - Computer Aided Drafting/2D I

Credit(s): 3
Lecture Hour(s): 1

Vocational Lab Hour(s): 3
Formerly CAD 101 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.

CIS 2020 - Fundamentals of Unix

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 220 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.

CNG 1021 - Computer Technician I: A+

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Formerly CNG 121 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+

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Prerequisite(s): CNG 1021 or Department Chair Approval.
Formerly CNG 122 Provides students with an in-depth look at desktop and mobile Operating System support, maintenance and troubleshooting, and an overview of 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 current operating systems, including using common GUI and command line tools, registry editing, system backup and recovery, and advanced troubleshooting. This course helps prepare you for the second CompTIA A+ Exam.

CNG 1024 - Networking I: Network +

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 124 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.

CSC 1019 - Introduction to Programming

Credit(s): 3
Lecture Hour(s): 2

Vocational Lab Hour(s): 1.50
Formerly CSC 119 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.

WEL 1024 - Gas Tungsten Arc Welding I

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.5
Formerly WEL 124 Covers Gas Tungsten Arc Welding (GTAW) operations in various positions and joint designs.

WEL 2050 - Layout and Fabrication

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1002.
Formerly WEL 250 Develops welding and associated skills in metal fabrication.

Elementary Teacher Education, AA (with Transfer Articulation Agreement)

CIP 24.0101

See list of Department Chairs on the Personnel page.

Career Opportunities

The Associate of Arts degree with an emphasis in Elementary Education prepares you to transfer as a junior to a four-year institution in Colorado in order to become an elementary teacher.

Program Description

This program introduces you to the field of education. The course work comprises general education requirements common to all Colorado two- and four-year institutions. It also meets appropriate Colorado Model Content standards for elementary education. Upon transfer, if you have earned the AA degree with an emphasis in Elementary Education, you will be ready to apply for admission to a four-year institution's teacher education program.

Before beginning to take classes, you must meet with PCC's teacher education faculty advisor to plan a course of study and to examine the list of approved credits for each four-year institution in Colorado.

Students interested in majoring in education need to identify the four-year college/university to which they plan to transfer. Each individual institution requires different curriculum electives for graduation.

There are no current statewide articulation agreements in secondary or K-12 education, but students can still effectively pursue these options at PCC.

Emphasis in Elementary Education (Grades K-6)

If you want to teach grades K through 6, you may pursue an Associate of Arts degree with Elementary Education emphasis.

Emphasis in Secondary Education (Grades 7-12)

If you want to teach grades 7 through 12, you should identify the four-year college or university to which you intend to transfer and the appropriate curriculum. You may pursue an Associate of Arts degree with Secondary Education emphasis in one of the following licensure areas:

- English
- Math
- Science
- Social Science (History/Political Science)
- Spanish

Emphasis in K-12 Education

If you would like to teach in the K-12 content areas of art, music or physical education, you should pursue an Associate of Arts degree at PCC. Your advisor will help you select the electives that will be required for your bachelor's degree.

Total Credits: 60

General Education Core Requirements (32 Credits)

Written Communication (6 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

Mathematics (6 Credits)

MAT 1220 - Integrated Math I

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): MAT 0250.
Formerly MAT 155 Engages students in the concepts of school mathematics, including the recognition of numerical and geometric patterns and their application to a variety of mathematical situations; mathematical problem-solving, reasoning, critical thinking, and communication; algebraic thinking, representation, analysis, manipulation, generalizations and extensions. (This course is only offered in the fall semester.)

MAT 1230 - Integrated Math II

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): MAT 1220.
Formerly MAT 156 Furthers MAT 1220concepts and will include fundamentals of probability, statistics and Euclidean geometry. Mathematical problem-solving, reasoning, critical thinking and communication will continue to be an integral part of this sequence. (This course is only offered in the spring semester.)

Natural and Physical Sciences (8 Credits)

SCI 1055 - Integrated Science I

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly SCI 155 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. Course is for elementary education majors only; both SCI 155 & SCI 1056required. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

SCI 1056 - Integrated Science II

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly SCI 156 Examines earth and biological systems, living and nonliving environments, through the application of fundamental energy and matter concepts. These systems and concepts will be explored in hands-on laboratory experiments. Course is for elementary education majors only; both SCI 1055& SCI 156 required. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

Arts and Humanities (3 Credits)

LIT 1015 - Introduction to Literature I: GT-AH2

Credit(s): 3
Lecture Hour(s): 3

Prerequisite(s): ENG 1021.
Formerly LIT 115 Introduces students to fiction, poetry and drama. Emphasizes active and responsive reading. This course is one of the statewide Guaranteed Transfer courses, GT-AH2.

or

LIT 2001 - World Literature to 1600: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): ENG 1021.
Formerly LIT 201 Examines significant writings in world literature from the ancients through the Renaissance. Emphasizes careful readings and understanding of the works and their cultural backgrounds. This course is one of the statewide Guaranteed Transfer courses, GT-AH2.

or

LIT 2002 - World Literature After 1600: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): ENG 1021.
Formerly LIT 202 Examines significant writings in world literature from the 17th century to the present. Emphasizes careful reading and understanding of the works and their cultural backgrounds. This course is one of the statewide Guaranteed Transfer courses, GT-AH2.

or

LIT 2011 - American Literature to Civil War: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): ENG 1021.
Formerly LIT 211 Provides an overview of American literature from the Native American through the 19th-century Romantics. It explores ideas, historical and social contexts, themes and literary characteristics of works in various genres by major writers. This course is one of the statewide Guaranteed Transfer courses, GT-AH2.

Social and Behavioral Sciences (6 Credits)

GEO 1005 - World Regional Geography: GT-SS2

Credit(s): 3
Lecture Hour(s): 3
Formerly GEO 105 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. This is a statewide Guaranteed Transfer course in the GT-SS2 category.

POS 1011 - American Government: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly POS 111 Includes the background of the US Constitution, the philosophy of American government, general principles of the Constitution, federalism and civil liberties. Examines public opinion and citizen participation, political parties, interest groups and the electoral process, and the structure and functions of the national government. This course is one of the statewide Guaranteed Transfer courses, GT-SS1.

History (3 Credits)

HIS 1210 - U.S. History to Reconstruction: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 121 Explores events, trends, peoples, groups, cultures, ideas and institutions in North America and United States history, including the multiple perspectives of gender, class and ethnicity, between the period when Native American Indians were the sole inhabitants of North America and the American Civil War. Focuses on developing, practicing and strengthening the skills historians use while constructing knowledge in the discipline. This course is one of the statewide Guaranteed Transfer courses, GT-HI1

Education Requirements (9 Credits)

Please note: If these credits are not required for the major at a receiving 4-year institution, they will be applied to the bachelor's degree as elective credits towards graduation. Please check with the receiving institution to determine in which way these courses will be applied.

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

EDU 2211 - Introduction to Education

Credit(s): 3
Lecture Hour(s): 3
Formerly EDU 221 Focuses on the historical, social, political, philosophical, cultural and economic forces that shape the United States public school system. Includes current issues of educational reform, technology as it relates to education and considerations related to becoming a teacher in the state of Colorado. Special interest will be paid to the topic of diversity in the K-12 school system.

PSY 2441 - Child Development: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 238 Focuses on the growth and development of the individual from conception through childhood, emphasizing physical, cognitive, emotional and psychosocial factors. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

Other Required Courses (19 Credits)

Determined by transferring institution.

Students must meet with an academic advisor to determine which specific other courses are required pertaining to their emphasis area and transfer institution.

Transfer Degrees

This degree transfers to the following Colorado public four-year institutions of higher education:Adams State University (B.A. Interdisciplinary Studies)

- Colorado Mesa University (B.A. Liberal Arts)
- Colorado Mountain College (B.A. Interdisciplinary Studies)
- Colorado State University-Pueblo (B.S. Liberal Studies)
- Fort Lewis College (B.A. Elementary Education)
- Metropolitan State University of Denver (B.A. Human Development, B.A. Elementary Education)
- University of Colorado, Boulder (B.A. Elementary Education)
- University of Colorado, Colorado Springs (B.A. Inclusive Elementary Education, B.A. Biology, B.A. English Literature, B.A. Geography and Environmental Studies, B.A. History, or B.A. Spanish)
- University of Colorado, Denver (B.A., Elementary Education emphasis; B.A. Education and Human Development – Elementary Education)
- University of Northern Colorado (B.A. Elementary Education)
- Western State Colorado University (B.A. Elementary Education, CLD emphasis)

Emergency Medical Services, AAS

Career Opportunities

See list of Department Chairs on the Personnel page.

The EMS program prepares you for a career in the pre-hospital health care field as an emergency medical care provider at the EMT, EMT-Intermediate or Paramedic level. Career opportunities include providing patient care while working for an ambulance agency, fire service or hospital emergency room. Additional opportunities are in such areas as tactical EMS, critical care transport and ski patrol. If you graduate with an AAS degree you have additional opportunities in administration and management in the pre-hospital field.

Program Description

This program teaches you the knowledge and skills needed for scene management, emergency patient care and transport. This includes scene safety, patient assessment and treatment, medication administration, documentation and patient transport. Upon successful completion of the program, you may take the National Registry exam and, upon passing the exam, you may apply for Colorado State Certification at your level of training.

Program Requirements

Entrance Requirements:

To enroll in the EMT, EMT-Intermediate or Paramedic programs, you must be at least 18 years of age, have all current immunizations and be able to meet the requirements of the PCC EMS Common Functional Abilities Standard. For enrollment into the EMT-Intermediate or Paramedic programs, you must have a current Colorado EMT certification, an EMT IV endorsement, successfully complete all prescreening examinations and prerequisites, and obtain department approval for enrollment into these programs.

The EMS Department is offering an EMT-Intermediate to Paramedic Bridge course for those who are EMT-Intermediates. To qualify for this program you must be an EMT-I99, be eligible for state certification, and pass an EMT-I prescreening exam or be nationally registered as an EMT-I99. For more information on prerequisites and classes, please call the EMS Department.

Note: Clinical agencies used during the program require that you successfully complete a background check and a drug screen, immunization series and CPR training. Please check with a program advisor for any changes to admission requirements.

Total Credits: 69

Semester One

BIO 1111 - General College Biology I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): ENG 1021
Formerly BIO 111 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 2101 - Human Anatomy and Physiology I with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 201 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, nervous and endocrine systems. Includes a mandatory hands-on laboratory experience covering experimentation, microscopy, observations and dissection. This is the first semester of a two-semester sequence.

Semester Two

BIO 2102 - Human Anatomy and Physiology II with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.

Formerly BIO 202 Focuses on the integrated study of the human body and the histology, anatomy, and physiology of the following systems and topics: cardiovascular, hematology, lymphatic and immune, urinary, fluid and electrolyte control, digestive, nutrition, respiratory, reproductive and development. Includes a mandatory hands-on laboratory experience involving experimentation, microscopy, observations and dissection. This is the second semester of a two-semester sequence.

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

MAT 1120 - Math for Clinical Calculations

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 103 Provides a review of general mathematics, introductory algebra and an opportunity to learn systems of measurement and methods of solving problems related to drug dosage and intravenous fluid administration. It is designed for students in the health disciplines. Topics may include algebra, graphs, measurement and conversion between various systems of measurement.

or

MAT 1140 - Career Math

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 107 Covers material designed for career technical or general studies students who need to study particular mathematical topics. Topics may include measurement, algebra, geometry, trigonometry, graphs and/or finance. These are presented on an introductory level and the emphasis is on applications.

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

or

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

Semester Three

EMS 2025 - Fundamentals of Paramedic Practice

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Prerequisite(s): BIO 2101, current Colorado Certification as an EMT with IV endorsement or higher and acceptance into the Paramedic Education Program.
Corequisite(s): EMS 2026.
Formerly EMS 225 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

Credit(s): 2
Vocational Lab Hour(s): 1.50
Vocational Clinic Hour(s): 2

Prerequisite(s): Currently enrolled in EMS 2025, or have successfully completed EMS 2025.
Formerly EMS 226 Complete all pre-course screening requirements, including drug test and criminal background check. Instructor approval. Serves as the lab experience to coincide with EMS 2025topics.

EMS 2029 - Paramedic Pharmacology

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Prerequisite(s): BIO 2101, current Colorado Certification as an EMT with IV endorsement or higher and acceptance into the Paramedic Education Program.
Corequisite(s): EMS 2030.
Formerly EMS 229 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

Credit(s): 2
Vocational Lab Hour(s): 1.50
Vocational Clinic Hour(s): 2

Prerequisite(s): Currently enrolled in EMS 2029, or have successfully completed EMS 2029.
Formerly EMS 230 Teaches the skills necessary for the paramedic to safely and effectively administer emergency medications. Serves as the companion course to Paramedic Pharmacology.

EMS 2033 - Paramedic Medical Emergencies

Credit(s): 4
Lecture Hour(s): 2

Vocational Lab Hour(s): 3
Prerequisite(s): BIO 2101, current Colorado Certification as an EMT with IV endorsement or higher and acceptance into the Paramedic Education Program.
Corequisite(s): EMS 2034.
Formerly EMS 233 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, nontraumatic musculoskeletal disorders and diseases of the eyes, ears, nose and throat.

EMS 2034 - Paramedic Medical Emergencies Lab

Credit(s): 1
Vocational Lab Hour(s): 0.75
Vocational Clinic Hour(s): 1

Prerequisite(s): Completion of pre-course screening including drug screen and criminal background check.
Corequisite(s): EMS 2033.
Formerly EMS 234 Teaches the skills necessary for the paramedic to effectively assess and treat patients with a variety of medical emergencies utilizing skills and simulation scenarios. Serves as the companion course to Paramedic Medical Emergencies.

Semester Four

EMS 2027 - Paramedic Special Considerations

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): BIO 2101, current Colorado Certification as an EMT with IV endorsement or higher and acceptance into the Paramedic Education Program.
Formerly EMS 227 Introduces the paramedic student to concepts in assessing and meeting the emergency care needs of the neonate, pediatric, geriatric and special needs patient. This course focuses on epidemiology, pathophysiology, assessment and treatment of these patient groups. Common medical and traumatic presentations are addressed. Relevant psychosocial and ethno cultural concepts and legal and ethical implications are integrated throughout.

EMS 2028 - Paramedic Special Considerations Lab

Credit(s): 2
Vocational Lab Hour(s): 1.50
Vocational Clinic Hour(s): 2

Prerequisite(s): Completion of pre-course screening including drug screen and criminal background check.
Corequisite(s): EMS 2027.
Formerly EMS 228 Teaches the skills necessary for the paramedic to effectively assess and treat neonatal, pediatric, geriatric and special needs patients utilizing skills and simulation scenarios. Serves as the companion course to Paramedic Special Considerations.

EMS 2031 - Paramedic Cardiology

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): BIO 2101, current Colorado Certification as an EMT with IV endorsement or higher and acceptance into the Paramedic Education Program.
Formerly EMS 231 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

Credit(s): 1
Vocational Lab Hour(s): 0.75
Vocational Clinic Hour(s): 1

Prerequisite(s): Completion of pre-course screening including drug screen and criminal background check.
Corequisite(s): EMS 2031.
Formerly EMS 232 Teaches the skills necessary for the paramedic to effectively assess and treat patients presenting with cardiovascular emergencies utilizing skills and simulation scenarios. Serves as the companion course to Paramedic Cardiology.

EMS 2036 - Paramedic Trauma Emergencies Lab

Credit(s): 1
Vocational Lab Hour(s): 0.75
Vocational Clinic Hour(s): 1

Prerequisite(s): Completion of pre-course screening including drug screen and criminal background check.
Corequisite(s): EMS 2035.
Formerly EMS 236 Teaches the skills necessary for the paramedic to effectively assess and treat patients with a variety of traumatic emergencies utilizing skills and simulation scenarios. Serves as the companion lab course for Paramedic Trauma Emergencies.

EMS 2037 - Paramedic Internship Preparatory

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Prerequisite(s): EMS 2025, EMS 2027, EMS 2029, EMS 2031, EMS 2033, EMS 2035
Formerly EMS 237 Reviews concepts and techniques used in the prehospital setting.

Semester Five

EMS 2080 - Paramedic Internship I

Credit(s): 6
Internship Hour(s): 18
Prerequisite(s): EMS 2037.
Formerly EMS 280 Provides the first course of a proctored Internship to develop paramedic skills in a field setting. The student will gain experience in scene management as a member of an ALS team. The student will also apply advanced life support patient care knowledge to the assessment and treatment of patients.

PSY 2440 - Human Growth and Development: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 235 Examines human development from conception through death, emphasizing physical, cognitive, emotional and psychosocial factors. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

Semester Six

EMS 2081 - Paramedic Internship II

Credit(s): 6
Internship Hour(s): 18
Prerequisite(s): EMS 2080.
Formerly EMS 281 Provides the second course of a proctored Internship to develop paramedic skills in a field setting. The student will gain experience in scene management as a leader of the ALS team. The student will also apply advanced life support patient care knowledge to the assessment and treatment of patients.

Emergency Medical Technician Mini-Certificate

CIP 51.0904

See list of Department Chairs on the Personnel page.

Career Opportunities

The EMS program prepares you for a career in the pre-hospital health care field as an emergency medical care provider at the EMT, EMT-Intermediate or Paramedic level. Career opportunities include providing patient care while working for an ambulance agency, fire service or hospital emergency room. Additional opportunities are in such areas as tactical EMS, critical care transport and ski patrol. If you graduate with an AAS degree you have additional opportunities in administration and management in the pre-hospital field.

Program Description

This program teaches you the knowledge and skills needed for scene management, emergency patient care and transport. This includes scene safety, patient assessment and treatment, medication administration, documentation and patient transport. Upon successful completion of the program, you may take the National Registry exam and, upon passing the exam, you may apply for Colorado State Certification at your level of training.

Program Requirements

Entrance Requirements:

To enroll in the EMT, EMT-Intermediate or Paramedic programs, you must be at least 18 years of age, have all current immunizations and be able to meet the requirements of the PCC EMS Common Functional Abilities Standard. For enrollment into the EMT-Intermediate or Paramedic programs, you must have a current Colorado EMT certification, an

EMT IV endorsement, successfully complete all prescreening examinations and prerequisites, and obtain department approval for enrollment into these programs.

The EMS Department is offering an EMT-Intermediate to Paramedic Bridge course for those who are EMT-Intermediates. To qualify for this program you must be an EMT-I99, be eligible for state certification, and pass an EMT-I prescreening exam or be nationally registered as an EMT-I99. For more information on prerequisites and classes, please call the EMS Department.

Note: Clinical agencies used during the program require that you successfully complete a background check and a drug screen, immunization series and CPR training. Please check with a program advisor for any changes to admission requirements.

Total Credits: 11-12

Emergency Medical Technician

Total Credits: 12

Certificate Requirements

EMS 1021 - EMT Fundamentals

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly EMS 121 Introduces the Emergency Medical Technician (EMT) student to prehospital 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

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Prerequisite(s): EMS 1021. EMS 1070.
Formerly EMS 122 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

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): EMS 1021.
Formerly EMS 123 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

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): EMS 1021.
Formerly EMS 124 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 1070 - EMT Clinical

Credit(s): 1
Vocational Lab Hour(s): 1.50
Formerly EMS 170 Provides the EMT student with the clinical experience required for initial certification and some renewal processes.

Advanced Emergency Medical Technician

Total Credits: 11

Certificate Requirements

EMS 1127 - AEMT Special Considerations

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Prerequisite(s): Acceptance into the AEMT Program.
Formerly EMS 127 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 - AEMT Pharmacology

Credit(s): 1
Lecture Hour(s): 0.50
Vocational Lab Hour(s): 0.75
Prerequisite(s): Acceptance into the AEMT Program.
Formerly EMS 129 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 1125 - AEMT Fundamentals

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): Acceptance into the AEMT Program.
Formerly EMS 131 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 1133 - AEMT Medical Emergencies

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): Acceptance into the AEMT Program.
Formerly EMS 133 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 - AEMT Trauma Emergencies

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): Acceptance into the AEMT Program.
Formerly EMS 135 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 1071 - AEMT Clinical Internship

Credit(s): 2
Internship Hour(s): 6
Prerequisite(s): Acceptance into the AEMT Program.
Formerly EMS 171 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.

EMT Enhanced Certificate

See list of Department Chairs on the Personnel page.

Career Opportunities

The EMS program prepares you for a career in the pre-hospital health care field as an emergency medical care provider at the EMT, EMT-Intermediate or Paramedic level. Career opportunities include providing patient care while working for an ambulance agency, fire service or hospital emergency room. Additional opportunities are in such areas as tactical EMS, critical care transport and ski patrol. If you graduate with an AAS degree you have additional opportunities in administration and management in the pre-hospital field.

Program Requirements

Entrance Requirements:

To enroll in all EMS programs, you msut be at least 18 years of age, have all current immunizations, pass a background check and a drug screen and be able to meet the requirements of the Functional EMS Job Description.

Total Credits: 18

Prerequisite Courses for Program Admission Credits: 18

Student must have a current Health Care Professional CPR card, successful completions of CCR 092, qualfiying assessment scores

Certificate Requirements

First Semester (12 credits)

EMS 1021 - EMT Fundamentals

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly EMS 121 Introduces the Emergency Medical Technician (EMT) student to prehospital 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

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Prerequisite(s): EMS 1021. EMS 1070.
Formerly EMS 122 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

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): EMS 1021.
Formerly EMS 123 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

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): EMS 1021.
Formerly EMS 124 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 1070 - EMT Clinical

Credit(s): 1
Vocational Lab Hour(s): 1.50
Formerly EMS 170 Provides the EMT student with the clinical experience required for initial certification and some renewal processes.

Second Semester (6 credits)

HPR 1050 - Basic EKG Interpretation

Credit(s): 2
Lecture Hour(s): 2
Formerly HPR 190 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.

EMS 1132 - EMS Intravenous / Intraosseous Therapy

Credit(s): 2
Lecture Hour(s): .25
Vocational Lab Hour(s): 1.9
Vocational Clinic Hour(s): 1

Prerequisite(s): Current Colorado Certification as EMT or Department Chair Approval
Formerly EMS 132 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 1080 - EMT Clinical Internship

Credit(s): 2
Internship Hour(s): 6

Formerly EMS 180 Provides the Emergency Medical Technician (EMT) with a supervised clinical learning experience that goes beyond the initial EMT requirements for the State of Colorado Department of Health. Enables the student to work with an assigned preceptor for 90 hours of clinical experience to develop an understanding of the role and responsibilities of the EMT-Basic.

Engine and Electrical Mini-Certificate

CIP 47.0604

See list of Department Chairs on the Personnel page.

To enter the automotive collision or automotive service program, you must successfully complete any CCR course or qualifying placement score or exemption.

Entrance into the program involves a screening and selection process. You can obtain an application and information by calling the Automotive Department at 719.549.3354.

Career Opportunities

The Automotive Service Technology program prepares you for a range of careers in automotive maintenance and repair.

Program Description

This program teaches you to perform general maintenance, as well as to diagnose and repair electrical, engine, transmission, suspension, brake and air conditioning systems. The program has met the National Institute for Automotive Technicians Education Foundation (NATEF) accreditation in the areas of Automatic Transmissions & Transaxles, Brakes, Electrical/Electronic Systems, Engine Performance, Engine Repair, Heating & Air Conditioning and Suspension & Steering. We also offer Automotive Services courses for students in the Concurrent Enrollment Program at Pueblo Community College, Cañon City High School, and PCC Southwest Campus in Mancos. We encourage you to take the Automotive Service Excellence (ASE) certification tests while enrolled at PCC. We offer a paid apprenticeship for high school students through the Automotive Youth Education System (AYES).

As a student in the program, you will become a member of the Skills USA club and participate in a number of leadership activities and competitions.

Program Requirements

Entrance Requirements:
Admissions to the Automotive Service Technology program is by application only. For admission requirements, please go to MT-129 and see the department chair.

Total Credits: 16

Certificate Requirements

ASE 1020 - Basic Auto Electricity

Credit(s): 2
Lecture Hour(s): 1.5
Vocational Lab Hour(s): 0.75
Formerly ASE 120 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 and Charging System

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 123 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

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 130 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 and Repair

Credit(s): 2
Lecture Hour(s): 1.50
Vocational Lab Hour(s): 0.75
Formerly ASE 132 Focuses on lecture and related laboratory experiences in the diagnosis, service, adjustments and repair of various automotive ignition systems.

ASE 1061 - Engine Repair & Rebuild

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly ASE 161 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 1062 - Automotive Engine Repair

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 162 Covers engine sealing requirements and repair procedures including engine fasteners, bolt torque, repair of fasteners, cooling system, and basic engine maintenance. This course meets AST/MAST requirements.

ASE 2060 - Advanced Engine Diagnosis

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50

Formerly ASE 260 Focuses on lecture and related laboratory experiences in the diagnosis and necessary corrective actions of automotive engine performance factors related to customer vehicles.

ASE 2182 - Internship: General (Summer)

Credit(s): 1
Internship Hour(s): 3
Formerly ASE 282 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 (FAST) Fundamental Automotive Systems Training (Chrysler) or others as required by the program track.

English, Literature Emphasis, AA (with Designation)

CIP 24.0101

See list of Department Chairs on the Personnel page.

Career Opportunities

The Associate of Arts (AA) Degree with Designation in English prepares the student to transfer as a junior to a four-year institution in Colorado in order to pursue a Bachelor of Arts (BA) degree in English. Students who opt for the Bachelor of Arts in English can choose to work in a wide variety of occupational fields including teaching, journalism, law, publishing, medicine and the fine arts. Once a BA is completed, students may pursue a higher or graduate degree in English, if interested.

Program Description

This program introduces the student to the discipline of English and includes the course work to meet general education requirements that are common to all Colorado four-year institutions. Upon transfer, students from Pueblo Community College who have earned the Associate of Arts (AA) Degree with Designation in English will be ready to complete the last half of a BA in English at a four-year institution.

Program Requirements

Refer to the course requirements listed below. Some courses may have prerequisites of lower level classes or assessment scores. Refer to the course descriptions for these prerequisites.

Total Credits: 60

** Refer to CCCS Guaranteed Transfer (GT) - Pathways Courses for a full list of all GT Pathway Courses*

General Education Core Requirements (34 Credits)

Written Communication (6 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

or

- ENG 1022 - English Composition II: GT-CP2 **Credit(s): 3 and**

ENG 2001 - Composition III: Writing for Public Discourse GT-CO3

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of ENG 1022 with a grade of C or better.
Formerly ENG 201 Provides students with skills necessary to enter into higher-level undergraduate academic discourse or professional workplace writing. ENG 201 extends students' rhetorical knowledge and develops critical reading, thinking and writing strategies in multiple specialized areas of discourse beyond what they encounter in ENG 1022. In ENG 201, students deepen their rhetorical and writing skills by learning to analyze, synthesize and summarize complex texts and incorporate this information into specific writing conventions for a defined discipline. As a more advanced composition course, ENG 201 provides interested students with the opportunity to continue their exploration of expository writing with the added benefit of learning to write for distinct audiences (format, language, level of specificity, length and documentation style). Students will also learn effective editing and revising techniques, discipline-specific writing strategies, and how to extend their mastery of rhetorical strategies. While ENG 201 may be taught with the focus in a variety of disciplines (science writing, gender studies, literary criticism, writing in the humanities, business writing, political geography, philosophy, and so on), every discipline will allow students the opportunity to learn how to communicate with specialized audiences and adapt content to the needs of varying rhetorical situations.

Mathematics (3 Credits)

- Select one GT Pathways Mathematics course (GT- MA1) *, prefer MAT 1240 - Mathematics for the Liberal Arts: GT-MA1

Natural and Physical Sciences (7 Credits)

- Select two GT Pathways Natural and Physical Sciences courses (GT-SC1) *. At least one of these courses must include a laboratory component (GT-SC1) *.

Arts and Humanities (9 Credits)

Note: Courses from the Literature and Humanities category (GT-AH2) may **not** be used to meet this requirement.

- Select three GT Pathways Arts and Humanities courses

Social and Behavioral Sciences (6 Credits)

- Select two GT Pathways Social and Behavioral courses from any category (GT-SS1, GT-SS2, GT-SS3) *

History (3 Credits)

- Select one GT Pathways History Course (GT-HI1) *

Additional Required Courses (18 Credits)

Verbal Communication (3 Credits)

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

or

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

Select five GT Pathways Arts and Humanities Literature (LIT) courses within the GT-AH2 category (15 Credits)

Note: Students are required to take a total of five (5) LIT courses (15 credits), four (4) of which must be at the 200-level. Please consult with your receiving institution regarding best choices for literature courses.

Electives (8 Credits)

Determined by transferring institution.

Recommended elective:

ENG 2021 - Creative Writing I

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 221 Teaches techniques for creative writing. Explores imaginative uses of language through creative genres (fiction, poetry, literary nonfiction) with emphasis on the student's own unique style, subject matter and needs.

Transfer Degrees

This degree transfers to the following Colorado Public Four-Year institutions of higher education:

- Adams State University (B.A. English, Liberal Arts emphasis)
- Colorado Mesa University (B.A. English, Literature concentration)
- Colorado State University-Fort Collins (B.A. English)
- Colorado State University-Pueblo (B.A. English)
- Ft. Lewis College (B.A. English, General Option)
- Metropolitan State University of Denver (B.A. English)
- University of Colorado, Boulder (B.A. English)
- University of Colorado, Colorado Springs (B.A. English)
- University of Colorado, Denver (B.A. English, Literature emphasis)
- University of Northern Colorado (B.A. English, Liberal Arts emphasis)
- Western State Colorado University (B.A. English)

Esthetician Certificate

CIP 12.0409

See list of Department Chairs on the Personnel page.

Career Opportunities

The Cosmetology program prepares students for careers in cosmetology, hairstyling, esthetics (facial care) and manicure (nail care). Students will receive the specialized training necessary to be prepared for a successful career with limitless opportunities for both men and women. Students learn the skills to keep pace with the fashion world and stand ready to meet the constantly changing demands of one of today's largest-growing service industries. Those opportunities can provide both part-time and full-time employment in specialty areas.

Program Description

The Cosmetology program teaches students job entry skills, customer communication and shop procedures. Instruction includes professional ethics, bacteriology, shampoo and rinses, color theory, hair coloring techniques, permanent waving, hairstyling, hair cutting, manicures, pedicures, facials, makeup, OSHA regulations, sanitation, safety and Colorado laws. Clinical practice involves working on the public under supervision and parallels, as close as possible, actual shop procedures in order to prepare students for working in the field.

- Esthetician certificate – This certificate program provides training in facial care.

Total Credits: 20

Certificate Requirements

Core Requirements (20 Credits)

COS 1050 - Laws, Rules and Regulations

Credit(s): 1
Lecture Hour(s): 1
Formerly COS 150 Provides instruction on the laws, rules and regulations and how they govern the cosmetology and barber industry, as well as the effects they have on the student, licensed individual, salons and school owners.

COS 2050 - Management, Ethics, Interpersonal Skills & Salesmanship

Credit(s): 1
Lecture Hour(s): 1
Formerly COS 250 Emphasizes the importance of salon management and the knowledge and skills necessary to build a successful business. Focuses on the importance of interpersonal skills and basic techniques in salesmanship and customer services. Integrates job readiness skills and professional ethics.

EST 1001 - Introduction to Sterilization, Sanitation & Safety

Credit(s): 2
Vocational Clinic Hour(s): 4

Formerly EST 101 Introduces the various methods of sterilization, sanitation and safety as used today in the industry. Classroom study of bacteriology and the terminology dealing with sterilization and sanitation.

EST 1060 - Introduction to Disinfection, Sanitation & Safety

Credit(s): 2
Vocational Clinic Hour(s): 4

Formerly EST 160 Introduces the various methods of disinfection, sanitation and safety as used today in the industry. Classroom study of bacteriology and the terminology dealing with disinfection, sanitation and safety.

EST 1061 - Intermediate Disinfection, Sanitation & Safety

Credit(s): 3
Vocational Clinic Hour(s): 6

Formerly EST 161 Presents theory and the daily utilization and practice of the proper methods of disinfection, sanitation, and safety. Procedures as related to all phases of the industry. Training is provided in a supervised (clinical) setting.

EST 1010 - Introduction to Facials and Skin Care

Credit(s): 3
Vocational Clinic Hour(s): 6

Formerly EST 110 Provides a basic understanding of massage manipulations when providing facials, the study of skin in both theory and practical applications, and benefits derived from proper facial and good skin care routines. Training is conducted in a classroom or lab setting using mannequins or models.

EST 1011 - Intermediate Facials & Skin Care

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): EST 1010.
Formerly EST 111 Covers theory and practical application pertaining to anatomy, skin disorders, skin types and facial shapes. Students help patrons to select the proper skin care treatment. Practical and theory application can be done in specialized classes or supervised salon (clinical) setting using models or customer service.

EST 2010 - Advanced Massage & Skin Care

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): EST 1011.
Formerly EST 210 Provides the student with advanced techniques in massage, skin care and lash/brow tinting. Theory and practical procedures ready the student for employment. Instruction is provided in specialized classes or in a supervised salon (clinical) setting. Student preparation for State Board Licensing Examination.

EST 2011 - Facial Make-up

Credit(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): EST 1010.
Formerly EST 211 Provides instruction on cosmetics and their functions. The importance of color theory, facial types and skin tones as they relate to facial makeup. Instruction from the basic makeup application to the corrective makeup procedure is taught. Disinfection and sanitation is taught as it pertains to all aspects of makeup.

EST 2012 - Hair Removal

Credit(s): 3
Vocational Clinic Hour(s): 6

Prerequisite(s): EST 1010.
Formerly EST 212 Provides in-depth study and practice of hair removal and the practice of patron protection and safety. Training for general waxing and body waxing procedures are provided. Demonstration of disinfection and sanitation as it pertains to Colorado rules and regulations will be practiced.

Fire Investigator I Mini-Certificate

CIP 43.0203

See list of Department Chairs on the Personnel page.

Career Opportunities

The Fire Science Technology program prepares students for entry-level positions in the fire service industry.

Certificate Program Description

The Fire Science Technology Certificate Programs vary in semester hours. These programs are designed to prepare individuals who have little or no firefighting experience for entry-level positions in the fire service industry, as well as special training for advancement for those already in the fire service. Most of the classes in the certificates related to structural firefighting can be applied to the Fire Science Associate of Applied Science Degree offered by Pueblo Community College.

Program Requirements

Entrance Requirements:

Successful completion of any CCR course or qualifying placement score or exemption.

Graduation Requirements:

The Fire Science Technology Certificate Program requires 21 credits for completion.

A grade of "C" or higher is required in each course

Total Credits: 9

Certificate Requirements

ALSO SEE WILDLAND FIREFIGHTER

FST 2005 - Fire Investigation I

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 205 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 firesetter, and types of fire causes.

FST 2051 - Legal Aspects of Fire Service

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 251 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 2052 - Fire Investigation II

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 252 Provides the student with advanced technical knowledge on rule of law, fire scene analysis, fire behavior, evidence collection and preservation, scene documentation, case preparation, and testifying.

Fire Officer I Mini-Certificate

CIP 43.0203

See list of Department Chairs on the Personnel page.

Career Opportunities

The Fire Science Technology program prepares students for entry-level positions in the fire service industry.

Certificate Program Description

The Fire Science Technology Certificate Programs vary in semester hours. These programs are designed to prepare individuals who have little or no firefighting experience for entry-level positions in the fire service industry, as well as special training for advancement for those already in the fire service. Most of the classes in the certificates related to structural firefighting can be applied to the Fire Science Associate of Applied Science Degree offered by Pueblo Community College.

Program Requirements

Entrance Requirements:

Successful completion of any CCR course or qualifying placement score or exemption.

Graduation Requirements:

The Fire Science Technology Certificate Program requires 21 credits for completion.

A grade of "C" or higher is required in each course.

Total Credits: 12

Certificate Requirements

ALSO SEE WILDLAND FIREFIGHTER

FST 2001 - Instructional Methodology

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 201 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 2006 - Fire Co Superv and Leadership

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 206 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 2053 - NIMS

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): FST 2002.
Formerly FST 253 Focuses on the National Incident Management System, including fire ground management and resource management. Multiagency coordination systems are discussed; organization preparedness for large scale emergencies, communication and information are addressed. The course concludes with a review of the National Response Plan.

FST 2055 - Fire Service Management

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 255 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.

Fire Prevention & Public Education Mini-Certificate

CIP 43.0203

Career Opportunities

The Fire Science Technology program prepares students for entry-level positions in the fire service industry.

Certificate Program Description

The Fire Science Technology Certificate Programs vary in semester hours. These programs are designed to prepare individuals who have little or no firefighting experience for entry-level positions in the fire service industry, as well as special training for advancement for those already in the fire service. Most of the classes in the certificates related to structural firefighting can be applied to the Fire Science Associate of Applied Science Degree offered by Pueblo Community College.

Program Requirements

Entrance Requirements:

Successful completion of any CCR course or qualifying placement score or exemption.

Graduation Requirements:

The Fire Science Technology Certificate Program requires 21 credits for completion.

A grade of "C" or higher is required in each course.

Total Credits: 14

Certificate Requirements

ALSO SEE WILDLAND FIREFIGHTER

FST 1006 - Fire Prevention

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 106 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 1050 - Introduction to Fire Prevention Education

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 150 Focuses on conducting prevention and education needs assessment, targeting audiences; development and delivery of prevention and education programs. Includes methods of conducting fire prevention and safety inspections.

FST 2004 - Principles of Code Enforcement

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 204 To provide the students with the fundamental knowledge of the role of code enforcement in a comprehensive fire prevention program.

FST 2008 - Fire Plans Review and Acceptance Testing

Credit(s): 2
Lecture Hour(s): 2
Formerly FST 208 Instructs the student on how to review building plans submitted to a fire department, acceptance testing procedures, implementation of a fire inspection program, and how to deal effectively with the public for fire prevention and education activities.

FST 2009 - Fire Protection Systems

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 209 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.

Fire Science Technology, AAS

See list of Department Chairs on the Personnel page.

Program Description

The Fire Science Technology is an Associate of Applied Science (AAS) degree designed to meet the needs of fire protection and safety personnel. The program will prepare you for a career in fire science or a related field. Courses are offered through traditional classroom instruction, online, independent study, and hands on training.

Career Information.

The Fire Science Technology program prepares students for entry level positions in the fire service industry. Students **are not** required to take EMT courses as a prerequisites to the Fire Science AAS degree.

Total Credits: 60

General Education Requirements (15 credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3

Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

ENG 1031 - Technical Writing I

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 131, then ENG 1020 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.

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

MAT 1140 - Career Math

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 107 Covers material designed for career technical or general studies students who need to study particular mathematical topics. Topics may include measurement, algebra, geometry, trigonometry, graphs and/or finance. These are presented on an introductory level and the emphasis is on applications.

MAT 1340 - College Algebra: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 0300.
Formerly MAT 121 Explores topics including intermediate algebra, equations, and inequalities, functions and their graphs, exponential and logarithmic functions, linear and nonlinear systems, selection of topics from among graphing of the conic sections, introduction to sequences and series permutations and combinations, the binomial theorem and theory of equations. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

POS 1011 - American Government: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly POS 111 Includes the background of the US Constitution, the philosophy of American government, general principles of the Constitution, federalism and civil liberties. Examines public opinion and citizen participation, political parties, interest groups and the electoral process, and the structure and functions of the national government. This course is one of the statewide Guaranteed Transfer courses, GT-SS1.

POS 1025 - American State and Local Government: GT-SS1

Credit(s): 3
Lecture Hour(s): 3

Formerly POS 125 Emphasizes 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. This course is one of the statewide Guaranteed Transfer courses, GT-SS1.

Technical Courses (33 credits)

FST 1000 - Firefighter I

Credit(s): 9
Lecture Hour(s): 6
Vocational Lab Hour(s): 4.50
Formerly FST 100 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 using IFSTA Essentials.

FST 1001 - Firefighter II

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Prerequisite(s): FST 1000.
Formerly FST 101 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

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 102 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

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 103 Explores the theories and fundamentals of how and why fires start, spread and are controlled.

FST 1005 - Building Construction for Fire Protection

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 105 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

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 106 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)

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 107 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

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 109 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 2002 - Strategy and Tactics

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 202 Provides an in-depth analysis of the principles of fire control through utilization of personnel, equipment, and extinguishing agents on the fire ground.

FST 2009 - Fire Protection Systems

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 209 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.

Technical Elective Courses (12 credits)

Select up to 12 hours from any of the following: FST, FSW or EMS courses

Firefighter Academy Structural Mini-Certificate

CIP 43.0203

See list of Department Chairs on the Personnel page.

Career Opportunities

The Fire Science Technology program prepares students for entry-level positions in the fire service industry.

Certificate Program Description

The Fire Science Technology Certificate Programs vary in semester hours. These programs are designed to prepare individuals who have little or no firefighting experience for entry-level positions in the fire service industry, as well as special training for advancement for those already in the fire service. Most of the classes in the certificates related to structural firefighting can be applied to the Fire Science Associate of Applied Science Degree offered by Pueblo Community College.

Program Requirements

Entrance Requirements:

Successful completion of any CCR course or qualifying placement score or exemption.

Graduation Requirements:

The Fire Science Technology Certificate Program requires 21 credits for completion.

A grade of "C" or higher is required in each course

Total Credits: 16

Certificate Requirements

ALSO SEE WILDLAND FIREFIGHTER

FST 1000 - Firefighter I

Credit(s): 9
Lecture Hour(s): 6
Vocational Lab Hour(s): 4.50
Formerly FST 100 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 using IFSTA Essentials.

FST 1007 - Hazardous Materials Operations (Level I)

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 107 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 1060 - Candidate Physical Abilities Test Prep

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly FST 160 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 1075 - Special Topics

Credit(s): 0-12
Formerly FST 175 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

Firefighter I Mini-Certificate

CIP 43.0203

See list of Department Chairs on the Personnel page.

Career Opportunities

The Fire Science Technology program prepares students for entry-level positions in the fire service industry.

Certificate Program Description

The Fire Science Technology Certificate Programs vary in semester hours. These programs are designed to prepare individuals who have little or no firefighting experience for entry-level positions in the fire service industry, as well as special training for advancement for those already in the fire service. Most of the classes in the certificates related to structural firefighting can be applied to the Fire Science Associate of Applied Science Degree offered by Pueblo Community College.

Program Requirements

Entrance Requirements:

Successful completion of any CCR course or qualifying placement score or exemption.

Graduation Requirements:

The Fire Science Technology Certificate Program requires 21 credits for completion.

A grade of "C" or higher is required in each course

Total Credits: 12

Certificate Requirements

ALSO SEE WILDLAND FIREFIGHTER

FST 1000 - Firefighter I

Credit(s): 9
Lecture Hour(s): 6
Vocational Lab Hour(s): 4.50
Formerly FST 100 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 using IFSTA Essentials.

FST 1007 - Hazardous Materials Operations (Level I)

Credit(s): 3
Lecture Hour(s): 3
Formerly FST 107 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.

First Year Nursing - PN Certificate Option

CIP 51.3801

See list of Department Chairs on the Personnel page.

Total Credits: 54

Certificate Requirements

General Education Requirements (18 Credits)

AAA 1009 - Advanced Academic Achievement

Credit(s): 3
Lecture Hour(s): 3
Formerly AAA 109 Examines theories and practices associated with successful learning to enhance college success. Recommended for new and returning students, this course study areas including education and career planning, effective communication, personal management, critical and creative thinking, development of community and awareness of diversity, leadership, and techniques for successful academic performance.

BIO 1111 - General College Biology I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): ENG 1021
Formerly BIO 111 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.

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

PSY 2440 - Human Growth and Development: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 235 Examines human development from conception through death, emphasizing physical, cognitive, emotional and psychosocial factors. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

BIO 2101 - Human Anatomy and Physiology I with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 201 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, nervous and endocrine systems. Includes a mandatory hands-on laboratory experience covering experimentation, microscopy, observations and dissection. This is the first semester of a two-semester sequence.

BIO 2102 - Human Anatomy and Physiology II with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 202 Focuses on the integrated study of the human body and the histology, anatomy, and physiology of the following systems and topics: cardiovascular, hematology, lymphatic and immune, urinary, fluid and electrolyte control, digestive, nutrition, respiratory, reproductive and development. Includes a mandatory hands-on laboratory experience involving experimentation, microscopy, observations and dissection. This is the second semester of a two-semester sequence.

BIO 2116 - Human Pathophysiology

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): BIO 2101, BIO 2102

Formerly BIO 216 Focuses on the alterations in physiological, cellular and biochemical processes, the associated homeostatic response, and the manifestations of disease. Prior knowledge of cellular biology, anatomy and physiology is essential for the study of pathophysiology.

Core Curriculum Requirements – 1st year (33 Credits)

Semester 1 – Fall

NUR 1009 - Fundamentals of Nursing

Credit(s): 6
Lecture Hour(s): 2
Vocational Lab Hour(s): 6
Vocational Clinic Hour(s): 6

Prerequisite(s): Admission to Nursing or Psychiatric Technician programs.
Corequisite(s): Nursing: NUR 1012, HPR 1010, MAT 1120. Psych Tech: NUR 1012.
Formerly NUR 109 Introduces the fundamental concepts necessary for safe, patient-centered nursing care to a diverse patient population while integrating legal and ethical responsibilities of the nurse. Introduces caring, critical thinking, the nursing process, quality improvement and communication used when interacting with patients and members of the interdisciplinary team, and relates evidence-based nursing practice. Application of knowledge and skills occurs in the nursing skills laboratory and a variety of clinical settings providing care to stable patients with common health alterations.

NUR 1012 - Basic Concepts of Pharmacology

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Admission to Nursing or Psychiatric Technician programs.
Corequisite(s): Nursing: NUR 1009, HPR 1010, MAT 1120; Psych Tech: NUR 1009.
Formerly NUR 112 Overview of the basic principles of pharmacology including major drug classifications and prototypes of commonly used medications. Principles of medication administration include aspects of best practice for safe, quality, patient-centered care. Central points include safety, quality improvement factors in the administration of medications, patient teaching and variations encountered when administering medications to diverse patient populations across the lifespan.

- NUR 175 - ST - Introduction to Nursing **Credit(s): 3**

Semester 2 – Spring

NUR 1006 - Med-Surg Nursing Concepts

Credit(s): 7
Lecture Hour(s): 3.40
Vocational Lab Hour(s): 0.90
Vocational Clinic Hour(s): 9.90

Prerequisite(s): Admission to Nursing Program and completion of preceding required program course work or permission of the program director.
Corequisite(s): NUR 1050 or permission of the program director.
Formerly NUR 106 NUR106 is the first medical/surgical nursing course. Building on NUR 1009, this course provides for the acquisition of basic medical/surgical nursing theory, as well as application of mental health concepts,

communication, collaboration, caring, and critical thinking/clinical reasoning necessary for safe, patient-centered care to a developmentally and culturally diverse adult patient population experiencing various medical/surgical interventions. Incorporates evidence-based practice, quality improvement, professional standards, and legal and ethical responsibilities of the nurse. Application of knowledge and skills occurs in the nursing skills laboratory and a variety of clinical settings.

NUR 1050 - Maternal-Child Nursing

Credit(s): 6
Lecture Hour(s): 3.30
Vocational Lab Hour(s): 2.10
Vocational Clinic Hour(s): 6

Prerequisite(s): Admission to Nursing program and completion of preceding required program course work or permission of the program director.
Corequisite(s): NUR 1006 or permission of the program director.
Formerly NUR 150 Nursing 150 provides for the acquisition of maternal/child nursing theory, as well as application of mental health concepts, communication, collaboration, caring, and critical thinking/clinical reasoning necessary for safe, family-centered nursing care to childbearing families and children that is developmentally and culturally appropriate. Incorporates evidence-based practice, standards of practice, quality improvement, and legal and ethical responsibilities of the nurse. Application of knowledge and skills occurs in the nursing skills laboratory and in a variety of maternal/child and pediatric clinical settings.

Semester Summer (Optional for Certificate)

NUR 1069 - Transition into Practical Nursing

Credit(s): 4
Lecture Hour(s): 2
Vocational Clinic Hour(s): 6

Prerequisite(s): Admission to Nursing program and completion of preceding required program course work or program director permission.
Formerly NUR 169 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.

Fitter or Combination Welder Certificate

CIP 48.0508

See list of Department Chairs on the Personnel page.

Program Description

Welders must be highly skilled and knowledgeable in a variety of welding processes to meet the challenges of advanced technology and new materials. Welding is not just a trade; it's a tool for many trades requiring a high level of training and technical knowledge. The Welding Technology program helps students develop skills through classroom studies and hands-on experience under close supervised instruction. Students learn about structural steel fabrication, layout work and pipe welding following detailed blueprints.

Total Credits: 20

Certificate Requirements

Core Requirements (20 Credits)

WEL 1024 - Gas Tungsten Arc Welding I

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.5
Formerly WEL 124 Covers Gas Tungsten Arc Welding (GTAW) operations in various positions and joint designs.

WEL 1025 - Introduction to Gas Metal Arc Welding

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1024.
Formerly WEL 125 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 2024 - Gas Tungsten Arc Welding II

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.5
Prerequisite(s): WEL 1024, WEL 1025.
Formerly WEL 224 Covers Gas Tungsten Arc Welding (GTAW) operations utilizing a variety of base metals and advanced joint designs.

WEL 2025 - Advanced Gas Metal Arc Welding

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1024, WEL 1025.
Formerly WEL 225 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 2050 - Layout and Fabrication

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1002.
Formerly WEL 250 Develops welding and associated skills in metal fabrication.

Forensic Computing Certificate

CIP 11.0101

See list of Department Chairs on the Personnel page.

Career Opportunities

The CIS program prepares you for careers in computer science, computer networking and electronic commerce. The AAS Degree with an emphasis in local area networking prepares you to work as a network technician on small and large networks. You may also administer smaller networks as a System Administrator. The AGS Degree with an emphasis in Computer Information Systems prepares you to transfer to a university to continue studies in Computer Science or Computer Information Systems.

Program Description

The CIS program provides training in basic technical computer and networking skills. You will study computer networking, programming and database technologies along with classes that teach the technical aspects of the Internet and data communications. Note: Students interested in transferring to a baccalaureate program in Computer Information Systems should refer to the Transfer Degree section.

Total Credits: 23

Certificate Requirements

CNG 1024 - Networking I: Network +

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 124 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 1032 - Network Security Fundamentals

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 132 Examines the field of information security to prepare information systems students for their future roles as business decision-makers. The course presents a balance of the managerial and the technical aspects of information security. The concepts covered in this course should be helpful for students working towards the Certified Information Systems Security Professional (CISSP) certification.

CNG 1033 - Network Security: Fire Walls and Intrusion Detection and Network Security

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 133 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 Disaster Recovery

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Department Chair Approval.
Formerly CNG 136 Presents methods to identify vulnerabilities and take appropriate countermeasures to prevent and mitigate failure risks for an organization. It will take an enterprise-wide approach to developing a disaster recovery plan.

CNG 2012 - Configuring Windows Server

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Formerly CNG 212 Provides students with the knowledge and skills that are required to install and configure a Microsoft Windows Server. This course helps prepare students for a MTA (Microsoft Technology Associate) and/or MCSA (Microsoft Certified Solutions Associate) exams.

CNG 2024 - Microsoft Windows Wireless Network

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Prerequisite(s): CNG 1004 or instructor approval.
Formerly CNG 224 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 2058 - Digital Forensics

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): CNG 1024.
Corequisite(s): CIS 2020.
Formerly CNG 258 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.

Fuels and Emissions Mini-Certificate

CIP 47.0604

See list of Department Chairs on the Personnel page.

To enter the automotive collision or automotive service program, you must successfully complete any CCR course or qualifying placement score or exemption.

Entrance into the program involves a screening and selection process. You can obtain an application and information by calling the Automotive Department at 719.549.3354.

Career Opportunities

The Automotive Service Technology program prepares you for a range of careers in automotive maintenance and repair.

Program Description

This program teaches you to perform general maintenance, as well as to diagnose and repair electrical, engine, transmission, suspension, brake and air conditioning systems. The program has met the National Institute for Automotive Technicians Education Foundation (NATEF) accreditation in the areas of Automatic Transmissions & Transaxles, Brakes, Electrical/Electronic Systems, Engine Performance, Engine Repair, Heating & Air Conditioning and Suspension & Steering. We also offer Automotive Services courses for students in the Concurrent Enrollment Program at Pueblo Community College, Cañon City High School, and PCC Southwest Campus in Mancos. We encourage you to take the Automotive Service Excellence (ASE) certification tests while enrolled at PCC. We offer a paid apprenticeship for high school students through the Automotive Youth Education System (AYES).

As a student in the program, you will become a member of the Skills USA club and participate in a number of leadership activities and competitions.

Program Requirements

Entrance Requirements:
Admissions to the Automotive Service Technology program is by application only. For admission requirements, please go to MT-129 and see the department chair.

Total Credits: 14

Certificate Requirements

ASE 1034 - Automotive Fuel and Emissions Systems I

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 134 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 2021 - Auto/Diesel Body Electrical

Credit(s): 4
Lecture Hour(s): 1

Vocational Lab Hour(s): 4.50
Formerly ASE 221 Provides a comprehensive study of the theory, operation, diagnosis, and repair of vehicle accessories.

ASE 2033 - Auto Fuel Injection and Emissions Systems II

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Formerly ASE 233 Focuses on lecture and related laboratory experiences in the diagnosis and repair of electronic fuel injection systems and modern exhaust systems.

ASE 2036 - Advanced Drivability Diagnosis/Repair

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Formerly ASE 236 Focuses on lecture and laboratory experiences in the inspection, testing and repair of typical computerized engine control systems on customer vehicles.

General Automotive Technology, AAS

CIP 47.0604

See list of Department Chairs on the Personnel page.

To enter the automotive collision or automotive service program, you must successfully complete any CCR course or qualifying placement score or exemption.

Entrance into the program involves a screening and selection process. You can obtain an application and information by calling the Automotive Department at 719.549.3354.

Career Opportunities

The Automotive Service Technology program prepares you for a range of careers in automotive maintenance and repair.

Program Description

This program teaches you to perform general maintenance, as well as to diagnose and repair electrical, engine, transmission, suspension, brake and air conditioning systems. The program has met the National Institute for Automotive Technicians Education Foundation (NATEF) accreditation in the areas of Automatic Transmissions & Transaxles, Brakes, Electrical/Electronic Systems, Engine Performance, Engine Repair, Heating & Air Conditioning and Suspension & Steering. We also offer Automotive Services courses for students in the Concurrent Enrollment Program at Pueblo Community College, Cañon City High School, and PCC Southwest Campus in Mancos. We encourage you to take the Automotive Service Excellence (ASE) certification tests while enrolled at PCC. We offer a paid apprenticeship for high school students through the Automotive Youth Education System (AYES).

As a student in the program, you will become a member of the Skills USA club and participate in a number of leadership activities and competitions.

Program Requirements

Entrance Requirements:
Admissions to the Automotive Service Technology program is by application only. For admission requirements, please go to MT-129 and see the department chair.

Total Credits: 78

Degree Requirements

General Education Courses (16 Credits)

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

or

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

COM 2063 - Conflict Resolution

Credit(s): 1
Lecture Hour(s): 1
Formerly COM 263 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.

or

COM 2064 - Negotiation

Credit(s): 1
Lecture Hour(s): 1
Formerly COM 264 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.

or

COM 2069 - Leadership

Credit(s): 1
Lecture Hour(s): 1
Formerly COM 269 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.

or

PSY 1001 - General Psychology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 101 Focuses on the scientific study of behavior including motivation, emotion, physiological psychology, stress and coping, research methods, consciousness, sensation, perception, learning and memory. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

or

ENG 1031 - Technical Writing I

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 131, then ENG 1020 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.

MAT 1140 - Career Math

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 107 Covers material designed for career technical or general studies students who need to study particular mathematical topics. Topics may include measurement, algebra, geometry, trigonometry, graphs and/or finance. These are presented on an introductory level and the emphasis is on applications.

or

MAT 1240 - Mathematics for the Liberal Arts: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 1001 concurrency allowed, or see Basic Skills Assessment
Formerly MAT 120 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. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 1340 - College Algebra: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 0300.
Formerly MAT 121 Explores topics including intermediate algebra, equations, and inequalities, functions and their graphs, exponential and logarithmic functions, linear and nonlinear systems, selection of topics from among graphing of the conic sections, introduction to sequences and series permutations and combinations, the binomial theorem and theory of equations. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 1420 - College Trigonometry: GT-MA1

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): MAT 1340.
Formerly MAT 122 Covers topics including trigonometric functions (with graphs and inverse functions), identities and equations, solutions of triangles, complex numbers, and other topics as time permits. This is a traditional prerequisite course to the calculus sequence. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 1320 - Finite Mathematics: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 0300 or Equivalent Test Score.
Formerly MAT 123 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. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 1400 - Survey of Calculus: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 1340 or see Basic Skills Assessment
Formerly MAT 125 Includes derivatives, integrals, and their applications, with attention restricted to algebraic, exponential, and logarithmic functions for business, life science and/or social science majors.. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2420 - Calculus II: GT-MA1

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): MAT 2410.
Formerly MAT 202 Continues the study of single variable calculus which will include techniques of integration, polar coordinates, analytic geometry, improper integrals and infinite series. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2430 - Calculus III: GT-MA1

Credit(s): 4
Lecture Hour(s): 4

Prerequisite(s): MAT 2420.
Formerly MAT 203 Focuses the traditional subject matter of the Calculus. Topics include vectors, vector-valued functions, and multivariable calculus including partial derivatives, multiple integrals, line integrals and application. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2431 - Calculus III with Engineering Applications: GT-MA1

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): Successful completion of MAT 2420 with a grade of C or better.
Formerly MAT 204 Focuses on the competencies established in MAT 2430 - Calculus III: GT-MA1with an additional emphasis on word problems and problem solving. This is the third course in the three-course calculus sequence. This course will additionally contain a thorough examination of multiple integration. This will include double and triple integrals, line integrals, Stokes' and Green's Theorems, and their applications. A graphing calculator is required for this course. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2520 - Discrete Mathematics: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): Successful completion of MAT 2410 with a C or better.
Formerly MAT 215 Concentrates on formal logic, algorithms, induction proofs, equivalence relations and graphs. This course is designed for mathematics and computer science students.

MAT 2561 - Differential Equations with Engineering Applications: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): Successful completion of MAT 2420 with a grade of C or better.
Formerly MAT 261 This course introduces ordinary differential equations. The content of this course includes all the topics of MAT 2560 - Differential Equations: GT-MA1with an additional emphasis on applications and problem solving. A graphing calculator is required for this course. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2560 - Differential Equations: GT-MA1

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of MAT 2420 with a C or better.
Formerly MAT 265 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.

PHY 1105 - Conceptual Physics with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly PHY 105 Focuses on mechanics, heat, properties of matter, electricity and magnetism, light and modern physics. Incorporates laboratory experience. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

Core Requirements (62 Credits)

ASE 1002 - Introduction to the Automotive Shop

Credit(s): 2
Lecture Hour(s): 2
Formerly ASE 102 Prepares the incoming automotive student to work in the shop safely and gain familiarity with the shop and common equipment.

ASE 1010 - Brakes I

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 110 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

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Prerequisite(s): ASE 1010.
Formerly ASE 111 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 Auto Electricity

Credit(s): 2
Lecture Hour(s): 1.5
Vocational Lab Hour(s): 0.75
Formerly ASE 120 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 and Charging System

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 123 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

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5

Formerly ASE 130 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 and Repair

Credit(s): 2
Lecture Hour(s): 1.50
Vocational Lab Hour(s): 0.75
Formerly ASE 132 Focuses on lecture and related laboratory experiences in the diagnosis, service, adjustments and repair of various automotive ignition systems.

ASE 1034 - Automotive Fuel and Emissions Systems I

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 134 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 and Steering I

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 140 Focuses on diagnosis and service of suspension and steering systems and components. This course meets MLR/AST/MAST requirements.

ASE 1041 - Suspension and Steering II

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 141 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 1051 - Automotive Manual Transmission/Transaxles & Clutches

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 151 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 and Clutches II

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 152 Focuses on lecture and related laboratory experiences in the diagnosis and repair of automotive differentials, four wheel and all-wheel drive units.

ASE 1061 - Engine Repair & Rebuild

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly ASE 161 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 1062 - Automotive Engine Repair

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 162 Covers engine sealing requirements and repair procedures including engine fasteners, bolt torque, repair of fasteners, cooling system, and basic engine maintenance. This course meets AST/MAST requirements.

ASE 2010 - Automotive Power and ABS Brake Systems

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 210 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 - Auto/Diesel Body Electrical

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Formerly ASE 221 Provides a comprehensive study of the theory, operation, diagnosis, and repair of vehicle accessories.

ASE 2033 - Auto Fuel Injection and Emissions Systems II

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Formerly ASE 233 Focuses on lecture and related laboratory experiences in the diagnosis and repair of electronic fuel injection systems and modern exhaust systems.

ASE 2036 - Advanced Drivability Diagnosis/Repair

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Formerly ASE 236 Focuses on lecture and laboratory experiences in the inspection, testing and repair of typical computerized engine control systems on customer vehicles.

ASE 2040 - Suspension and Steering III

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Formerly ASE 240 Covers operation of steering and power steering systems. It will also include different alignment types and procedures.

ASE 2050 - Automatic Transmission/Transaxle Service

Credit(s): 1
Lecture Hour(s): 1
Formerly ASE 250 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 and Transaxle Repair

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly ASE 251 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 2052 - Advanced Automatic Transmissions/Transaxles

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 252 Covers the diagnosis, repair, and rebuild of automatic transmissions and transaxles including the hydraulic, electronic, and mechanical components. This course meets MAST requirements.

ASE 2053 - Advanced Manual Transmission/Transaxles

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Formerly ASE 253 Focuses on lecture and laboratory experiences in the diagnosis and repair of automotive manual transmissions, transaxles, clutches and their related components on customer vehicles.

ASE 2060 - Advanced Engine Diagnosis

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Formerly ASE 260 Focuses on lecture and related laboratory experiences in the diagnosis and necessary corrective actions of automotive engine performance factors related to customer vehicles.

ASE 2064 - Introduction Automotive Heating and Air Conditioning

Credit(s): 1
Vocational Lab Hour(s): 1.5

Formerly ASE 264 Covers basic operation of heating and air conditioning components. This course meets MLR/AST/MAST requirements.

ASE 2065 - Heating and Air Conditioning Systems

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Formerly ASE 265 Emphasizes lecture and related laboratory experiences in the diagnosis and service of vehicle heating and air conditioning systems and their components.

ASE 2181 - Internship: Basic Heavy Duty and Power Train

Credit(s): 1
Internship Hour(s): 3
Formerly ASE 281 Focuses on 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 (FAST) Fundamental Automotive Systems Training (Chrysler) or others as required by the program track.

ASE 2182 - Internship: General (Summer)

Credit(s): 1
Internship Hour(s): 3
Formerly ASE 282 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 (FAST) Fundamental Automotive Systems Training (Chrysler) or others as required by the program track.

General Machining Technology Certificate

CIP 48.0503

See list of Department Chairs on the Personnel page.

This is a NIMS Accredited program

Program Description

Students will start their career in Machining Technology by building a strong foundation in machining by learning to use various tools, such as hand tools, manual machines and grinding tools. Students develop introductory skills in print reading. They are also taught how to use CAD CAM software, which enables students to create two-dimensional drawings and gain experience with computer-aided manufacturer software. Learning G&M Code for manual CNC (Computer Numerical Control) programming is a focus, as well as setup and operations of CNC equipment.

Work experience may be converted to college credit through credit-by-portfolio or credit-by-challenge.

Total Credits: 35

Certificate Requirements

MAC 1000 - Machine Shop Safety

Credit(s): 1
Lecture Hour(s): 1
Formerly MAC 100 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 1002 - Print Reading for Machinists

Credit(s): 3
Lecture Hour(s): 3
Formerly MAC 102 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 2043 - Mastercam

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Formerly MAC 243 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 1005 - Introduction to Machining Technology

Credit(s): 4
Lecture Hour(s): 1.50
Vocational Lab Hour(s): 3.75
Formerly MAC 105 Introduces the student to the changing era of machining technology, emphasizing terminology, referencing and applications related to manufacturing environments. The fundamental use of bench tools, layout procedures, materials, precision measuring tools, machining processes, drilling and cut-off machines and other machining/manufacturing processes will be stressed. Skill competencies and standards will be identified. Use of the Machinery's Handbook will be strictly required and particular competencies may require performance evaluations.

MAC 1030 - Conventional Lathe Operations

Credit(s): 4
Lecture Hour(s): 1.50
Vocational Lab Hour(s): 3.75
Formerly MAC 130 Includes calculation of speeds and feeds on various materials, identification and application of various work holding techniques, tool forming, advanced machining practices and applications, and spindle tooling. Students will learn how to calculate and turn tapers using the compound slide or taper attachment, offset work on a four jaw chuck, turning between centers, boring, grooving, finishing, single point threading, knurling, tool grinding, drilling operations, and reaming.

MAC 1031 - Milling Machines & Operations

Credit(s): 4
Lecture Hour(s): 1.50
Vocational Lab Hour(s): 3.75
Formerly MAC 131 Introduces vertical milling machines. The operations and applications will consist of using the machine controls, speeds and feeds, spindles, arbors and adapters cutting tools, tool holders, conventional and climb milling applications simple indexing, fixture alignments, work holding methods. Students will become familiar with set-up applications considering offset boring operations, face milling, plain milling, and precision drilling applications. Students will be required to produce parts to a tolerance of +/- .004in. and perform competencies set by manufacturing standards.

MAC 2050 - Advanced Inspection Techniques

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly MAC 250 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.

MAC 2003 - Introduction to CNC Operations

Credit(s): 6
Lecture Hour(s): 2
Vocational Lab Hour(s): 6
Formerly MAC 203 Introduces basic writing and editing of CNC programs. G&M codes, math, speeds feeds, production processes including basic process controls, simple fixturing, and documentation associated with manufacturing will be covered.

MAC 2008 - CNC Operations II

Credit(s): 6
Lecture Hour(s): 2
Vocational Lab Hour(s): 6
Formerly MAC 208 Further develops skills in writing and editing advanced CNC programs. G&M codes, math, speeds deeds, production processes including multi-part, process controls, fixturing, and documentation associated with manufacturing will be covered.

Geology, AS (with Designation)

CIP 24.0199

See list of Department Chairs on the Personnel page.

Career Opportunities

The Associate of Science (AS) Degree with Designation in Geology prepares the student to transfer as a junior to a four-year institution in Colorado in order to pursue a Bachelor of Science (BS) degree in Geology or Earth Sciences. Students who opt for the Bachelor of Science in Geology can choose to work in various occupational fields of science or engineering. Once a BS is completed, many students will pursue a higher or graduate degree in Geology.

Program Description

This program introduces the student to the discipline of Geology includes the course work to meet general education requirements that are common to all Colorado four-year institutions, as well a specific courses in various subfields of Geology. Upon transfer, students from Pueblo Community College who have earned the Associate of Science (AS) Degree with Designation in Geology will be ready to complete the last half of a BS in Geology at a four-year institution.

Program Requirements

Refer to the course requirements listed below. Some courses may have prerequisites of lower level classes or assessment scores. Refer to the course descriptions for these prerequisites.

Total Credits: 60

** Refer to CCCS Guaranteed Transfer (GT) - Pathways Courses for a full list of all GT Pathway Courses*

General Education Core Requirements (36 Credits)

Written Communication (6 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

or

- ENG 1022 - English Composition II: GT-CP2 **Credit(s): 3 and** a GT Pathways Course (GT-CO3) *

Mathematics (5 Credits)

MAT 2410 - Calculus I: GT-MA1

Credit(s): 5
Lecture Hour(s): 5

Prerequisite(s): MAT 1420.
Formerly MAT 201 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. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

Natural and Physical Sciences (10 Credits)

CHE 1111 - General College Chemistry I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 1340, CHE 1011.
Corequisite(s): ENG 1021.
Formerly CHE 111 Focuses on basic chemistry and measurement, matter, chemical formulas, reactions and equations, stoichiometry. This course covers the development of atomic theory culminating in the use of quantum numbers to determine electron configurations of atoms, and the relationship of electron configuration to chemical bond theory. The course includes gases, liquids, and solids and problem-solving skills are emphasized through laboratory experiments.

CHE 1112 - General College Chemistry II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): CHE 1111, ENG 1021.
Formerly CHE 112 Presents concepts in the areas of solution properties, chemical kinetics, chemical equilibrium, acid-base and ionic equilibrium, thermodynamics, and electrochemistry. This course emphasizes problem solving skills and descriptive contents for these topics. Laboratory experiments demonstrate qualitative and quantitative analytical techniques.

Arts and Humanities (6 Credits)

- Select two GT Pathways Arts and Humanities courses from any category (GT-AH1, GT-AH2, GT-AH3, GT-AH4) *

Social and Behavioral Sciences (6 Credits)

- Select two GT Pathways Social and Behavioral courses from any category (GT-SS1, GT-SS2, GT-SS3) *

History (3 Credits)

- Select one GT Pathways History Course (GT-HI1) *

Additional Required Science and Mathematics Courses (23 Credits)

GEY 1111 - Physical Geology with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly GEY 111 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: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly GEY 112 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.

MAT 2420 - Calculus II: GT-MA1

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): MAT 2410.
Formerly MAT 202 Continues the study of single variable calculus which will include techniques of integration, polar coordinates, analytic geometry, improper integrals and infinite series. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

PHY 2111 - Physics: Calculus Based I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 2410, ENG 1021.
Formerly PHY 211 Explores the physical world through reasoning, mathematics and experimentation. Covers kinematics, force, gravity, energy, momentum, torque, rotational dynamics and fluids, and may include thermodynamics. The concepts and theories presented in class are explored through demonstrations and hands-on experiments. This first semester calculus-based physics course is recommended for students entering engineering or one of the advanced sciences. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 2112 - Physics: Calculus-Based II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 2410, ENG 1021.
Formerly PHY 212 Expands upon PHY 2111and examines waves, electric fields, electric circuits, magnetic fields, light and optics, and modern physics. The concepts and theories presented in class are explored through demonstrations and hands-on experiments. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

Elective (1 Credit)

Determined by transferring institution

Transfer Degrees

Note: In addition to meeting the requirements listed here, contact the department at the school to which you want to transfer for program-specific information.

This degree transfers to the following Colorado Public Four-Year institutions of higher education:

- Adams State University (B.A./B.S. Earth Sciences, Geology emphasis)
- Colorado Mesa University (B.S. Geosciences, Geology concentration)
- Colorado State University-Ft. Collins (B.S. Geology, Geology concentration)
- Fort Lewis College (B.S. Geology, Geology option)
- University of Colorado, Boulder (B.A. Geology)
- University of Northern Colorado (B.S. Earth Sciences, Geology emphasis)
- Western State Colorado University (B.A. Geology, Geology emphasis)

Graphic Design, AAS

CIP 09.0702

See list of Department Chairs on the Personnel page.

Career Opportunities

Careers in Media Communications are in demand and PCC offers an affordable way for students to begin their education. Some of the exciting career options within this field include: Graphic Designers; Web Developers; Broadcast Technicians; Film Video Editors; and Advertising & Promotion Managers.

Program Description

The Media Communications program teaches students to think critically and develop skills in Web Design, Graphic Design, Advertising, Videography, News Writing, and TV-Radio Production. Courses provide a solid foundation in these areas through a combination of lecture and hands on applications. There are multiple labs with state of the art equipment and software for your area of emphasis. The Media Communications program provides a high technical skill attainment in this changing field of communication. Students have multiple options to pursue. The AAS degrees with emphases in Graphic Design and Web Design offer advanced technical skills in these areas. Certificates provide basic skill sets to enhance an existing degree or occupation. The AGS degree provides a transfer option to a four year university. If interested in this option, please refer to the Transferring Credits section of the catalog.

Total Credits: 63

Degree Requirements

Semester 1 - Fall (15 Credits)

ART 1002 - Visual Concepts 2-D Design

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 131 Examines the basic elements of design, visual perception, and artistic form and composition as they relate to two-dimensional media.

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

or

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

or

ENG 1031 - Technical Writing I

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 131, then ENG 1020 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.

MGD 1002 - Introduction to Multimedia

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly MGD 102 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 1015 - Typography & Layout

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly MGD 105 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.

Semester 2 - Spring (15 Credits)

ART 1201 - Drawing I

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 121 Investigates the various approaches and media that students need to develop drawing skills and visual perception.

or

ART 1401 - Digital Photography I

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 139 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.

MAR 2020 - Principles of Advertising

Credit(s): 3
Lecture Hour(s): 3
Formerly MAR 220 Examines the principles and practices of advertising and its relationship to business in order to promote a business or organization. Areas of major emphasis include advertising principles, strategies, media, copy and layout, and ethical considerations.

MGD 1011 - Adobe Photoshop I

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly MGD 111 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 1013 - Adobe Indesign

Credit(s): 3
Vocational Lab Hour(s): 4.5

Formerly MGD 114 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.

Mathematics (3 Credits)

MAT 1160 - Financial Mathematics

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 112 Covers topics including pricing, taxes, insurance, interest, annuities, amortization, investments using financial calculators and spreadsheets.

or

MAT 1260 - Introduction to Statistics: GT-MA1

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 135 Explores and applies data presentation and summarization, introduction to probability concepts and distributions, statistical inference estimation, hypothesis testing, comparison of populations, correlation and regression. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

Or Choose Any GT-MA1 Mathematics

MAT 1240 - Mathematics for the Liberal Arts: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 1001 concurrency allowed, or see Basic Skills Assessment
Formerly MAT 120 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. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 1340 - College Algebra: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 0300.
Formerly MAT 121 Explores topics including intermediate algebra, equations, and inequalities, functions and their graphs, exponential and logarithmic functions, linear and nonlinear systems, selection of topics from among graphing of the conic sections, introduction to sequences and series permutations and combinations, the binomial theorem and theory of equations. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 1420 - College Trigonometry: GT-MA1

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): MAT 1340.
Formerly MAT 122 Covers topics including trigonometric functions (with graphs and inverse functions), identities and

equations, solutions of triangles, complex numbers, and other topics as time permits. This is a traditional prerequisite course to the calculus sequence. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 1320 - Finite Mathematics: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 0300 or Equivalent Test Score.
Formerly MAT 123 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. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 1400 - Survey of Calculus: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 1340 or see Basic Skills Assessment
Formerly MAT 125 Includes derivatives, integrals, and their applications, with attention restricted to algebraic, exponential, and logarithmic functions for business, life science and/or social science majors.. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2420 - Calculus II: GT-MA1

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): MAT 2410.
Formerly MAT 202 Continues the study of single variable calculus which will include techniques of integration, polar coordinates, analytic geometry, improper integrals and infinite series. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2430 - Calculus III: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 2420.
Formerly MAT 203 Focuses the traditional subject matter of the Calculus. Topics include vectors, vector-valued functions, and multivariable calculus including partial derivatives, multiple integrals, line integrals and application. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2431 - Calculus III with Engineering Applications: GT-MA1

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): Successful completion of MAT 2420 with a grade of C or better.
Formerly MAT 204 Focuses on the competencies established in MAT 2430 - Calculus III: GT-MA1with an additional emphasis on word problems and problem solving. This is the third course in the three-course calculus sequence. This course will additionally contain a thorough examination of multiple integration. This will include double and triple integrals, line integrals, Stokes' and Green's Theorems, and their applications. A graphing calculator is required for this course. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2520 - Discrete Mathematics: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): Successful completion of MAT 2410 with a C or better.
Formerly MAT 215 Concentrates on formal logic, algorithms, induction proofs, equivalence relations and graphs. This course is designed for mathematics and computer science students.

MAT 2561 - Differential Equations with Engineering Applications: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): Successful completion of MAT 2420 with a grade of C or better.
Formerly MAT 261 This course introduces ordinary differential equations. The content of this course includes all the topics of MAT 2560 - Differential Equations: GT-MA1with an additional emphasis on applications and problem solving. A graphing calculator is required for this course. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2560 - Differential Equations: GT-MA1

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of MAT 2420 with a C or better.
Formerly MAT 265 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.

Semester 3 - Fall (12 Credits)

JOU 1005 - Introduction to Mass Media: GT SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly JOU 105 Places the mass media in a historical and cultural perspective, considering the validity, integrity and influence of the media in a democracy. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

MGD 1012 - Adobe Illustrator I

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly MGD 112 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.

or

MGD 1043 - Motion Graphic Design I: (Software)

Credit(s): 3
Vocational Lab Hour(s): 4.5
Formerly MGD 143 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 1033 - Graphic Design I

Credit(s): 3
Vocational Lab Hour(s): 4.50
Prerequisite(s): MGD 1015 and MGD 1011 or MGD 1013, or Department Chair Approval.
Formerly MGD 133 Focuses upon the study of design layout and conceptual elements concerning graphic design projects such as posters, advertisements, logos and brochures.

MGD 1041 - Web Design I

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly MGD 141 Introduces website planning, design and creation using industry standards-based website development tools. Screen-based color theory, web aesthetics, use of graphics editors and intuitive interface design are explored.

Semester 4 - Spring (15 Credits)

MGD 2033 - Graphic Design II

Credit(s): 3
Vocational Lab Hour(s): 4.50
Prerequisite(s): MGD 1033.
Formerly MGD 233 Continues instruction in idea development for advanced graphic design.

MGD 2041 - Web Design II

Credit(s): 3
Vocational Lab Hour(s): 4.50
Prerequisite(s): MGD 1041, or department chair approval.
Formerly MGD 241 Expands on previously learned fundamentals of HTML introducing cascading style sheets, DHTML, Java Scripts and CGI forms. Color usage and interface design principles are emphasized in this course. In this course we'll examine websites that employ more complex structures, optimal site architecture and navigation necessary for larger and more complex sites.

MGD 2056 - Graphic Design Production

Credit(s): 3
Vocational Lab Hour(s): 4.50
Prerequisite(s): MGD 1033
Formerly MGD 256 Provides an opportunity to combine several draw and paint applications into one design and layout class. Students will explore advanced techniques in creating and designing computer art.

MGD 2068 - Business for Creatives

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021 or ENG 1031
Formerly MGD 268 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.

Human Nutrition (3 Credits)

HWE 1050 - Human Nutrition

Credit(s): 3
Lecture Hour(s): 3
Formerly HWE 100 Introduces basic principles of nutrition with emphasis on personal nutrition. This course focuses on macro and micro nutrients and their effects on the functions of the human body. Special emphasis is placed on the application of wellness, disease, and lifespan as it pertains to nutrition.

Or Choose any GT-SC1 Physical & Life Sciences with lab

ANT 1005 - Biological Anthropology with Laboratory: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly ANT 111 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. This is a statewide Guaranteed Transfer course in the GT-SC1 category. GT-SC1

AST 1110 - Astronomy I With Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly AST 101 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 - Astronomy II with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): AST 1110.
Formerly AST 102 Emphasizes the structure and life cycle of the stars, the sun, galaxies, and the universe as a whole, including cosmology and relativity. Stellar phenomena including white dwarves, black holes will be explored. Incorporates laboratory experience.

BIO 1005 - Science of Biology with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly BIO 105 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 - as is the impact of biological science on society. Includes laboratory experiences. Designed for non-science majors.

BIO 1111 - General College Biology I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): ENG 1021
Formerly BIO 111 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 - General College Biology II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Corequisite(s): ENG 1021.
Formerly BIO 112 A continuation of Biology I. Includes ecology, evolution, classification, structure, and function in plants and animals. This course includes laboratory experience.

BIO 2101 - Human Anatomy and Physiology I with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 201 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, nervous and endocrine systems. Includes a mandatory hands-on laboratory experience covering experimentation, microscopy, observations and dissection. This is the first semester of a two-semester sequence.

BIO 2102 - Human Anatomy and Physiology II with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 202 Focuses on the integrated study of the human body and the histology, anatomy, and physiology of the following systems and topics: cardiovascular, hematology, lymphatic and immune, urinary, fluid and electrolyte control, digestive, nutrition, respiratory, reproductive and development. Includes a mandatory hands-on laboratory experience involving experimentation, microscopy, observations and dissection. This is the second semester of a two-semester sequence.

BIO 2104 - Microbiology with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 204 Designed for health science majors. Examines microorganisms with an emphasis on their structure, development, physiology, classification and identification. The laboratory experience includes culturing, identifying and controlling microorganisms with an emphasis on their role in infectious disease.

CHE 1011 - Introduction to Chemistry I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 0300.
Formerly CHE 101 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: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): CHE 1011.
Formerly CHE 102 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 1005 - Chemistry in Context with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Formerly CHE 105 Covers the study of measurements, matter, molecules, atoms, chemical bonding, nomenclature, energy, acids, bases, and nutrition. Course work examines chemistry in the modern world and surveys the current knowledge as well as the conceptual framework of the discipline. Chemistry as a science is explored, as is the impact of chemistry on society. This course includes laboratory experience and is designed for non-science majors.

CHE 1111 - General College Chemistry I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 1340, CHE 1011.
Corequisite(s): ENG 1021.
Formerly CHE 111 Focuses on basic chemistry and measurement, matter, chemical formulas, reactions and equations,

stoichiometry. This course covers the development of atomic theory culminating in the use of quantum numbers to determine electron configurations of atoms, and the relationship of electron configuration to chemical bond theory. The course includes gases, liquids, and solids and problem-solving skills are emphasized through laboratory experiments.

CHE 1112 - General College Chemistry II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): CHE 1111, ENG 1021.
Formerly CHE 112 Presents concepts in the areas of solution properties, chemical kinetics, chemical equilibrium, acid-base and ionic equilibrium, thermodynamics, and electrochemistry. This course emphasizes problem solving skills and descriptive contents for these topics. Laboratory experiments demonstrate qualitative and quantitative analytical techniques.

ENV 1111 - Environmental Science with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly ENV 101 Provides an introduction to the basic concepts of ecology and the relationship between environmental problems and biological systems. Includes interdisciplinary discussions on biology, chemistry, geology, energy, natural resources, pollution and environmental protection. Using a holistic approach, students will study how the foundations of natural sciences interconnect with the environment. This course includes laboratory experience.

GEO 1011 - Physical Geography: Landforms with Lab: GT-SCI

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly GEO 111 Introduces students to 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. The course incorporates an integrated process of lectures, discussion and laboratory assignments.

GEO 1012 - Physical Geography: Weather and Climate with Lab: GT-SCI

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly GEO 112 Introduces the principles of meteorology, climatology, world vegetation patterns and world regional climate classification. The course includes investigating the geographic factors which influence climate, such as topography, location, elevation, winds and latitude.

GEY 1111 - Physical Geology with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly GEY 111 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: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly GEY 112 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: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): MAT 0300 with a grade of S/C or better.
Formerly GEY 135 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.

MET 1050 - General Meteorology: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly MET 150 Provides an introduction to general meteorology and atmospheric sciences. It includes the composition and structure of the atmosphere and characteristics that affect the atmosphere, such as temperature, pressure and moisture. Additionally, the development of weather systems such as storm systems, hurricanes, weather fronts and cloud development will also be examined. Finally, concepts of climatology will be stressed. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 1105 - Conceptual Physics with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly PHY 105 Focuses on mechanics, heat, properties of matter, electricity and magnetism, light and modern physics. Incorporates laboratory experience. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 1107 - Energy Science & Technology with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): MAT 0300 with a grade of S/C or better.
Formerly PHY 107 Explores the science of energy and energy technologies, with a focus on renewable energy resources and clean technologies. It provides a background in the physics of energy, energy transfer and the current

state of technology. Students will evaluate the future utilization of renewable technologies. Activities may include investigating conservation of energy, mechanical, electrical, heat and fluid power systems; energy transfer and loss; understanding energy audits; testing solar collectors and wind generators; and investigating hydrogen fuel cells. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 1111 - Physics: Algebra-Based I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 0300.
Formerly PHY 111 Explores the physical world through reasoning, mathematics and experimentation. Examines kinematics, force, circular motion, energy, momentum, torque, rotational dynamics, simple harmonic motion, temperature, heat and thermodynamics. The concepts and theories presented are explored through demonstrations and hands-on experiments. It is a general physics course that is recommended for all of the health sciences and all other interested students. Students entering engineering or one of the advanced sciences should register for PHY 211. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 1112 - Physics: Algebra-Based II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 0300.
Formerly PHY 112 Expands upon PHY 1111and explores sound waves, electric fields, electric circuits, magnetic fields, light, optics and modern physics. Explores the concepts and theories presented in class through demonstrations and hands-on experiments. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 2111 - Physics: Calculus Based I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 2410, ENG 1021.
Formerly PHY 211 Explores the physical world through reasoning, mathematics and experimentation. Covers kinematics, force, gravity, energy, momentum, torque, rotational dynamics and fluids, and may include thermodynamics. The concepts and theories presented in class are explored through demonstrations and hands-on experiments. This first semester calculus-based physics course is recommended for students entering engineering or one of the advanced sciences. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 2112 - Physics: Calculus-Based II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 2410, ENG 1021.
Formerly PHY 212 Expands upon PHY 2111and examines waves, electric fields, electric circuits, magnetic fields, light and optics, and modern physics. The concepts and theories presented in class are explored through demonstrations and hands-on experiments. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

SCI 1055 - Integrated Science I

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly SCI 155 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. Course is for elementary education majors only; both SCI 155 & SCI 1056required. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

SCI 1056 - Integrated Science II

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly SCI 156 Examines earth and biological systems, living and nonliving environments, through the application of fundamental energy and matter concepts. These systems and concepts will be explored in hands-on laboratory experiments. Course is for elementary education majors only; both SCI 1055& SCI 156 required. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

Semester 5 - Summer (6 Credits)

MGD 2080 - Internship

Credit(s): 3
Internship Hour(s): 9
Prerequisite(s): Department Chair Approval.
Formerly MGD 280 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

Credit(s): 3
Internship Hour(s): 9
Prerequisite(s): Department Chair Approval.
Formerly MGD 289 A demonstrated culmination of learning within a given program of study.

Hairstylist Barber Crossover

See list of Department Chairs on the Personnel page.

The Barbering Crossover Certificate is designed for Licensed Hairstylists to learn the remaining skills that Barbers know they can carry a dual license in the State of Colorado. The program includes techniques in men's hair cutting, men's facials, shaving, OSHA regulations, sanitation, safety and Colorado laws. Clinical practice involves working on manikins and the public under supervision and parallels, as close as possible, actual shop procedures in order to prepare students for working in the field.

Total Credits: 6

HST

Students wanting to obtain a Barbering License by completing the Barbering Crossover Certificate will have to have already obtained their Hairstylist License.

Core Curriculum Summer Semester (6 credits)

BAR 1007 - Introduction to Shaving, Honing & Stropping

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly BAR 107 Introduces the general principles of shaving to include hair texture, grain of the beard and analysis of the skin. Theory is combined with the practical application of proper shaving procedures and cutting strokes used on the face.

BAR 1008 - Intermediate Shaving, Honing & Stropping

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly BAR 108 Focuses on theory and practical training related to mustache and beard designing and trimming. Practical applications are incorporated in specialized classes or in a supervised salon.

BAR 2007 - Advanced Shaving, Honing & Stropping

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly BAR 207 Focuses on advanced training in shaving, honing and stropping. Practical and theory application is completed in specialized classes or supervised clinical training. Student will be prepared for State Board license exam.

BAR 1066 - Introduction to Facial Massages & Skin Care

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly BAR 166 Emphasizes basic understanding of facial massage manipulations and the study of skin in both practical and theory applications. Covers the benefits derived from proper facial massage and a good skin care routine.

BAR 1067 - Intermediate Facial Massage & Skin Care

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly BAR 167 Focuses on practical application dealing with anatomy, skin disorders, skin types and facial shapes. Students help patrons select proper skin care treatments

BAR 2066 - Advanced Facial Massage & Skin Care

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly BAR 266 Emphasizes anatomy, skin disorders, skin types and facial shapes. Students guide patrons on selection of proper skin care treatments. Covers student preparation for State Board licensing examination on theory and practical procedures.

Hairstylist Certificate

CIP 12.0407

See list of Department Chairs on the Personnel page.

Career Opportunities

The Cosmetology program prepares students for careers in cosmetology, hairstyling, esthetics (facial care) and manicure (nail care). Students will receive the specialized training necessary to be prepared for a successful career with limitless opportunities for both men and women. Students learn the skills to keep pace with the fashion world and stand ready to meet the constantly changing demands of one of today's largest-growing service industries. Those opportunities can provide both part-time and full-time employment in specialty areas.

Program Description

The Cosmetology program teaches students job entry skills, customer communication and shop procedures. Instruction includes professional ethics, bacteriology, shampoo and rinses, color theory, hair coloring techniques, permanent waving, hairstyling, hair cutting, manicures, pedicures, facials, makeup, OSHA regulations, sanitation, safety and Colorado laws. Clinical practice involves working on the public under supervision and parallels, as close as possible, actual shop procedures in order to prepare students for working in the field.

- Hairstylist certificate – This certificate program provides training in hair care. Instruction is provided in hair cutting, hair styling, hair coloring and chemical textures services.

Total Credits: 40

Certificate Requirements

Core Requirements (40 Credits)

COS 1003 - Shampoo/Rinses/Conditioners I

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly COS 103 Introduces various types of scalp treatments and shampoos. Enables student to recognize and treat disorders of hair and scalp. Covers product knowledge and proper massage techniques to help control disorders and to cleanse the hair and scalp. Includes terminology dealing with hair structure, scalp and hair disorders. Provides training in a lab or classroom setting.

COS 1010 - Introduction to Hair Coloring

Credit(s): 2
Vocational Clinic Hour(s): 4

Formerly COS 110 Provides theory pertaining to the law of color, theory of color, chemistry of color, product knowledge and analysis of hair and scalp. Covers basic techniques and procedures for the application of hair coloring.

COS 1011 - Intermediate: Hair Coloring

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 1010.
Formerly COS 111 Focuses on theory and practical application of color products, formulations of color, level and shades of color. Examines techniques in a specialized class or in a supervised salon setting.

COS 1020 - Introduction to Hair Cutting

Credit(s): 2
Vocational Clinic Hour(s): 4

Formerly COS 120 Introduction to the theory relevant to patron protection, angles, elevations and the analysis of hair textures as related to hair cutting. Covers the proper use and care of hair-cutting implements. Focuses on basic hair-cutting techniques using all cutting implements, disinfection and sanitation procedures as they relate to haircutting.

COS 1021 - Intermediate I: Haircutting

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 120.
Formerly COS 121 Focuses on theory related to facial shapes, head and body forms to determine the clients appropriate haircut. Incorporates practical applications of hair cutting techniques in specialized classes or in the supervised salon (clinical setting).

COS 1030 - Introduction to Hair Styling

Credit(s): 2
Vocational Clinic Hour(s): 4

Formerly COS 130 Combines theory with the practical application of roller placement, shaping, pin curls, finger waves, air forming iron curling, soft pressing and hard pressing.

COS 1031 - Intermediate I: Hair Styling

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 1030.

Formerly COS 131 Focuses on the accepted methods of styling hair, air forming roller sets, finger waves pin curls braiding and hair pressing.

COS 1040 - Introduction to Chemical Texture

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly COS 140 Introduces a combination of theory and practice focusing on the analysis of hair and scalp, proper equipment and product knowledge. Includes basic techniques in permanent waving and chemical relaxing. Provides training in a classroom or lab setting on mannequins or live models.

COS 1041 - Intermediate I: Chemical Texture

Credit(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): COS 1040.
Formerly COS 141 Emphasizes theory and practical application of permanent waves and chemical relaxers in specialized classes or a supervised salon setting. Enables the student to practice different wrapping techniques required by trend styles.

COS 1050 - Laws, Rules and Regulations

Credit(s): 1
Lecture Hour(s): 1
Formerly COS 150 Provides instruction on the laws, rules and regulations and how they govern the cosmetology and barber industry, as well as the effects they have on the student, licensed individual, salons and school owners.

COS 1060 - Introduction to Disinfection, Sanitation & Safety

Credit(s): 2
Vocational Clinic Hour(s): 4

Formerly COS 160 Introduces the various methods of disinfection, sanitation and safety as used in the cosmetology industry. Includes classroom study of bacteriology and the terminology dealing with cosmetology.

COS 1061 - Intermediate I: Disinfection, Sanitation & Safety

Credit(s): 1
Vocational Clinic Hour(s): 2

Formerly COS 161 Focuses on the theory and daily practice of proper methods of disinfection, sanitation and safety procedures as related to all phases of cosmetology. Covers terminology and training of disinfection, sanitation and safety procedures. Also includes customer service in a supervised salon (clinical) setting or specialized class.

COS 2003 - Shampoo/Rinses/Conditioners II

Credit(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): COS 1003.
Formerly COS 203 Provides theory and practical training in shampoos, rinses and conditioners. Examines advanced techniques to prepare the student for employment. Includes preparation for the State Board Licensing Examination in shampoos, rinses and conditioners.

COS 2010 - Intermediate II: Hair Coloring

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 1010.
Formerly COS 210 Provides continued instruction in the theory and practical application of color products, formulations of color, level and shades of color. Enables students to practice techniques in a specialized class or in a supervised salon setting.

COS 2011 - Advanced Hair Coloring

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 1011.
Formerly COS 211 Provides continued instruction on advanced theory and practical techniques in hair coloring. Focuses on the recognition of color problems and color correction procedures. Covers advanced techniques and product knowledge to prepare the student for employment. Prepares the student for the State Board Licensing Examination pertaining to hair coloring.

COS 2020 - Intermediate II: Haircutting

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 1020.
Formerly COS 220 Provides continued instruction in the theory related to facial shapes, head and body forms to determine the client's appropriate haircut. Incorporates practical applications of haircutting techniques.

COS 2021 - Advanced Hair Cutting

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 1021.
Formerly COS 221 Focuses on advanced cutting techniques using all the cutting tools. Emphasizes current fashion trends. Includes student preparation for the State Licensure examination.

COS 2030 - Intermediate II: Hair Styling

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): COS 1030.

Formerly COS 230 Provides continued instruction on accepted methods of styling hair, air forming, roll set, finger waves and hair pressing. Examines techniques in specialized classes or in a supervised salon setting.

COS 2031 - Advanced Hair Styling

Credit(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): COS 1031.
Formerly COS 231 Focuses on theory and advanced techniques in all phases of hair styling to prepare the student for employment. Training is a combination of supervised salon (clinical) work and specialized classes. Includes student preparation for the State Board Licensing Examination relating to hairstyling.

COS 2040 - Intermediate II: Chemical Texture

Credit(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): COS 1040.
Formerly COS 240 Provides continued instruction in the theory and practical application of permanent waves and chemical relaxers in specialized classes or a supervised salon setting. Enables students to practice different wrapping techniques required by trend styles.

COS 2041 - Advanced Chemical Texture

Credit(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): COS 1041.
Formerly COS 241 Focuses on advanced techniques to prepare the student for employment and the changes in current industry standards. Instruction is provided in specialized classes or supervised salon (clinical) setting. Includes student preparation for the State Board Licensing Examination pertaining to permanent waves and chemical relaxers.

COS 2050 - Management, Ethics, Interpersonal Skills & Salesmanship

Credit(s): 1
Lecture Hour(s): 1
Formerly COS 250 Emphasizes the importance of salon management and the knowledge and skills necessary to build a successful business. Focuses on the importance of interpersonal skills and basic techniques in salesmanship and customer services. Integrates job readiness skills and professional ethics.

COS 2060 - Intermediate II: Disinfection, Sanitation & Safety

Credit(s): 2
Vocational Clinic Hour(s): 4

Formerly COS 260 Provides continued study of theory and practice of proper methods of sterilization, disinfection, sanitation and safety procedures as related to all phases of the industry. Covers terminology and training of disinfection, sanitation and safety procedures. The individual responsibility to provide a safe work environment is practiced.

COS 2061 - Advanced Disinfection, Sanitation & Safety

Credit(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): COS 1061.
Formerly COS 261 Provides advanced training on decontamination and safety practices in a supervised salon and/or classroom setting. Examines advanced techniques that prepare the student for employment. Includes student preparation for the State Board Licensing Examination in decontamination and safety for all aspects of the industry. Study of OSHA requirements for schools and salon are done in a theory or practical setting.

COS 2062 - Advanced II: Disinfection, Sanitation & Safety

Credit(s): 3
Vocational Clinic Hour(s): 6

Prerequisite(s): COS 2060.
Formerly COS 262 This course is the extra hours/credits required for the hairstylist program, per State Board of Colorado Barber/Cosmetology Board. Provides advanced training on decontamination and safety practices in a supervised salon and/or classroom setting. Examines advanced techniques that prepare the student for employment. Includes student preparation for the State Board Licensing Examination in decontamination and safety for all aspects of the industry. Study of OSHA requirements for schools and salon are done in a theory or practical setting.

Healthcare Information Systems AAS

CIP: 51.0705

See list of Department Chairs on the Personnel Page

Program Description

Few professions offer the level of diversity in positions and tasks, as well as job security, as Health Information Technology (HIT). HIT is positioned at the intersection of healthcare, technology, and business. HIT professional duties span medical coding, clinical documentation integrity, supporting and creating required computer systems, data analytics, management, patient privacy, network security, and beyond. HIT professionals empower partners in healthcare to provide high-quality, efficient, financially prudent, and life-saving care.

What Do Healthcare Information Systems Specialists Do?

Health information technology (health IT) specialists handle the technical aspects of managing patient health information. Depending on their position, health IT professionals might build, implement, or support electronic health records (EHRs) and other systems that store patient-related data. They know what data is needed, where it is stored, and how the data is used.

Their work affects quality of care tremendously. As they move up the ladder, health IT specialists become more involved in collaborating with other health-care teams to drive improved patient outcomes, lower costs, and new developments in patient care.

PCC's HIT programs, staff, and students are affiliated with the global Health information Management Systems Society (HIMSS), the premier national association of health information management (HIM) professionals and the leading source of HIM knowledge.

After completing the stringent processes through the American Health Information Management Association to be identified with the AHIMA Professional Certificate Approval Program (PCAP) and successfully earning the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM) accreditation, PCC HIT students are not only prepared to earn the AHIMA Medical Coding Credentials, they are eligible to sit for the Registered Health Information Technician (RHIT) credentialing exam.

Total Credits: 61

General Education (15 credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1031 - Technical Writing I

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 131, then ENG 1020 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.

MAT 1260 - Introduction to Statistics: GT-MA1

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 135 Explores and applies data presentation and summarization, introduction to probability concepts and distributions, statistical inference estimation, hypothesis testing, comparison of populations, correlation and regression. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

- Gen Ed Elective (PSY or COM) **Credit(s):** 3

PHI 1013 - Logic: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 113 Studies effective thinking using language-oriented logic. Provides tools and develops skills for creative and critical thinking. Emphasizes the development of decision-making and problem-solving. This course is one of the statewide Guaranteed Transfer courses, GT-AH3.

CIS 1018 - Intro to PC Applications

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 118 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.

HIT Core Curriculum (46-47 credits)

HIT 1002 - Medical Vocabulary for Documentation

Credit(s): 3
Lecture Hour(s): 3
Formerly HIT 102 Introduces medical vocabulary through the study of word structures and phrases with reinforcement in writing narratives and the study of medical records. Anatomy and physiology of all body systems are reviewed with discussion of related diseases, diagnostic procedures, treatments and drugs. Emphasis on learning to read, pronounce and interpret medical documentation prepares the student for document review in HIT fields. Illustrates the importance of HIPAA in both physical and electronic dissemination of medical records.

HIT 1011 - Health Data Management and Information Systems

Credit(s): 3
Lecture Hour(s): 3
Formerly HIT 111 Introduces the electronic health record (EHR)/components and health informatics including infrastructure, privacy, security and legal implications. Federal involvement and its impact on information technology regarding health data will be discussed. Students will study the roles and relationships, in the transformation of data into meaningful information, through research, vital statistics and epidemiology. Data quality, integrity, collection, access and retention will also be emphasized.

HIT 1050 - Healthcare Delivery Systems

Credit(s): 3
Lecture Hour(s): 3
Formerly HIT 150 Provides an overview of the healthcare delivery system at the national, state and local level. The course provides healthcare education, including applicable regulations and standards, reimbursement methods, and evolution and current trends in healthcare delivery.

HIT 2061 - Healthcare Software

Credit(s): 3
Lecture Hour(s): 3
Formerly HIT 261 This course covers basic computer system architecture, file structure and design for healthcare settings. Topics include system analysis, design, security and selection for a variety of hardware environments. This course provides students with a review of computer fundamentals and the fundamentals of the electronic health record and an introduction to the information systems life cycle with software application. Security and confidentiality issues, concerns and implications in relation to the electronic health record will be addressed.

HIT 2022 - Quality Management

Credit(s): 3
Lecture Hour(s): 3
Formerly HIT 222 Introduces the student to the basic concepts of quality management in the healthcare environment. Requirements by regulatory agencies regarding quality documentation, utilization and risk management are discussed. Data collection, verification, analysis, descriptive statistics and presentation techniques will be studied. The course emphasizes the ongoing use of objective data and feedback to improve processes, systems and patient outcomes. Analysis of documentation for various purposes is also covered.

HIT 1012 - Legal Aspects for Health Records

Credit(s): 2
Lecture Hour(s): 2
Formerly HIT 112 Introduces the student to the legal system and defines the role of the healthcare professionals. Specific federal and state laws are identified and discussed as they relate to release of medical information.

HIT 2089 - HIT Capstone Course

Credit(s): 3
Internship Hour(s): 9
Prerequisite(s): Department approval required
Formerly HIT 289 Provides a demonstrated culmination of learning within a given program of study.

HIT 1020 - Working with Health IT Systems

Credit(s): 4
Lecture Hour(s): 4
Formerly HIT 120 Provides hands-on experience with a computerized HIT system/electronic health record, utilizing contemporary online systems with simulated data. The course will include additional lecture, project work and practice in the use of HIT systems. Students will play the role of practitioners using these systems and experience threats to security and gain an appreciation of the need for standards and high levels of usability. Students will also learn how errors can occur and ways to minimize them.

HIT 1022 - Workflow Fund of Healthcare

Credit(s): 3
Lecture Hour(s): 3
Formerly HIT 122 Introduces the fundamentals of healthcare workflow, process analysis and redesign in various healthcare settings. Health information technology culture changes (IT/clinicians) and project management, including HIT system selection, design, implementation and support will also be covered. Electronic health record/practice management systems will be evaluated for quality and process improvement, clinical decision support, health information exchange, public health, and population health management in ambulatory and alternative care settings.

CNG 1020 - A+ Certification Preparation

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Formerly CNG 120 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 1024 - Networking I: Network +

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 124 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 1032 - Network Security Fundamentals

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 132 Examines the field of information security to prepare information systems students for their future roles as business decision-makers. The course presents a balance of the managerial and the technical aspects of information security. The concepts covered in this course should be helpful for students working towards the Certified Information Systems Security Professional (CISSP) certification.

CNG 1036 - Guide to Disaster Recovery

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Department Chair Approval.
Formerly CNG 136 Presents methods to identify vulnerabilities and take appropriate countermeasures to prevent and mitigate failure risks for an organization. It will take an enterprise-wide approach to developing a disaster recovery plan.

Electives (Select 2 out of 3 of the below classes)

HIT 1075 - Special Topics

Credit(s): 0-12
Formerly HIT 175 Provides students with a vehicle to pursue in-depth exploration of Special Topics of interest.

HIT 2064 - Data Visualization

Credit(s): 4
Lecture Hour(s): 4
Formerly HIT 264 Introduces data visualization tools and techniques software, as well as increasing proficiency in Excel. Students will be able to tell a story with data, communicating observations in a clear, compelling way that provides meaning and explanation. As part of this course, students are also required to complete a professional practicum experience to apply classroom knowledge in a clinical setting.

HIT 2065 - Data Analytics Applications

Credit(s): 3
Lecture Hour(s): 3
Formerly HIT 265 Deepens understanding of current and emerging practices in the application of data analytics. Topics include clinical, financial, operations and qualitative analytics; trends in practices; customer expectations; regulations that affect analytics; and ethical issues in gathering, analyzing and reporting healthcare data. Explore the roles and applications of descriptive, retrospective and prescriptive analytics in various settings.

High Pressure Pipe Welder Mini-Certificate

CIP 48.0508

See list of Department Chairs on the Personnel page.

Program Description

Welders must be highly skilled and knowledgeable in a variety of welding processes to meet the challenges of advanced technology and new materials. Welding is not just a trade; it's a tool for many trades requiring a high level of training and technical knowledge. The Welding Technology program helps students develop skills through classroom studies and hands-on experience under close supervised instruction. Students learn about structural steel fabrication, layout work and pipe welding following detailed blueprints.

Total Credits: 16

Certificate Requirements

Core Requirements (16 Credits)

WEL 2039 - 2G-Horizontal Pipe A.S.M.E.

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 2033.
Formerly WEL 239 Instruction in safety, theory and practical applications in joint fit-up, design and welding pipe in the 2-G Horizontal position. Welding in accordance with the American Society of Mechanical Engineers Pipe Code using the GTAW process and SMAW process with E-XX18 and E-XX10 type electrodes.

WEL 2041 - 5G-Verticial Up A.S.M.E.

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 2039.
Formerly WEL 241 Instruction in safety, theory and practical applications in joint fit-up, design and welding pipe in the 5-G Vertical up position. Welding in accordance with the American Society of Mechanical Engineers Pipe Code using the GTAW process and SMAW process with E-XX18 and E-XX10 type electrodes.

WEL 2042 - 6G-45 All Sizes Pipe

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 2041.
Formerly WEL 242 Instruction in safety, theory and practical applications in joint fit-up, design and welding pipe in the 6-G 45 Uphill position. Welding in accordance with the American Society of Mechanical Engineers Pipe Code using the GTAW process and SMAW process with E-XX18 and E-XX10 type electrodes.

WEL 2043 - Testing All Sizes Pipe

Credit(s): 4
Lecture Hour(s): 1

Vocational Lab Hour(s): 4.50
Formerly WEL 243 Testing with different sizes of pipe to the American Petroleum Institute Pipe Code and American Society of Mechanical Engineers codes in all positions 2G, 5G, 6G with 2 3/8-inch pipe and 2-inch pipe.

History, AA (with Designation)

CIP 24.0101

See list of Department Chairs on the Personnel page.

Career Opportunities

The Associate of Arts Degree with Designation in History prepares students to transfer as a junior to a four-year institution in Colorado in order to pursue a Bachelor of Arts degree (BA) in history. Students who opt for a bachelor's degree in history can choose to work in several occupational fields including education at multiple levels, historical and/or corporate research, public history and many other related areas of social sciences. Once a BA is completed, students may pursue a higher or graduate degree in history, if interested.

Program Description

The Associate of Arts Degree with Designation in History introduces students to the field of history and includes the course work to meet general education requirements that are common to all Colorado four-year institutions. The degree is designed for students who want to transfer to a four-year college or university to pursue a bachelor's degree in history. Completion of the AA degree completes the first two years of a bachelor's degree in history, and guarantees transfer at junior standing with no more than 60 remaining credits to meet the graduation requirements for a bachelor's degree in history.

Program Requirements

In addition to the requirements listed below, you must:

a. Earn a minimum of 60 semester hours of course work
b. Earn a minimum of 15 graded semester hours at PCC
c. Earn a minimum of "C" in all coursework for the degree

Consult with a PCC Arts and Sciences advisor or transfer advisor to find out which Colorado Statewide Guaranteed Transfer Courses (GT Pathways) or elective courses meet the degree requirements of the four-year college to which you plan to transfer.

To earn an AA degree with a designation in history, you must complete at least 60 college-level credits, as described below:

Total Credits: 60

** Refer to CCCS Guaranteed Transfer (GT) - Pathways Courses for a full list of all GT Pathway Courses*

General Education Core Requirements (34 Credits)

Written Communication (6 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

or

- ENG 1022 - English Composition II: GT-CP2 **Credit(s): 3 and** a GT Pathways Advanced Writing course (GT-CO3) *

Mathematics (3 Credits)

- Select from a GT Pathways Mathematics course (GT-MA1) *, prefer MAT 1240 - Mathematics for the Liberal Arts: GT-MA1

Natural and Physical Sciences (7 Credits)

One of these courses must include a laboratory component

- Select two GT Pathways Natural and Physical Sciences courses (GT-SC1 **or** GT-SC2) *

Arts and Humanities (9 Credits)

- Select three from a GT Pathway course from any category (GT-AH1, GT-AH2, GT-AH3, **or** GT-AH4) *

Social and Behavioral Sciences (6 Credits)

- Select two from a GT Pathway course from any category (GT-SS1, GT-SS2, GT-SS3) *

History (3 Credits)

HIS 1310 - Western Civilization: Antiquity-1650: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 101 Explores a number of events, peoples, groups, ideas, institutions and trends that have shaped western

civilization from the prehistoric era to 1650. Reflects the multiple perspectives of gender, class, religion and ethnic groups. Focuses on developing, practicing and strengthening the skills historians use while constructing knowledge in this discipline. This course is one of the statewide Guaranteed Transfer courses, GT-HI1.

or

HIS 1110 - The World: Antiquity-1500: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 111 Explores a number of peoples, groups, ideas, institutions and trends that have shaped world history from the prehistoric era to 1500. Reflects the multiple perspectives of gender, class, religion and ethnic groups in a broad global sense. Focuses on the common denominators among all people. This approach goes beyond political borders to provide a better appreciation for different cultures. Focuses on developing, practicing and strengthening the skills historians use while constructing knowledge in this discipline. This course is one of the statewide Guaranteed Transfer courses, GT-HI1.

Additional Required History Courses (15 Credits)

HIS 1320 - Western Civ: 1650-present: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 102 Explores a number of events, peoples, groups, ideas, institutions and trends that have shaped western civilization from 1650 to the present. Reflects the multiple perspectives of gender, class, religion and ethnic groups. Focuses on developing, practicing and strengthening the skills historians use while constructing knowledge in this discipline. This course is one of the statewide Guaranteed Transfer courses, GT-HI1.

or

HIS 1120 - The World: 1500-present: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 112 Explores a number of peoples, groups, ideas, institutions and trends that have shaped world history from 1500 to the present. Reflects the multiple perspectives of gender, class, religion and ethnic groups in a broad global sense. Focuses on the common denominators among all people. This approach goes beyond political borders to provide a better appreciation for different cultures. Focuses on developing, practicing and strengthening the skills historians use while constructing knowledge in this discipline. This course is one of the statewide Guaranteed Transfer courses, GT-HI1.

HIS 1210 - U.S. History to Reconstruction: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 121 Explores events, trends, peoples, groups, cultures, ideas and institutions in North America and United States history, including the multiple perspectives of gender, class and ethnicity, between the period when Native American Indians were the sole inhabitants of North America and the American Civil War. Focuses on developing, practicing and strengthening the skills historians use while constructing knowledge in the discipline. This course is one of the statewide Guaranteed Transfer courses, GT-HI1

HIS 1220 - U.S. History Since the Civil War: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 122 Explores events, trends, peoples, groups, cultures, ideas and institutions in United States history, including the multiple perspectives of gender, class and ethnicity, between the period of the American Civil War and the present. Focuses on developing, practicing and strengthening the skills historians use while constructing knowledge in the discipline. This course is one of the statewide Guaranteed Transfer courses, GT-HI1.

- Choose one additional GT Pathways HIS course (GT-HI1) *

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

or

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

Electives (11 Credits)

Determined by transferring institution
Note: Students planning to transfer to University of Colorado Boulder must take either HIS 1310 or HIS 1320 to fulfill this requirement.

Students planning to transfer to CSU-Fort Collins are advised to complete at least two semesters of one college-level foreign language.

Transfer Degrees

This degree transfers to the following Colorado public four-year institutions of higher education:

- Adams State University (B.A. History, Anthropology, & Political Science: History)
- Colorado Mesa University (B.A. History; History or Secondary Education concentrations)
- Colorado State University-Ft. Collins (B.A. History; General History concentration)
- Colorado State University-Pueblo (B.A. History; General emphasis; B.S. History; General emphasis)
- Fort Lewis College (B.A. History; United States Option)
- Metropolitan State University of Denver (B.A. History)
- University of Colorado, Boulder (B.A. History)
- University of Colorado, Colorado Springs (B.A. History)
- University of Colorado, Denver (B.A. History)
- University of Northern Colorado (B.A. History; Liberal Arts emphasis)
- Western State Colorado University (B.A. History)

HIT Medical Coding AAS

See list of Department Chairs on the Personnel page.

Program Description

Health Information Technology (HIT) is the combination study of healthcare and information technology. The Medical Coding student has the option to complete the HIT Medical Coding Certificate and test for the Certified Coding Associate (CCA) or Certified Coding Specialist (CCS) exam. This will make the student immediately employable for an entry-level or mid-level position as a certified coder in an acute-care hospital, ambulatory, long-term or skilled-care nursing facility, physician office, insurance company, and any other setting using medical coding.

Specialization is growing in all areas of coding and coding management, allowing the coding professional to narrow or broaden their scope of practice through new and innovative roles within the healthcare field (e.g., clinical data specialist, medical records reviewer, medical records field technician, remote medical coder, reimbursement specialist, various registries, and coding auditor).

PCC's HIT programs, staff, and students are affiliated with the American Health Information Management Association (AHIMA), the premier national association of health information management (HIM) professionals and the leading source of HIM knowledge.

After completing the stringent processes through the American Health Information Management Association to be identified with the AHIMA Professional Certificate Approval Program (PCAP) and successfully earning the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM) accreditation, PCC HIT students are not only prepared to earn the AHIMA Medical Coding Credentials, they are eligible to sit for the Registered Health Information Technician (RHIT) credentialing exam.

Total Credits: 62

State Guaranteed Transfer Courses (16 credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1031 - Technical Writing I

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 131, then ENG 1020 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.

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

MAT 1260 - Introduction to Statistics: GT-MA1

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 135 Explores and applies data presentation and summarization, introduction to probability concepts and distributions, statistical inference estimation, hypothesis testing, comparison of populations, correlation and regression. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

BIO 1006 - Basic Anatomy and Physiology

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly BIO 106 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, Paramedic Program, and the Medical Office Technology Program.

PSY 1001 - General Psychology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 101 Focuses on the scientific study of behavior including motivation, emotion, physiological psychology, stress and coping, research methods, consciousness, sensation, perception, learning and memory. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

Core Curriculum Requirements (23 credits)

HIT 1002 - Medical Vocabulary for Documentation

Credit(s): 3
Lecture Hour(s): 3
Formerly HIT 102 Introduces medical vocabulary through the study of word structures and phrases with reinforcement in writing narratives and the study of medical records. Anatomy and physiology of all body systems are reviewed with discussion of related diseases, diagnostic procedures, treatments and drugs. Emphasis on learning to read, pronounce and interpret medical documentation prepares the student for document review in HIT fields. Illustrates the importance of HIPAA in both physical and electronic dissemination of medical records.

CIS 1018 - Intro to PC Applications

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 118 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.

HIT 1050 - Healthcare Delivery Systems

Credit(s): 3
Lecture Hour(s): 3
Formerly HIT 150 Provides an overview of the healthcare delivery system at the national, state and local level. The course provides healthcare education, including applicable regulations and standards, reimbursement methods, and evolution and current trends in healthcare delivery.

HIT 2061 - Healthcare Software

Credit(s): 3
Lecture Hour(s): 3
Formerly HIT 261 This course covers basic computer system architecture, file structure and design for healthcare settings. Topics include system analysis, design, security and selection for a variety of hardware environments. This course provides students with a review of computer fundamentals and the fundamentals of the electronic health record and an introduction to the information systems life cycle with software application. Security and confidentiality issues, concerns and implications in relation to the electronic health record will be addressed.

HIT 2025 - Health Information Management

Credit(s): 3
Lecture Hour(s): 3
Formerly HIT 225 Concentrates on the principles of management as they relate to the administration of the health information management department as part of a healthcare organization.

HIT 2022 - Quality Management

Credit(s): 3
Lecture Hour(s): 3
Formerly HIT 222 Introduces the student to the basic concepts of quality management in the healthcare environment. Requirements by regulatory agencies regarding quality documentation, utilization and risk management are discussed. Data collection, verification, analysis, descriptive statistics and presentation techniques will be studied. The course emphasizes the ongoing use of objective data and feedback to improve processes, systems and patient outcomes. Analysis of documentation for various purposes is also covered.

HIT 1012 - Legal Aspects for Health Records

Credit(s): 2
Lecture Hour(s): 2
Formerly HIT 112 Introduces the student to the legal system and defines the role of the healthcare professionals. Specific federal and state laws are identified and discussed as they relate to release of medical information.

HIT 2089 - HIT Capstone Course

Credit(s): 3
Internship Hour(s): 9
Prerequisite(s): Department approval required
Formerly HIT 289 Provides a demonstrated culmination of learning within a given program of study.

Medical Coding (23 credits)

HIT 1011 - Health Data Management and Information Systems

Credit(s): 3
Lecture Hour(s): 3
Formerly HIT 111 Introduces the electronic health record (EHR)/components and health informatics including infrastructure, privacy, security and legal implications. Federal involvement and its impact on information technology regarding health data will be discussed. Students will study the roles and relationships, in the transformation of data into meaningful information, through research, vital statistics and epidemiology. Data quality, integrity, collection, access and retention will also be emphasized.

HIT 2020 - ICD Coding I

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): HPR 1032
Formerly HIT 220 Introduces the ICD coding classification system and provides a basic understanding of ICD structure, conventions and principles utilized in code assignment. The student will be introduced to the official coding guidelines. They will apply knowledge of anatomy, physiology, pathophysiology and pharmacology in the assignment of diagnostic and procedural codes.

HIT 2041 - CPT Coding Basic Principles

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): HPR 1032.
Formerly HIT 241 Provides the student with skill sets to apply the current procedural terminology (CPT) and HCPCS code set principles and guidelines for application in reporting/communicating information and data about clinical services provided to patients by healthcare providers. Includes understanding what the CPT nomenclature is, how and why it is used, and guidelines for each code category and how it is applied to represent services within each code category.

HPR 1032 - Disease Process and Treatment

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): BIO 1006
Formerly HPR 232 Covers disease processes and drug therapy used to treat commonly found pathological conditions. Normal anatomy and physiology of each body system is reviewed. Conditions that disrupt homeostasis are examined. Conditions considered are both acquired and congenital. Diagnostic methods, management, treatment modalities and prognosis are discussed. Classifications of drugs are introduced. A general understanding of the actions; absorption, metabolism and excretion; and reasons for use of various groups of pharmacologic agents are introduced.

HIT 2052 - Coding II for Certification

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): HIT 2020, HIT 2041
Formerly HIT 252 Covers medical necessity and coding issues using ICD and CPT coding principles. Students should already possess a fundamental understanding of the CPT, ICD and HCPCS coding principle. Intensive coding

application will be achieved through the use of medical records, case studies and scenarios. DRGs, APCs, RUGs, RBRVs and the Correct Coding Initiative (CCI) will also be covered in this class.

HIT 1005 - Principles of Healthcare Reimbursement

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): HIT 2020, HIT 2041
Formerly HIT 105 Provides students with the knowledge needed to perform necessary tasks involved in healthcare reimbursement systems, including payment methodologies, use of clinical data and compliance.

HIT 1088 - Health Information Practicum I

Credit(s): 2
Practicum Hour(s): 4
Prerequisite(s): HIT 2052 or Department Chair Approval.
Formerly HIT 188 Provides a directed clinical experience which focuses on the practice of skills related to the application of legal principles, record analysis and abstraction and record retention and retrieval.

HIT 2068 - Certification Test Preparation

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): Department Chair Approval.
Formerly HIT 268 Prepares students who have made the decision to obtain a national health information technology credential by completing national credentialing exams.

HIT Medical Coding Certificate

See list of Department Chairs on the Personnel page.

Health Information Technology (HIT) is the combination study of healthcare and information technology. The Medical Coding student has the option to complete the HIT Medical Coding Certificate and test for the Certified Coding Associate (CCA) or Certified Coding Specialist (CCS) exam. This will make the student immediately employable for an entry-level or mid-level position as a certified coder in an acute-care hospital, ambulatory, long-term or skilled-care nursing facility, physician office, insurance company, and any other setting using medical coding.

Specialization is growing in all areas of coding and coding management, allowing the coding professional to narrow or broaden their scope of practice through new and innovative roles within the healthcare field (e.g., clinical data specialist, medical records reviewer, medical records field technician, remote medical coder, reimbursement specialist, various registries, and coding auditor).

PCC's HIT programs, staff, and students are affiliated with the American Health Information Management Association (AHIMA), the premier national association of health information management (HIM) professionals and the leading source of HIM knowledge. PCC also completed a very stringent process through the American Health Information Management Association to be identified with the AHIMA Professional Certificate Approval Program (PCAP).

Total Credits: 42

HIT Medical Coding - AHIMA Accredited Certified Coding Associate (42 credits)

BIO 1006 - Basic Anatomy and Physiology

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly BIO 106 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, Paramedic Program, and the Medical Office Technology Program.

HIT 1002 - Medical Vocabulary for Documentation

Credit(s): 3
Lecture Hour(s): 3
Formerly HIT 102 Introduces medical vocabulary through the study of word structures and phrases with reinforcement in writing narratives and the study of medical records. Anatomy and physiology of all body systems are reviewed with discussion of related diseases, diagnostic procedures, treatments and drugs. Emphasis on learning to read, pronounce and interpret medical documentation prepares the student for document review in HIT fields. Illustrates the importance of HIPAA in both physical and electronic dissemination of medical records.

CIS 1018 - Intro to PC Applications

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 118 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.

HIT 1011 - Health Data Management and Information Systems

Credit(s): 3
Lecture Hour(s): 3
Formerly HIT 111 Introduces the electronic health record (EHR)/components and health informatics including infrastructure, privacy, security and legal implications. Federal involvement and its impact on information technology regarding health data will be discussed. Students will study the roles and relationships, in the transformation of data into meaningful information, through research, vital statistics and epidemiology. Data quality, integrity, collection, access and retention will also be emphasized.

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Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): HPR 1032
Formerly HIT 220 Introduces the ICD coding classification system and provides a basic understanding of ICD structure, conventions and principles utilized in code assignment. The student will be introduced to the official coding

guidelines. They will apply knowledge of anatomy, physiology, pathophysiology and pharmacology in the assignment of diagnostic and procedural codes.

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Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): HPR 1032.
Formerly HIT 241 Provides the student with skill sets to apply the current procedural terminology (CPT) and HCPCS code set principles and guidelines for application in reporting/communicating information and data about clinical services provided to patients by healthcare providers. Includes understanding what the CPT nomenclature is, how and why it is used, and guidelines for each code category and how it is applied to represent services within each code category.

HIT 1050 - Healthcare Delivery Systems

Credit(s): 3
Lecture Hour(s): 3
Formerly HIT 150 Provides an overview of the healthcare delivery system at the national, state and local level. The course provides healthcare education, including applicable regulations and standards, reimbursement methods, and evolution and current trends in healthcare delivery.

HPR 1032 - Disease Process and Treatment

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): BIO 1006
Formerly HPR 232 Covers disease processes and drug therapy used to treat commonly found pathological conditions. Normal anatomy and physiology of each body system is reviewed. Conditions that disrupt homeostasis are examined. Conditions considered are both acquired and congenital. Diagnostic methods, management, treatment modalities and prognosis are discussed. Classifications of drugs are introduced. A general understanding of the actions; absorption, metabolism and excretion; and reasons for use of various groups of pharmacologic agents are introduced.

HIT 2061 - Healthcare Software

Credit(s): 3
Lecture Hour(s): 3
Formerly HIT 261 This course covers basic computer system architecture, file structure and design for healthcare settings. Topics include system analysis, design, security and selection for a variety of hardware environments. This course provides students with a review of computer fundamentals and the fundamentals of the electronic health record and an introduction to the information systems life cycle with software application. Security and confidentiality issues, concerns and implications in relation to the electronic health record will be addressed.

HIT 2052 - Coding II for Certification

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): HIT 2020, HIT 2041
Formerly HIT 252 Covers medical necessity and coding issues using ICD and CPT coding principles. Students should already possess a fundamental understanding of the CPT, ICD and HCPCS coding principle. Intensive coding

application will be achieved through the use of medical records, case studies and scenarios. DRGs, APCs, RUGs, RBRVs and the Correct Coding Initiative (CCI) will also be covered in this class.

HIT 1005 - Principles of Healthcare Reimbursement

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): HIT 2020, HIT 2041
Formerly HIT 105 Provides students with the knowledge needed to perform necessary tasks involved in healthcare reimbursement systems, including payment methodologies, use of clinical data and compliance.

HIT 1088 - Health Information Practicum I

Credit(s): 2
Practicum Hour(s): 4
Prerequisite(s): HIT 2052 or Department Chair Approval.
Formerly HIT 188 Provides a directed clinical experience which focuses on the practice of skills related to the application of legal principles, record analysis and abstraction and record retention and retrieval.

HIT 2068 - Certification Test Preparation

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): Department Chair Approval.
Formerly HIT 268 Prepares students who have made the decision to obtain a national health information technology credential by completing national credentialing exams.

HIT 2089 - HIT Capstone Course

Credit(s): 3
Internship Hour(s): 9
Prerequisite(s): Department approval required
Formerly HIT 289 Provides a demonstrated culmination of learning within a given program of study.

Industrial Technology Maintenance Level I Certificate

CIP 15.0303

See list of Department Chairs on the Personnel page.

Career Opportunities

The Industrial Technology Maintenance Level one Certificate provides foundational skills. Students may start as an entry level operator and are encouraged to obtain the Level Two Certificate and the degree to pursue careers as an electronics technician, an electro-mechanical technician, a semiconductor manufacturing technician, or an electro-mechanical field service technician.

Total Credits: 31

Certificate Requirements

Fall Semester (15 Credits)

ELT 1206 - Fundamentals of DC/AC

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Corequisite(s): ELT 1207.
Formerly ELT 106 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 - Industrial Electronics

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Corequisite(s): ELT 1206.
Formerly ELT 107 Provides a basic knowledge of generators, motors and the solid state devices and digital techniques used for industrial control applications.

MAC 1000 - Machine Shop Safety

Credit(s): 1
Lecture Hour(s): 1
Formerly MAC 100 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.

MAT 1150 - Technical Mathematics

Credit(s): 4
Lecture Hour(s): 4
Formerly MAT 108 Covers material designed for career technical or general studies students who need to study particular mathematical topics. Topics may include measurement, algebra, geometry, trigonometry, graphs and/or finance. These are presented at an introductory level and the emphasis is on applications.

MAC 2056 - Industrial Components

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly MAC 256 Covers common mechanical components used on industrial equipment. It is designed to assist maintenance staff in removal, installation and maintenance of plant equipment. It includes safety, fits, threads, bearings, fasteners, and hardware, lubrication, assembly and the use of hand tools.

Spring Semester (16 Credits)

ELT 2252 - Motors and Controls

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly ELT 252 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. 68 contact hours.

ELT 2254 - Industrial Wiring

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly ELT 254 Focuses on the required and recommended practice for industrial wiring. The National Electrical Code is applied to industrial power and control wiring. Covers specification and installation of wiring, conduit, enclosures and termination components in lecture and applied during lab.

ELT 2358 - Programmable Logic Controllers

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly ELT 258 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.

MAC 1005 - Introduction to Machining Technology

Credit(s): 4
Lecture Hour(s): 1.50
Vocational Lab Hour(s): 3.75
Formerly MAC 105 Introduces the student to the changing era of machining technology, emphasizing terminology, referencing and applications related to manufacturing environments. The fundamental use of bench tools, layout procedures, materials, precision measuring tools, machining processes, drilling and cut-off machines and other machining/manufacturing processes will be stressed. Skill competencies and standards will be identified. Use of the Machinery's Handbook will be strictly required and particular competencies may require performance evaluations.

MAC 2065 - Mechanical Component II

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly MAC 265 Covers common mechanical components used on industrial equipment. It is designed to assist maintenance staff in removal, installation and maintenance of plant equipment. It includes coupling, vibration, shafting, keys and keyways, belts and chain drives, gears and gear drive, and seals.

Industrial Technology Maintenance Level II Mini-Certificate

CIP 15.0303

See list of Department Chairs on the Personnel page.

Career Opportunities

The Industrial Technology Maintenance Level Two Certificate provides advanced technical skills as students pursue careers as an electronics technician, an electro-mechanical technician, a semiconductor manufacturing technician, or an electro-mechanical field services technician. Students are encouraged to obtain an AAS degree for supervisory positions.

Total Credits: 16

Certificate Requirements

Fall Semester

ELT 2357 - Sensors and Transducers

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Prerequisite(s): ELT 1001 , ELT 1206.
Formerly ELT 257 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. 68 contact hours.

ELT 2359 - Advanced Programmable Logic Controllers

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Prerequisite(s): ELT 2358.
Formerly ELT 259 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 2089 - Capstone: Automated Systems

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly ELT 289 Enables the student to plan, construct and evaluate a modified flexible manufacturing system using a programmable logic controller, industrial computer, robot and work cell peripherals. Addresses safety and emergency control procedures throughout this course.

MTE 2320 - Fluid Power Control

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly MTE 238 Introduces fluid power application in industry and various types of industrial control devices used in modern manufacturing equipment and machinery. Enables the student to produce the graphics required to incorporate these items into a mechanical design.

WEL 1024 - Gas Tungsten Arc Welding I

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.5
Formerly WEL 124 Covers Gas Tungsten Arc Welding (GTAW) operations in various positions and joint designs.

Industrial Technology Maintenance, AAS

CIP 15.0303

See list of Department Chairs on the Personnel page.

Career Opportunities

The AAS degree in Industrial Technology Maintenance prepares you for a career as an electronics technician, an electro-mechanical technician, a semiconductor manufacturing technician, or an electro-mechanical field service technician.

Total Credits: 61

Degree Requirements

General Education Requirements (15 Credits)

ENG 1031 - Technical Writing I

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 131, then ENG 1020 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.

MAT 1150 - Technical Mathematics

Credit(s): 4
Lecture Hour(s): 4
Formerly MAT 108 Covers material designed for career technical or general studies students who need to study particular mathematical topics. Topics may include measurement, algebra, geometry, trigonometry, graphs and/or finance. These are presented at an introductory level and the emphasis is on applications.

Any general education courses in (8 Credits)

- Arts/Humanities, or Social/Behavioral Science, or Communications, or Natural & Physical Sciences.

Recommendations are

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

COM 2069 - Leadership

Credit(s): 1
Lecture Hour(s): 1
Formerly COM 269 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.

PHY 1105 - Conceptual Physics with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly PHY 105 Focuses on mechanics, heat, properties of matter, electricity and magnetism, light and modern physics. Incorporates laboratory experience. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

Core Curriculum Requirements (46 Hours)

ELT 1206 - Fundamentals of DC/AC

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Corequisite(s): ELT 1207.
Formerly ELT 106 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 - Industrial Electronics

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Corequisite(s): ELT 1206.
Formerly ELT 107 Provides a basic knowledge of generators, motors and the solid state devices and digital techniques used for industrial control applications.

ELT 2252 - Motors and Controls

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly ELT 252 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. 68 contact hours.

ELT 2254 - Industrial Wiring

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly ELT 254 Focuses on the required and recommended practice for industrial wiring. The National Electrical Code is applied to industrial power and control wiring. Covers specification and installation of wiring, conduit, enclosures and termination components in lecture and applied during lab.

ELT 2357 - Sensors and Transducers

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Prerequisite(s): ELT 1001 , ELT 1206.
Formerly ELT 257 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. 68 contact hours.

ELT 2358 - Programmable Logic Controllers

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly ELT 258 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

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Prerequisite(s): ELT 2358.
Formerly ELT 259 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 2080 - Internship

Credit(s): 1-12
Internship Hour(s): 3-36
Formerly ELT 280 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 2089 - Capstone: Automated Systems

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly ELT 289 Enables the student to plan, construct and evaluate a modified flexible manufacturing system using a programmable logic controller, industrial computer, robot and work cell peripherals. Addresses safety and emergency control procedures throughout this course.

MAC 1000 - Machine Shop Safety

Credit(s): 1
Lecture Hour(s): 1
Formerly MAC 100 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 1005 - Introduction to Machining Technology

Credit(s): 4
Lecture Hour(s): 1.50
Vocational Lab Hour(s): 3.75
Formerly MAC 105 Introduces the student to the changing era of machining technology, emphasizing terminology, referencing and applications related to manufacturing environments. The fundamental use of bench tools, layout procedures, materials, precision measuring tools, machining processes, drilling and cut-off machines and other machining/manufacturing processes will be stressed. Skill competencies and standards will be identified. Use of the Machinery's Handbook will be strictly required and particular competencies may require performance evaluations.

MAC 2056 - Industrial Components

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly MAC 256 Covers common mechanical components used on industrial equipment. It is designed to assist maintenance staff in removal, installation and maintenance of plant equipment. It includes safety, fits, threads, bearings, fasteners, and hardware, lubrication, assembly and the use of hand tools.

MAC 2065 - Mechanical Component II

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly MAC 265 Covers common mechanical components used on industrial equipment. It is designed to assist maintenance staff in removal, installation and maintenance of plant equipment. It includes coupling, vibration, shafting, keys and keyways, belts and chain drives, gears and gear drive, and seals.

MTE 2320 - Fluid Power Control

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly MTE 238 Introduces fluid power application in industry and various types of industrial control devices used in modern manufacturing equipment and machinery. Enables the student to produce the graphics required to incorporate these items into a mechanical design.

WEL 1002 - Oxy-fuel Joining Processes

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.5
Formerly WEL 102 Covers Oxy-fuel joining operations.

or

WEL 1024 - Gas Tungsten Arc Welding I

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.5
Formerly WEL 124 Covers Gas Tungsten Arc Welding (GTAW) operations in various positions and joint designs.

Industry Certification Prep Certificate

CIP 11.0101

See list of Department Chairs on the Personnel page.

Career Opportunities

The CIS IT Industry Certification Preparation Program provids the theory and technical training so that students are prepared to sit for examination to earn A+, Network+, and Security+ industry credentials, from CompTIA.

Program Description

The CIS program provides training in basic technical computer and networking skills. You will study computer networking, programming and database technologies along with classes that teach the technical aspects of the Internet and data communications. Note: Students interested in transferring to a baccalaureate program in Computer Information Systems should refer to the Transfer Degree section.

Total Credits: 16

Certificate Requirements

CIS 1015 - Introduction to Computer Information Systems

Credit(s): 3
Lecture Hour(s): 3
Formerly CIS 115 Focuses on an overview of the needs for and roles of computer information systems. Emphasizes computer requirements in organizations, history, hardware functions, programming, systems development and computer operations. Introduces computer applications.

CNG 1020 - A+ Certification Preparation

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Formerly CNG 120 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 1024 - Networking I: Network +

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 124 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 1032 - Network Security Fundamentals

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 132 Examines the field of information security to prepare information systems students for their future roles as business decision-makers. The course presents a balance of the managerial and the technical aspects of information security. The concepts covered in this course should be helpful for students working towards the Certified Information Systems Security Professional (CISSP) certification.

Certificate Electives

Choose two elective courses from the list below

CNG 1021 - Computer Technician I: A+

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Formerly CNG 121 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+

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Prerequisite(s): CNG 1021 or Department Chair Approval.
Formerly CNG 122 Provides students with an in-depth look at desktop and mobile Operating System support, maintenance and troubleshooting, and an overview of 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 current operating systems, including using common GUI and command line tools, registry editing, system backup and recovery, and advanced troubleshooting. This course helps prepare you for the second CompTIA A+ Exam.

CNG 1025 - Networking II: Network +

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Prerequisite(s): CNG 1024
Formerly CNG 125 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 1042 - Introduction to Cloud Computing Concepts

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Formerly CNG 142 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.

Infant Toddler Supervisor Mini-Certificate

CIP 13.1210

See list of Department Chairs on the Personnel page.

Career Opportunities

The ECE program prepares you for a career in teaching children (birth to age 5). The program can also prepare you to become an Early Childhood Teacher or director in the field of Early Childhood Education.

Program Description

This program prepares you to become a productive, caring and responsible teacher. Classes emphasize child development skills in the areas of language, social, emotional, cognitive and physical development. Classes also focus on cultural diversity among children. You will become familiar with theories concerning child development and ECE,

and you will participate in many group discussions and hands-on activities that you can apply in the preschool classroom. You will learn from qualified faculty members who believe in the success of each ECE student.

Program Requirements

Entrance Requirements:

You should demonstrate an interest in the care and well-being of young children. You must also be free from evidence of illness – mental and physical – and free from personal conduct which may be injurious to children as stated in the Colorado Rules and Regulations for Child Care Centers, section 7.702.51.

You must meet with an ECE faculty advisor before registering for ECE courses.

Note: Students interested in transferring to a baccalaureate program in Early Childhood Education or Elementary Education should refer to the Transfer Degree section.

Total Credits: 12

Certificate Requirements

ECE 1011 - Introduction to Early Childhood Education

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 101 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

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 103 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 1111 - Infant and Toddler Theory and Practice

Credit(s): 3
Lecture Hour(s): 3
Formerly ECE 111 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. Focuses on birth through age 3.

ECE 1125 - Intro to Infant/Toddler Lab Techniques

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly ECE 112 Includes a classroom Seminar and placement in an infant and/or toddler setting. The supervised placement provides the student with the opportunity to observe, practice appropriate interactions and develop effective guidance and nurturing techniques with infants and/or toddlers. Addresses ages prenatal through age 2.

Information Assurance Certificate

CIP 11.0101

See list of Department Chairs on the Personnel page.

Career Opportunities

The CIS program prepares you for careers in computer science, computer networking and electronic commerce. The AAS Degree with an emphasis in local area networking prepares you to work as a network technician on small and large networks. You may also administer smaller networks as a System Administrator. The AGS Degree with an emphasis in Computer Information Systems prepares you to transfer to a university to continue studies in Computer Science or Computer Information Systems.

Program Description

The CIS program provides training in basic technical computer and networking skills. You will study computer networking, programming and database technologies along with classes that teach the technical aspects of the Internet and data communications. Note: Students interested in transferring to a baccalaureate program in Computer Information Systems should refer to the Transfer Degree section.

Total Credits: 19

Certificate Requirements

CNG 1024 - Networking I: Network +

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 124 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 1031 - Principles of Information Assurance

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50

Formerly CNG 131 Delivers a comprehensive overview of network security, including general security concepts. Communication Security is studied, including remote access, email, 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.

or

CNG 1033 - Network Security: Fire Walls and Intrusion Detection and Network Security

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 133 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 1032 - Network Security Fundamentals

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 132 Examines the field of information security to prepare information systems students for their future roles as business decision-makers. The course presents a balance of the managerial and the technical aspects of information security. The concepts covered in this course should be helpful for students working towards the Certified Information Systems Security Professional (CISSP) certification.

CNG 1036 - Guide to Disaster Recovery

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Department Chair Approval.
Formerly CNG 136 Presents methods to identify vulnerabilities and take appropriate countermeasures to prevent and mitigate failure risks for an organization. It will take an enterprise-wide approach to developing a disaster recovery plan.

CNG 2012 - Configuring Windows Server

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Formerly CNG 212 Provides students with the knowledge and skills that are required to install and configure a Microsoft Windows Server. This course helps prepare students for a MTA (Microsoft Technology Associate) and/or MCSA (Microsoft Certified Solutions Associate) exams.

CNG 2024 - Microsoft Windows Wireless Network

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Prerequisite(s): CNG 1004 or instructor approval.
Formerly CNG 224 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.

Intermediate Structural Certificate

CIP 48.0508

See list of Department Chairs on the Personnel page.

Career Opportunities

The Welding program prepares you for a career in construction and manufacturing settings, small job shops, city and government welding centers and related sites. You may also work as a self-employed welder.

Program Description

The Welding AAS degree offers advanced instruction if you have finished the basic welding courses or if you are working at the trade and wish to upgrade your skills. We also give qualification tests if you wish to be become qualified in a welding process.

The Welding Certificate program provides training in the SMAW (Shielded Metal Arc Welding), GTAW (Gas Tungsten Arc Welding), GMAW (Gas Metal Arc Welding) and the Oxyacetylene cutting process. This training is also included in the degree program. This two-semester program stresses print reading and applied metal properties. It prepares you for employment in the industry in the shortest possible time.

Total Credits: 12

Certificate Requirements

WEL 1006 - Blueprint Reading for Welders and Fitters

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Prerequisite(s): WEL 1001 or WEL 1002
Formerly WEL 106 Covers interpretation and creation of weld symbols and blueprints used in metal fabrication.

WEL 1024 - Gas Tungsten Arc Welding I

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.5
Formerly WEL 124 Covers Gas Tungsten Arc Welding (GTAW) operations in various positions and joint designs.

WEL 1025 - Introduction to Gas Metal Arc Welding

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1024.
Formerly WEL 125 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 2050 - Layout and Fabrication

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1002.
Formerly WEL 250 Develops welding and associated skills in metal fabrication.

Introduction to Agriculture

A general program that focuses on modern business and economic principles involved in the organization, operation, and management of agricultural enterprises.

Total Credits: 9

Core Curriculum Requirements (9 credits)

AGB 1002 - Foundations of Agri-Business

Credit(s): 3
Lecture Hour(s): 3
Formerly AGB 102 Focuses on the foundational aspects of the primary agriculture business areas including economics, management, marketing, sales, and finance in an applied manner. Current events in agriculture are discussed with emphasis on application to agribusiness.

ASC 1100 - Animal Sciences

Credit(s): 3
Lecture Hour(s): 3
Formerly ASC 100 Covers the basic fundamentals of livestock production including the principles of nutrition, reproduction, breeding, genetics, health, and physiology of cattle, sheep, swine, horses, and other farm species. Trends and issues in animal science and animal agriculture are also discussed in this course.

CIS 1018 - Intro to PC Applications

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 118 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.

Introduction to Health Information Technology

See list of Department Chairs on the Personnel page.

Program Description

Few professions offer the level of diversity in positions and tasks, as well as job security, as Health Information Technology (HIT). HIT is positioned at the intersection of healthcare, technology, and business. This certificate prepares individuals from other degree programs and professions to successfully transition their skills and credentials to the healthcare sector.

Skills, duties, and tasks within healthcare span business, accounting, counseling, IT, data analytics, management, laws and regulations, marketing, human resources, network security, project management, and beyond. Professionals with insight and understanding into the unique business environment of serving patients empower clinical partners in health care to provide high-quality, efficient, financially prudent, and life-saving care.

PCC's HIT programs, staff, and students are affiliated, approved, and credentialed with the American Health Information Management Association (AHIMA) – the premier national association of health information management (HIM) professionals and the leading source of HIM knowledge – as well as the global Health information Management Systems Society (HIMSS), the premier international association whose mission is to "reform the global health ecosystem through the power of information and technology."

Total Credits: 18

Core Curriculum Requirements

HIT 1002 - Medical Vocabulary for Documentation

Credit(s): 3
Lecture Hour(s): 3
Formerly HIT 102 Introduces medical vocabulary through the study of word structures and phrases with reinforcement in writing narratives and the study of medical records. Anatomy and physiology of all body systems are reviewed with discussion of related diseases, diagnostic procedures, treatments and drugs. Emphasis on learning to read, pronounce and interpret medical documentation prepares the student for document review in HIT fields. Illustrates the importance of HIPAA in both physical and electronic dissemination of medical records.

HIT 1011 - Health Data Management and Information Systems

Credit(s): 3
Lecture Hour(s): 3
Formerly HIT 111 Introduces the electronic health record (EHR)/components and health informatics including infrastructure, privacy, security and legal implications. Federal involvement and its impact on information technology regarding health data will be discussed. Students will study the roles and relationships, in the transformation of data into meaningful information, through research, vital statistics and epidemiology. Data quality, integrity, collection, access and retention will also be emphasized.

HIT 1012 - Legal Aspects for Health Records

Credit(s): 2
Lecture Hour(s): 2
Formerly HIT 112 Introduces the student to the legal system and defines the role of the healthcare professionals. Specific federal and state laws are identified and discussed as they relate to release of medical information.

HIT 1020 - Working with Health IT Systems

Credit(s): 4
Lecture Hour(s): 4
Formerly HIT 120 Provides hands-on experience with a computerized HIT system/electronic health record, utilizing contemporary online systems with simulated data. The course will include additional lecture, project work and practice in the use of HIT systems. Students will play the role of practitioners using these systems and experience threats to security and gain an appreciation of the need for standards and high levels of usability. Students will also learn how errors can occur and ways to minimize them.

HIT 1050 - Healthcare Delivery Systems

Credit(s): 3
Lecture Hour(s): 3
Formerly HIT 150 Provides an overview of the healthcare delivery system at the national, state and local level. The course provides healthcare education, including applicable regulations and standards, reimbursement methods, and evolution and current trends in healthcare delivery.

HIT 2022 - Quality Management

Credit(s): 3
Lecture Hour(s): 3
Formerly HIT 222 Introduces the student to the basic concepts of quality management in the healthcare environment. Requirements by regulatory agencies regarding quality documentation, utilization and risk management are discussed. Data collection, verification, analysis, descriptive statistics and presentation techniques will be studied. The course emphasizes the ongoing use of objective data and feedback to improve processes, systems and patient outcomes. Analysis of documentation for various purposes is also covered.

Introduction to Media Communications Mini-Certificate

CIP 09.0702

See list of Department Chairs on the Personnel page.

Career Opportunities

Careers in Media Communications are in demand and PCC offers an affordable way for students to begin their education. Some of the exciting career options within this field include: Graphic Designers; Web Developers; Broadcast Technicians; Film Video Editors; and Advertising & Promotion Managers.

Program Description

The Media Communications program teaches students to think critically and develop skills in Web Design, Graphic Design, Advertising, Videography, News Writing, and TV-Radio Production. Courses provide a solid foundation in these areas through a combination of lecture and hands on applications. There are multiple labs with state of the art equipment and software for your area of emphasis. The Media Communications program provides a high technical skill attainment in this changing field of communication. Students have multiple options to pursue. The AAS degrees with emphases in Graphic Design and Web Design offer advanced technical skills in these areas. Certificates provide basic skill sets to enhance an existing degree or occupation. The AGS degree provides a transfer option to a four year university. If interested in this option, please refer to the Transferring Credits section of the catalog.

Total Credits: 15

Certificate Requirements

MGD 1011 - Adobe Photoshop I

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly MGD 111 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

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly MGD 112 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 - Quark Xpress

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly MGD 114 Introduces students to QuarkXPress, a digital page layout tool. Students learn how to assemble, organize, manipulate and manage text and graphics to produce a high-quality publication. Class discussions and independent projects supplement hands-on classroom work.

MGD 1041 - Web Design I

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly MGD 141 Introduces website planning, design and creation using industry standards-based website development tools. Screen-based color theory, web aesthetics, use of graphics editors and intuitive interface design are explored.

MGD 2041 - Web Design II

Credit(s): 3
Vocational Lab Hour(s): 4.50
Prerequisite(s): MGD 1041, or department chair approval.
Formerly MGD 241 Expands on previously learned fundamentals of HTML introducing cascading style sheets, DHTML, Java Scripts and CGI forms. Color usage and interface design principles are emphasized in this course. In this course we'll examine websites that employ more complex structures, optimal site architecture and navigation necessary for larger and more complex sites.

Introductory Structural Certificate

CIP 48.0508

See list of Department Chairs on the Personnel page.

Career Opportunities

The Welding program prepares you for a career in construction and manufacturing settings, small job shops, city and government welding centers and related sites. You may also work as a self-employed welder.

Program Description

The Welding AAS degree offers advanced instruction if you have finished the basic welding courses or if you are working at the trade and wish to upgrade your skills. We also give qualification tests if you wish to be become qualified in a welding process.

The Welding Certificate program provides training in the SMAW (Shielded Metal Arc Welding), GTAW (Gas Tungsten Arc Welding), GMAW (Gas Metal Arc Welding) and the Oxyacetylene cutting process. This training is also included in the degree program. This two-semester program stresses print reading and applied metal properties. It prepares you for employment in the industry in the shortest possible time.

Total Credits: 13

Certificate Requirements

WEL 1000 - Safety for Welders

Credit(s): 1
Lecture Hour(s): 1
Formerly WEL 100 Covers the hazards of welding on health and safety.

WEL 1002 - Oxy-fuel Joining Processes

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.5
Formerly WEL 102 Covers Oxy-fuel joining operations.

WEL 1003 - Basic Shielded Metal Arc I

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1002.
Formerly WEL 103 Covers Shielded Metal Arc Welding (SMAW) operation utilizing E-XX10 electrodes.

WEL 1004 - Basic Shielded Metal Arc II

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1003.
Formerly WEL 104 Covers Shielded Metal Arc Welding (SMAW) operation utilizing E-XX18 electrodes.

IT Systems Administration AAS

See list of Department Chairs on the Personnel page.

Career Opportunities

The CIS program prepares you for careers in computer science, computer networking and electronic commerce. The AAS Degree with an emphasis in local area networking prepares you to work as a network technician on small and large networks. You may also administer smaller networks as a System Administrator. The AGS Degree with an emphasis in Computer Information Systems prepares you to transfer to a university to continue studies in Computer Science or Computer Information Systems.

Program Description

The CIS program provides training in basic technical computer and networking skills. You will study computer networking, programming, and database technologies along with classes that teach the technical aspects of the internet and data communications. Note: Students interested in transferring ot a baccalaureate program in Computer Information Systems should refer to the Transfer Degree section of this catalog.

Total Credits: 60

Communications (3 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of

critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

OR

ENG 1031 - Technical Writing I

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 131, then ENG 1020 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.

Mathematics (4 Credits)

MAT 1150 - Technical Mathematics

Credit(s): 4
Lecture Hour(s): 4
Formerly MAT 108 Covers material designed for career technical or general studies students who need to study particular mathematical topics. Topics may include measurement, algebra, geometry, trigonometry, graphs and/or finance. These are presented at an introductory level and the emphasis is on applications.

OR

MAT 1340 - College Algebra: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 0300.
Formerly MAT 121 Explores topics including intermediate algebra, equations, and inequalities, functions and their graphs, exponential and logarithmic functions, linear and nonlinear systems, selection of topics from among graphing of the conic sections, introduction to sequences and series permutations and combinations, the binomial theorem and theory of equations. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

General Education Electives (9 Credits)

CIS 1015 - Introduction to Computer Information Systems

Credit(s): 3
Lecture Hour(s): 3
Formerly CIS 115 Focuses on an overview of the needs for and roles of computer information systems. Emphasizes computer requirements in organizations, history, hardware functions, programming, systems development and computer operations. Introduces computer applications.

CIS 1018 - Intro to PC Applications

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 118 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.

CSC 1020 - Problem Solving with Java

Credit(s): 3
Lecture Hour(s): 3
Formerly CSC 120 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 1019 - Introduction to Programming

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CSC 119 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.

CIS Core (16 Credits)

CIS 2020 - Fundamentals of Unix

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 220 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

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly CIS 223 Introduces students to the concepts of installing, configuring, and managing the Linux operating system. Topics covered include working with various desktops, use of filesystem commands, and management of user and group permissions.

CIS 2087 - Cooperative Education

Credit(s): 1-12
Internship Hour(s): 3-36
Formerly CIS 287 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 works with the student to select an appropriate work site, establish learning objectives and to coordinate learning activities with the employer work site supervisor.

Credit(s) needed: 3

CNG 1024 - Networking I: Network +

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 124 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 1032 - Network Security Fundamentals

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 132 Examines the field of information security to prepare information systems students for their future roles as business decision-makers. The course presents a balance of the managerial and the technical aspects of information security. The concepts covered in this course should be helpful for students working towards the Certified Information Systems Security Professional (CISSP) certification.

CNG 2012 - Configuring Windows Server

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Formerly CNG 212 Provides students with the knowledge and skills that are required to install and configure a Microsoft Windows Server. This course helps prepare students for a MTA (Microsoft Technology Associate) and/or MCSA (Microsoft Certified Solutions Associate) exams.

IT Systems Administration Core (28 Credits)

CIS 2040 - Database Design and Development

Credit(s): 3
Lecture Hour(s): 3
Formerly CIS 240 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)

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Prerequisite(s): CIS 2040, Database Design and Development
Formerly CIS 243 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.

CNG 1004 - Intro to TCP/IP

Credit(s): 3
Lecture Hour(s): 3
Formerly CNG 104 Covers the basic elements of the Transmission Control Protocol and the Internet Protocol, the basic

technologies that implement the Internet and computer networking. In addition to TCP and IP the course covers networking media, link layer, network layer and transport layer protocols. Also included are routing, broadcast, multicast and network address translation. IP version 4 and IP version 6 are both covered.

CNG 1020 - A+ Certification Preparation

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Formerly CNG 120 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 1042 - Introduction to Cloud Computing Concepts

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Formerly CNG 142 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 2024 - Microsoft Windows Wireless Network

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Prerequisite(s): CNG 1004 or instructor approval.
Formerly CNG 224 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.

MAN 2026 - Principles of Management

Credit(s): 3
Lecture Hour(s): 3
Formerly MAN 226 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.

CNG 2040 - Virtual Environment Admin

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Formerly CNG 240 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 2042 - Cloud Computing

Credit(s): 3
Lecture Hour(s): 2

Vocational Lab Hour(s): 1.5
Formerly CNG 242 Installs, configures and manages a cloud environment. Builds on knowledge of hypervisor and virtual machine environments.

Law Enforcement Academy Certificate

CIP 43.0107

See list of Department Chairs on the Personnel page.

Career Opportunities

The Law Enforcement program prepares students for careers in law enforcement as a police officers, desk officer, bailiff or corrections officer. Additionally, students could work as criminal investigators, detectives, police agencies, or in correction and judicial facilities.

Program Description

The Law Enforcement program teaches students an in-depth analysis of the three (3) components of the criminal justice system (law enforcement, the judicial system and corrections) with special emphasis on criminology, substantive criminal law, procedural criminal law and constitutional law. It places a strong emphasis on reading and comprehension skills, written and verbal communication skills and empathetic awareness of cultural diversity.

Program Requirements

Entrance Requirements:

Successful completion of any CCR course or qualifying placement score or exemption to complete the Criminal Justice courses. Admission into the Law Enforcement Academy courses requires a student to file an application with the PLEA Department Chair and meet specific guidelines prior to admission into the program (such as state statutory requirements for background checks). You may enroll in PLEA courses only if you are admitted into the program.

Graduation Requirements:

In addition to program requirements for this program, you must complete ENG 1021, COM 1150, MAT 1140 and six (6) credits of social and behavioral science courses.

Total Credits: 37

Certificate Requirements

LEA 1001 - Basic Police Academy I

Credit(s): 6
Lecture Hour(s): 6
Formerly LEA 101 Conforms to POST standards and state certification requirements as well as the basic skills and knowledge necessary to perform the entry-level duties of a peace officer. Emphasis will be on simulating actual situations utilizing a lecture and laboratory mode of learning.

LEA 1002 - Basic Police Academy II

Credit(s): 12
Lecture Hour(s): 12
Formerly LEA 102 Conforms to POST standards and state certification requirements as well as the basic skills and knowledge to perform the entry-level duties of a peace officer. Emphasis will be on simulating actual situations utilizing a lecture and laboratory mode of learning.

LEA 1003 - Basic Law Enforcement Academy III

Credit(s): 2
Lecture Hour(s): 0.50
Vocational Lab Hour(s): 2.25
Formerly LEA 103 Enhances the standards established by the POST 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 POST curriculum to create a unique learning experience.

LEA 1005 - Basic Law

Credit(s): 8
Lecture Hour(s): 8
Formerly LEA 105 Conforms to POST standards and state certification requirements as well as the basic skills and knowledge necessary to perform the entry-level duties of a peace officer. Emphasis will be on United States Constitution, arrest, search and seizure, interrogation and confessions, rules of evidence, Colorado Criminal Code, Colorado Traffic Code, Colorado Children's Code, Liquor Code and controlled substances.

LEA 1006 - Arrest Control Techniques

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly LEA 106 Covers the skills, knowledge and abilities necessary to effectively maintain control of a suspect when making an arrest. Emphasizes the continuum of force and de-escalation of force.

LEA 1007 - Law Enforcement Driving

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly LEA 107 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

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly LEA 108 Discusses the skills, knowledge and abilities necessary to safely use police firearms. Students will demonstrate skills by firing weapons on a firing range. The student will demonstrate basic safety techniques and will explain the firearms role within the continuum of force.

Law Enforcement, AAS

CIP 43.0107

See list of Department Chairs on the Personnel page.

Career Opportunities

The Law Enforcement program prepares students for careers in law enforcement as a police officers, desk officer, bailiff or corrections officer. Additionally, students could work as criminal investigators, detectives, police agencies, or in correction and judicial facilities.

Program Description

The Law Enforcement program teaches students an in-depth analysis of the three (3) components of the criminal justice system (law enforcement, the judicial system and corrections) with special emphasis on criminology, substantive criminal law, procedural criminal law and constitutional law. It places a strong emphasis on reading and comprehension skills, written and verbal communication skills and empathetic awareness of cultural diversity.

Program Requirements

Entrance Requirements:

Successful completion of any CCR course or qualifying placement score or exemption to complete the Criminal Justice courses. Admission into the Law Enforcement Academy courses requires a student to file an application with the PLEA Department Chair and meet specific guidelines prior to admission into the program (such as state statutory requirements for background checks). You may enroll in PLEA courses only if you are admitted into the program.

Graduation Requirements:

In addition to program requirements for this program, you must complete ENG 1021, COM 1150, MAT 1140 and six (6) credits of social and behavioral science courses.

Total Credits: 67

Degree Requirements

General Education Requirements (15 Credits)

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

MAT 1140 - Career Math

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 107 Covers material designed for career technical or general studies students who need to study particular mathematical topics. Topics may include measurement, algebra, geometry, trigonometry, graphs and/or finance. These are presented on an introductory level and the emphasis is on applications.

- Select two courses in Social & Behavior Science **Credit(s): 6**

Related Requirements (15 Credits)

CRJ 1010 - Intro to Criminal Justice: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): ENG 1021.
Formerly CRJ 110 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. This is a statewide Guaranteed Transfer course in the GT-SS3 category.

CRJ 1035 - Judicial Function

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of CRJ 1010.
Formerly CRJ 135 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

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of CRJ 1010.
Formerly CRJ 145 Examines the history and total correctional process from law enforcement through the administration of justice, probation, prisons, correctional institutions and parole. Also examines the principles, theories, phenomena and problems of the crime, society and the criminal justice system from the perspective of criminology and the criminal justice system in general. Emphasizes the role of sociology and other interdisciplinary approaches to the field of corrections and society's response.

CRJ 2010 - Constitutional Law

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of CRJ 1010and CRJ 1035.
Prerequisite(s)/Corequisite(s): COM 1150and ENG 1021.
Formerly CRJ 210 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 2030 - Criminology

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of CRJ 1010 and CRJ 1045.
Prerequisite(s)/Corequisite(s): COM 1150 and ENG 1021.
Formerly CRJ 230 Provides an introduction to the study of crime, understanding the causes of crime, and examines, theoretical frameworks and theories to explain criminal behavior. Within a social context, consideration is given to how theories have emerged and understand how social context contributes to explanations of crime. Examination of the nature of crime, crime victimization, crime patterns, types of crime, crime statistics, and criminal behavior is also included.

or

CRJ 2080 - Cooperative Education/internship

Credit(s): 3
Internship Hour(s): 9
Prerequisite(s): Department chair or program coordinator approval.
Formerly CRJ 280 Provides work experience for students to gain practical work experience related to their educational program. *Individuals desiring this Peace Officers Standard and Training (P.O.S.T.) course of study must file an application with the Police Academy coordinator before registering. Colorado State law requires that Police Academy students meet specific guidelines prior to admission. *Students pursuing a Police Science area of emphasis are expected to complete the Pueblo Law Enforcement Academy. This must be coordinated with the Director of the Academy and the assigned CRJ student advisor.

Common Core Requirements (37 Credits)

LEA 1001 - Basic Police Academy I

Credit(s): 6
Lecture Hour(s): 6

Formerly LEA 101 Conforms to POST standards and state certification requirements as well as the basic skills and knowledge necessary to perform the entry-level duties of a peace officer. Emphasis will be on simulating actual situations utilizing a lecture and laboratory mode of learning.

LEA 1002 - Basic Police Academy II

Credit(s): 12
Lecture Hour(s): 12
Formerly LEA 102 Conforms to POST standards and state certification requirements as well as the basic skills and knowledge to perform the entry-level duties of a peace officer. Emphasis will be on simulating actual situations utilizing a lecture and laboratory mode of learning.

LEA 1003 - Basic Law Enforcement Academy III

Credit(s): 2
Lecture Hour(s): 0.50
Vocational Lab Hour(s): 2.25
Formerly LEA 103 Enhances the standards established by the POST 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 POST curriculum to create a unique learning experience.

LEA 1005 - Basic Law

Credit(s): 8
Lecture Hour(s): 8
Formerly LEA 105 Conforms to POST standards and state certification requirements as well as the basic skills and knowledge necessary to perform the entry-level duties of a peace officer. Emphasis will be on United States Constitution, arrest, search and seizure, interrogation and confessions, rules of evidence, Colorado Criminal Code, Colorado Traffic Code, Colorado Children's Code, Liquor Code and controlled substances.

LEA 1006 - Arrest Control Techniques

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly LEA 106 Covers the skills, knowledge and abilities necessary to effectively maintain control of a suspect when making an arrest. Emphasizes the continuum of force and de-escalation of force.

LEA 1007 - Law Enforcement Driving

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly LEA 107 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

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3

Formerly LEA 108 Discusses the skills, knowledge and abilities necessary to safely use police firearms. Students will demonstrate skills by firing weapons on a firing range. The student will demonstrate basic safety techniques and will explain the firearms role within the continuum of force.

Leadership Studies Mini-Certificate

CIP 52.0201

See list of Department Chairs on the Personnel page.

Career Opportunities

The AAS and Certificate programs prepare you for entry level positions in marketing, management or sales; they also give you the skills you need to open your own business.

Program Description

Prepares students for lives of learning, leadership, and service; and designed to enhance and explore leadership potential through curricular design that includes academic courses, seminars, and community service opportunities. The Leadership certificate will verify student's leadership education and training for potential transfer colleges and employers. By obtaining a PCC leadership certificate, students should be able to demonstrate the following: 1.) Personal leadership development. 2.) Leadership skills (communication, motivation, team building, etc.). 3.) Critical thinking. 4). Leadership theory. 5). Civic engagement. 6). Appreciation for diversity.

Total Credits: 12

Certificate Requirements

Leadership Certificate Requirements (9 Credits)

BUS 2017 - Business Communication & Report Writing

Credit(s): 3
Lecture Hour(s): 3
Formerly BUS 217 Emphasizes effective business writing and covers letters, memoranda, reports, application letters and resumes. Includes the fundamentals of business communication and an introduction to international communication.

MAN 2024 - Leadership

Credit(s): 3
Lecture Hour(s): 3
Formerly MAN 224 Focuses on the leadership skills for contemporary organizations. Covers development and communication a shared vision to motivate and empower employees to manage conflict, to negotiate, and to develop teams.

PSV 2030 - Introduction to Civic Leadership

Credit(s): 3
Lecture Hour(s): 3
Formerly PSV 230 Enables the student to develop a critical understanding of public leadership through the study of pertinent models, theories and research.

Elective Courses (3 Credits)

(Select 3 credit hours)

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

COM 2300 - Intercultural Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 220 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. This is a statewide Guaranteed Transfer course in the GT-SS3 category.

MAN 2026 - Principles of Management

Credit(s): 3
Lecture Hour(s): 3
Formerly MAN 226 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.

PHI 1011 - Introduction to Philosophy: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 111 ompletion with a minimum C? grade guarantees transfer and application of credit in this GT Pathways category.

PHI 1012 - Ethics: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 112 Examines human life, experience and thought in order to discover and develop the principles and values for pursuing a more fulfilled existence. Theories designed to justify ethical judgments are applied to a selection of contemporary personal and social issues. This course is one of the statewide Guaranteed Transfer courses, GT-AH3.

PSY 1001 - General Psychology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 101 Focuses on the scientific study of behavior including motivation, emotion, physiological psychology, stress and coping, research methods, consciousness, sensation, perception, learning and memory. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 1002 - General Psychology II: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 102 Focuses on the scientific study of behavior including cognition, language, intelligence, psychological assessment, personality, abnormal psychology, therapy, lifespan development and social psychology. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2221 - Social Psychology: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 226 Focuses on the behavior of humans in social settings, including attitudes, aggression, conformity, cooperation and competition, prejudice and interpersonal attraction. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2771 - Psychology of Personality: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 265 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 of psychology. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2773 - Organizational Psychology

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 268 Provides a comprehensive study of psychological principles and theories as applied to organizational behavior. Topics include motivation, job satisfaction, conflict supervision, human relations and stress management.

SOC 1001 - Introduction to Sociology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 101 Examines the basic concepts, theories and principles of sociology as well as human culture, social groups, and the social issues of age, gender, class and race. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

SOC 1002 - Introduction to Sociology II: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 102 Examines social institutions and organizations from the macro perspective. Emphasizes issues of social change, demography, social movements, and conflicts and trends within education, religion, family, political and economic structures. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

Library Technician Certificate

CIP 25.0301

See list of Department Chairs on the Personnel page.

Career Opportunities

The LTN program prepares you for a career in a variety of information environments including academic libraries, public libraries, school media centers, special libraries – corporate, correctional, law and medical – and other information services. In rural settings, the Library/Media Technician manages the library/media center and is the person responsible for providing additional library services, such as maintaining the computerized catalog and library webpage, conducting patron orientation and directing library programs.

Program Description

This program offers instruction in a variety of library functions including collection management (selecting and acquiring materials); cataloging; processing and repair of library materials; circulating and shelving materials; helping patrons with reference, readers' advisory and resource sharing services; and managing a small library or media center. We also train you in the nontechnical skills you need to be a successful library technician: customer service, listening, speaking, writing, attention to detail and working as a member of a team.

Program Requirements

Entrance Requirements:

The LTN program is designed for the student who, because of time or distance constraints, is looking for an online degree. The courses use the Desire2Learn platform.

If you plan to transfer to a bachelor's level program, consult with your advisor to determine the transferability of courses.

Total Credits: 30

Certificate Requirements

General Education Requirements (12 Credits)

- Social and Behavioral Sciences OR Humanities **Credit(s): 3**

Communications (6 Credits)

Select one:

- (ENG 1021 and COM 1150) or COM 1250

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

or

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

Mathematics (3 Credits)

MAT 1140 - Career Math

Credit(s): 3
Lecture Hour(s): 3

Formerly MAT 107 Covers material designed for career technical or general studies students who need to study particular mathematical topics. Topics may include measurement, algebra, geometry, trigonometry, graphs and/or finance. These are presented on an introductory level and the emphasis is on applications.

Core Curriculum Requirements (18 Credits)

LTN 1001 - Introduction to Library Services

Credit(s): 3
Lecture Hour(s): 3
Formerly LTN 101 Introduces libraries and their procedures through research, vocabulary, readings and assignments. Identifies current tools such as wikis, blogs, podcasting, interactive web pages and other online services. Presents resources for library technicians.

LTN 1010 - Selection and Acquisitions

Credit(s): 3
Lecture Hour(s): 3
Formerly LTN 110 Introduces the student to the tools, vendors, jobbers and approval plans that comprise the selection process. In addition, the student is introduced to acquisitions policy. The student engages in a course project whereby he/she applies a collection evaluation methodology to a section of a library collection and locates and recommends replacement titles.

LTN 1015 - Library Circulation

Credit(s): 3
Lecture Hour(s): 3
Formerly LTN 115 Discusses customer service and circulation issues and procedures. Students will learn the role of customer service and the effects that automation has had on the circulation function of the library.

LTN 2005 - Introduction to Cataloging & Classification

Credit(s): 3
Lecture Hour(s): 3
Formerly LTN 205 Introduces the library organization, how to use Dewey and Sears subject headings, elements of cataloging, practice in the use of Dewey and the Library of Congress classification systems, use of cutter tables, subject classification, accession numbers, and bar codes. Basic philosophy, procedures, tools and techniques for library routines are emphasized.

LTN 2010 - Reference Materials

Credit(s): 3
Lecture Hour(s): 3
Formerly LTN 210 Teaches how to select reference materials, how to use at least 100 reference resources, the reference interview, and the role of resource sharing (interlibrary loan) in reference. Students will prepare a bibliography of the 100 titles they would want in their reference collection and 10 online sources they find useful.

LTN 2020 - Library/Media Center Management & Public Relations

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of LTN 1001.
Formerly LTN 220 Includes budget preparation, how to work with staff, the public, and administrators, and the use of statistics.

Library Technician, AAS

CIP 25.0301

See list of Department Chairs on the Personnel page.

Career Opportunities

The LTN program prepares you for a career in a variety of information environments including academic libraries, public libraries, school media centers, special libraries – corporate, correctional, law and medical – and other information services. In rural settings, the Library/Media Technician manages the library/media center and is the person responsible for providing additional library services, such as maintaining the computerized catalog and library webpage, conducting patron orientation and directing library programs.

Program Description

This program offers instruction in a variety of library functions including collection management (selecting and acquiring materials); cataloging; processing and repair of library materials; circulating and shelving materials; helping patrons with reference, readers' advisory and resource sharing services; and managing a small library or media center. We also train you in the nontechnical skills you need to be a successful library technician: customer service, listening, speaking, writing, attention to detail and working as a member of a team.

Program Requirements

Entrance Requirements:

The LTN program is designed for the student who, because of time or distance constraints, is looking for an online degree. The courses use the Desire2Learn platform.

If you plan to transfer to a bachelor's level program, consult with your advisor to determine the transferability of courses.

Total Credits: 60

Degree Requirements

General Education Requirements (33 Credits)

* General Education must total 33 credits.

- English/Speech (Select one) **Credit(s): 6**
    - (ENG 1021 and COM 1150) or COM 1250
- Mathematics **Credit(s): 3**
    - MAT 1140 or higher
- Social and Behavioral Sciences **Credit(s): 12**
- Arts and Humanities **Credit(s): 12**

English/Speech (6 Credits)

Select one:

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

or

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

Mathematics

MAT 1140 - Career Math

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 107 Covers material designed for career technical or general studies students who need to study particular mathematical topics. Topics may include measurement, algebra, geometry, trigonometry, graphs and/or finance. These are presented on an introductory level and the emphasis is on applications.

Core Curriculum Requirements (18 Credits)

LTN 1001 - Introduction to Library Services

Credit(s): 3
Lecture Hour(s): 3
Formerly LTN 101 Introduces libraries and their procedures through research, vocabulary, readings and assignments. Identifies current tools such as wikis, blogs, podcasting, interactive web pages and other online services. Presents resources for library technicians.

LTN 1010 - Selection and Acquisitions

Credit(s): 3
Lecture Hour(s): 3
Formerly LTN 110 Introduces the student to the tools, vendors, jobbers and approval plans that comprise the selection process. In addition, the student is introduced to acquisitions policy. The student engages in a course project whereby he/she applies a collection evaluation methodology to a section of a library collection and locates and recommends replacement titles.

LTN 1015 - Library Circulation

Credit(s): 3
Lecture Hour(s): 3
Formerly LTN 115 Discusses customer service and circulation issues and procedures. Students will learn the role of customer service and the effects that automation has had on the circulation function of the library.

LTN 2005 - Introduction to Cataloging & Classification

Credit(s): 3
Lecture Hour(s): 3
Formerly LTN 205 Introduces the library organization, how to use Dewey and Sears subject headings, elements of cataloging, practice in the use of Dewey and the Library of Congress classification systems, use of cutter tables, subject classification, accession numbers, and bar codes. Basic philosophy, procedures, tools and techniques for library routines are emphasized.

LTN 2010 - Reference Materials

Credit(s): 3
Lecture Hour(s): 3
Formerly LTN 210 Teaches how to select reference materials, how to use at least 100 reference resources, the reference interview, and the role of resource sharing (interlibrary loan) in reference. Students will prepare a bibliography of the 100 titles they would want in their reference collection and 10 online sources they find useful.

LTN 2020 - Library/Media Center Management & Public Relations

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of LTN 1001.
Formerly LTN 220 Includes budget preparation, how to work with staff, the public, and administrators, and the use of statistics.

Electives Approved by Advisor (9 Credits)

All electives must be approved by the LTN Advisor. Students must take sufficient electives to meet the minimum 60 credit hour requirements for the associate degree.

Local Anesthesia and Nitrous Oxide/Oxygen Sedation Mini-Certificate

CIP 51.0602

See list of Department Chairs on the Personnel page.

Career Opportunities

The Dental Hygiene program prepares you for a career in a variety of professional settings. The most familiar setting is the private dental office, where hygienists perform critical services to detect and prevent diseases of the mouth. Beyond the private dental office, you can find employment in nursing homes and long-term care facilities, hospitals, corporate health facilities, school systems and public health clinics. You may also work as an educator or researcher.

Program Description

The AAS Degree prepares you to provide dental hygiene services to patients and educate them in aspects of preventive dentistry. In our on-campus clinic, you will provide preventive and therapeutic services for patients under the supervision of Dental Hygiene faculty.

In the traditional role of dental hygienist, training includes prophylaxis, patient data gathering for dental hygiene diagnosis and treatment planning, fluoride treatment, sealant application, radiographic examination and nutritional counseling. In the expanded role of the dental hygienist, training includes treatment of periodontally-involved patients and treatment of handicapped, institutionalized and other medically compromised patients. You also learn to perform local anesthesia and administer nitrous oxide.

Because of the high level of personal and professional responsibility required of a dental hygienist, you must have integrity, maturity, individual motivation, good interpersonal skills, excellent manual dexterity and a solid science and general studies academic background to be successful in this program. We are firmly committed to fostering your intellectual growth and to developing well-qualified dental hygienists with high professional standards and ethics.

The Mini-Certificate in Local Anesthesia and Nitrous Oxide/Oxygen Sedation provides you with knowledge of the theory and practice of local anesthesia and nitrous oxide/oxygen sedation. This program teaches you to administer local anesthetics and nitrous oxide proficiently and safely. The administration of local anesthesia and nitrous oxide/oxygen sedation may be performed by licensed dental hygienists under the Colorado State Dental Practice Act. You must be currently enrolled in the Dental Hygiene program to enter this program.

Program Requirements

Entrance Requirements:

You must complete a current Dental Hygiene program application and meet all minimum requirements and application timelines. The application is available through the Dental Hygiene program, at the PCC Dental Hygiene website or in Admissions & Records. You should seek advisement from program faculty for assistance with applications, minimum

requirements and required general education courses for admissions. In addition, all students entering the program will need a current CPR card good for 2 years.

If you are an AAS Dental Hygiene student, you must complete all General Education/Related Requirements.

Note: All students are accepted provisionally pending completion of a criminal background check. Disclaimer: The Colorado Board of Dental Examiners requires a dental hygienist applying for licensure to answer questions concerning felony history, excessive use or abuse of controlled substances/alcoholic beverages (within the last five years) and any physical or mental condition that may affect the ability to practice dental hygiene. Other questions asked by the State Board pertain to an applicant's history of malpractice judgment and any disciplinary action by any government or private agency. The PCC Department of Dental Hygiene assumes no responsibility for the denial of licensure by the Colorado State Board of Dental Examiners.

Total Credits: 3

Certificate Requirements

DEH 1033 - Local Anesthesia

Credit(s): 2
Lecture Hour(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): DEH 1011, DEH 1023, current enrollment in Dental Hygiene program.
Formerly DEH 133 Provides a working knowledge of the theory and practice of local anesthesia as applied to the practice of dentistry/dental hygiene. Emphasizes mastery of the armamentarium and techniques of regional anesthesia. Covers the knowledge and skills necessary to administer local anesthetics proficiently and safely.

DEH 1038 - Nitrous Oxide/Oxygen Sedation

Credit(s): 1
Lecture Hour(s): 0.80
Vocational Clinic Hour(s): 0.40

Prerequisite(s): BIO 2101, BIO 2102, current enrollment in Dental Hygiene program.
Formerly DEH 138 Provides a working knowledge of the latest equipment and methods of nitrous oxide/oxygen sedation administration in the dental office.

Low Pressure Pipe Welder Mini-Certificate

CIP 48.0508

See list of Department Chairs on the Personnel page.

Program Description

Welders must be highly skilled and knowledgeable in a variety of welding processes to meet the challenges of advanced technology and new materials. Welding is not just a trade; it's a tool for many trades requiring a high level of training and technical knowledge. The Welding Technology program helps students develop skills through classroom

studies and hands-on experience under close supervised instruction. Students learn about structural steel fabrication, layout work and pipe welding following detailed blueprints.

Total Credits: 16

Certificate Requirements

Core Requirements (16 Credits)

WEL 2033 - 2G-Horizontal Pipe A.P.I.

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1004 or equivalent.
Formerly WEL 233 Instruction in safety, theory and practical applications in joint fit-up, design and welding pipe in the 2-G horizontal position. Welding in accordance with the American Petroleum Institute Pipe Code using the SMAW process with E-XX10 type electrodes.

WEL 2034 - 5G-Vertical Down A.P.I.

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 2033.
Formerly WEL 234 Instruction in safety, theory and practical applications in joint fit-up, design and welding pipe in the 5-G Vertical down position. Welding in accordance with the American Petroleum Institute Pipe Code using the SMAW process with E-XX10 type electrodes.

WEL 2035 - 6G-45 Down A.P.I.

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 2034.
Formerly WEL 235 Instruction in safety, theory and practical applications in joint fit-up, design and welding pipe in the 6-G 45 down position. Welding in accordance with the American Petroleum Institute Pipe Code using the SMAW process with E-XX10 type electrodes.

WEL 2048 - Pipe Layout

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Formerly WEL 248 Using pipe template layout procedures and drawing procedures, perform cutting on pipe. Performs layout such as Y-fittings, laterals, full size tees, elbows, orange peel, bull plug, reducers, reducing tees and branch pipe.

Machining Technology, AAS

CIP 48.0503

See list of Department Chairs on the Personnel page.

This is a NIMS Accredited program

Career Opportunities

The AAS Degree and certificate programs in Machining Technology prepare you to enter the manufacturing world using the latest technology and metalworking skills.

Program Description

Students will start their career in Machining Technology by building a strong foundation in machining by learning to use various tools, such as hand tools, manual machines and grinding tools. Students develop introductory skills in print reading. They are also taught how to use CAD CAM software, which enables students to create two-dimensional drawings and gain experience with computer-aided manufacturer software. Learning G&M Code for manual CNC (Computer Numerical Control) programming is a focus, as well as setup and operations of CNC equipment.

The AAS degree provides training in advanced manufacturing using manual and computer-controlled machines. Students will use CAD CAM software to create three-dimensional drawings, solids and surfaces. Students will then utilize geometry to create parts, which are then inspected for industry standard accuracy with top-of-the-line metrology equipment. If completing the AAS degree or currently working in the field, CAD CAM certification and NIMS credentials may be available.

Work experience may be converted to college credit through credit-by-portfolio or credit-by-challenge.

Total Credits: 63

Degree Requirements

General Education Requirements (15 Credits)

ENG 1031 - Technical Writing I

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 131, then ENG 1020 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.

MAT 1150 - Technical Mathematics

Credit(s): 4
Lecture Hour(s): 4
Formerly MAT 108 Covers material designed for career technical or general studies students who need to study particular mathematical topics. Topics may include measurement, algebra, geometry, trigonometry, graphs and/or finance. These are presented at an introductory level and the emphasis is on applications.

CIS 1018 - Intro to PC Applications

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 118 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.

- Any combination of Arts/Humanities/Social Sci/COM/Science **Credit(s): 5**

Core Curriculum Requirements (48 Credits)

MAC 1000 - Machine Shop Safety

Credit(s): 1
Lecture Hour(s): 1
Formerly MAC 100 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 1002 - Print Reading for Machinists

Credit(s): 3
Lecture Hour(s): 3
Formerly MAC 102 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 1005 - Introduction to Machining Technology

Credit(s): 4
Lecture Hour(s): 1.50
Vocational Lab Hour(s): 3.75
Formerly MAC 105 Introduces the student to the changing era of machining technology, emphasizing terminology, referencing and applications related to manufacturing environments. The fundamental use of bench tools, layout procedures, materials, precision measuring tools, machining processes, drilling and cut-off machines and other machining/manufacturing processes will be stressed. Skill competencies and standards will be identified. Use of the Machinery's Handbook will be strictly required and particular competencies may require performance evaluations.

MAC 1030 - Conventional Lathe Operations

Credit(s): 4
Lecture Hour(s): 1.50
Vocational Lab Hour(s): 3.75
Formerly MAC 130 Includes calculation of speeds and feeds on various materials, identification and application of various work holding techniques, tool forming, advanced machining practices and applications, and spindle tooling. Students will learn how to calculate and turn tapers using the compound slide or taper attachment, offset work on a four jaw chuck, turning between centers, boring, grooving, finishing, single point threading, knurling, tool grinding, drilling operations, and reaming.

MAC 1031 - Milling Machines & Operations

Credit(s): 4
Lecture Hour(s): 1.50
Vocational Lab Hour(s): 3.75
Formerly MAC 131 Introduces vertical milling machines. The operations and applications will consist of using the machine controls, speeds and feeds, spindles, arbors and adapters cutting tools, tool holders, conventional and climb milling applications simple indexing, fixture alignments, work holding methods. Students will become familiar with set-up applications considering offset boring operations, face milling, plain milling, and precision drilling applications. Students will be required to produce parts to a tolerance of +/- .004in. and perform competencies set by manufacturing standards.

MAC 1041 - Advanced Machining Operations

Credit(s): 4
Lecture Hour(s): 1.50
Vocational Lab Hour(s): 3.75
Formerly MAC 141 Provides the student the use of various conventional machine tools used in a machine shop environment. The use of engine lathes, horizontal and vertical milling machines, surface grinders, drill presses, pedestal grinders, power cut-off saws and other machine tools commonly used to produce quality machined parts in today 's manufacturing environments. Machining competencies will be stressed and students will be required to produce parts manufactured by local manufacturing companies with the consideration of ISO quality standards.

MAC 2003 - Introduction to CNC Operations

Credit(s): 6
Lecture Hour(s): 2
Vocational Lab Hour(s): 6
Formerly MAC 203 Introduces basic writing and editing of CNC programs. G&M codes, math, speeds feeds, production processes including basic process controls, simple fixturing, and documentation associated with manufacturing will be covered.

MAC 2008 - CNC Operations II

Credit(s): 6
Lecture Hour(s): 2
Vocational Lab Hour(s): 6
Formerly MAC 208 Further develops skills in writing and editing advanced CNC programs. G&M codes, math, speeds deeds, production processes including multi-part, process controls, fixturing, and documentation associated with manufacturing will be covered.

MAC 2043 - Mastercam

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Formerly MAC 243 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 2041 - CAD CAM 2D Lab

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly MAC 241 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 remachining operations. Coursework will primarily focus on 2D geometry projects.

MAC 2050 - Advanced Inspection Techniques

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly MAC 250 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.

EGT 2305 - Geometric Dimension & Tolerance

Credit(s): 3
Lecture Hour(s): 3
Formerly EGT 205 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.

CAD 2455 - Solidworks/Mechanical

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly CAD 255 Introduces parametric feature-based solid modeling 3D concepts to build confidence in 3D thinking and progresses to three-dimensional parameters. The student learns to construct, modify, and manage complex parts in 3D space as well as to produce 2D drawings from the 3D models.

Machining Technology, Inspection Certificate

See list of Department Chairs on the Personnel page.

Total Credits: 9

Certificate Requirements

MAC 2050 - Advanced Inspection Techniques

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly MAC 250 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.

MAC 1002 - Print Reading for Machinists

Credit(s): 3
Lecture Hour(s): 3
Formerly MAC 102 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.

EGT 2305 - Geometric Dimension & Tolerance

Credit(s): 3
Lecture Hour(s): 3
Formerly EGT 205 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.

Magnetic Resonance Imaging, BAS

CIP 51.0911

See list of Department Chairs on the Personnel page.

Career Opportunities

The BAS in Radiologic Technology program prepares students for careers in Computed Tomography (CT) or Magnetic Resonance Imaging (MRI), Leadership and Teaching in Medical Imaging.

Program Description

The BAS in Radiologic Technology program teaches students to perform Computed Tomography (CT) exams or Magnetic Resonance Imaging (MRI) exams as well as how to lead or teach others in the Medical Imaging Department. It provides students with an additional imaging modality and prepares them to take on leadership roles in the imaging department in health care facilities.

Program Requirements

Entrance Requirements:

Applicants must hold an associate's degree and be a registered radiologic technologist with the American Registry of Radiologic Technologists (ARRT).

Graduation Requirements:

Must complete 120 credits including didactic and clinical components of the program.

Total Credits: 120

Curriculum Requirements (43 Credits)

First Year-Fall Semester

BIO 2101 - Human Anatomy and Physiology I with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 201 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, nervous and endocrine systems. Includes a mandatory hands-on laboratory experience covering experimentation, microscopy, observations and dissection. This is the first semester of a two-semester sequence.

BIO 2102 - Human Anatomy and Physiology II with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 202 Focuses on the integrated study of the human body and the histology, anatomy, and physiology of the following systems and topics: cardiovascular, hematology, lymphatic and immune, urinary, fluid and electrolyte control, digestive, nutrition, respiratory, reproductive and development. Includes a mandatory hands-on laboratory experience involving experimentation, microscopy, observations and dissection. This is the second semester of a two-semester sequence.

PHY 1105 - Conceptual Physics with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly PHY 105 Focuses on mechanics, heat, properties of matter, electricity and magnetism, light and modern physics. Incorporates laboratory experience. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

First Year-Spring Semester

CIS 1018 - Intro to PC Applications

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 118 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.

ENG 1031 - Technical Writing I

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 131, then ENG 1020 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.

RTE 3011 - Sectional Anatomy for Medical Imaging

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): AAS in Radiologic Technology and ARRT Registered.
Formerly RTE 311 Identifies anatomy in various imaging planes of advanced modalities. Compares normal anatomy with gross pathology on advanced cross-sectional images. Evaluation of anatomy and pathology will include head, spine, thorax, abdomen/pelvis and extremities.

RTE 3012 - IV Certificate for Contrast Medium

Credit(s): 1
Lecture Hour(s): 0.50
Vocational Clinic Hour(s): 1

Prerequisite(s): AAS in Radiologic Technology and ARRT Registered.
Formerly RTE 312 Prepares the student to perform IV contrast administration including knowledge of arterial and venous anatomy, appropriate puncture sites, necessary equipment and supplies, understanding of different contrast media, injectors and administration safety.

RTE 3021 - Theory and Application of MR Imaging I

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): AAS in Radiologic Technology and ARRT Registered.
Formerly RTE 321 Applies the fundamental principles of MRI in order to perform clinical MRI examinations of the human body with special consideration to image production, quality control, terminology, basic procedural steps and MRI equipment and safety.

Summer Semester

RTE 3031 - MRI Protocols and Procedures

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): AAS in Radiologic Technology and ARRT Registered.
Formerly RTE 331 Develops the knowledge necessary to perform procedures for imaging various anatomical structures utilizing MRI. It provides instruction on routine parameter selection, patient positioning, coil selection and application and anatomy and pathologies demonstrated on MR images.

RTE 3081 - Internship: MRI I

Credit(s): 3
Internship Hour(s): 9
Prerequisite(s): AAS in Radiologic Technology and ARRT Registered.
Formerly RTE 381 Provides supervised hands-on training in MR imaging exams. The Internship allows the student to gain clinical experience and develop proficiency in MRI.

Second Year-Fall Semester

RTE 4021 - Theory and Application of MR Imaging II

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): RTE 3021.
Formerly RTE 421 Examines in-depth knowledge of designing MRI pulse sequences, data manipulation, artifacts and quality control and quality assurance procedures. Special consideration will be given to methods to shorten scan time, k-space filling and reconstruction, Fast Fourier Transform and image transfer and storage systems used in healthcare facilities.

RTE 4031 - Advanced MRI Protocols and Procedures

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): RTE 3031.
Formerly RTE 431 Examines specialized advancements in MRI. Emphasis will be placed on the heart and vasculature, functional imaging, contrast agents and their uses, enterography, pelvic run-off and breast imaging.

RTE 4061 - Leadership in Medical Imaging

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): MRI or CT Program Admission.
Formerly RTE 461 Examines concepts and skills needed for leadership roles in Medical Imaging. It prepares the student with communication, time management, supervision, task delegation, conflict management and performance assessment skills.

or

RTE 4062 - Teaching Methodologies in Medical Imaging Education

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): MRI or CT Program Admission.
Formerly RTE 462 Provides a general overview of the concepts and theory of Medical Imaging education. It introduces

current theories of teaching adult learners in the Imaging Sciences, objective development of active learning activities, classroom assessment techniques and delivering course content through distance-learning formats.

RTE 4081 - Internship: MRI II

Credit(s): 7
Internship Hour(s): 21
Prerequisite(s): RTE 3081.
Formerly RTE 481 Provides continued hands-on training for the student to perform supervised exams, gain clinical experience and develop proficiency in MRI.

Manicurist Certificate

CIP 12.0410

See list of Department Chairs on the Personnel page.

Career Opportunities

The Cosmetology program prepares students for careers in cosmetology, hairstyling, esthetics (facial care) and manicure (nail care). Students will receive the specialized training necessary to be prepared for a successful career with limitless opportunities for both men and women. Students learn the skills to keep pace with the fashion world and stand ready to meet the constantly changing demands of one of today's largest-growing service industries. Those opportunities can provide both part-time and full-time employment in specialty areas.

Program Description

The Cosmetology program teaches students job entry skills, customer communication and shop procedures. Instruction includes professional ethics, bacteriology, shampoo and rinses, color theory, hair coloring techniques, permanent waving, hairstyling, hair cutting, manicures, pedicures, facials, makeup, OSHA regulations, sanitation, safety and Colorado laws. Clinical practice involves working on the public under supervision and parallels, as close as possible, actual shop procedures in order to prepare students for working in the field.

- Manicurist certificate – This certificate program provides training in nail care. Instruction is provided in manicuring, pedicure, nail design extensions and nail artistry.

Total Credits: 20

Certificate Requirements

Core Requirements (20 Credits)

COS 1050 - Laws, Rules and Regulations

Credit(s): 1
Lecture Hour(s): 1

Formerly COS 150 Provides instruction on the laws, rules and regulations and how they govern the cosmetology and barber industry, as well as the effects they have on the student, licensed individual, salons and school owners.

COS 2050 - Management, Ethics, Interpersonal Skills & Salesmanship

Credit(s): 1
Lecture Hour(s): 1
Formerly COS 250 Emphasizes the importance of salon management and the knowledge and skills necessary to build a successful business. Focuses on the importance of interpersonal skills and basic techniques in salesmanship and customer services. Integrates job readiness skills and professional ethics.

NAT 1008 - Introduction of Manicuring/Pedicures/Artificial Nails

Credit(s): 3
Vocational Clinic Hour(s): 6

Formerly NAT 108 Provides a basic introduction into the proper use of implements used in manicures, pedicures and artificial nails. Theory and practical application of proper set-up, safety, sanitation, nail shapes, anatomy, product knowledge and terminology dealing with manicures, pedicures and artificial nails is covered. Training is done in a classroom or lab setting using models or other techniques.

NAT 1010 - Introduction to Manicures & Pedicures

Credit(s): 3
Vocational Clinic Hour(s): 6

Formerly NAT 110 Provides a basic introduction in the proper use of implements used in manicures and pedicures. Theory and practical application of proper set-up, safety, sanitation, nail shapes, anatomy, product knowledge and terminology dealing with manicures and pedicures is covered. Training is done in a classroom or lab setting using models or other techniques.

NAT 1011 - Intermediate Manicures & Pedicures

Credit(s): 2
Vocational Clinic Hour(s): 4

Formerly NAT 111 Presents theory and practical application dealing with different types of manicures, pedicures, nail art and massage techniques. Theory and practical application of procedures, products, nail shapes and maintenance of natural nails is covered. Students learn to recognize different nail disorders and their proper treatment. Training is done in a specialized class or in supervised salon (clinical) setting, using models or customer service. Proper sanitation and sterilization as it pertains to all aspect of manicures, pedicures and nail art is taught.

NAT 1058 - Intermediate Manicuring/Pedicures/Artificial Nails

Credit(s): 2
Vocational Clinic Hour(s): 4

Formerly NAT 158 Presents theory and practical application dealing with different types of manicures, pedicures and massage techniques. Theory and practical application of procedures, products, nail shapes and maintenance of artificial nails is covered. Students learn to recognize different nail disorders and their proper treatment. Training is done in a specialized class or in supervised salon (clinical) setting, using models or customer service.

NAT 1059 - Intermediate Manicuring/Pedicures/Artificial Nails II

Credit(s): 2
Vocational Clinic Hour(s): 4

Formerly NAT 159 Presents theory and practical application dealing with different types of manicures, pedicures and massage techniques. Theory and practical application of procedures, products, nail shapes and maintenance of artificial nails is covered. Students learn to recognize different nail disorders and their proper treatment. Training is done in a specialized class or in supervised salon (clinical) setting, using models or customer service.

NAT 2008 - Advanced Manicuring/Pedicures/Artificial Nails

Credit(s): 4
Vocational Clinic Hour(s): 8

Formerly NAT 208 Provides advanced theory and practical application of manicures, pedicures and nail art techniques. Theory and advanced practical techniques of silk wraps, tip overlays, acrylics and product knowledge to ready the student for employment is presented. Instruction is provided in specialized classes or in supervised salon (clinical) setting using models or customer service. Student preparation for state board licensing examination pertaining to manicures and pedicures is covered.

NAT 2010 - Advanced Manicures & Pedicures

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): NAT 2011.
Formerly NAT 210 Presents theory and practical application dealing with different types of manicures, pedicures massage techniques and nail art. Theory and practical application of procedures, products, nail shapes and maintenance of the natural nails is covered. Students learn to recognize different nail disorders and their proper treatment. Training is done in a specialized class or in supervised salon (clinical) setting, using models or customer service.

Manual Machining Certificate

CIP 48.0503

See list of Department Chairs on the Personnel page.

This is a NIMS Accredited program

Program Description

Students will start their career in Machining Technology by building a strong foundation in machining by learning to use various tools, such as hand tools, manual machines and grinding tools. Students develop introductory skills in print reading. They are also taught how to use CAD CAM software, which enables students to create two-dimensional drawings and gain experience with computer-aided manufacturer software. Learning G&M Code for manual CNC (Computer Numerical Control) programming is a focus, as well as setup and operations of CNC equipment.

Work experience may be converted to college credit through credit-by-portfolio or credit-by-challenge.

Total Credits: 16

Certificate Requirements

MAC 1005 - Introduction to Machining Technology

Credit(s): 4
Lecture Hour(s): 1.50
Vocational Lab Hour(s): 3.75
Formerly MAC 105 Introduces the student to the changing era of machining technology, emphasizing terminology, referencing and applications related to manufacturing environments. The fundamental use of bench tools, layout procedures, materials, precision measuring tools, machining processes, drilling and cut-off machines and other machining/manufacturing processes will be stressed. Skill competencies and standards will be identified. Use of the Machinery's Handbook will be strictly required and particular competencies may require performance evaluations.

MAC 1030 - Conventional Lathe Operations

Credit(s): 4
Lecture Hour(s): 1.50
Vocational Lab Hour(s): 3.75
Formerly MAC 130 Includes calculation of speeds and feeds on various materials, identification and application of various work holding techniques, tool forming, advanced machining practices and applications, and spindle tooling. Students will learn how to calculate and turn tapers using the compound slide or taper attachment, offset work on a four jaw chuck, turning between centers, boring, grooving, finishing, single point threading, knurling, tool grinding, drilling operations, and reaming.

MAC 1031 - Milling Machines & Operations

Credit(s): 4
Lecture Hour(s): 1.50
Vocational Lab Hour(s): 3.75
Formerly MAC 131 Introduces vertical milling machines. The operations and applications will consist of using the machine controls, speeds and feeds, spindles, arbors and adapters cutting tools, tool holders, conventional and climb milling applications simple indexing, fixture alignments, work holding methods. Students will become familiar with set-up applications considering offset boring operations, face milling, plain milling, and precision drilling applications. Students will be required to produce parts to a tolerance of +/- .004in. and perform competencies set by manufacturing standards.

MAC 1041 - Advanced Machining Operations

Credit(s): 4
Lecture Hour(s): 1.50
Vocational Lab Hour(s): 3.75
Formerly MAC 141 Provides the student the use of various conventional machine tools used in a machine shop environment. The use of engine lathes, horizontal and vertical milling machines, surface grinders, drill presses, pedestal grinders, power cut-off saws and other machine tools commonly used to produce quality machined parts in today 's manufacturing environments. Machining competencies will be stressed and students will be required to produce parts manufactured by local manufacturing companies with the consideration of ISO quality standards.

Manual Transmissions Mini-Certificate

CIP 47.0604

See list of Department Chairs on the Personnel page.

To enter the automotive collision or automotive service program, you must successfully complete any CCR course or qualifying placement score or exemption.

Entrance into the program involves a screening and selection process. You can obtain an application and information by calling the Automotive Department at 719.549.3354.

Career Opportunities

The Automotive Service Technology program prepares you for a range of careers in automotive maintenance and repair.

Program Description

This program teaches you to perform general maintenance, as well as to diagnose and repair electrical, engine, transmission, suspension, brake and air conditioning systems. The program has met the National Institute for Automotive Technicians Education Foundation (NATEF) accreditation in the areas of Automatic Transmissions & Transaxles, Brakes, Electrical/Electronic Systems, Engine Performance, Engine Repair, Heating & Air Conditioning and Suspension & Steering. We also offer Automotive Services courses for students in the Concurrent Enrollment Program at Pueblo Community College, Cañon City High School, and PCC Southwest Campus in Mancos. We encourage you to take the Automotive Service Excellence (ASE) certification tests while enrolled at PCC. We offer a paid apprenticeship for high school students through the Automotive Youth Education System (AYES).

As a student in the program, you will become a member of the Skills USA club and participate in a number of leadership activities and competitions.

Program Requirements

Entrance Requirements:
Admissions to the Automotive Service Technology program is by application only. For admission requirements, please go to MT-129 and see the department chair.

Total Credits: 7

Certificate Requirements

ASE 1051 - Automotive Manual Transmission/Transaxles & Clutches

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 151 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 and Clutches II

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 152 Focuses on lecture and related laboratory experiences in the diagnosis and repair of automotive differentials, four wheel and all-wheel drive units.

ASE 2053 - Advanced Manual Transmission/Transaxles

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Formerly ASE 253 Focuses on lecture and laboratory experiences in the diagnosis and repair of automotive manual transmissions, transaxles, clutches and their related components on customer vehicles.

ASE 2181 - Internship: Basic Heavy Duty and Power Train

Credit(s): 1
Internship Hour(s): 3
Formerly ASE 281 Focuses on 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 (FAST) Fundamental Automotive Systems Training (Chrysler) or others as required by the program track.

Mass Communications, AGS (with Transfer Articulation Agreement)

CIP 09.0702

See list of Department Chairs on the Personnel page.

Career Opportunities

The Associate of General Studies degree with an emphasis in Mass Communications prepares you for a career in journalism, radio/TV broadcasting, advertising, public relations or New Media Technology by providing a two-year foundation of courses designed to transfer to four-year colleges and universities.

Program Description

This program teaches you to think critically and develops your skills in news writing, television and radio production, advertising, videography and web design. Courses provide a solid foundation in these areas through a mixture of lecture and hands-on application. A fully equipped video control room and a mobile production truck provide you with multi-camera working classrooms. Several nonlinear editing suites offer you a diversity of experience in the changing field of communication. You will also gain experience in production and digital media through our media lab and the many volunteer opportunities we offer.

Transferability of courses depends upon the courses taken and the receiving institution. The PCC/CSU-Pueblo Transfer Agreement allows the AGS Media Communications graduate to transfer to the Colorado State University-Pueblo Mass Communications Department with a junior standing.

Please see the certificate option - Broadcasting & Production Technology Certificate.

Total Credits: 60

General Education Requirements (35 Credits)

Should be GTPathway courses

Communication (6 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

Mathematics (3 Credits)

MAT 1260 - Introduction to Statistics: GT-MA1

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 135 Explores and applies data presentation and summarization, introduction to probability concepts and distributions, statistical inference estimation, hypothesis testing, comparison of populations, correlation and regression. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

or

MAT 1240 - Mathematics for the Liberal Arts: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 1001 concurrency allowed, or see Basic Skills Assessment
Formerly MAT 120 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. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 1340 - College Algebra: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 0300.
Formerly MAT 121 Explores topics including intermediate algebra, equations, and inequalities, functions and their graphs, exponential and logarithmic functions, linear and nonlinear systems, selection of topics from among graphing of the conic sections, introduction to sequences and series permutations and combinations, the binomial theorem and theory of equations. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 1420 - College Trigonometry: GT-MA1

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): MAT 1340.
Formerly MAT 122 Covers topics including trigonometric functions (with graphs and inverse functions), identities and equations, solutions of triangles, complex numbers, and other topics as time permits. This is a traditional prerequisite course to the calculus sequence. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 1320 - Finite Mathematics: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 0300 or Equivalent Test Score.
Formerly MAT 123 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. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 1400 - Survey of Calculus: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 1340 or see Basic Skills Assessment
Formerly MAT 125 Includes derivatives, integrals, and their applications, with attention restricted to algebraic, exponential, and logarithmic functions for business, life science and/or social science majors.. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2420 - Calculus II: GT-MA1

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): MAT 2410.
Formerly MAT 202 Continues the study of single variable calculus which will include techniques of integration, polar coordinates, analytic geometry, improper integrals and infinite series. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2430 - Calculus III: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 2420.
Formerly MAT 203 Focuses the traditional subject matter of the Calculus. Topics include vectors, vector-valued

functions, and multivariable calculus including partial derivatives, multiple integrals, line integrals and application. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2431 - Calculus III with Engineering Applications: GT-MA1

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): Successful completion of MAT 2420 with a grade of C or better.
Formerly MAT 204 Focuses on the competencies established in MAT 2430 - Calculus III: GT-MA1with an additional emphasis on word problems and problem solving. This is the third course in the three-course calculus sequence. This course will additionally contain a thorough examination of multiple integration. This will include double and triple integrals, line integrals, Stokes' and Green's Theorems, and their applications. A graphing calculator is required for this course. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2520 - Discrete Mathematics: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): Successful completion of MAT 2410 with a C or better.
Formerly MAT 215 Concentrates on formal logic, algorithms, induction proofs, equivalence relations and graphs. This course is designed for mathematics and computer science students.

MAT 2561 - Differential Equations with Engineering Applications: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): Successful completion of MAT 2420 with a grade of C or better.
Formerly MAT 261 This course introduces ordinary differential equations. The content of this course includes all the topics of MAT 2560 - Differential Equations: GT-MA1with an additional emphasis on applications and problem solving. A graphing calculator is required for this course. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2560 - Differential Equations: GT-MA1

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of MAT 2420 with a C or better.
Formerly MAT 265 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.

Physical & Life Sciences (Courses with Required Labs) (8 Credits)

Select two courses from:

ANT 1005 - Biological Anthropology with Laboratory: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly ANT 111 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. This is a statewide Guaranteed Transfer course in the GT-SC1 category. GT-SC1

AST 1110 - Astronomy I With Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly AST 101 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 - Astronomy II with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): AST 1110.
Formerly AST 102 Emphasizes the structure and life cycle of the stars, the sun, galaxies, and the universe as a whole, including cosmology and relativity. Stellar phenomena including white dwarves, black holes will be explored. Incorporates laboratory experience.

BIO 1005 - Science of Biology with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly BIO 105 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 - as is the impact of biological science on society. Includes laboratory experiences. Designed for non-science majors.

BIO 1111 - General College Biology I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): ENG 1021
Formerly BIO 111 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 - General College Biology II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Corequisite(s): ENG 1021.
Formerly BIO 112 A continuation of Biology I. Includes ecology, evolution, classification, structure, and function in plants and animals. This course includes laboratory experience.

BIO 2101 - Human Anatomy and Physiology I with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 201 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, nervous and endocrine systems. Includes a mandatory hands-on laboratory experience covering experimentation, microscopy, observations and dissection. This is the first semester of a two-semester sequence.

BIO 2102 - Human Anatomy and Physiology II with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 202 Focuses on the integrated study of the human body and the histology, anatomy, and physiology of the following systems and topics: cardiovascular, hematology, lymphatic and immune, urinary, fluid and electrolyte control, digestive, nutrition, respiratory, reproductive and development. Includes a mandatory hands-on laboratory experience involving experimentation, microscopy, observations and dissection. This is the second semester of a two-semester sequence.

BIO 2104 - Microbiology with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 204 Designed for health science majors. Examines microorganisms with an emphasis on their structure, development, physiology, classification and identification. The laboratory experience includes culturing, identifying and controlling microorganisms with an emphasis on their role in infectious disease.

CHE 1011 - Introduction to Chemistry I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 0300.
Formerly CHE 101 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: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): CHE 1011.
Formerly CHE 102 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 1005 - Chemistry in Context with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Formerly CHE 105 Covers the study of measurements, matter, molecules, atoms, chemical bonding, nomenclature, energy, acids, bases, and nutrition. Course work examines chemistry in the modern world and surveys the current knowledge as well as the conceptual framework of the discipline. Chemistry as a science is explored, as is the impact of chemistry on society. This course includes laboratory experience and is designed for non-science majors.

CHE 1111 - General College Chemistry I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 1340, CHE 1011.
Corequisite(s): ENG 1021.
Formerly CHE 111 Focuses on basic chemistry and measurement, matter, chemical formulas, reactions and equations, stoichiometry. This course covers the development of atomic theory culminating in the use of quantum numbers to determine electron configurations of atoms, and the relationship of electron configuration to chemical bond theory. The course includes gases, liquids, and solids and problem-solving skills are emphasized through laboratory experiments.

CHE 1112 - General College Chemistry II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): CHE 1111, ENG 1021.
Formerly CHE 112 Presents concepts in the areas of solution properties, chemical kinetics, chemical equilibrium, acid-base and ionic equilibrium, thermodynamics, and electrochemistry. This course emphasizes problem solving skills and descriptive contents for these topics. Laboratory experiments demonstrate qualitative and quantitative analytical techniques.

ENV 1111 - Environmental Science with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly ENV 101 Provides an introduction to the basic concepts of ecology and the relationship between environmental problems and biological systems. Includes interdisciplinary discussions on biology, chemistry, geology, energy, natural resources, pollution and environmental protection. Using a holistic approach, students will study how the foundations of natural sciences interconnect with the environment. This course includes laboratory experience.

GEO 1011 - Physical Geography: Landforms with Lab: GT-SCI

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2

Formerly GEO 111 Introduces students to 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. The course incorporates an integrated process of lectures, discussion and laboratory assignments.

GEO 1012 - Physical Geography: Weather and Climate with Lab: GT-SCI

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly GEO 112 Introduces the principles of meteorology, climatology, world vegetation patterns and world regional climate classification. The course includes investigating the geographic factors which influence climate, such as topography, location, elevation, winds and latitude.

GEY 1111 - Physical Geology with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly GEY 111 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: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly GEY 112 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: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): MAT 0300 with a grade of S/C or better.
Formerly GEY 135 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.

MET 1050 - General Meteorology: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly MET 150 Provides an introduction to general meteorology and atmospheric sciences. It includes the composition and structure of the atmosphere and characteristics that affect the atmosphere, such as temperature,

pressure and moisture. Additionally, the development of weather systems such as storm systems, hurricanes, weather fronts and cloud development will also be examined. Finally, concepts of climatology will be stressed. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 1105 - Conceptual Physics with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly PHY 105 Focuses on mechanics, heat, properties of matter, electricity and magnetism, light and modern physics. Incorporates laboratory experience. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 1107 - Energy Science & Technology with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): MAT 0300 with a grade of S/C or better.
Formerly PHY 107 Explores the science of energy and energy technologies, with a focus on renewable energy resources and clean technologies. It provides a background in the physics of energy, energy transfer and the current state of technology. Students will evaluate the future utilization of renewable technologies. Activities may include investigating conservation of energy, mechanical, electrical, heat and fluid power systems; energy transfer and loss; understanding energy audits; testing solar collectors and wind generators; and investigating hydrogen fuel cells. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 1111 - Physics: Algebra-Based I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 0300.
Formerly PHY 111 Explores the physical world through reasoning, mathematics and experimentation. Examines kinematics, force, circular motion, energy, momentum, torque, rotational dynamics, simple harmonic motion, temperature, heat and thermodynamics. The concepts and theories presented are explored through demonstrations and hands-on experiments. It is a general physics course that is recommended for all of the health sciences and all other interested students. Students entering engineering or one of the advanced sciences should register for PHY 211. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 1112 - Physics: Algebra-Based II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 0300.
Formerly PHY 112 Expands upon PHY 1111and explores sound waves, electric fields, electric circuits, magnetic fields, light, optics and modern physics. Explores the concepts and theories presented in class through demonstrations and hands-on experiments. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 2111 - Physics: Calculus Based I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 2410, ENG 1021.
Formerly PHY 211 Explores the physical world through reasoning, mathematics and experimentation. Covers kinematics, force, gravity, energy, momentum, torque, rotational dynamics and fluids, and may include thermodynamics. The concepts and theories presented in class are explored through demonstrations and hands-on experiments. This first semester calculus-based physics course is recommended for students entering engineering or one of the advanced sciences. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 2112 - Physics: Calculus-Based II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 2410, ENG 1021.
Formerly PHY 212 Expands upon PHY 2111and examines waves, electric fields, electric circuits, magnetic fields, light and optics, and modern physics. The concepts and theories presented in class are explored through demonstrations and hands-on experiments. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

SCI 1055 - Integrated Science I

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly SCI 155 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. Course is for elementary education majors only; both SCI 155 & SCI 1056required. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

SCI 1056 - Integrated Science II

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly SCI 156 Examines earth and biological systems, living and nonliving environments, through the application of fundamental energy and matter concepts. These systems and concepts will be explored in hands-on laboratory experiments. Course is for elementary education majors only; both SCI 1055& SCI 156 required. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

Arts and Humanities (9 Credits)

Select three courses from any one category:

Arts and Expression

ART 1110 - Art Appreciation: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly ART 110 Introduces the cultural significance of the visual arts, including media, processes, techniques, traditions, and terminology. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

ART 1111 - Art History Ancient to Medieval: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly ART 111 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

ART 1112 - Art History Renaissance to Modern: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly ART 112 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

ART 1113 - Art History

Credit(s): 3
Lecture Hour(s): 3
Formerly ART 207 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

MUS 1020 - Music Appreciation: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly MUS 120 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

MUS 1021 - Music History Medieval Thru Classical Period: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly MUS 121 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

MUS 1022 - Music History Early Romantic Period to the Present: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly MUS 122 Provides an 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

MUS 1025 - History of Jazz: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly MUS 125 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

THE 1005 - Theatre Appreciation: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly THE 105 Includes discussions, workshops and lectures designed to discover, analyze and evaluate all aspects of the theatre experience: scripts, acting, directing, staging, history, criticism and theory. This course is one of the statewide Guaranteed Transfer courses, GT-AH1.

THE 2011 - Development of Theatre Greek-Renaissance: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly THE 211 Surveys the history and evolution of drama from ancient Greece to the Renaissance, emphasizing all aspects of the art from period values to analysis of dramatic literature and performance. This course is one of the statewide Guaranteed Transfer courses, GT-AH1.

THE 2012 - Development of Theatre Restoration to Modern: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly THE 212 Surveys the history and evolution of drama from the Renaissance to the present, emphasizing all aspects of the art from period values to the analysis of dramatic literature and performance. This course is one of the statewide Guaranteed Transfer courses, GT-AH1.

THE 2015 - Playwriting: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly THE 215 Gives students the opportunity to learn and practice playwriting techniques, thereby improving creative writing skills. Elements of dramatic structure, dialogue, styles and theatrical practices are emphasized. This course is one of the statewide Guaranteed Transfer courses, GT-AH1.

Literature and Humanities

HUM 1003 - Introduction to Film Art: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Formerly HUM 103 Studies the relationships among film's stylistic systems, narrative systems and audience reception. Students view, discuss and critically analyze a variety of films which represent a variety of genres and themes. The course incorporates the vocabulary of stylistic systems (for instance, cinematography and editing) and narrative systems (for instance, story structure and character motivation) as both relate to the kinds of meanings a film conveys. This course is approved as part of the Colorado Statewide Guaranteed transfer curriculum: GT:AH2.

HUM 1015 - World Mythology: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Formerly HUM 115 Introduces students to a multidisciplinary approach to world mythology. Common themes are illustrated and connected to religion, philosophy, art, literature, music and contemporary culture. In addition, students will study various ways of interpreting myth. This course is one of the statewide Guaranteed Transfer courses. GT-AH2.

HUM 1021 - Humanities: Early Civilization: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Formerly HUM 121 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 prehistoric to the early medieval era. This course is one of the statewide Guaranteed Transfer courses. GT-AH2.

HUM 1022 - Humanities: Medieval - Modern: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Formerly HUM 122 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. This is a statewide Guaranteed Transfer course in the GT-AH2 category. GT-AH2

HUM 1023 - Humanities: Modern World: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Formerly HUM 123 Examines the cultures of the 17th through the 20th centuries by focusing on the interrelationships of the arts, ideas, and history. Considers the influences of industrialism, scientific development and non-European peoples. This course is one of the statewide Guaranteed Transfer courses. GT-AH2.

LIT 1015 - Introduction to Literature I: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly LIT 115 Introduces students to fiction, poetry and drama. Emphasizes active and responsive reading. This course is one of the statewide Guaranteed Transfer courses, GT-AH2.

LIT 2001 - World Literature to 1600: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): ENG 1021.
Formerly LIT 201 Examines significant writings in world literature from the ancients through the Renaissance. Emphasizes careful readings and understanding of the works and their cultural backgrounds. This course is one of the statewide Guaranteed Transfer courses, GT-AH2.

LIT 2002 - World Literature After 1600: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): ENG 1021.
Formerly LIT 202 Examines significant writings in world literature from the 17th century to the present. Emphasizes careful reading and understanding of the works and their cultural backgrounds. This course is one of the statewide Guaranteed Transfer courses, GT-AH2.

LIT 2005 - Race. Ethnicity, and Culture in U.S. Literature: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Formerly LIT 205 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. This is a statewide Guaranteed Transfer course in the GT-AH2 category. GT-AH2

LIT 2011 - American Literature to Civil War: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): ENG 1021.
Formerly LIT 211 Provides an overview of American literature from the Native American through the 19th-century Romantics. It explores ideas, historical and social contexts, themes and literary characteristics of works in various genres by major writers. This course is one of the statewide Guaranteed Transfer courses, GT-AH2.

LIT 2012 - American Literature After Civil War: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): ENG 1021.
Formerly LIT 212 Provides an overview of American literature from the mid-19th century to the present. It explores ideas, historical and social contexts, themes and literary characteristics of works in various genres by major writers. This course is one of the statewide Guaranteed Transfer courses, GT-AH2.

LIT 2025 - Introduction to Shakespeare: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at ENG 1021 level or consent of instructor.
Formerly LIT 225 Explores a selection of works by William Shakespeare. It focuses on careful reading and interpretation of the plays and poems, includes pertinent information about Elizabethan England, and examines formal

as well as thematic elements of the selected works. This course is one of the statewide Guaranteed Transfer courses. GT-AH2.

LIT 2046 - Literature of Women: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Formerly LIT 246 Examines the techniques and themes in literature by and about women by examining women's issues from various genres. This course is one of the statewide Guaranteed Transfer courses, GT-AH2.

Ways of Thinking

PHI 1011 - Introduction to Philosophy: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 111 ompletion with a minimum C? grade guarantees transfer and application of credit in this GT Pathways category.

PHI 1012 - Ethics: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 112 Examines human life, experience and thought in order to discover and develop the principles and values for pursuing a more fulfilled existence. Theories designed to justify ethical judgments are applied to a selection of contemporary personal and social issues. This course is one of the statewide Guaranteed Transfer courses, GT-AH3.

PHI 1013 - Logic: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 113 Studies effective thinking using language-oriented logic. Provides tools and develops skills for creative and critical thinking. Emphasizes the development of decision-making and problem-solving. This course is one of the statewide Guaranteed Transfer courses, GT-AH3.

PHI 1014 - Comparative Religions: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 114 Introduces students to the major world religions from both the Eastern and Western world such as Hinduism, Buddhism, Confucianism, Taoism, Zoroastrianism, Judaism, Christianity, Islam, Bahand influential preliterate traditions. Utilizes religious studies methods (historical, sociological, legal, psychological and phenomenological) 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. This course is one of the statewide Guaranteed Transfer courses, GT-AH3.

PHI 2014 - Philosophy of Religion: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 214 Focuses on the critical examination of the fundamental concepts, ideas and implications of religion. Includes the nature of God, the varieties of religious experience, argument concerning God`s existence, the problem of evil, faith and reason, religion and human destiny, and the connection between religion and ethics. This course is one of the statewide Guaranteed Transfer courses, GT-AH3.

PHI 2018 - Environmental Ethics: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 218 Critically analyzes theories of value of the natural world. Topics include the relation between scientific and moral principles; theories of the moral worth of persons, animals, plants and other natural objects; historical, religious and cultural influences on conceptions of nature; alternative accounts of human relationships and responsibilities to nature, including deep ecology and eco-feminism; and the connection between moral and political values and economic policies. This course is one of the statewide Guaranteed Transfer courses, GT-AH3.

PHI 2020 - Philosophy of-Death and Dying: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 220 Explores the major philosophical questions surrounding death and dying: the metaphysical arguments for and against the existence of a soul and life after bodily death; the epistemological assessment of arguments for the soul and life after death; the ethical justifications taken on positions such as rational suicide and physician assisted suicide, as well as a focus on philosophy's existentialist contribution to questions about the meaning of life and the meaning of death. This course is one of the statewide Guaranteed Transfer courses. GT-AH3.

Foreign Languages

SPA 2011 - Spanish Language III: GT-AH4

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of SPA 1012 or Department Chair Approval.
Formerly SPA 211 Continues SPA 1011 - Spanish Language Iand SPA 1012 - Spanish Language IIin the development of increased functional proficiency in listening, speaking, reading and writing the Spanish Language. Note: The order of the topics and the methodology will vary according to individual texts and instructors. This course is one of statewide Guaranteed Transfer courses, GT-AH4.

SPA 2012 - Spanish Language IV: GT-AH4

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of SPA 2011 or Department Chair Approval.
Formerly SPA 212 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. This is a statewide Guaranteed Transfer course in the GT-AH4 category. This course is one of statewide Guaranteed Transfer courses, GT-AH4.

Social and Behavioral Science (9 Credits)

JOU 1005 - Introduction to Mass Media: GT SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly JOU 105 Places the mass media in a historical and cultural perspective, considering the validity, integrity and influence of the media in a democracy. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

Select Three Courses in at Least Two Categories

History

HIS 1310 - Western Civilization: Antiquity-1650: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 101 Explores a number of events, peoples, groups, ideas, institutions and trends that have shaped western civilization from the prehistoric era to 1650. Reflects the multiple perspectives of gender, class, religion and ethnic groups. Focuses on developing, practicing and strengthening the skills historians use while constructing knowledge in this discipline. This course is one of the statewide Guaranteed Transfer courses, GT-HI1.

HIS 1320 - Western Civ: 1650-present: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 102 Explores a number of events, peoples, groups, ideas, institutions and trends that have shaped western civilization from 1650 to the present. Reflects the multiple perspectives of gender, class, religion and ethnic groups. Focuses on developing, practicing and strengthening the skills historians use while constructing knowledge in this discipline. This course is one of the statewide Guaranteed Transfer courses, GT-HI1.

HIS 1110 - The World: Antiquity-1500: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 111 Explores a number of peoples, groups, ideas, institutions and trends that have shaped world history from the prehistoric era to 1500. Reflects the multiple perspectives of gender, class, religion and ethnic groups in a broad global sense. Focuses on the common denominators among all people. This approach goes beyond political borders to provide a better appreciation for different cultures. Focuses on developing, practicing and strengthening the skills historians use while constructing knowledge in this discipline. This course is one of the statewide Guaranteed Transfer courses, GT-HI1.

HIS 1120 - The World: 1500-present: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 112 Explores a number of peoples, groups, ideas, institutions and trends that have shaped world history from 1500 to the present. Reflects the multiple perspectives of gender, class, religion and ethnic groups in a broad global sense. Focuses on the common denominators among all people. This approach goes beyond political borders to provide a better appreciation for different cultures. Focuses on developing, practicing and strengthening the skills historians use while constructing knowledge in this discipline. This course is one of the statewide Guaranteed Transfer courses, GT-HI1.

HIS 1210 - U.S. History to Reconstruction: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 121 Explores events, trends, peoples, groups, cultures, ideas and institutions in North America and United States history, including the multiple perspectives of gender, class and ethnicity, between the period when Native American Indians were the sole inhabitants of North America and the American Civil War. Focuses on developing, practicing and strengthening the skills historians use while constructing knowledge in the discipline. This course is one of the statewide Guaranteed Transfer courses, GT-HI1

HIS 1220 - U.S. History Since the Civil War: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 122 Explores events, trends, peoples, groups, cultures, ideas and institutions in United States history, including the multiple perspectives of gender, class and ethnicity, between the period of the American Civil War and the present. Focuses on developing, practicing and strengthening the skills historians use while constructing knowledge in the discipline. This course is one of the statewide Guaranteed Transfer courses, GT-HI1.

HIS 2135 - Colorado History: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 225 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 and mountain men, the gold rush, railroad builders, the cattlemen and farmers, the silver boom, the tourists and the modern state. This course is one of the statewide Guaranteed Transfer courses, GT-HI1.

HIS 2015 - 20th Century World History: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 247 Investigates the major political, social and economic developments, international relationships, scientific breakthroughs, and cultural trends that have shaped the various global regions and nation-states from 1900 to the present. Emphasizes the interactions of global regions and nation-states. This course is one of the statewide Guaranteed Transfer courses, GT-HI1.

Economic or Political Systems

ECO 2001 - Principles of Macroeconomics: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly ECO 201 Focuses on the study of the American economy, stressing the interrelationships among household, business and government sectors. Explores saving and investment decisions, unemployment, inflation, national income accounting, taxing and spending policies, the limits of the market and government, public choice theory, the Federal Reserve System, money and banking, and international trade.

ECO 2002 - Principles of Microeconomics: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly ECO 202 Studies the firm, the nature of cost and how these relate to the economy as a whole. Analyzes economic models of the consumer, perfect competition, monopoly, oligopoly and monopolistic competition. Explores economic issues including market power, population growth, positive and negative externalities, income distribution, poverty and welfare, discrimination, and international economic interdependence.

ECO 2045 - Environmental Economics: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly ECO 245 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. This is a statewide Guaranteed Transfer course in the GT-SS1 category. GT-SS1

POS 2020 - Introduction to Political Science: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly POS 105 Focuses on a survey of the discipline of political science, including political philosophy and ideology, democratic and nondemocratic governments and processes, and international relations. This course is one of the statewide Guaranteed Transfer courses, GT-SS1.

POS 1011 - American Government: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly POS 111 Includes the background of the US Constitution, the philosophy of American government, general principles of the Constitution, federalism and civil liberties. Examines public opinion and citizen participation, political parties, interest groups and the electoral process, and the structure and functions of the national government. This course is one of the statewide Guaranteed Transfer courses, GT-SS1.

POS 1025 - American State and Local Government: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly POS 125 Emphasizes 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. This course is one of the statewide Guaranteed Transfer courses, GT-SS1.

Geography

GEO 1005 - World Regional Geography: GT-SS2

Credit(s): 3
Lecture Hour(s): 3
Formerly GEO 105 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. This is a statewide Guaranteed Transfer course in the GT-SS2 category.

GEO 1006 - Human Geography: GT-SS2

Credit(s): 3
Lecture Hour(s): 3
Formerly GEO 106 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. This is a statewide Guaranteed Transfer course in the GT-SS2 category. GT-SS2

Human Behavior, Culture, or Social Frameworks

ANT 1001 - Cultural Anthropology: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly ANT 101 Studies human cultural patterns and learned behavior including linguistics, social and political organization, religion, culture and personality, culture change, and applied anthropology.

ANT 1003 - Introduction to Archaeology: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly ANT 107 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. This is a statewide Guaranteed Transfer course in the GT-SS3 category. GT-SS3

COM 2300 - Intercultural Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 220 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. This is a statewide Guaranteed Transfer course in the GT-SS3 category.

CRJ 1010 - Intro to Criminal Justice: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): ENG 1021.
Formerly CRJ 110 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. This is a statewide Guaranteed Transfer course in the GT-SS3 category.

ETH 2000 - Introduction to Ethnic Studies: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly ETH 200 Introduces students to the issues of race and ethnicity. Emphasizes ethnic relations in the United States as it pertains to four major groups Americans of African, Asian, Latino and Native descent. Explores issues of racial and ethnic identity, racism and discrimination, stereotyping, prejudice, segregation, colonialism, integration and acculturation.

JOU 1005 - Introduction to Mass Media: GT SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly JOU 105 Places the mass media in a historical and cultural perspective, considering the validity, integrity and influence of the media in a democracy. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 1001 - General Psychology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 101 Focuses on the scientific study of behavior including motivation, emotion, physiological psychology, stress and coping, research methods, consciousness, sensation, perception, learning and memory. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 1002 - General Psychology II: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 102 Focuses on the scientific study of behavior including cognition, language, intelligence, psychological assessment, personality, abnormal psychology, therapy, lifespan development and social psychology. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2105 - Psychology of Gender: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 205 Examines gender comparisons in work, courtship, family life and sexual behavior throughout the lifespan. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2107 - Human Sexuality: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 217 Surveys physiological, psychological and psychosocial aspects of human sexuality. Topics include relationships, sexual identity and sexual health. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2221 - Social Psychology: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 226 Focuses on the behavior of humans in social settings, including attitudes, aggression, conformity, cooperation and competition, prejudice and interpersonal attraction. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2222 - Psychology of Death and Dying: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 227 Examines the philosophies of life and death, emphasizing dying, death, mourning and the consideration of one's own death. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2331 - Positive Psychology: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 231 explore strengths-based research, concepts of happiness, helpfulness and resiliency. The research and theories about human nature will go beyond simply not being mentally ill as a form of mental health, which will include optimism, post-traumatic growth, and how to increase emotional, psychological and social functioning. Overall, this course will be focused on understanding one's own sense of life satisfaction and how to further improve well-being. This course is approved as part of the Colorado statewide Guaranteed transfer curriculum: GT: SS3.

PSY 2440 - Human Growth and Development: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 235 Examines human development from conception through death, emphasizing physical, cognitive, emotional and psychosocial factors. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2441 - Child Development: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 238 Focuses on the growth and development of the individual from conception through childhood, emphasizing physical, cognitive, emotional and psychosocial factors. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2333 - Health Psychology: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 240 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. This is a statewide Guaranteed Transfer course in the GT-SS3 category. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2552 - Abnormal Psychology: GT-SS3

Credit(s): 3
Lecture Hour(s): 3

Corequisite(s): PSY 1001 or Department Chair Approval.
Formerly PSY 249 Examines abnormal behavior and its classification, causes, treatment and prevention. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2771 - Psychology of Personality: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 265 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 of psychology. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

SOC 1001 - Introduction to Sociology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 101 Examines the basic concepts, theories and principles of sociology as well as human culture, social groups, and the social issues of age, gender, class and race. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

SOC 1002 - Introduction to Sociology II: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 102 Examines social institutions and organizations from the macro perspective. Emphasizes issues of social change, demography, social movements, and conflicts and trends within education, religion, family, political and economic structures. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

SOC 2005 - Sociology of Family Dynamics: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 205 Develops an understanding of marriage, family and kinship. It examines the family as an institution and how social, cultural and personal factors influence family relations. The stability and diversity of the family will be explored, along with current trends and some alternative lifestyles. This course is one of statewide Guaranteed Transfer courses, GT-SS3.

SOC 2007 - Environmenetal Sociology: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 207 Examination of humans and the environment from an ecological perspective. Focuses on industrial and economic growth versus sustainability, natural resources development and management, environmental values and social movements, and comparative perspectives on people's relationship to the environment. Review of the Green movement and other environmental movements and their impacts upon social dynamics, the environment and the evolution of social movements.

SOC 2015 - Contemporary Social Problems: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 215 Explores current social issues that result in societal problems. It focuses on such issues as civil liberties, gender discrimination, substance abuse, crime, poverty and social change. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

SOC 2016 - Sociology of Gender: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 216 Gives students the theoretical and factual background necessary to understand the phenomenon of gender stratification in American and other cultures. Students will be exposed to a history of gender stratification in human societies, theoretical explanations for this and insights into the consequences of gender differentiation in our world today. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

SOC 2018 - Sociology of Diversity: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 218 Explores the variety of intergroup relations regarding race, nationality, ethnicity, gender, sexual orientation and other diversity issues. Patterns of prejudice, discrimination and possible solutions to these issues will be addressed. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

SOC 2031 - The Sociology of Deviant Behavior: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 231 Examines the nature, identification, and explanation of deviant categories. Theories and philosophies, as well as methods of treatment related to deviancy, will also be considered. The course will study society's attempts to control, change and institutionalize those acts, individuals or groups that a population may deem unacceptable. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

SOC 2037 - Sociology of Death and Dying: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 237 Provides an opportunity to familiarize students and professionals with the needs and issues surrounding dying and death. This course will provide sociological, psychological, religious, historical and anthropological perspectives for interpreting contemporary American customs dealing with dying, death and bereavement. We will examine the professions associated with death and dying, such as hospice, funeral and crematory institutions, and medical care. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

WST 2000 - Introduction to Women's Studies: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly WST 200 Examines the nature and function of women in society from an interdisciplinary perspective, focusing on the similarity and diversity of women`s experience over time and across cultures. The course will examine topics such as sex role, socialization, political and philosophical perspectives on women`s issues, and women`s accomplishments in history, art, literature, science, health issues and the family. Students will gain an awareness of the

limitations of traditional scholarship on women and gain a means of practical application of the new scholarship on women`s roles and nature. This course is one of the statewide Guaranteed Transfer Courses, GT-SS3.

Core Curriculum Requirements (25 Credits)

JOU 2006 - Intermediate Newswriting and Editing

Credit(s): 3
Vocational Lab Hour(s): 4.50
Prerequisite(s): JOU 1005, ENG 1021, or Department Chair Approval
Formerly JOU 206 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.

MGD 1002 - Introduction to Multimedia

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly MGD 102 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 2089 - Capstone

Credit(s): 3
Internship Hour(s): 9
Prerequisite(s): Department Chair Approval.
Formerly MGD 289 A demonstrated culmination of learning within a given program of study.

RTV 1000 - Introduction to Electronic Media

Credit(s): 3
Lecture Hour(s): 3
Formerly RTV 100 Focuses on the study of the market demands involving national, local and international uses of electronic media.

Choose 15 credits below

ART 1401 - Digital Photography I

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 139 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.

MAR 2020 - Principles of Advertising

Credit(s): 3
Lecture Hour(s): 3
Formerly MAR 220 Examines the principles and practices of advertising and its relationship to business in order to promote a business or organization. Areas of major emphasis include advertising principles, strategies, media, copy and layout, and ethical considerations.

MGD 1011 - Adobe Photoshop I

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly MGD 111 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 1013 - Adobe Indesign

Credit(s): 3
Vocational Lab Hour(s): 4.5
Formerly MGD 114 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 1041 - Web Design I

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly MGD 141 Introduces website planning, design and creation using industry standards-based website development tools. Screen-based color theory, web aesthetics, use of graphics editors and intuitive interface design are explored.

MGD 1064 - Digital Video Editing I

Credit(s): 3
Vocational Lab Hour(s): 4.5
Formerly MGD 164 Introduces to digital nonlinear 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.

RTV 1002 - Beginning Television

Credit(s): 3
Vocational Lab Hour(s): 4.5
Formerly RTV 102 Focuses on principles and techniques of television production in theory and the approach of studio and production. Emphasizes producing television programs, beginning with a concept through script to actual studio production, pre-production and post-production.

Mathematics, AS (with Designation)

CIP 24.0199

Career Opportunities

The Associate of Science Degree with Designation in Mathematics prepares students to transfer as a junior to a four-year institution in Colorado in order to pursue a bachelor's degree in mathematics. Bachelor degree curriculums allow students to prepare for graduate school, teaching careers, or employment in areas that require mathematics, such as actuarial science, computer science, engineering or statistics.

Program Description

The Associate of Science Degree with Designation in Mathematics is designed for students who want to transfer to a four-year college or university to pursue a bachelor's degree in mathematics. Completion of the AS degree completes the first two years of a mathematics bachelor's degree, and guarantees transfer at junior standing with no more than 60 remaining credits to meet the graduation requirements for a bachelor's degree in mathematics.

Program Requirements

In addition to the requirements listed below, you must:

a. Earn a minimum of 60 semester hours of course work
b. Earn a minimum of 15 graded semester hours at PCC
c. Earn a minimum of "C" in all coursework for the degree

Consult with a PCC Arts and Sciences advisor or transfer advisor to find out which Colorado Statewide Guaranteed Transfer Courses (GT Pathways) or elective courses meet the degree requirements of the four-year college to which you plan to transfer.

To earn an AS Degree with Designation in Mathematics, you must complete at least 60 college-level credits, as described below:

Total Credits: 60

** Refer to CCCS Guaranteed Transfer (GT) - Pathways Courses for a full list of all GT Pathway Courses*

General Education Requirements (39 Credits)

Written Communication (6 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

or

- ENG 1022 - English Composition II: GT-CP2 **Credit(s): 3 and** a GT Pathways Advanced Writing course (GT-CO3) *

Mathematics (5 Credits)

MAT 2410 - Calculus I: GT-MA1

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): MAT 1420.
Formerly MAT 201 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. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

Natural and Physical Sciences (10 Credits)

PHY 2111 - Physics: Calculus Based I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 2410, ENG 1021.
Formerly PHY 211 Explores the physical world through reasoning, mathematics and experimentation. Covers kinematics, force, gravity, energy, momentum, torque, rotational dynamics and fluids, and may include thermodynamics. The concepts and theories presented in class are explored through demonstrations and hands-on experiments. This first semester calculus-based physics course is recommended for students entering engineering or one of the advanced sciences. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 2112 - Physics: Calculus-Based II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 2410, ENG 1021.
Formerly PHY 212 Expands upon PHY 2111and examines waves, electric fields, electric circuits, magnetic fields, light and optics, and modern physics. The concepts and theories presented in class are explored through demonstrations and hands-on experiments. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

Arts and Humanities (9 Credits)

- Select three GT Pathway courses from any category: (GT-AH1, GT-AH2, GT-AH3, **or** GT-AH4) *

Social and Behavioral Sciences (6 Credits)

- Select two GT Pathway courses from any category (GT-SS1, GT-SS2, **or** GT-SS3) *

History (3 Credits)

- Select one GT Pathways History course (GT-HI1) *

Additional Required Courses (16-17 Credits)

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

or

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

MAT 2420 - Calculus II: GT-MA1

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): MAT 2410.
Formerly MAT 202 Continues the study of single variable calculus which will include techniques of integration, polar coordinates, analytic geometry, improper integrals and infinite series. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2430 - Calculus III: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 2420.
Formerly MAT 203 Focuses the traditional subject matter of the Calculus. Topics include vectors, vector-valued functions, and multivariable calculus including partial derivatives, multiple integrals, line integrals and application. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

or

MAT 2431 - Calculus III with Engineering Applications: GT-MA1

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): Successful completion of MAT 2420 with a grade of C or better.
Formerly MAT 204 Focuses on the competencies established in MAT 2430 - Calculus III: GT-MA1with an additional emphasis on word problems and problem solving. This is the third course in the three-course calculus sequence. This course will additionally contain a thorough examination of multiple integration. This will include double and triple integrals, line integrals, Stokes' and Green's Theorems, and their applications. A graphing calculator is required for this course. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

CSC 1060 - Computer Science I: (Language)

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Prerequisite(s): CSC 1020.
Formerly CSC 160 Introduces students to the discipline of computer science. Covers algorithm development, data representation, logical expressions, sub-programs and input/output operations using a structured programming language. Requires intensive lab work outside of class time.

Electives (4-5 Credits)

Determined by transferring institution

Transfer Degrees

** CSU-Fort Collins requires a different computer science course than the community college course. Students should seek advising at CSU-Ft. Collins for information on the appropriate computer science course to take.

This degree transfers to the following Colorado public four-year institutions of higher education:

- Adams State University (B.A. Mathematics)
- Colorado Mesa University (B.S. Mathematics; Mathematics, Secondary Education or Statistics concentrations)
- Colorado State University-Ft. Collins (B.S. Mathematics)
- Colorado State University-Pueblo (B.A. Mathematics; B.S. Mathematics)
- Fort Lewis College (B.A. Mathematics; Mathematics option)
- Metropolitan State University of Denver (B.A. Mathematics)
- University of Colorado, Boulder (B.A. Mathematics)
- University of Colorado, Colorado Springs (B.A. Mathematics; B.S. Mathematics)
- University of Colorado, Denver (B.S. Mathematics)
- University of Northern Colorado (B.S. Mathematics; Applied Mathematical Sciences or Liberal Arts emphasis)
- Western State Colorado University (B.A. Mathematics)

Med Prep for Nursing Assistant Mini-Certificate

CIP 51.9999

See list of Department Chairs on the Personnel page.

Program Description

The Med Prep program provides students with the opportunity to develop skills and knowledge for health occupations. This program is nine months in length; however, students have the option of taking either one or both semesters.

During the fall semester, students will pursue a common core of instruction. This course is structured to provide the students with a broad academic and vocational foundation in the health care professions. An introduction to the health care professions is provided through field trips, speakers, classroom activities and laboratory experiences. Students will have presentations by medical professionals who are currently working in the field to offer insight into the medical careers available. Students will receive instruction in nurse assisting and will be eligible to take the State Certification test.

The second semester will provide students with career development skills such as resume writing, portfolio building, interviewing techniques and basic knowledge about how to be successful in the professions of health care. Students will also obtain job exploration experience (job shadowing) at several health care agencies in the area. At the end of the semester, students will receive a certificate for Clinical Medical Assistant/Pharmacy Aid.

Total Credits: 14.5

Certificate Requirements

HPR 1000 - Introduction to Health

Credit(s): 3
Lecture Hour(s): 3
Formerly HPR 100 Provides an exploratory course for students interested in a health career. Basic health skills such as vital signs and CPR will be included.

NUA 1001 - Nurse Aide Health Care Skills

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Formerly NUA 101 Prepares the student to perform the fundamental skills of the nurse aide. Basic nursing skills, communication 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 Aid Clinical Experience

Credit(s): 1
Vocational Clinic Hour(s): 1.5

Formerly NUA 170 Applies knowledge and skill gained in NUA 101 to patient care. Pass/fail grading (F).

Medical Assistant Certificate

CIP 51.0801

See list of Department Chairs on the Personnel page.

Career Opportunities

The Medical Assistant Program will prepare the student for a career in medical assisting. Medical assistants can work in a variety of settings – physician offices, outpatient facilities, urgent care centers and other ambulatory health care services. Medical assistants play a vital role in the success of a medical practice and play the role of a liaison between the physician and the patients.

Program Description

The Medical Assistant program will prepare the student to primarily work in the back office of a medical practice, along with teaching some basic front office duties. Students will be taught the clinical tasks of drawing blood, giving injections, performing lab tests, taking patient histories and measuring vital signs. The administrative tasks include scheduling appointments, coding medical information and bookkeeping. Students will serve an internship and prepare for a national certification exam to become a Registered Medical Assistant.

Program Requirements

Entrance Requirements:

Successful completion of any CCR course or qualifying placement score or exemption.

Enrollment in the program is limited. Students must apply for admission to the program prior to the deadline. Students will be notified in writing of conditional acceptance. Clinical sites used during the program require that you successfully complete a background check and drug screen. These need to be completed before final acceptance into the program. Students must also obtain CPR certification and immunization series within the first semester of the program.

Graduation Requirements:

Students must complete all credits and courses listed in the curriculum with a "C" grade or higher.

Total Credits: 40

Certificate Requirements

Semester 1 - Fall

HPR 1007 - Computers in Healthcare

Credit(s): 2
Lecture Hour(s): 2
Formerly HPR 119 Introduces basic computer technology, file management, and PC system components as used in Health Care settings. Provides an overview of word processing, spreadsheets, and personal information management

software. Introduces the Electronic Health Record (EHR), its content, EHR software, EHR management, patient management and scheduling, and privacy and security of the EHR.

HPR 1039 - Medical Terminology

Credit(s): 2
Lecture Hour(s): 2
Formerly HPR 139 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.

MAP 1010 - Medical Office Administration

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): Department Chair Approval.
Formerly MAP 110 Introduces the administrative duties specifically used in medical offices.

MOT 1025 - Basic Medical Sciences I

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Department Approval Required.
Formerly MOT 125 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

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Department Approval Required
Formerly MOT 133 Introduces the anatomy, physiology, pathophysiology, and drug therapy of the cardiovascular, respiratory, integumentary, and senses systems. The scope of the material is limited for the medical office technology personnel.

MOT 1027 - Basic Medical Sciences III

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Department Approval Required
Formerly MOT 135 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.

Semester 2 - Spring

HPR 1008 - Law & Ethics for Health Professions

Credit(s): 2
Lecture Hour(s): 2
Formerly HPR 106 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.

MAP 1020 - Medical Office Financial Management

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): Department Chair Approval.
Formerly MAP 120 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 2038 - Medical Assisting Laboratory

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 4
Prerequisite(s): Department Chair Approval.
Formerly MAP 138 Introduces the student to 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

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 4
Prerequisite(s): Department Chair Approval.
Formerly MAP 140 Provides hands-on experience with clinical skills required in medical offices. Delivers theory and skills presentations allowing for students to properly demonstrate techniques for a variety of medical needs.

MAP 1050 - Pharmacology for Medical Assistants

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Department Chair Approval.
Formerly MAP 150 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.

Semester 3 - Summer

HPR 1010 - Dietary Nutrition

Credit(s): 1
Lecture Hour(s): 1

Formerly HPR 108 Studies the basic nutritional principles in clinical practice in health care. The course will cover factors which influence the nutritional status of individuals, methods of nutritional assessment and support, and diet modification for specific disease states.

MAP 1083 - Medical Assistant Internship

Credit(s): 4
Internship Hour(s): 12
Prerequisite(s): Department Chair Approval.
Formerly MAP 183 Provides supervised placement in contracted facility for guided experience in application of knowledge and skill acquired in the classroom. The student assists with a variety of business and clinical procedures. Positions are nonpaid. Student must have permission by program coordinator to begin Internship.

MAP 2069 - Review for Medical Assistant National Exam

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): Department Chair Approval.
Formerly MAP 189 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, supporting quality care in the office or clinic.

Medical Assistant, AAS

CIP 51.0801

See list of Department Chairs on the Personnel page.

Career Opportunities

The Medical Assistant Program will prepare the student for a career in medical assisting. Medical assistants can work in a variety of settings – physician offices, outpatient facilities, urgent care centers and other ambulatory health care services. Medical assistants play a vital role in the success of a medical practice and play the role of a liaison between the physician and the patients.

Program Description

The Medical Assistant program will prepare the student to primarily work in the back office of a medical practice, along with teaching some basic front office duties. Students will be taught the clinical tasks of drawing blood, giving injections, performing lab tests, taking patient histories and measuring vital signs. The administrative tasks include scheduling appointments, coding medical information and bookkeeping. Students will serve an internship and prepare for a national certification exam to become a Registered Medical Assistant.

Program Requirements

Entrance Requirements:

Successful completion of any CCR course or qualifying placement score or exemption.

Enrollment in the program is limited. Students must apply for admission to the program prior to the deadline. Students will be notified in writing of conditional acceptance. Clinical sites used during the program require that you successfully complete a background check and drug screen. These need to be completed before final acceptance into the program. Students must also obtain CPR certification and immunization series within the first semester of the program.

Graduation Requirements:

Students must complete all credits and courses listed in the curriculum with a "C" grade or higher.

Total Credits: 61

Degree Requirements

General Education Requirements (15 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

or

ENG 1031 - Technical Writing I

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 131, then ENG 1020 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.

MAN 1028 - Human Relations in Organizations

Credit(s): 3
Lecture Hour(s): 3
Formerly MAN 128 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.

or

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

MAT 1120 - Math for Clinical Calculations

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 103 Provides a review of general mathematics, introductory algebra and an opportunity to learn systems of measurement and methods of solving problems related to drug dosage and intravenous fluid administration. It is designed for students in the health disciplines. Topics may include algebra, graphs, measurement and conversion between various systems of measurement.

or

MAT 1240 - Mathematics for the Liberal Arts: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 1001 concurrency allowed, or see Basic Skills Assessment
Formerly MAT 120 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. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 1340 - College Algebra: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 0300.
Formerly MAT 121 Explores topics including intermediate algebra, equations, and inequalities, functions and their graphs, exponential and logarithmic functions, linear and nonlinear systems, selection of topics from among graphing of the conic sections, introduction to sequences and series permutations and combinations, the binomial theorem and theory of equations. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 1420 - College Trigonometry: GT-MA1

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): MAT 1340.
Formerly MAT 122 Covers topics including trigonometric functions (with graphs and inverse functions), identities and equations, solutions of triangles, complex numbers, and other topics as time permits. This is a traditional prerequisite course to the calculus sequence. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 1320 - Finite Mathematics: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 0300 or Equivalent Test Score.

Formerly MAT 123 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. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 1400 - Survey of Calculus: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 1340 or see Basic Skills Assessment
Formerly MAT 125 Includes derivatives, integrals, and their applications, with attention restricted to algebraic, exponential, and logarithmic functions for business, life science and/or social science majors.. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2420 - Calculus II: GT-MA1

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): MAT 2410.
Formerly MAT 202 Continues the study of single variable calculus which will include techniques of integration, polar coordinates, analytic geometry, improper integrals and infinite series. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2430 - Calculus III: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 2420.
Formerly MAT 203 Focuses the traditional subject matter of the Calculus. Topics include vectors, vector-valued functions, and multivariable calculus including partial derivatives, multiple integrals, line integrals and application. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2431 - Calculus III with Engineering Applications: GT-MA1

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): Successful completion of MAT 2420 with a grade of C or better.
Formerly MAT 204 Focuses on the competencies established in MAT 2430 - Calculus III: GT-MA1with an additional emphasis on word problems and problem solving. This is the third course in the three-course calculus sequence. This course will additionally contain a thorough examination of multiple integration. This will include double and triple integrals, line integrals, Stokes' and Green's Theorems, and their applications. A graphing calculator is required for this course. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2520 - Discrete Mathematics: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): Successful completion of MAT 2410 with a C or better.
Formerly MAT 215 Concentrates on formal logic, algorithms, induction proofs, equivalence relations and graphs. This course is designed for mathematics and computer science students.

MAT 2561 - Differential Equations with Engineering Applications: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): Successful completion of MAT 2420 with a grade of C or better.
Formerly MAT 261 This course introduces ordinary differential equations. The content of this course includes all the topics of MAT 2560 - Differential Equations: GT-MA1with an additional emphasis on applications and problem solving. A graphing calculator is required for this course. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2560 - Differential Equations: GT-MA1

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of MAT 2420 with a C or better.
Formerly MAT 265 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.

PSY 1001 - General Psychology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 101 Focuses on the scientific study of behavior including motivation, emotion, physiological psychology, stress and coping, research methods, consciousness, sensation, perception, learning and memory. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

or

PSY 2440 - Human Growth and Development: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 235 Examines human development from conception through death, emphasizing physical, cognitive, emotional and psychosocial factors. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

- Arts and Humanities **Credit(s): 3**

Core Curriculum Requirements (40 Credits)

Semester 1 - Fall

HPR 1008 - Law & Ethics for Health Professions

Credit(s): 2
Lecture Hour(s): 2
Formerly HPR 106 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 1039 - Medical Terminology

Credit(s): 2
Lecture Hour(s): 2
Formerly HPR 139 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.

MAP 1010 - Medical Office Administration

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): Department Chair Approval.
Formerly MAP 110 Introduces the administrative duties specifically used in medical offices.

MOT 1025 - Basic Medical Sciences I

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Department Approval Required.
Formerly MOT 125 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

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Department Approval Required
Formerly MOT 133 Introduces the anatomy, physiology, pathophysiology, and drug therapy of the cardiovascular, respiratory, integumentary, and senses systems. The scope of the material is limited for the medical office technology personnel.

MOT 1027 - Basic Medical Sciences III

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Department Approval Required
Formerly MOT 135 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.

Semester 2 - Spring

HPR 1007 - Computers in Healthcare

Credit(s): 2
Lecture Hour(s): 2
Formerly HPR 119 Introduces basic computer technology, file management, and PC system components as used in Health Care settings. Provides an overview of word processing, spreadsheets, and personal information management software. Introduces the Electronic Health Record (EHR), its content, EHR software, EHR management, patient management and scheduling, and privacy and security of the EHR.

MAP 1020 - Medical Office Financial Management

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): Department Chair Approval.
Formerly MAP 120 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 2038 - Medical Assisting Laboratory

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 4
Prerequisite(s): Department Chair Approval.
Formerly MAP 138 Introduces the student to 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

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 4
Prerequisite(s): Department Chair Approval.
Formerly MAP 140 Provides hands-on experience with clinical skills required in medical offices. Delivers theory and skills presentations allowing for students to properly demonstrate techniques for a variety of medical needs.

MAP 1050 - Pharmacology for Medical Assistants

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Department Chair Approval.
Formerly MAP 150 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.

Semester 3 - Summer

HPR 1010 - Dietary Nutrition

Credit(s): 1
Lecture Hour(s): 1
Formerly HPR 108 Studies the basic nutritional principles in clinical practice in health care. The course will cover factors which influence the nutritional status of individuals, methods of nutritional assessment and support, and diet modification for specific disease states.

MAP 1083 - Medical Assistant Internship

Credit(s): 4
Internship Hour(s): 12
Prerequisite(s): Department Chair Approval.
Formerly MAP 183 Provides supervised placement in contracted facility for guided experience in application of knowledge and skill acquired in the classroom. The student assists with a variety of business and clinical procedures. Positions are nonpaid. Student must have permission by program coordinator to begin Internship.

MAP 2069 - Review for Medical Assistant National Exam

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): Department Chair Approval.
Formerly MAP 189 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, supporting quality care in the office or clinic.

Electives (6 Credits)

- Select 3 from Arts and Humanities

or

- Social & Behavioral Science

Medical Sonography, AAS

CIP 51.0910

See list of Department Chairs on the Personnel page.

Associate of Applied Science (AAS) Degree

Applicants to this program must possess a two-year health degree with direct patient care-responsibility or a bachelor's degree in any discipline from a regionally accredited institution.

Career Opportunities

The program prepares you for a career in medical sonography (ultrasound). After graduating from the program, you may take the America Registry of Diagnostic Medical Sonographers (ARDMS) national certification examinations in ultrasound. A Registered Ultrasound Technologist (ultrasonographer) specializes in ultrasound procedures that demonstrate anatomy and pathologies on medical film or electronic (PACS) systems. These images are, in turn, interpreted by radiologists and other physicians for the diagnosis and treatment of disease.

Program Description

DMS is a four-semester program.

The program teaches students to function as critical members of today's health care team. Students will learn and practice important critical thinking/problem-solving skills. Learning appropriate interpersonal and communication skills allows students to interact effectively with other health care team members, patients, and families.

We teach 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.

This curriculum includes lab/clinical experience to gain competencies in the areas of ultrasound physics and instrumentation, ultrasound of the abdomen, OB/GYN, small parts and basic vascular sonongraphy.

Total Credits: 68.5

Degree Requirements

General Education Requirements (9 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

PSY 2440 - Human Growth and Development: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 235 Examines human development from conception through death, emphasizing physical, cognitive, emotional and psychosocial factors. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

or

PSY 1001 - General Psychology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 101 Focuses on the scientific study of behavior including motivation, emotion, physiological psychology, stress and coping, research methods, consciousness, sensation, perception, learning and memory. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

- Any Arts & Humanities Classes **Credit(s): 3**

Prerequisite Requirements (12 Credits)

BIO 2101 - Human Anatomy and Physiology I with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 201 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, nervous and endocrine systems. Includes a mandatory hands-on laboratory experience covering experimentation, microscopy, observations and dissection. This is the first semester of a two-semester sequence.

BIO 2102 - Human Anatomy and Physiology II with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 202 Focuses on the integrated study of the human body and the histology, anatomy, and physiology of the following systems and topics: cardiovascular, hematology, lymphatic and immune, urinary, fluid and electrolyte control, digestive, nutrition, respiratory, reproductive and development. Includes a mandatory hands-on laboratory experience involving experimentation, microscopy, observations and dissection. This is the second semester of a two-semester sequence.

DMS 1001 - Introduction to Sonography

Credit(s): 2
Lecture Hour(s): 2
Formerly DMS 101 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.

RTE 2055 - Multiplanar Sectional Imaging

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Radiologic Technology student or imaging professional or permission of instructor.
Formerly RTE 255 Offers a course designed to increase knowledge in multiplanar/multimodality sectional anatomy for imaging professionals, radiologic technology students and other interested health care professionals. Correlative studies of line drawings, cadaverous photographs, MRI and CT images are thoroughly studied.

Core Curriculum Requirements (51.5 Credits)

Semester 1 – Fall (11.5 Credits)

DMS 2201 - OB/GYN Ultrasound I

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Program admission and DMS 1001.
Formerly DMS 221 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 2101 - Abdominal Ultrasound I

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Program admission and DMS 1001.
Formerly DMS 231 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 2001 - Ultrasound Physics I

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Program admission and DMS 1001
Formerly DMS 241 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 2111 - Ultrasound Scanning Lab

Credit(s): 3
Vocational Lab Hour(s): 4.5
Prerequisite(s): Program admission. Enrollment in a DMS Program.
Formerly DMS 244 Prepares the sonography student for ultrasound Internship with an emphasis on applied instrumentation, ergonomics and image optimization.

DMS 2080 - Clinical Observation

Credit(s): 2.50
Internship Hour(s): 7.50
Prerequisite(s): BIO 2101, BIO 2102, RTE 2055.
Corequisite(s): DMS 2201, DMS 2101, DMS 2001 and DMS 2111 .
Formerly DMS 280 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.

Semester 2 – Spring (14 Credits)

DMS 2202 - OB/GYN Ultrasound II

Credit(s): 2
Lecture Hour(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): DMS 2201, DMS 2101, DMS 2001, DMS 2081.
Corequisite(s): DMS 2102, DMS 2002, DMS 2083.
Formerly DMS 222 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 2102 - Abdominal Ultrasound II

Credit(s): 2
Lecture Hour(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): DMS 2201, DMS 2001, DMS 2081.
Corequisite(s): DMS 2202, DMS 2002, DMS 2083.
Formerly DMS 232 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 2002 - Ultrasound Physics II

Credit(s): 2
Lecture Hour(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): DMS 2201, DMS 2101, DMS 2001, DMS 2082.
Corequisite(s): DMS 2202, DMS 2102, DMS 2083.
Formerly DMS 242 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 2081 - Clinical Internship I

Credit(s): 8
Internship Hour(s): 24
Prerequisite(s): DMS 2111 , DMS 2080.
Formerly DMS 281 Offers the initial clinical course wherein the fundamental principles of abdominal, OB/GYN and ultrasound physics will be applied under the direct supervision of a registered sonographer. The mastery of the foundations of instrumentation, scanning techniques, and image evaluation in sectional planes in abdominal and OB/GYN sonography will be stressed.

Semester 3 – Summer (12 Credits)

DMS 2100 - Small Parts Ultrasound

Credit(s): 2
Lecture Hour(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): DMS 2201, DMS 2101, DMS 2001, DMS 2081.
Corequisite(s): DMS 2400, DMS 2082.
Formerly DMS 205 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 2400 - Vascular Ultrasound

Credit(s): 2
Lecture Hour(s): 1
Vocational Clinic Hour(s): 2

Prerequisite(s): DMS 2201, DMS 2101, DMS 2001, DMS 2081.
Corequisite(s): DMS 2100, DMS 2082.
Formerly DMS 206 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.

DMS 2082 - Clinical Internship II

Credit(s): 8
Internship Hour(s): 24
Prerequisite(s): DMS 2081.
Formerly DMS 282 Offers continued clinical experience for the ultrasound student. Application of the small parts didactic lectures will be applied and will include image evaluation and cross-sectional anatomy of the thyroid, breast and scrotum. The foundations of vascular anatomy, instrumentation, scanning techniques and image evaluation will be stressed. The student will spend 30 hours per week at the clinical site under the direct supervision of a registered sonographer.

Semester 4 – Fall (11 Credits)

DMS 2083 - Clinical Internship III

Credit(s): 8
Internship Hour(s): 24
Prerequisite(s): DMS 2082.
Formerly DMS 283 Continues clinical experience for the ultrasound student. Application of the topics covered in advanced didactic lectures to include an introduction to invasive procedures using ultrasound guidance. Sterile technique and standard precautions will be reviewed. The student will spend 30 hours per week at the clinical site under the direct supervision of a registered sonographer.

DMS 2089 - Ultrasound Capstone

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): DMS 2082.
Corequisite(s): DMS 2083.
Formerly DMS 289 Prepares the sonography student to effectively search for a job and sit for the American Registry of Diagnostic Medical Sonographers examination in their specialty.

Microsoft Office Applications

CIP 11.0101

See list of Department Chairs on the Personnel page.

Career Opportunities

The CIS program prepares you for careers in computer science, computer networking and electronic commerce. The AAS Degree with an emphasis in local area networking prepares you to work as a network technician on small and large networks. You may also administer smaller networks as a System Administrator. The AGS Degree with an emphasis in Computer Information Systems prepares you to transfer to a university to continue studies in Computer Science or Computer Information Systems.

Program Description

The CIS program provides training in basic technical computer and networking skills. You will study computer networking, programming and database technologies along with classes that teach the technical aspects of the Internet and data communications. Note: Students interested in transferring to a baccalaureate program in Computer Information Systems should refer to the Transfer Degree section.

Total Credits: 6

Certificate Requirements

CIS 1018 - Intro to PC Applications

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 118 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 2018 - Advanced PC Applications

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Prerequisite(s): CIS 1018 or Instructor approval.
Formerly CIS 218 Covers the advanced capabilities of a PC software applications suite. Emphasizes solving business problems by integrating data from all of the software applications that facilitate the production of useful information. Printed documents, reports, slides and forms are produced to communicate information.

CIS 1055 - PC Spreadsheet Concepts: (Software Package)

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 155 Exposes the student to a wide range of uses of the electronic spreadsheet with special emphasis on using it as a business tool. Includes fundamentals and terms, creating and saving workbooks, entering and using formulas, formatting, printing, multiple-page workbooks, creating charts, entering and using functions, managing lists, and simple macros.

ACC 1035 - Spreadsheet Applications for Accounting

Credit(s): 3
Lecture Hour(s): 3
Formerly ACC 135 Introduces spreadsheets as an accounting tool in the application of fundamental accounting concepts, problem-solving, and decision-making skills.

Networking Cyber Security, AAS

CIP 11.0101

See list of Department Chairs on the Personnel page.

Career Opportunities

The CIS program prepares you for careers in computer science, computer networking and electronic commerce. The AAS Degree with an emphasis in local area networking prepares you to work as a network technician on small and large networks. You may also administer smaller networks as a System Administrator. The AGS Degree with an emphasis in Computer Information Systems prepares you to transfer to a university to continue studies in Computer Science or Computer Information Systems.

Program Description

The CIS program provides training in basic technical computer and networking skills. You will study computer networking, programming and database technologies along with classes that teach the technical aspects of the Internet and data communications. Note: Students interested in transferring to a baccalaureate program in Computer Information Systems should refer to the Transfer Degree section.

Total Credits: 60

General Education Requirements (16 credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1031 - Technical Writing I

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 131, then ENG 1020 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.

MAT 1150 - Technical Mathematics

Credit(s): 4
Lecture Hour(s): 4
Formerly MAT 108 Covers material designed for career technical or general studies students who need to study particular mathematical topics. Topics may include measurement, algebra, geometry, trigonometry, graphs and/or finance. These are presented at an introductory level and the emphasis is on applications.

General Education Electives (9 credits)

Choose 3 of the below courses with an advisor

CIS 1015 - Introduction to Computer Information Systems

Credit(s): 3
Lecture Hour(s): 3
Formerly CIS 115 Focuses on an overview of the needs for and roles of computer information systems. Emphasizes computer requirements in organizations, history, hardware functions, programming, systems development and computer operations. Introduces computer applications.

CIS 1018 - Intro to PC Applications

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 118 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.

CSC 1019 - Introduction to Programming

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CSC 119 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 Java

Credit(s): 3
Lecture Hour(s): 3
Formerly CSC 120 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 1029 - Introduction to Secure Coding

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Prerequisite(s): CSC 1060 , Computer Science I
Formerly CSC 129 Focuses on introduction to secure coding. Emphasizes concepts, principles, and 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.

ECO 2001 - Principles of Macroeconomics: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly ECO 201 Focuses on the study of the American economy, stressing the interrelationships among household, business and government sectors. Explores saving and investment decisions, unemployment, inflation, national income accounting, taxing and spending policies, the limits of the market and government, public choice theory, the Federal Reserve System, money and banking, and international trade.

Core Curriculum Requirements (35 credits)

CNG 1020 - A+ Certification Preparation

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Formerly CNG 120 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 1024 - Networking I: Network +

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 124 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.

CIS 2020 - Fundamentals of Unix

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 220 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

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly CIS 223 Introduces students to the concepts of installing, configuring, and managing the Linux operating system. Topics covered include working with various desktops, use of filesystem commands, and management of user and group permissions.

CNG 1036 - Guide to Disaster Recovery

Credit(s): 3
Lecture Hour(s): 3

Prerequisite(s): Department Chair Approval.
Formerly CNG 136 Presents methods to identify vulnerabilities and take appropriate countermeasures to prevent and mitigate failure risks for an organization. It will take an enterprise-wide approach to developing a disaster recovery plan.

CNG 1032 - Network Security Fundamentals

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 132 Examines the field of information security to prepare information systems students for their future roles as business decision-makers. The course presents a balance of the managerial and the technical aspects of information security. The concepts covered in this course should be helpful for students working towards the Certified Information Systems Security Professional (CISSP) certification.

CNG 1004 - Intro to TCP/IP

Credit(s): 3
Lecture Hour(s): 3
Formerly CNG 104 Covers the basic elements of the Transmission Control Protocol and the Internet Protocol, the basic technologies that implement the Internet and computer networking. In addition to TCP and IP the course covers networking media, link layer, network layer and transport layer protocols. Also included are routing, broadcast, multicast and network address translation. IP version 4 and IP version 6 are both covered.

CNG 2012 - Configuring Windows Server

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Formerly CNG 212 Provides students with the knowledge and skills that are required to install and configure a Microsoft Windows Server. This course helps prepare students for a MTA (Microsoft Technology Associate) and/or MCSA (Microsoft Certified Solutions Associate) exams.

CNG 2024 - Microsoft Windows Wireless Network

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Prerequisite(s): CNG 1004 or instructor approval.
Formerly CNG 224 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 2058 - Digital Forensics

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): CNG 1024.
Corequisite(s): CIS 2020.
Formerly CNG 258 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.

CIS 2087 - Cooperative Education

Credit(s): 1-12
Internship Hour(s): 3-36
Formerly CIS 287 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 works with the student to select an appropriate work site, establish learning objectives and to coordinate learning activities with the employer work site supervisor.

CNG 1031 - Principles of Information Assurance

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 131 Delivers a comprehensive overview of network security, including general security concepts. Communication Security is studied, including remote access, email, 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

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 133 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.

Academic or Vocational Electives (9 credits)

Choose 3 of the below courses with an advisor

CNG 2056 - Vulnerability Assessment I

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Prerequisite(s): CIS 2020, CNG 1024, and CNG 1032.
Formerly CNG 256 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.

CSC 1060 - Computer Science I: (Language)

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Prerequisite(s): CSC 1020.
Formerly CSC 160 Introduces students to the discipline of computer science. Covers algorithm development, data representation, logical expressions, sub-programs and input/output operations using a structured programming language. Requires intensive lab work outside of class time.

CSC 1061 - Computer Science II: (Language)

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Prerequisite(s): CSC 1060 or instructor approval.
Formerly CSC 161 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 2067 - Object-Oriented Analysis and Design

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): CSC 1060, Computer Science I
Formerly CSC 267 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.

CIS 2040 - Database Design and Development

Credit(s): 3
Lecture Hour(s): 3
Formerly CIS 240 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)

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Prerequisite(s): CIS 2040, Database Design and Development
Formerly CIS 243 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.

CNG 1042 - Introduction to Cloud Computing Concepts

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Formerly CNG 142 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.

- Any course with an HIT prefix **Credit(s): 3**

Networking Mini-Certificate

CIP 11.0101

See list of Department Chairs on the Personnel page.

Career Opportunities

The CIS program prepares you for careers in computer science, computer networking and electronic commerce. The AAS Degree with an emphasis in local area networking prepares you to work as a network technician on small and large networks. You may also administer smaller networks as a System Administrator. The AGS Degree with an emphasis in Computer Information Systems prepares you to transfer to a university to continue studies in Computer Science or Computer Information Systems.

Program Description

The CIS program provides training in basic technical computer and networking skills. You will study computer networking, programming and database technologies along with classes that teach the technical aspects of the Internet and data communications. Note: Students interested in transferring to a baccalaureate program in Computer Information Systems should refer to the Transfer Degree section.

Total Credits: 13

Certificate Requirements

CIS 2020 - Fundamentals of Unix

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 220 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.

CNG 1004 - Intro to TCP/IP

Credit(s): 3
Lecture Hour(s): 3
Formerly CNG 104 Covers the basic elements of the Transmission Control Protocol and the Internet Protocol, the basic technologies that implement the Internet and computer networking. In addition to TCP and IP the course covers networking media, link layer, network layer and transport layer protocols. Also included are routing, broadcast, multicast and network address translation. IP version 4 and IP version 6 are both covered.

CNG 1024 - Networking I: Network +

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 124 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 2012 - Configuring Windows Server

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Formerly CNG 212 Provides students with the knowledge and skills that are required to install and configure a Microsoft Windows Server. This course helps prepare students for a MTA (Microsoft Technology Associate) and/or MCSA (Microsoft Certified Solutions Associate) exams.

Nurse Aide

CIP 51.3902

See list of Department Chairs on the Personnel page.

Program Description

The Nurse Aide (NUA) program teaches students the basic skills and methods needed to help hospital clients.

Students will also learn skills to help long-term care residents, and home health care clients with their daily living activities.

The NUA program has a selective admissions process. The program application and requirements are available in the Nursing Department front office or at Pueblo Community College NUA at any time. All Nursing and Health & Public Safety programs have essential functions to help you be successful in the program and career.

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.

Career Information

Nurse Aides work in Hospitals, Skilled Nursing Facilities, Assisted Living and home health care.

Total Credits: 5

Certificate Requirements

NUA 1001 - Nurse Aide Health Care Skills

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Formerly NUA 101 Prepares the student to perform the fundamental skills of the nurse aide. Basic nursing skills, communication 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 Aid Clinical Experience

Credit(s): 1
Vocational Clinic Hour(s): 1.5

Formerly NUA 170 Applies knowledge and skill gained in NUA 101 to patient care. Pass/fail grading (F).

Nursing, LPN to ADN, AAS

CIP 51.3801

See list of Department Chairs on the Personnel page.

Program Description

The LPN-ADN program teaches you skills of direct patient care and critical thinking in the role of a registered nurse that you can apply in any healthcare setting. It offers theoretical and applied instruction in classrooms, simulated laboratories, and clinical settings. It integrates education in adult, gerontological, obstetric, pediatric, and psychiatric-mental health nursing. Your clinical learning will take place in diverse types of institutions.

The Nursing program has a selective and limited admission policy. The application is available online at Pueblo Community College Nursing from October 1 to November 15. All Health Professions programs have essential functions to help you be successful in the program and career. Applicants must have a current Colorado LPN license in good standing. PCC will accept a block transfer of up to 21 credits. Official transcripts from the student's LPN program and proof of LPN licensure are required for admission to this program. PCC will accept a block transfer of up to 24 PLA credits.

In progress grades will be accepted, however, course must show in progress at time of application and be completed in Fall semester. It is the applicant's responsibility to submit final spring semester course grade(s) as soon as possible to the admission committee for consideration**.**

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.

Career Information

The LPN-ADN program prepares you to provide safe, therapeutic, and competent nursing care in hospitals and other healthcare settings.

Total Credits: 71.5

General Education and Program Prerequisites

First (11 credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

BIO 2101 - Human Anatomy and Physiology I with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 201 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, nervous and endocrine systems. Includes a mandatory hands-on laboratory experience covering experimentation, microscopy, observations and dissection. This is the first semester of a two-semester sequence.

BIO 2102 - Human Anatomy and Physiology II with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 202 Focuses on the integrated study of the human body and the histology, anatomy, and physiology of the following systems and topics: cardiovascular, hematology, lymphatic and immune, urinary, fluid and electrolyte control, digestive, nutrition, respiratory, reproductive and development. Includes a mandatory hands-on laboratory experience involving experimentation, microscopy, observations and dissection. This is the second semester of a two-semester sequence.

Second (12 credits)

BIO 2104 - Microbiology with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 204 Designed for health science majors. Examines microorganisms with an emphasis on their structure, development, physiology, classification and identification. The laboratory experience includes culturing, identifying and controlling microorganisms with an emphasis on their role in infectious disease.

BIO 2116 - Human Pathophysiology

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): BIO 2101, BIO 2102

Formerly BIO 216 Focuses on the alterations in physiological, cellular and biochemical processes, the associated homeostatic response, and the manifestations of disease. Prior knowledge of cellular biology, anatomy and physiology is essential for the study of pathophysiology.

HPR 1010 - Dietary Nutrition

Credit(s): 1
Lecture Hour(s): 1
Formerly HPR 108 Studies the basic nutritional principles in clinical practice in health care. The course will cover factors which influence the nutritional status of individuals, methods of nutritional assessment and support, and diet modification for specific disease states.

PSY 2440 - Human Growth and Development: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 235 Examines human development from conception through death, emphasizing physical, cognitive, emotional and psychosocial factors. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

1 Course must be completed within 10 years of entrance into the program

2 The 10-year science requirement will not apply to LPNs with 2000 hours worked in the past two (2) years

Program Course Schedule

Apply to the Program – **October 1 to November 15** for a spring start

Application is online at Pueblo Community College Nursing

Accepted applicants must have a current Colorado LPN license in good standing and 21 credits will be transcribed as prior learning credits to complete this degree.

Credits received for Practical Nursing License: 24

Spring (9 credits)

NUR 1089 - Transition from LPN to ADN

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Vocational Clinic Hour(s): 1.50

Prerequisite(s): Admission to Nursing program.
Formerly NUR 189 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 2012 - Pharmacology II

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Admission to Nursing program and successful completion of preceding required program course work

or permission of the program director.
Corequisite(s): NUR 2011 or permission of the program director.
Formerly NUR 212 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 2011 - Psychiatric-Mental Health Nursing

Credit(s): 4
Lecture Hour(s): 2.70
Vocational Clinic Hour(s): 3.90

Prerequisite(s): Admission to Nursing program and successful completion of preceding Nursing program course work or permission of the program director.
Corequisite(s): NUR 2012 or permission of program director.
Formerly NUR 211 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.

Summer (6.5 credits)

NUR 2006 - Advanced Concepts of Medical-Surgical Nursing I

Credit(s): 6.50
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Vocational Clinic Hour(s): 9

Prerequisite(s): Admission to Nursing program and successful completion of preceding Nursing program course work or permission of the program director.
Corequisite(s): NUR 2012 or permission of the program director.
Formerly NUR 206 NUR 206 builds on NUR 1006focusing on advanced concepts of nursing applied to care of patients with high acuity medical/surgical conditions. Builds on medical/surgical nursing theory, mental health concepts, communication, collaboration, caring, and critical thinking/clinical reasoning necessary for safe, patient-centered nursing care to developmentally and culturally diverse adult patients. Incorporates evidence-based practice, quality improvement, professional standards, and legal and ethical responsibilities of the professional nurse as applied in a variety of healthcare settings. Application of knowledge and skills occurs in the nursing skills laboratory and in a variety of clinical settings.

Fall (9 credits)

NUR 2016 - Advanced Concepts of Medical Surgical Nursing II

Credit(s): 5
Lecture Hour(s): 2.30
Vocational Clinic Hour(s): 8.10

Prerequisite(s): Admission to Nursing program and successful completion of preceding program course work or permission of the program director.

Corequisite(s): NUR 2006 and NUR 2012 or permission of the program director.
Formerly NUR 216 Nursing 216 is a continuation of Nursing 206, focusing on complex medical/surgical conditions of the high acuity patient. Builds on medical/surgical nursing theory, mental health concepts, communication, collaboration, caring, and critical thinking/clinical reasoning necessary for safe, patient-centered nursing care to developmentally and culturally diverse adult patients experiencing high acuity medical/surgical conditions. Incorporates evidence-based practice, quality improvement, professional standards, and legal and ethical responsibilities of the professional nurse as applied in the acute care and high acuity settings. Application of knowledge and skills occurs in a variety of clinical settings.

NUR 2030 - Transition to Professional Nursing Practice

Credit(s): 4
Lecture Hour(s): 1.60
Vocational Clinic Hour(s): 7.20

Prerequisite(s): Admission to Nursing program and successful completion of preceding program course work or permission of the program director.
Corequisite(s): NUR 2016 or permission of the program director.
Formerly NUR 230 Nursing 230 is a Seminar and practice Capstone course that provides an integrative experience applying all dimensions of the professional nurse in the care of diverse patient populations across a variety of healthcare settings. All major concepts of the nursing program are addressed. Leadership and the management of multiple patients are emphasized. Application of knowledge and skills occurs in the clinical setting to facilitate an effective transition from student to registered professional nurse.

Occupational Therapy Assistant, AAS

CIP 51.0803

See list of Department Chairs on the Personnel page.

Career Opportunities

The OTA Program prepares you for a career in helping others improve their quality of life. You will use rehabilitative activities and exercises to help clients of all ages overcome physical, emotional, mental and/or social challenges and maximize one's independence in their activities of daily living. You can work in hospitals, schools, mental health centers, skilled nursing facilities and in the community. PCC graduates hold positions throughout Colorado and in many different states. The US Department of Labor projects that this will be one of the fastest-growing careers in the foreseeable future.

Program Description

This program teaches you to work under the supervision of a registered occupational therapist to assess clients of all ages, design individual rehabilitative programs, create goals and help clients meet their goals while monitoring their progress.

The program consists of 18 months of academic preparation and 16 weeks of fieldwork prior to graduation. When you graduate from the program, you are eligible to take the national certification examination administered by the National Board for Certification in Occupational Therapy (NBCOT). In addition, Colorado requires licensure through the Colorado Department of Regulatory Agencies (DORA).

Program Requirements

Entrance Requirements:

The OTA program has a selective admissions policy due to a limited number of fieldwork sites. You must submit a completed application packet, available through the Health and Public Safety office or on the Pueblo Community College's OTA website (available Nov. 1-March 1). You must have completed all basic skills requirements to perform at a college level in Reading, Math and English. You must also have a cumulative 2.5 GPA in college courses or on high school transcripts if no college courses have been taken. In addition, you must have vision, hearing, tactile sensation, gross and fine motor strength and coordination, memory, critical thinking and interpersonal skills adequate to allow effective communication, ensure safety of self and others, document accurately, and provide effective assessment and treatment in order to meet facility standards.

The OTA Program is primarily an in-person program and requires one to bring their own computer device to campus for instructional purposes. Please refer to this link for further information: https://www.pueblocc.edu/IT

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 the NBCOT certification exam. Contact NBCOT at 301.990.7979 or www.nbcot.org for an Early Determination Review.

Total Credits: 69

Degree Requirements

Note: All courses other than OTA may be taken prior to admission to the program.

Semester 1 — Fall

BIO 1006 - Basic Anatomy and Physiology

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly BIO 106 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, Paramedic Program, and the Medical Office Technology Program.

or

BIO 2101 - Human Anatomy and Physiology I with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 201 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, nervous and endocrine systems. Includes a mandatory hands-on laboratory experience covering experimentation, microscopy, observations and dissection. This is the first semester of a two-semester sequence.

HPR 1038 - Intro to Medical Terminology

Credit(s): 1
Lecture Hour(s): 1
Formerly HPR 138 Introduces the student to the structure of medical terms with emphasis on using and combining the most common prefixes, roots and suffixes. Includes terms related to major body systems, oncology and psychiatry, as well as clinical laboratory and diagnostic procedures and imaging. Class structure provides accepted pronunciation of terms and relative use in the healthcare setting.

OTA 1000 - Introduction to Occupational Therapy

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Program admission
Formerly OTA 100 Explores career options in occupational therapy through discussion, observation and participation. Identifies the need for areas of occupation and the differences between health, illness and wellness. Describes the history and philosophy of occupational therapy and the roles, responsibilities and relationships between other healthcare professionals. Discusses ethical and legal implications of health care and explores basic sociological issues.

OTA 1005 - Occupational Disruption and Activity Analysis

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Prerequisite(s): Admission into the OTA program.
Formerly OTA 105 Explores the diseases and aspects of health and wellness common to occupational therapy intervention and occupational disruption and gains insight to various treatment methods and techniques as well as applying activity/task analysis.

OTA 1006 - Basic Occupational Therapy Frames of Reference and Documentation

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Admission into the OTA program.
Formerly OTA 106 Develops the ability to identify the types of occupational therapy documentation and practice basic documentation skills. Identifies models of practice, frames of reference and occupational therapy theories, founders, underlying assumptions of the theories, and implications to occupational therapy practice and treatment interventions.

PSY 1001 - General Psychology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 101 Focuses on the scientific study of behavior including motivation, emotion, physiological psychology, stress and coping, research methods, consciousness, sensation, perception, learning and memory. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

or

PSY 1002 - General Psychology II: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 102 Focuses on the scientific study of behavior including cognition, language, intelligence, psychological assessment, personality, abnormal psychology, therapy, lifespan development and social psychology. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

or

PSY 2440 - Human Growth and Development: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 235 Examines human development from conception through death, emphasizing physical, cognitive, emotional and psychosocial factors. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

Semester 2 — Spring

MAT 1140 - Career Math

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 107 Covers material designed for career technical or general studies students who need to study particular mathematical topics. Topics may include measurement, algebra, geometry, trigonometry, graphs and/or finance. These are presented on an introductory level and the emphasis is on applications.

or

MAT 1340 - College Algebra: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 0300.
Formerly MAT 121 Explores topics including intermediate algebra, equations, and inequalities, functions and their graphs, exponential and logarithmic functions, linear and nonlinear systems, selection of topics from among graphing of the conic sections, introduction to sequences and series permutations and combinations, the binomial theorem and theory of equations. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

OTA 1021 - Assessing Movement Through Occupation

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Prerequisite(s): OTA 1005, BIO 1006 or BIO 2101
Formerly OTA 121 Provides communication strategies with clients and caregivers in an inter-professional setting. Students will demonstrate an understanding of how performance skills affect occupation and how assessments such as muscle movement, body mechanics, transfers, range of motion and manual muscle testing will influence rehabilitation.

OTA 1022 - Origins of Occupation and Performance from the Neonate to Adulthood

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Admission into the OTA program.
Formerly OTA 122 Explores the impact and influences of environment, community and various contexts of the client, focusing on a dynamic and ever changing occupational status through the influences of areas of occupation, contexts, performance patterns, client factors, performance skills, and activity demands from neonate through middle-age development.

OTA 1025 - Basic Occupational Therapy Application to Mental Health

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Prerequisite(s): OTA 1005, OTA 1006, PSY 1001 or PSY 1002 or PSY 2440
Formerly OTA 125 Identifies commonly seen signs and symptoms of mental illness that affect health and wellness and learn methods of screening and various occupational therapy techniques for the assessment and treatment of occupational disruption within a variety of contexts. A Level I Fieldwork experience is integrated within this course.

OTA 1031 - Geriatric Concerns, Diseases and Treatment Techniques

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Prerequisite(s): OTA 1005 and OTA 1006.
Formerly OTA 131 Explores aging trends and the impact of context and environmental influences on the older individual, focusing on an ever-changing occupational status through the influences of client factors, activity demands, and performance skills and patterns. Identify geriatric diseases and conditions common to occupational therapy and discuss strategies and methods of intervention.

Semester 3 — Summer

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

OTA 1081 - Geriatric Level I Fieldwork Experience

Credit(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): OTA 1031.
Formerly OTA 181 Identifies and provides practical experience in commonly seen disabilities, aspects of health and wellness, evaluation/assessment techniques, and methods for treatment for the geriatric population from diverse backgrounds in an inter-professional setting. Students will demonstrate universal precautions and safety standards in a variety of situations.

OTA 2017 - Occupational Therapy Rehabilitation Techniques

Credit(s): 2
Vocational Lab Hour(s): 3
Prerequisite(s): OTA 1021
Formerly OTA 217 Examines and demonstrates various treatment interventions and techniques based on aspects of health and wellness and physical/cognitive/psychosocial occupational disruption. The course focuses on adaptive equipment, assistive devices, areas of occupation and specialized physical disability assessments.

Semester 4 — Fall

- Humanities **Credit(s): 3**

or

- Social Behavioral Science **Credit(s): 3**

OTA 1082 - Physical Disabilities Level I Fieldwork Experience

Credit(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): OTA 2018
Formerly OTA 182 Identify and provide practical experience with commonly seen disabilities, aspects of health and wellness, evaluation/assessment techniques, and methods of treatment intervention for conditions affecting adult clients from diverse backgrounds in collaboration with intra-professional and inter-professional team members.

OTA 1083 - Pediatric Level I Fieldwork Experience

Credit(s): 1
Vocational Lab Hour(s): 1.50
Corequisite(s): OTA 2021.
Formerly OTA 183 Provides the student with the practical experience necessary to identify commonly seen disabilities, aspects of health and wellness, evaluation/assessment techniques, and methods of treatment for the pediatric population from diverse backgrounds in collaboration with intra-professional and inter-professional team members.

OTA 2016 - Physical Disabilities Neuro-Retraining

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Prerequisite(s): OTA 1021.
Formerly OTA 216 Provides skills necessary to utilize the occupational therapy treatment planning process, including age-appropriate assessments, treatment interventions and discharge planning within a client-centered and inter-professional context.

OTA 2018 - Occupational Therapy Application to Adult Physical Disabilities

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Prerequisite(s): OTA 1021.
Formerly OTA 218 Provides students with the ability to identify commonly seen medical and orthopedic diseases and

disabilities, aspects of health and wellness, and areas of occupational disruption. Students will learn treatment interventions within appropriate frames of reference through a variety of methodologies and will explore aspects of intervention including, but not limited to, splinting, transfers, positioning and communication techniques.

OTA 2021 - Pediatric Concerns, Diseases, Disabilities, and Treatment

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Prerequisite(s): OTA 1021 and OTA 1022.
Formerly OTA 221 Explains the impact of environment, culture and community on the child. Focuses on an ever-changing occupational status through the influences of performance skills. Provides the skills necessary to identify commonly seen diseases and disabilities and treatment techniques used in pediatrics to promote health and wellness. Identifies occupational therapy evaluation/assessment techniques and methods of intervention within the context and environment of health care and the community.

OTA 2035 - Professional Management for the OTA

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Admission into the OTA program.
Formerly OTA 235 Provides the student with the basic management skills needed as an occupational therapy assistant as well as provides an understanding of effective job seeking skills, the role of the OTA in research, professional responsibilities and lifelong learning.

Semester 5 — Spring

*OTA 2080 AND OTA 2081 must be completed within 18 months of the didactic coursework.

OTA 2078 - OTA Seminar

Credit(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): OTA 2080 or OTA 2081.
Formerly OTA 278 Provides the opportunity for discussion of Level II experiences and how to apply logical thinking, critical analysis and clinical reasoning strategies to future scenarios. Students will have discussions on continuing lifelong learning opportunities and professional responsibilities.

OTA 2080 - Fieldwork in Occupational Therapy I

Credit(s): 7
Internship Hour(s): 21
Prerequisite(s): All OTA courses except OTA 2078 and OTA 2081.
Formerly OTA 280 Provides an 8-week, full-time (or an equal amount of hours completed through part-time rotation), supervised fieldwork to develop professional behaviors consistent with the profession's standards and ethics and apply previously learned academic knowledge as an occupational therapy team member. Students will gain experience in the application of occupational therapy treatment process from admission to discharge for clients from a variety of sociocultural backgrounds and age levels in the practice area of physical disabilities to promote health and wellness.

OTA 2081 - Fieldwork in Occupational Therapy II

Credit(s): 7
Internship Hour(s): 21
Prerequisite(s): All OTA courses except OTA 2078 and OTA 2080.
Formerly OTA 281 n), supervised fieldwork to develop professional behaviors consistent with the profession's standards and ethics and apply previously learned academic knowledge as an occupational therapy team member. Students will gain experience in the application of occupational therapy treatment process from admission to discharge for clients from a variety of sociocultural backgrounds and age levels in the practice area of behavioral/mental health, sensorimotor and/or developmental disabilities as well as promoting health and wellness.

Paramedic Option Certificate

CIP 51.0904

See list of Department Chairs on the Personnel page.

Career Opportunities

The EMS program prepares you for a career in the pre-hospital health care field as an emergency medical care provider at the EMT, Advanced EMT or Paramedic level. Career opportunities include providing patient care while working for an ambulance agency, fire service, hospital or other health care facility. Additional opportunities are in such areas as tactical EMS, critical care transport and ski patrol. If you graduate with an AAS degree you have additional opportunities in administration and management in the pre-hospital field. PCC also offers a Bachelor's degree in Advanced Paramedic Practice to advance your scope into critical care and community paramedic.

Program Description

This program teaches you the knowledge and skills needed for scene management, emergency patient care and transport. This includes scene safety, patient assessment and treatment, medication administration, documentation and patient transport. Upon successful completion of the program, you may take the National Registry exam and, upon passing the exam, you may apply for Colorado State Certification at your level of training.

Program Requirements

Entrance Requirements:

To enroll in the EMT, AEMT or Paramedic programs, you must be at least 18 years of age, have all current immunizations and be able to meet the requirements of the PCC EMS Common Functional Abilities Standard. For enrollment into the Paramedic programs, you must have a current Colorado EMT certification, an EMT IV endorsement, successfully complete all prescreening examinations and prerequisites, and obtain department approval for enrollment into these programs.

The EMS Department is offering an EMT-Intermediate to Paramedic Bridge course for those who are EMT-Intermediates. To qualify for this program you must be an EMT-I99, be eligible for state certification, and pass an EMT-I prescreening exam. For more information on prerequisites and classes, please call the EMS Department.

Total Credits: 49

Certificate Requirements

General Education Requirements (4 Credits)

BIO 2101 - Human Anatomy and Physiology I with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 201 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, nervous and endocrine systems. Includes a mandatory hands-on laboratory experience covering experimentation, microscopy, observations and dissection. This is the first semester of a two-semester sequence.

Core Curriculum Requirements

EMS 2025 - Fundamentals of Paramedic Practice

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Prerequisite(s): BIO 2101, current Colorado Certification as an EMT with IV endorsement or higher and acceptance into the Paramedic Education Program.
Corequisite(s): EMS 2026.
Formerly EMS 225 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

Credit(s): 2
Vocational Lab Hour(s): 1.50
Vocational Clinic Hour(s): 2

Prerequisite(s): Currently enrolled in EMS 2025, or have successfully completed EMS 2025.
Formerly EMS 226 Complete all pre-course screening requirements, including drug test and criminal background check. Instructor approval. Serves as the lab experience to coincide with EMS 2025topics.

EMS 2027 - Paramedic Special Considerations

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): BIO 2101, current Colorado Certification as an EMT with IV endorsement or higher and acceptance into the Paramedic Education Program.
Formerly EMS 227 Introduces the paramedic student to concepts in assessing and meeting the emergency care needs of the neonate, pediatric, geriatric and special needs patient. This course focuses on epidemiology, pathophysiology,

assessment and treatment of these patient groups. Common medical and traumatic presentations are addressed. Relevant psychosocial and ethno cultural concepts and legal and ethical implications are integrated throughout.

EMS 2028 - Paramedic Special Considerations Lab

Credit(s): 2
Vocational Lab Hour(s): 1.50
Vocational Clinic Hour(s): 2

Prerequisite(s): Completion of pre-course screening including drug screen and criminal background check.
Corequisite(s): EMS 2027.
Formerly EMS 228 Teaches the skills necessary for the paramedic to effectively assess and treat neonatal, pediatric, geriatric and special needs patients utilizing skills and simulation scenarios. Serves as the companion course to Paramedic Special Considerations.

EMS 2029 - Paramedic Pharmacology

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Prerequisite(s): BIO 2101, current Colorado Certification as an EMT with IV endorsement or higher and acceptance into the Paramedic Education Program.
Corequisite(s): EMS 2030.
Formerly EMS 229 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

Credit(s): 2
Vocational Lab Hour(s): 1.50
Vocational Clinic Hour(s): 2

Prerequisite(s): Currently enrolled in EMS 2029, or have successfully completed EMS 2029.
Formerly EMS 230 Teaches the skills necessary for the paramedic to safely and effectively administer emergency medications. Serves as the companion course to Paramedic Pharmacology.

EMS 2031 - Paramedic Cardiology

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): BIO 2101, current Colorado Certification as an EMT with IV endorsement or higher and acceptance into the Paramedic Education Program.
Formerly EMS 231 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

Credit(s): 1
Vocational Lab Hour(s): 0.75
Vocational Clinic Hour(s): 1

Prerequisite(s): Completion of pre-course screening including drug screen and criminal background check.
Corequisite(s): EMS 2031.
Formerly EMS 232 Teaches the skills necessary for the paramedic to effectively assess and treat patients presenting with cardiovascular emergencies utilizing skills and simulation scenarios. Serves as the companion course to Paramedic Cardiology.

EMS 2033 - Paramedic Medical Emergencies

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Prerequisite(s): BIO 2101, current Colorado Certification as an EMT with IV endorsement or higher and acceptance into the Paramedic Education Program.
Corequisite(s): EMS 2034.
Formerly EMS 233 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, nontraumatic musculoskeletal disorders and diseases of the eyes, ears, nose and throat.

EMS 2034 - Paramedic Medical Emergencies Lab

Credit(s): 1
Vocational Lab Hour(s): 0.75
Vocational Clinic Hour(s): 1

Prerequisite(s): Completion of pre-course screening including drug screen and criminal background check.
Corequisite(s): EMS 2033.
Formerly EMS 234 Teaches the skills necessary for the paramedic to effectively assess and treat patients with a variety of medical emergencies utilizing skills and simulation scenarios. Serves as the companion course to Paramedic Medical Emergencies.

EMS 2035 - Paramedic Trauma Emergencies

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): BIO 2101, current Colorado Certification as an EMT with IV endorsement or higher and acceptance into the Paramedic Education Program.
Formerly EMS 235 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

Credit(s): 1
Vocational Lab Hour(s): 0.75
Vocational Clinic Hour(s): 1

Prerequisite(s): Completion of pre-course screening including drug screen and criminal background check.
Corequisite(s): EMS 2035.
Formerly EMS 236 Teaches the skills necessary for the paramedic to effectively assess and treat patients with a variety of traumatic emergencies utilizing skills and simulation scenarios. Serves as the companion lab course for Paramedic Trauma Emergencies.

EMS 2037 - Paramedic Internship Preparatory

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Prerequisite(s): EMS 2025, EMS 2027, EMS 2029, EMS 2031, EMS 2033, EMS 2035
Formerly EMS 237 Reviews concepts and techniques used in the prehospital setting.

EMS 2080 - Paramedic Internship I

Credit(s): 6
Internship Hour(s): 18
Prerequisite(s): EMS 2037.
Formerly EMS 280 Provides the first course of a proctored Internship to develop paramedic skills in a field setting. The student will gain experience in scene management as a member of an ALS team. The student will also apply advanced life support patient care knowledge to the assessment and treatment of patients.

EMS 2081 - Paramedic Internship II

Credit(s): 6
Internship Hour(s): 18
Prerequisite(s): EMS 2080.
Formerly EMS 281 Provides the second course of a proctored Internship to develop paramedic skills in a field setting. The student will gain experience in scene management as a leader of the ALS team. The student will also apply advanced life support patient care knowledge to the assessment and treatment of patients.

Paramedic Prep

See list of Department Chairs on the Personnel page.

This program prepares students with the knowledge and skills needed for scene management, emergency patient care and transport. This includes scene safety, patient assessment and treatment, medication administration, documentation and patient transport. Upon successful completion of the program, students take the National Registry exam, and upon passing the exam, you may apply for Colorado State Certification at your level of training.

The Emergency Medical Services (EMS) program has a selective admissions process. The program application and requirements are available in the Health & Public Safety office or at Pueblo Community College EMT. All Health & Public Safety programs have essential functions you must be able to perform for you to be successful in the program and career.

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 certification exams.

Prerequisites for Program Admissions

Student must hold a current EMT certification in Colorado. Student must have a Health Care Professional CPR card and successfully completed CCR 092 or qualifying assessment scores. If you hold a current state EMT certification the BIO 111 prerequisite to BIO 201/202 can be waived.

Total Credits: 18

General Education Courses (8 credits)

BIO 2101 - Human Anatomy and Physiology I with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 201 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, nervous and endocrine systems. Includes a mandatory hands-on laboratory experience covering experimentation, microscopy, observations and dissection. This is the first semester of a two-semester sequence.

BIO 2102 - Human Anatomy and Physiology II with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 202 Focuses on the integrated study of the human body and the histology, anatomy, and physiology of the following systems and topics: cardiovascular, hematology, lymphatic and immune, urinary, fluid and electrolyte control, digestive, nutrition, respiratory, reproductive and development. Includes a mandatory hands-on laboratory experience involving experimentation, microscopy, observations and dissection. This is the second semester of a two-semester sequence.

Program Schedule (10 credits)

EMS 1125 - AEMT Fundamentals

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): Acceptance into the AEMT Program.
Formerly EMS 131 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 1129 - AEMT Pharmacology

Credit(s): 1
Lecture Hour(s): 0.50
Vocational Lab Hour(s): 0.75
Prerequisite(s): Acceptance into the AEMT Program.
Formerly EMS 129 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 1127 - AEMT Special Considerations

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Prerequisite(s): Acceptance into the AEMT Program.
Formerly EMS 127 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 1133 - AEMT Medical Emergencies

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): Acceptance into the AEMT Program.
Formerly EMS 133 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 - AEMT Trauma Emergencies

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): Acceptance into the AEMT Program.
Formerly EMS 135 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 1071 - AEMT Clinical Internship

Credit(s): 2
Internship Hour(s): 6
Prerequisite(s): Acceptance into the AEMT Program.
Formerly EMS 171 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.

Paramedic to Associate Degree Nursing

See list of Department Chairs on the Personnel page.

Program Description

The Paramedic to RN program teaches you skills of direct patient care that you can apply in any healthcare setting. It offers theoretical and applied instruction in classrooms, simulated laboratories, and clinical settings. The program integrates education in adult, gerontological, obstetric, pediatric, and psychiatric-mental health nursing. Your clinical learning will take place in diverse types of institutions.

The Nursing program has a selective and limited admission policy. The application is available online at Pueblo Community College Nursing from October 1 to November 15. All Health & Public Safety programs have essential functions to help you be successful in the program and career. Applicants must have two (2) years of Paramedic work experience. Eligible paramedics must have an unencumbered license. Accepted applicants will receive 21 PLA credits.

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.

Career Information

The Paramedic-ADN program prepares you to provide safe, therapeutic, and competent nursing care in hospitals and other healthcare settings. You may also work as an entry-level patient-care manager.

Total Credits: 71.5

General Education and Program Prerequisites

First (8 credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of

critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

BIO 1111 - General College Biology I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): ENG 1021
Formerly BIO 111 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.

Second (11 credits)

BIO 2101 - Human Anatomy and Physiology I with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 201 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, nervous and endocrine systems. Includes a mandatory hands-on laboratory experience covering experimentation, microscopy, observations and dissection. This is the first semester of a two-semester sequence.

BIO 2102 - Human Anatomy and Physiology II with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 202 Focuses on the integrated study of the human body and the histology, anatomy, and physiology of the following systems and topics: cardiovascular, hematology, lymphatic and immune, urinary, fluid and electrolyte control, digestive, nutrition, respiratory, reproductive and development. Includes a mandatory hands-on laboratory experience involving experimentation, microscopy, observations and dissection. This is the second semester of a two-semester sequence.

PSY 2440 - Human Growth and Development: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 235 Examines human development from conception through death, emphasizing physical, cognitive, emotional and psychosocial factors. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

Third (4 credits)

BIO 2116 - Human Pathophysiology

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): BIO 2101, BIO 2102
Formerly BIO 216 Focuses on the alterations in physiological, cellular and biochemical processes, the associated homeostatic response, and the manifestations of disease. Prior knowledge of cellular biology, anatomy and physiology is essential for the study of pathophysiology.

1 Courses must be complete or in progress (Fall Semester) to apply to the program

2 Course must be completed within 10 years of entrance into the Program

3 BIO 106 Basic Anatomy & Physiology plus one credit general education may be used as substitution for BIO 111 General College Biology I

Program Course Schedule

Spring (12.5 credits)

- NUR 175 - Paramedic to ADN Transition **Credit(s): 6**

NUR 2006 - Advanced Concepts of Medical-Surgical Nursing I

Credit(s): 6.50
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Vocational Clinic Hour(s): 9

Prerequisite(s): Admission to Nursing program and successful completion of preceding Nursing program course work or permission of the program director.
Corequisite(s): NUR 2012 or permission of the program director.
Formerly NUR 206 NUR 206 builds on NUR 1006focusing on advanced concepts of nursing applied to care of patients with high acuity medical/surgical conditions. Builds on medical/surgical nursing theory, mental health concepts, communication, collaboration, caring, and critical thinking/clinical reasoning necessary for safe, patient-centered nursing care to developmentally and culturally diverse adult patients. Incorporates evidence-based practice, quality improvement, professional standards, and legal and ethical responsibilities of the professional nurse as applied in a variety of healthcare settings. Application of knowledge and skills occurs in the nursing skills laboratory and in a variety of clinical settings.

Summer (6 credits)

NUR 2011 - Psychiatric-Mental Health Nursing

Credit(s): 4
Lecture Hour(s): 2.70
Vocational Clinic Hour(s): 3.90

Prerequisite(s): Admission to Nursing program and successful completion of preceding Nursing program course work or permission of the program director.
Corequisite(s): NUR 2012 or permission of program director.
Formerly NUR 211 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

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Admission to Nursing program and successful completion of preceding required program course work or permission of the program director.
Corequisite(s): NUR 2011 or permission of the program director.
Formerly NUR 212 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.

Fall (9 credits)

NUR 2016 - Advanced Concepts of Medical Surgical Nursing II

Credit(s): 5
Lecture Hour(s): 2.30
Vocational Clinic Hour(s): 8.10

Prerequisite(s): Admission to Nursing program and successful completion of preceding program course work or permission of the program director.
Corequisite(s): NUR 2006 and NUR 2012 or permission of the program director.
Formerly NUR 216 Nursing 216 is a continuation of Nursing 206, focusing on complex medical/surgical conditions of the high acuity patient. Builds on medical/surgical nursing theory, mental health concepts, communication, collaboration, caring, and critical thinking/clinical reasoning necessary for safe, patient-centered nursing care to developmentally and culturally diverse adult patients experiencing high acuity medical/surgical conditions. Incorporates evidence-based practice, quality improvement, professional standards, and legal and ethical responsibilities of the professional nurse as applied in the acute care and high acuity settings. Application of knowledge and skills occurs in a variety of clinical settings.

NUR 2030 - Transition to Professional Nursing Practice

Credit(s): 4
Lecture Hour(s): 1.60
Vocational Clinic Hour(s): 7.20

Prerequisite(s): Admission to Nursing program and successful completion of preceding program course work or permission of the program director.
Corequisite(s): NUR 2016 or permission of the program director.
Formerly NUR 230 Nursing 230 is a Seminar and practice Capstone course that provides an integrative experience applying all dimensions of the professional nurse in the care of diverse patient populations across a variety of healthcare settings. All major concepts of the nursing program are addressed. Leadership and the management of multiple patients are emphasized. Application of knowledge and skills occurs in the clinical setting to facilitate an effective transition from student to registered professional nurse.

Pharmacy Technician Certificate

CIP 51.0805

See list of Department Chairs on the Personnel page.

Career Opportunities

This program prepares you to work in a pharmacy setting under the supervision of a licensed pharmacist, performing activities that do not require the professional judgment of a pharmacist. The Colorado Department of Labor and employment estimates pharmacy technicians earn from $28,301 to $40,222, with a mean annual salary of $36,248.

Program Description

This certificate program is 34 credits and is completed in three semesters. It provides instruction in basic pharmacy theories and is an important step toward national certification as a pharmacy technician and state licensure. Learning experiences include lecture, lab and clinical exposure in local pharmacies. To ensure success in this class, you should have a good knowledge of basic algebra and math formulas.

Program Requirements

Entrance Requirements:

Students must apply for admission to the program (through the program coordinator or the administrative assistant for the Health and Public Safety Division). Students are conditionally accepted into the program on a first-come, first-served basis. Students must pass a background check and drug screen to be admitted into the program. Additional requirements must be met prior to placement in a clinical setting. Applications are available January 10 with a deadline for submission of July 15 for the following fall semester. Pharmacy technician certificate will not be offered during the spring semester.

Total Credits: 34

Fall (15 credits)

AAA 1009 - Advanced Academic Achievement

Credit(s): 3
Lecture Hour(s): 3
Formerly AAA 109 Examines theories and practices associated with successful learning to enhance college success. Recommended for new and returning students, this course study areas including education and career planning, effective communication, personal management, critical and creative thinking, development of community and awareness of diversity, leadership, and techniques for successful academic performance.

MAT 1120 - Math for Clinical Calculations

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 103 Provides a review of general mathematics, introductory algebra and an opportunity to learn systems of measurement and methods of solving problems related to drug dosage and intravenous fluid administration. It is designed for students in the health disciplines. Topics may include algebra, graphs, measurement and conversion between various systems of measurement.

CIS 1018 - Intro to PC Applications

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 118 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.

PHT 1011 - Introduction to Pharmacy

Credit(s): 3
Lecture Hour(s): 1.5
Vocational Lab Hour(s): 2.25
Prerequisite(s): Program admission
Formerly PHT 111 Introduces 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 1015 - Pharmacology I

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to program
Formerly PHT 115 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.

Spring (13 credits)

PHT 1013 - Communication and Professionalism for Pharmacy Technicians

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): Admission to program
Formerly PHT 113 Provides fundamental components of theoretical and applied aspects of personal and interpersonal communication related to pharmacy practice. Theoretical aspects include such topics as communication perceptions and barriers, listening, responding, assertiveness and non-verbal communication. Applied aspects include such techniques as role-playing, group discussion and interviewing. This course also examines the methods and practice of interviewing with respect to the roles and functions of both interviewee and interviewer.

PHT 1035 - Pharmaceutical Calculations and Compounding Techniques

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): Program admission required.
Formerly PHT 235 Develops the skills necessary for performing calculations in pharmacy practice and the compounding of sterile and nonsterile products. Includes a review of basic mathematical skills. Enables the student to solve problems involving calculations pertinent to the preparations of pharmaceuticals. These skills are put to practical use in the compounding portion of this course. Preparation of sterile products, parenteral admixtures, TPN solutions

and chemotherapeutics, using proper aseptic techniques is taught. The safe handling of antineoplastics and other hazardous drug products, as well as special drug storage requirements, is learned. Emphasizes the importance of accuracy, quality and infection control. Use and maintenance of equipment such as laminar flow hoods, auto injectors and pumps is discussed.

PHT 1014 - Computer Skills for Pharmacy Technicians

Credit(s): 1
Vocational Lab Hour(s): 1.5
Prerequisite(s): Admission to program.
Formerly PHT 114 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 to allow hands-on technical experience.

PHT 1016 - Pharmacology II

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to program
Formerly PHT 118 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.

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

HPR 1038 - Intro to Medical Terminology

Credit(s): 1
Lecture Hour(s): 1
Formerly HPR 138 Introduces the student to the structure of medical terms with emphasis on using and combining the most common prefixes, roots and suffixes. Includes terms related to major body systems, oncology and psychiatry, as well as clinical laboratory and diagnostic procedures and imaging. Class structure provides accepted pronunciation of terms and relative use in the healthcare setting.

Summer (6 credits)

PHT 1012 - Pharmacy Law and Ethics

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Admission to program.
Formerly PHT 112 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 1070 - Clinical:

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): Admission to program
Formerly PHT 170 Offers the clinical practicum required for the program.

PHT 1071 - Clinical:

Credit(s): 2
Vocational Clinic Hour(s): 4

Prerequisite(s): Program admission
Formerly PHT 171 Offers the clinical practicum required for the program.

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[1] First 8 weeks

[2] Second 8 weeks

[3] May be substituted with a GT general education course

Philosophy, AA (with Designation)

CIP 24.0101

See list of Department Chairs on the Personnel page.

Career Opportunities

The Associate of Arts (AA) Degree with Designation in Philosophy prepares the student to transfer as a junior to a four-year institution in Colorado in order to pursue a Bachelor of Arts (BA) degree in Philosophy. Students who opt for the Bachelor of Arts in Philosophy can choose to work in several occupational fields, including law, government, business, science, clergy, teaching and academia. Once a BA is completed, students may pursue a higher or graduate degree in Philosophy, if interested.

Program Description

This program introduces the student to the field of Philosophy and includes the course work to meet general education requirements that are common to all Colorado four-year institutions, as well a specific courses in various subfields of Philosophy. Upon transfer, students from Pueblo Community College who have earned the Associate of Arts (AA) Degree with Designation in Philosophy will be ready to complete the last half of a BA in Philosophy at a four-year institution.

Program Requirements

Refer to the course requirements listed below. Some courses may have prerequisites of lower level classes or assessment scores. Refer to the course descriptions for these prerequisites.

Total Credits: 60

** Refer to CCCS Guaranteed Transfer (GT) - Pathways Courses for a full list of all GT Pathway Courses*

General Education Core Requirements (31 Credits)

Written Communication (6 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

or

- ENG 1022 - English Composition II: GT-CP2 **Credit(s): 3 and** a GT Pathways Advanced Writing Course (GT-CO3) *

Mathematics (3 Credits)

- Select one GT Pathways Mathematics course (GT-MA1) *, prefer MAT 1240 - Mathematics for the Liberal Arts: GT-MA1

Natural and Physical Sciences (7 Credits)

- Select two GT Pathways Natural and Physical Sciences courses (GT-SC1, GT-SC2) *. At least one of these courses must include a laboratory component (GT-SC1) *

Arts and Humanities (6 Credits)

- Select two GT Pathways Arts and Humanities courses from any category (GT-AH1, GT-AH2, GT-AH4) *

Social and Behavioral Sciences (6 Credits)

- Select two GT Pathways Social and Behavioral courses from any category (GT-SS1, GT-SS2, GT-SS3) *

History (3 Credits)

- Select one GT Pathways History Course (GT-HI1) *

Additional Required Philosophy Courses (15 Credits)

PHI 1011 - Introduction to Philosophy: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 111 ompletion with a minimum C? grade guarantees transfer and application of credit in this GT Pathways category.

PHI 1012 - Ethics: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 112 Examines human life, experience and thought in order to discover and develop the principles and values for pursuing a more fulfilled existence. Theories designed to justify ethical judgments are applied to a selection of contemporary personal and social issues. This course is one of the statewide Guaranteed Transfer courses, GT-AH3.

PHI 1013 - Logic: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 113 Studies effective thinking using language-oriented logic. Provides tools and develops skills for creative and critical thinking. Emphasizes the development of decision-making and problem-solving. This course is one of the statewide Guaranteed Transfer courses, GT-AH3.

Choose Two Courses from the Following: (6 Credits)

PHI 2014 - Philosophy of Religion: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 214 Focuses on the critical examination of the fundamental concepts, ideas and implications of religion. Includes the nature of God, the varieties of religious experience, argument concerning God`s existence, the problem of evil, faith and reason, religion and human destiny, and the connection between religion and ethics. This course is one of the statewide Guaranteed Transfer courses, GT-AH3.

PHI 2018 - Environmental Ethics: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 218 Critically analyzes theories of value of the natural world. Topics include the relation between scientific and moral principles; theories of the moral worth of persons, animals, plants and other natural objects; historical, religious and cultural influences on conceptions of nature; alternative accounts of human relationships and

responsibilities to nature, including deep ecology and eco-feminism; and the connection between moral and political values and economic policies. This course is one of the statewide Guaranteed Transfer courses, GT-AH3.

PHI 2005 - Business Ethics: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 205 Examines major ethical theories and then applies ethical decision-making criteria to various moral issues and challenges in a business environment. This course includes issues such as job discrimination, worker's rights, consumerism, advertising, whistle-blowing, product safety, responsibility to the environment, as well as compassionate and fair responsibility to society. This is a statewide Guaranteed Transfer course in the GT-AH3 category. GT-AH3

PHI 2020 - Philosophy of-Death and Dying: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 220 Explores the major philosophical questions surrounding death and dying: the metaphysical arguments for and against the existence of a soul and life after bodily death; the epistemological assessment of arguments for the soul and life after death; the ethical justifications taken on positions such as rational suicide and physician assisted suicide, as well as a focus on philosophy's existentialist contribution to questions about the meaning of life and the meaning of death. This course is one of the statewide Guaranteed Transfer courses. GT-AH3.

Electives (14 Credits)

Determined by transferring institution

Transfer Degrees

This degree transfers to the following Colorado Public Four-Year institutions of higher education:

- Colorado State University-Fort Collins (B.A. Philosophy, General Philosophy concentration)
- Fort Lewis College (B.A. Philosophy)
- Metropolitan State University of Denver (B.A. Philosophy)
- University of Colorado, Boulder (B.A. Philosophy)
- University of Colorado, Colorado Springs (B.A. Philosophy)
- University of Colorado, Denver (B.A. Philosophy)
- University of Northern Colorado (B.A. Philosophy)

Phlebotomy Technician Mini-Certificate

CIP 51.1009

See list of Department Chairs on the Personnel page.

Program Description

Phlebotomy Technician (PHL) is a one-semester (three course) certificate program. Courses cover venipuncture, capillary puncture, quality control, infection control, safety procedures, and laboratory computer systems. You will

participate in laboratory and clinical experiences to perfect blood drawing skills and prepare you for the workforce as a qualified phlebotomist. When you successfully complete this program, you are eligible to sit for the National Phlebotomy Registry Exam.

The PHL program has a selective admissions process. The program application and requirements are available in the Health & Public Safety office or at Pueblo Community College PHL April 1 to July 15 for Fall Semester start and October 1 to December 15 for Spring Semester start.

Note: You must undergo a background check and drug screen before we can officially admit you to 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.

Career Information

Phlebotomy Technician work in doctor's offices, hospital and outpatient labs.

Total Credits: 10

Certificate Requirements

HPR 1020 - Phlebotomy

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Prerequisite(s): Program admission required.
Formerly HPR 112 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 2020 - Advanced Phlebotomy

Credit(s): 4
Lecture Hour(s): 2.50
Vocational Lab Hour(s): 2.25
Prerequisite(s): Program admission required.
Formerly HPR 113 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 1080 - Internship

Credit(s): 2
Internship Hour(s): 6
Prerequisite(s): Program admission and HPR 1020
Formerly HPR 180 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.

Photovoltaic Panel Installation CER

Program Description

See list of Department Chairs on the Personnel page.

The Industrial Technology Maintenance (ITM) Program prepares students for entry level employment into career paths that include electronics technicians, electrical technicians, semiconductor manufacturing technicians, and field service technicians. The program provides the student with knowledge and essential skills in the complex electro-mechanical systems found in production facilities. The curriculum addresses digital electronics, print reading, motors and controls, programmable logic controllers, and mechanical components. The ITM Program also offers certificates in Solar installation and Green Energy Technologies associated with Industrial Installation and Maintenance.

Total Credits: 17

Core Curriculum Requirements

MAC 1000 - Machine Shop Safety

Credit(s): 1
Lecture Hour(s): 1
Formerly MAC 100 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.

ELT 1206 - Fundamentals of DC/AC

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Corequisite(s): ELT 1207.
Formerly ELT 106 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.

ENY 1621 - Solar Photovoltaic Components

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Corequisite(s): ELT 1206
Formerly ENY 121 Reinforces basic safety principles and provides detailed knowledge of photovoltaic components. Also covered is an overview of site analysis and special purpose tools. Upon successful conclusion of this course the student will be able to select proper components for a photovoltaic system based on regulatory codes and standards and individual component specifications.

ELT 1207 - Industrial Electronics

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Corequisite(s): ELT 1206.

Formerly ELT 107 Provides a basic knowledge of generators, motors and the solid state devices and digital techniques used for industrial control applications.

ENY 1655 - Solar Photovoltaic Field Lab Experience

Credit(s): 2
Vocational Lab Hour(s): 3
Prerequisite(s): Department approval required
Formerly ENY 165 Onsite / hands-on training experience for students. Experiences include on-site installations, inspection tours, mock-roof training installations, industry association meetings, field experience workshops.

ELT 2080 - Internship

Credit(s): 1-12
Internship Hour(s): 3-36
Formerly ELT 280 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.

ENY 1632 - NABCEP Entry Level Prep Class

Credit(s): 1
Vocational Lab Hour(s): 1.5
Prerequisite(s): Department approval required
Formerly ENY 132 Reviews the knowledge needed by the student to permit passing the NABCEP Entry level test. This is an overview class only and is not meant to be a replacement for the actual class.

Physical Therapist Assistant, AAS

CIP 51.0806

See list of Department Chairs on the Personnel page.

Career Opportunities

PTAs work under the direction of physical therapists, helping to manage conditions such as back and neck injuries, sprains/strains and fractures, arthritis, burns, amputations, strokes, multiple sclerosis, birth defects, injuries related to work and sports, and many other conditions. You will work in a broad range of settings, including hospitals, outpatient clinics, rehabilitation facilities, skilled nursing, extended care, sub-acute facilities, homes, schools, fitness centers and sports training facilities.

Program Description

The AAS degree prepares you to serve as a PTA within 5 semesters. The program is offered 2-2½ days per week except during the clinical experiences which occur in the third and fifth semester. Clinical experiences are scheduled for 40 hours per week and placement is typically anywhere in Southern Colorado. Learning experiences include lecture and interactive lab opportunities in a spacious lab with state-of-the-art equipment.

The Physical Therapist Assistant Program at Pueblo Community College is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE), 3030 Potomac Ave, Suite 100, Alexandria, Virginia 22305-3085; telephone: 703-706-3245; email: accreditation@apta.org; website: http://www.capteonline.org. If needing to contact the program/institution directly, please call 719-549-3433 or email Margaret.Oreskovich@pueblocc.edu.

Students accepted into the PTA program must pass a background check and drug screen before being officially admitted into the program. The background check and drug screen must be repeated before the student begins the second year of the program. Students are responsible for all expenses associated with internships and must provide their own transportation to and from clinicals. Financial aid is available through the PCC Financial Aid Office. Additional scholarship and grant information will be posted on the PTA bulletin board as it becomes available.

Program Requirements

The PTA Program has a selective admissions policy. You must submit a PTA application that is available through the Health and Public Safety Division or the PTA website. General Education requirements include ENG 1021, COM 1150, PSY 1001, HPR 1038, BIO 2101 and PHY 1105. BIO 2101 and PHY 1105 must be completed before the application due date of May 25. All general education courses must be completed with a "C" or above and the applicant must have a minimum GPA of 2.50. Once in the program you must also have a health care provider CPR card to attend clinical experiences and you must provide proof of current immunizations and purchase liability insurance.

Note: Clinical sites used during the program require that you successfully complete a background check and drug screen. These need to be completed before final acceptance into the program.

Total Credits: 75

Degree Requirements

*** May** be completed prior to program admission
**** Must** be completed prior to program admission

Prerequisites

BIO 2101 - Human Anatomy and Physiology I with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 201 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, nervous and endocrine systems. Includes a mandatory hands-on laboratory experience covering experimentation, microscopy, observations and dissection. This is the first semester of a two-semester sequence.

PHY 1105 - Conceptual Physics with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly PHY 105 Focuses on mechanics, heat, properties of matter, electricity and magnetism, light and modern physics. Incorporates laboratory experience. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

Core Curriculum Requirements

Semester 1 — Fall

HPR 1017 - Anatomical Kinesiology

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Prerequisite(s): BIO 2101
Formerly HPR 117 Studies the Anatomical Bases of Human Movement.

PTA 1010 - Basic Patient Care in Physical Therapy

Credit(s): 5
Lecture Hour(s): 2
Vocational Lab Hour(s): 4.50
Prerequisite(s): Program Admission
Formerly PTA 110 Examines the basic patient care skills for the healthcare practitioner enabling understanding and demonstration of skills that include positioning, body mechanics, transfers, range of motion, palpation, vital signs, aseptic techniques, bandaging, medical terminology, activities of daily living (ADLs), wheelchair management, architectural barriers, and gait training.

PTA 1015 - Principles and Practices of Physical Therapy

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Program admission
Formerly PTA 115 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 1031 - Professional Communications I

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): Program admission
Formerly PTA 131 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.

HPR 1038 - Intro to Medical Terminology

Credit(s): 1
Lecture Hour(s): 1
Formerly HPR 138 Introduces the student to the structure of medical terms with emphasis on using and combining the most common prefixes, roots and suffixes. Includes terms related to major body systems, oncology and psychiatry, as

well as clinical laboratory and diagnostic procedures and imaging. Class structure provides accepted pronunciation of terms and relative use in the healthcare setting.

Semester 2 — Spring

PTA 1020 - Modalities in Physical Therapy

Credit(s): 5
Lecture Hour(s): 2
Vocational Lab Hour(s): 4.50
Prerequisite(s): PTA 1010.
Formerly PTA 120 Examines the theory and principles of physical therapy modalities. This course includes therapeutic heat and cold, traction, hydrotherapy, and light therapies.

PTA 1035 - Principles of Electrical Stimulation

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): Program admission
Formerly PTA 135 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

Credit(s): 5
Lecture Hour(s): 2
Vocational Lab Hour(s): 4.5
Prerequisite(s): HPR 1017, Program Admission.
Formerly PTA 140 Focuses on the science of human motion, theories of biomechanics and muscle/joint structure and function. Emphasizes basic principles of therapeutic exercise and their application to specific body regions. A laboratory experience that includes the application of kinesiology and exercise principles is integrated in the learning experience.

PTA 1041 - Professional Communications II

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): PTA 1031.
Formerly PTA 141 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 1024 - Rehab Principles of Medical I

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Program admission
Formerly PTA 124 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.

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

Semester 3 — Summer

PTA 1034 - Rehab Principles of Medical II

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Program admission
Formerly PTA 134 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 2080 - PTA Internship I

Credit(s): 4
Internship Hour(s): 12
Prerequisite(s): PTA 1020, PTA 1040
Formerly PTA 280 Focuses on 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 will provide supervision.

PSY 1001 - General Psychology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 101 Focuses on the scientific study of behavior including motivation, emotion, physiological psychology, stress and coping, research methods, consciousness, sensation, perception, learning and memory. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

Semester 4 — Fall

PTA 2005 - Psychosocial Issues in Health Care

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Program admission
Formerly PTA 205 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 and Management

Credit(s): 5
Lecture Hour(s): 2
Vocational Lab Hour(s): 4.5
Prerequisite(s): PTA 1020, PTA 1040.
Formerly PTA 230 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 and Management Techniques

Credit(s): 5
Lecture Hour(s): 2
Vocational Lab Hour(s): 4.50
Prerequisite(s): PTA 1020 and PTA 1040
Formerly PTA 240 Examines the theory and principles of physical therapy with an introduction to assessment, management techniques and advanced physical therapy procedures as they relate to neurologic, cardiac, and pulmonary conditions.

PTA 2051 - Professional Communications III

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): PTA 1041.
Formerly PTA 251 Advances development and application of the written and oral communication skills utilized in healthcare and physical therapy workplace settings.

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

Semester 5 — Spring

PTA 2078 - PTA Seminar

Credit(s): 2
Lecture Hour(s): 2

Prerequisite(s): Successful completion of all previous PTA courses, department approval required
Formerly PTA 278 Provides a summary of all coursework, Internships and prepares the student for transition into the workforce as an entry level PTA. It includes a comprehensive review and mock exam in preparation for the national PTA exam, employment benefits, licensing, state practice act review, professional development, employment opportunities and community service.

PTA 2081 - PTA Internship II

Credit(s): 5
Internship Hour(s): 15
Prerequisite(s): Successful completion of all prevous courses, department approval required
Formerly PTA 281 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

Credit(s): 5
Internship Hour(s): 15
Prerequisite(s): Successful completion of all previous PTA courses, department approval required
Formerly PTA 282 Incorporates advanced clinical experience providing hands on patient practicum skills and techniques. Students will 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 will present an in-service on a physical therapy-related topic.

PN Opt-out Certificate

See list of Department Chairs on the Personnel page.

Program Description

The LPN program teaches you skills of direct patient care that you can apply in any healthcare setting. It offers theoretical and applied instruction in classrooms, simulated laboratories, and clinical settings. It integrates education in adult, gerontological, obstetric, pediatric, and psychiatric-mental health nursing. Your clinical learning will take place in diverse types of institutions.

The Nursing program has a selective and limited admission policy. The application is available online at **Pueblo Community College Nursing** from **April 1 to May 21, 2022 for Fall of 2022 admission.** All Health & Public Safety programs have essential functions to help you be successful in the program and career. **In progress grades will be accepted, however course must show in progress at time of application and be completed in Spring semester.** It is the applicant's responsibility to submit final spring semester course grade(s) as soon as possible to the admission committee for consideration.

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.

Career Information

The LPN program prepares you to provide safe, therapeutic, and competent nursing care in hospitals and other healthcare settings. You may also work as an entry-level patient care manager.

Total Credits: 54

General Education and Program Prerequisites

First (12 credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

BIO 1111 - General College Biology I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): ENG 1021
Formerly BIO 111 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.

HPR 1010 - Dietary Nutrition

Credit(s): 1
Lecture Hour(s): 1
Formerly HPR 108 Studies the basic nutritional principles in clinical practice in health care. The course will cover factors which influence the nutritional status of individuals, methods of nutritional assessment and support, and diet modification for specific disease states.

PSY 2440 - Human Growth and Development: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 235 Examines human development from conception through death, emphasizing physical, cognitive, emotional and psychosocial factors. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

Second (12 credits)

BIO 2101 - Human Anatomy and Physiology I with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 201 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, nervous and endocrine systems. Includes a mandatory hands-on laboratory experience covering experimentation, microscopy, observations and dissection. This is the first semester of a two-semester sequence.

BIO 2102 - Human Anatomy and Physiology II with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 202 Focuses on the integrated study of the human body and the histology, anatomy, and physiology of the following systems and topics: cardiovascular, hematology, lymphatic and immune, urinary, fluid and electrolyte control, digestive, nutrition, respiratory, reproductive and development. Includes a mandatory hands-on laboratory experience involving experimentation, microscopy, observations and dissection. This is the second semester of a two-semester sequence.

BIO 2104 - Microbiology with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 204 Designed for health science majors. Examines microorganisms with an emphasis on their structure, development, physiology, classification and identification. The laboratory experience includes culturing, identifying and controlling microorganisms with an emphasis on their role in infectious disease.

1 Course must be completed or in progress (Spring Semester) to apply to the program

2 Course must be completed within 10 years of entrance into the program

Program Course Schedule

Application Admission Requirements

Complete NUA 101 Certified Nurse Aide Health Care Skills, or the Nurse Aide coursework within the Colorado Community College System (CCCS), or have an Active Colorado CNA Certificate. (If Nursing Assistant Certificate is obtained through a private company or an out-of-state institution, student must obtain an Active Colorado CNA Certificate). Nurse Aide certificate must be in good standing without stipulation. Nurse Aide courses must be completed within seven (7) years of entry into PCC Nursing program. If the applicant is a current Colorado Certified Nurse Aide, in good standing, there is no time limit.

Apply to the program -- April 1 to May 20, 2022

Application is online at Pueblo Community College Nursing

First (13 credits)

NUR 1009 - Fundamentals of Nursing

Credit(s): 6
Lecture Hour(s): 2
Vocational Lab Hour(s): 6
Vocational Clinic Hour(s): 6

Prerequisite(s): Admission to Nursing or Psychiatric Technician programs.
Corequisite(s): Nursing: NUR 1012, HPR 1010, MAT 1120. Psych Tech: NUR 1012.
Formerly NUR 109 Introduces the fundamental concepts necessary for safe, patient-centered nursing care to a diverse patient population while integrating legal and ethical responsibilities of the nurse. Introduces caring, critical thinking, the nursing process, quality improvement and communication used when interacting with patients and members of the interdisciplinary team, and relates evidence-based nursing practice. Application of knowledge and skills occurs in the nursing skills laboratory and a variety of clinical settings providing care to stable patients with common health alterations.

NUR 1012 - Basic Concepts of Pharmacology

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Admission to Nursing or Psychiatric Technician programs.
Corequisite(s): Nursing: NUR 1009, HPR 1010, MAT 1120; Psych Tech: NUR 1009.
Formerly NUR 112 Overview of the basic principles of pharmacology including major drug classifications and prototypes of commonly used medications. Principles of medication administration include aspects of best practice for safe, quality, patient-centered care. Central points include safety, quality improvement factors in the administration of medications, patient teaching and variations encountered when administering medications to diverse patient populations across the lifespan.

NUR 1001 - Pharmacology Calculations

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): Admission to Practical Nurse Program.
Formerly NUR 101 Prepares nurse to provide safe, patient-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.

BIO 2116 - Human Pathophysiology

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): BIO 2101, BIO 2102
Formerly BIO 216 Focuses on the alterations in physiological, cellular and biochemical processes, the associated homeostatic response, and the manifestations of disease. Prior knowledge of cellular biology, anatomy and physiology is essential for the study of pathophysiology.

Second (13 credits)

NUR 1006 - Med-Surg Nursing Concepts

Credit(s): 7
Lecture Hour(s): 3.40
Vocational Lab Hour(s): 0.90
Vocational Clinic Hour(s): 9.90

Prerequisite(s): Admission to Nursing Program and completion of preceding required program course work or permission of the program director.
Corequisite(s): NUR 1050 or permission of the program director.
Formerly NUR 106 NUR106 is the first medical/surgical nursing course. Building on NUR 1009, this course provides for the acquisition of basic medical/surgical nursing theory, as well as application of mental health concepts, communication, collaboration, caring, and critical thinking/clinical reasoning necessary for safe, patient-centered care to a developmentally and culturally diverse adult patient population experiencing various medical/surgical interventions. Incorporates evidence-based practice, quality improvement, professional standards, and legal and ethical responsibilities of the nurse. Application of knowledge and skills occurs in the nursing skills laboratory and a variety of clinical settings.

NUR 1050 - Maternal-Child Nursing

Credit(s): 6
Lecture Hour(s): 3.30
Vocational Lab Hour(s): 2.10
Vocational Clinic Hour(s): 6

Prerequisite(s): Admission to Nursing program and completion of preceding required program course work or permission of the program director.
Corequisite(s): NUR 1006 or permission of the program director.
Formerly NUR 150 Nursing 150 provides for the acquisition of maternal/child nursing theory, as well as application of mental health concepts, communication, collaboration, caring, and critical thinking/clinical reasoning necessary for safe, family-centered nursing care to childbearing families and children that is developmentally and culturally appropriate. Incorporates evidence-based practice, standards of practice, quality improvement, and legal and ethical responsibilities of the nurse. Application of knowledge and skills occurs in the nursing skills laboratory and in a variety of maternal/child and pediatric clinical settings.

Summer (4 credits)

NUR 1069 - Transition into Practical Nursing

Credit(s): 4
Lecture Hour(s): 2
Vocational Clinic Hour(s): 6

Prerequisite(s): Admission to Nursing program and completion of preceding required program course work or program director permission.
Formerly NUR 169 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.

Police Science Certificate

CIP 43.0107

See list of Department Chairs on the Personnel page.

Career Opportunities

The Law Enforcement program prepares students for careers in law enforcement as a police officers, desk officer, bailiff or corrections officer. Additionally, students could work as criminal investigators, detectives, police agencies, or in correction and judicial facilities.

Program Description

The Law Enforcement program teaches students an in-depth analysis of the three (3) components of the criminal justice system (law enforcement, the judicial system and corrections) with special emphasis on criminology, substantive criminal law, procedural criminal law and constitutional law. It places a strong emphasis on reading and comprehension skills, written and verbal communication skills and empathetic awareness of cultural diversity.

Program Requirements

Entrance requirements:

Successful completion of any CCR course or qualifying placement score or exemption to complete the Criminal Justice courses. Admission into the Law Enforcement Academy courses requires a student to file an application with the PLEA Department Chair and meet specific guidelines prior to admission into the program (such as state statutory requirements for background checks). You may enroll in PLEA courses only if you are admitted into the program.

Graduation requirements:

In addition to program requirements for this program, you must complete ENG 1021, COM 1150, MAT 1140 and six (6) credits of social and behavioral science courses.

Total Credits: 37

Certificate Requirements

LEA 1001 - Basic Police Academy I

Credit(s): 6
Lecture Hour(s): 6
Formerly LEA 101 Conforms to POST standards and state certification requirements as well as the basic skills and knowledge necessary to perform the entry-level duties of a peace officer. Emphasis will be on simulating actual situations utilizing a lecture and laboratory mode of learning.

LEA 1002 - Basic Police Academy II

Credit(s): 12
Lecture Hour(s): 12
Formerly LEA 102 Conforms to POST standards and state certification requirements as well as the basic skills and knowledge to perform the entry-level duties of a peace officer. Emphasis will be on simulating actual situations utilizing a lecture and laboratory mode of learning.

LEA 1003 - Basic Law Enforcement Academy III

Credit(s): 2
Lecture Hour(s): 0.50
Vocational Lab Hour(s): 2.25
Formerly LEA 103 Enhances the standards established by the POST 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 POST curriculum to create a unique learning experience.

LEA 1005 - Basic Law

Credit(s): 8
Lecture Hour(s): 8
Formerly LEA 105 Conforms to POST standards and state certification requirements as well as the basic skills and knowledge necessary to perform the entry-level duties of a peace officer. Emphasis will be on United States Constitution, arrest, search and seizure, interrogation and confessions, rules of evidence, Colorado Criminal Code, Colorado Traffic Code, Colorado Children's Code, Liquor Code and controlled substances.

LEA 1006 - Arrest Control Techniques

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly LEA 106 Covers the skills, knowledge and abilities necessary to effectively maintain control of a suspect when making an arrest. Emphasizes the continuum of force and de-escalation of force.

LEA 1007 - Law Enforcement Driving

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly LEA 107 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

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly LEA 108 Discusses the skills, knowledge and abilities necessary to safely use police firearms. Students will demonstrate skills by firing weapons on a firing range. The student will demonstrate basic safety techniques and will explain the firearms role within the continuum of force.

Political Science, AA (with Designation)

CIP 24.0101

See list of Department Chairs on the Personnel page.

Career Opportunities

The Associate of Arts Degree with Designation in Political Science prepares students to transfer as a junior to a four-year institution in Colorado in order to pursue a Bachelor of Arts degree (BA) in political science. Students who opt for a bachelor's degree in political science may choose to work in federal, state and local governments, law, business, international organizations, nonprofit organizations, campaign management and polling, journalism, electoral politics, research or education. Once a BA is completed, students may pursue a higher or graduate degree in political science if interested.

Program Description

The Associate of Arts Degree with Designation in Political Science includes the course work to meet general education requirements that are common to all Colorado four-year institutions. The degree is designed for students who want to transfer to a four-year college or university to pursue a bachelor's degree in political science. Completion of the AA degree completes the first two years of a bachelor's degree and guarantees transfer at junior standing with no more than 60 remaining credits to meet the graduation requirements for a bachelor's degree in political science.

Program Requirements

In addition to the requirements listed below, you must:

a. Earn a minimum of 60 semester hours of course work
b. Earn a minimum of 15 graded semester hours at PCC
c. Earn a minimum of "C" in all coursework for the degree

Consult with a PCC Arts and Sciences advisor or transfer advisor to find out which Colorado Statewide Guaranteed Transfer Courses (GT Pathways) or elective courses meet the degree requirements of the four-year college to which you plan to transfer.

To earn an AA degree with a designation in political science, you must complete at least 60 college-level credits, as described below:

Total Credits: 60

** Refer to CCCS Guaranteed Transfer (GT) - Pathways Courses for a full list of all GT Pathway Courses*

General Education Core Requirements (32 Credits)

Written Communication (6 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3

Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

or

- ENG 1022 - English Composition II: GT-CP2 **Credit(s): 3 and** a GT Pathways Advanced Writing course (GT-CO3) *

Mathematics (3 Credits)

- Select from a GT Pathways Mathematics course (GT-MA1), prefer MAT 1260 *

Natural and Physical Sciences (8 Credits)

- Select two GT Pathways Natural and Physical Sciences courses (GT-SC1) *

Arts and Humanities (6 Credits)

Select two GT Pathway courses from any category

- (GT-AH1, GT-AH2, GT-AH3, GT-AH4) *

Social and Behavioral Sciences (6 Credits)

ECO 2001 - Principles of Macroeconomics: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly ECO 201 Focuses on the study of the American economy, stressing the interrelationships among household, business and government sectors. Explores saving and investment decisions, unemployment, inflation, national income accounting, taxing and spending policies, the limits of the market and government, public choice theory, the Federal Reserve System, money and banking, and international trade.

ECO 2002 - Principles of Microeconomics: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly ECO 202 Studies the firm, the nature of cost and how these relate to the economy as a whole. Analyzes economic models of the consumer, perfect competition, monopoly, oligopoly and monopolistic competition. Explores economic issues including market power, population growth, positive and negative externalities, income distribution, poverty and welfare, discrimination, and international economic interdependence.

History (3 Credits)

- Select one GT Pathways History course (GT-HI1) *

Additional Required Political Science Courses (12 Credits)

POS 2020 - Introduction to Political Science: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly POS 105 Focuses on a survey of the discipline of political science, including political philosophy and ideology, democratic and nondemocratic governments and processes, and international relations. This course is one of the statewide Guaranteed Transfer courses, GT-SS1.

POS 1011 - American Government: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly POS 111 Includes the background of the US Constitution, the philosophy of American government, general principles of the Constitution, federalism and civil liberties. Examines public opinion and citizen participation, political parties, interest groups and the electoral process, and the structure and functions of the national government. This course is one of the statewide Guaranteed Transfer courses, GT-SS1.

- POS 205 - OFFERED ONLINE
- POS 225 - OFFERED ONLINE

Electives (16 Credits)

Determined by transferring institution

Transfer Degrees

This degree transfers to the following Colorado public four-year institutions of higher education:

- Adams State University (B.A. History, Anthropology, & Political Science: Political Science)
- Colorado Mesa University (B.A. Political Science)
- Colorado State University-Fort Collins (B.A. Political Science)
- Colorado State University-Pueblo (B.A. Political Science; B.S. Political Science)
- Fort Lewis College (B.A. Political Science)
- Metropolitan State University of Denver (B.A. Political Science)
- University of Colorado, Boulder (B.A. Political Science)
- University of Colorado, Colorado Springs (B.A. Political Science)
- University of Colorado, Denver (B.A. Political Science)
- University of Northern Colorado (B.A. Political Science)
- Western State Colorado University (B.A. Politics & Government)

Practical Nursing Certificate

Offered only at PCC's Southwest Campus, Mancos

See list of Department Chairs on the Personnel page.

This is a limited-entry program. You must meet specific program entrance requirements in addition to the PCC admission requirements. Students must complete general education requirements with a "C" or higher (minimum GPA 2.5) to be admitted to the Practical Nurse program. Students who complete the departmental application process will have their qualifications reviewed by the program's admission committee.

Total Credits: 43

General Education (7 credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

BIO 1006 - Basic Anatomy and Physiology

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly BIO 106 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, Paramedic Program, and the Medical Office Technology Program.

Core Requirements (36 credits)

Semester 1 - Spring (18 credits)

NUR 1001 - Pharmacology Calculations

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): Admission to Practical Nurse Program.
Formerly NUR 101 Prepares nurse to provide safe, patient-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

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): Admission to Practical Nurse Program.
Formerly NUR 102 Provides acquisition of basic nursing theory, communication, collaboration, and critical thinking necessary for safe, patient-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.

NUR 1005 - Practical Nursing Arts and Skills

Credit(s): 6
Lecture Hour(s): 3
Vocational Lab Hour(s): 9
Prerequisite(s): Admission to Practical Nurse Program.
Formerly NUR 105 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, patient-centered nursing care are applied to the care of patients across the lifespan with stable and predictable outcomes. The course applies guidelines related to the professional, legal, and ethical scope of practice of the Practical Nurse, including demonstrating safe performance of all psychomotor skills.

NUR 1010 - Pharmacology Practical Nursing

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to Practical Nurse Program.
Formerly NUR 110 Categorizes basic principles of pharmacology, including major drug classifications using prototype drugs, principles of medication administration including best practices for safe, quality, and patient-centered care. Discusses the legal and ethical responsibilities of the Practical Nurse related to medication administration. Application of this content is used throughout the program nursing courses.

NUR 1070 - Clinical I

Credit(s): 2
Vocational Clinic Hour(s): 6

Prerequisite(s): Admission to Practical Nursing Program.
Formerly NUR 170 Offers the clinical practicum to apply the related nursing theory.

NUR 1071 - Clinical II

Credit(s): 2
Vocational Clinic Hour(s): 6

Prerequisite(s): Admission to Nursing Program.
Formerly NUR 171 Offers the clinical practicum to apply the related nursing theory.

Semester 2 - Fall (18 credits)

NUR 1004 - Alterations in Adult Health II

Credit(s): 5
Lecture Hour(s): 4.50
Vocational Lab Hour(s): 1.50
Prerequisite(s): NUR 1001, NUR 1002, NUR 1003, NUR 1005, NUR 1016, NUR 1070, NUR 1071.
Formerly NUR 104 Apply and expand the knowledge and skills learned in Adult Health I to provide acquisition of basic nursing theory, communication, collaboration and critical thinking necessary for safe, patient-centered nursing care for diverse adult patients with conditions that are stable and predictable. The 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 in the care of adults.

NUR 1003 - Basic Assessment for the Pn

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): Admission to Practical Nurse Program.
Formerly NUR 103 Provides the theoretical knowledge and psychomotor skills used by the Practical Nurse performing a basic assessment of health status of stable adult patients with predictable outcomes, including collecting, reporting, and recording objective/subjective data, observing conditions or changes in condition, and differentiating normal from abnormal findings. Principles of therapeutic communication and patient teaching are included. Includes practice collecting basic assessment data in the nursing skills laboratory.

NUR 1015 - Basic Concepts of Mental Health Nursing

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): NUR 1001, NUR 1002, NUR 1003, NUR 1005, NUR 1016, NUR 1070, NUR 1071.
Formerly NUR 115 Applies knowledge of basic nursing theory, communication, collaboration, and critical thinking necessary for safe, patient-centered nursing care to diverse patients at various levels of mental health promotion and mental illness management. The course incorporates the legal and ethical responsibilities of the Practical Nurse in the care of patients with mental health issues.

NUR 1011 - Advancement into Practical Nursing

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): NUR 1001, NUR 1002, NUR 1003, NUR 1005, NUR 1016, NUR 1070, NUR 1071.
Formerly NUR 111 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 1013 - Basic Concepts of Maternal-Newborn Nursing

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): NUR 1001, NUR 1002, NUR 1003, NUR 1005, NUR 1016, NUR 1070, NUR 1071.
Formerly NUR 113 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, patient-centered nursing care to childbearing families. The course incorporates the legal and ethical responsibilities of the Practical Nurse in the care of childbearing families.

NUR 1014 - Basic Concepts of Pediatric Nursing

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): NUR 1001, NUR 1002, NUR 1003, NUR 1005, NUR 1016, NUR 1070, NUR 1071.
Formerly NUR 114 Applies and expands on 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, patient-centered nursing care to children and their families. The course incorporates the legal and ethical responsibilities of the Practical Nurse in the care of children.

NUR 1016 - Basic Concepts of Geriatric Nursing

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): Admission to Practical Nurse Program.
Formerly NUR 116 Applies and expands 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, patient-centered nursing care to older adults. The course incorporates the legal and ethical responsibilities of the Practical Nurse in the care of older adults.

NUR 1072 - Clinical III

Credit(s): 3
Vocational Clinic Hour(s): 9

Prerequisite(s): NUR 1001, NUR 1002, NUR 1003, NUR 1005, NUR 1016, NUR 1070, NUR 1071.
Formerly NUR 172 Offers the clinical practicum to apply the related nursing theory.

NUR 1073 - Clinical III

Credit(s): 2
Vocational Clinic Hour(s): 6

Prerequisite(s): NUR 1001, NUR 1002, NUR 1003, NUR 1005, NUR 1016, NUR 1070, NUR 1071.
Formerly NUR 173 Offers the clinical practicum to apply the related nursing theory.

Pre-Engineering, AS (with Designation)

CIP 24.0199

See list of Department Chairs on the Personnel page.

Career Opportunities

Engineers apply mathematical principles and those of many sciences to the solution of practical design problems. Most engineers specialize in a particular area. There are more than 25 major specialties, including aerospace, chemical, mining and metallurgical, mechanical, architectural, electrical and systems. The Pueblo Community College curriculum provides a transferable foundation for all the major branches of engineering.

Program Description

The pre-engineering program at Pueblo Community College is designed for students interested in studying for the engineering profession through the community college pathway. This pathway prepares students for the completion of a two-year Associate of Science (AS) degree which meets the requirements of the statewide engineering articulation agreement with Colorado's four-year engineering bachelor's degree programs. Classes taken at PCC for the pre-engineering program at Pueblo Community College are dependent on the University you choose to attend for your bachelor's. Please see an advisor for details.

Program Requirements

Refer to the general requirements for the Associate of Science degree listed above. Some pre-engineering courses have prerequisites of lower level classes or assessment scores. Refer to the course descriptions for specific course prerequisites.

Total Credits: 60

** Refer to CCCS Guaranteed Transfer (GT) - Pathways Courses for a full list of all GT Pathway Courses*

General Education Core Requirements (38 Credits)

Communication (9 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

Mathematics (4 Credits)

MAT 1340 - College Algebra: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 0300.
Formerly MAT 121 Explores topics including intermediate algebra, equations, and inequalities, functions and their graphs, exponential and logarithmic functions, linear and nonlinear systems, selection of topics from among graphing of the conic sections, introduction to sequences and series permutations and combinations, the binomial theorem and theory of equations. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

Natural and Physical Sciences (10 Credits)

PHY 2111 - Physics: Calculus Based I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 2410, ENG 1021.
Formerly PHY 211 Explores the physical world through reasoning, mathematics and experimentation. Covers kinematics, force, gravity, energy, momentum, torque, rotational dynamics and fluids, and may include thermodynamics. The concepts and theories presented in class are explored through demonstrations and hands-on experiments. This first semester calculus-based physics course is recommended for students entering engineering or one of the advanced sciences. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

PHY 2112 - Physics: Calculus-Based II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 2410, ENG 1021.
Formerly PHY 212 Expands upon PHY 2111and examines waves, electric fields, electric circuits, magnetic fields, light and optics, and modern physics. The concepts and theories presented in class are explored through demonstrations and hands-on experiments. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

Arts and Humanities (6 Credits)

(Select three courses, with no more than two courses from any one category):

- Arts and Expression: Select from a GT Pathways Arts and Expression course (GT-AH1) *
- Literature and Humanities: Select from a GT Pathways Literature and Humanities course (GT-AH2) *
- Ways of Thinking: Select from a GT Pathways Ways of Thinking course (GT-AH3) *
- Foreign Languages: Select from a GT Pathways Foreign Languages course (GT-AH4) *

Social and Behavioral Sciences (6 Credits)

(Select two courses from two different categories):

- Economics or Political Systems: Select from a GT Pathways Economics or Political Systems course (GT-SS1) *
- Geography: Select from a GT Pathways Geography course (GT-SS2) *

- Human Behavior, Culture, or Social Frameworks: Select from a GT Pathways Human Behavior, Culture, or Social Frameworks course (GT-SS3) *

History (3 Credits)

- Select one GT Pathways History course (GT-HI1) *

Guided Electives (22 Credits)

see an academic advisor

AAA 1009 - Advanced Academic Achievement

Credit(s): 3
Lecture Hour(s): 3
Formerly AAA 109 Examines theories and practices associated with successful learning to enhance college success. Recommended for new and returning students, this course study areas including education and career planning, effective communication, personal management, critical and creative thinking, development of community and awareness of diversity, leadership, and techniques for successful academic performance.

CAD 1101 - Computer Aided Drafting/2D I

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly CAD 101 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.

EGG 1020 - Engingeering Methodologies

Credit(s): 3
Lecture Hour(s): 2
Academic Lab Hour(s): 2
Prerequisite(s): MAT 1340
Formerly EGG 102 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.

HWE 1062 - Health and Fitness

Credit(s): 3
Lecture Hour(s): 3
Formerly HWE 111 Studies health and fitness in the US today. The course will look at personal health issues, managing stress, nutrition and health lifestyles.

MAT 1420 - College Trigonometry: GT-MA1

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): MAT 1340.
Formerly MAT 122 Covers topics including trigonometric functions (with graphs and inverse functions), identities and equations, solutions of triangles, complex numbers, and other topics as time permits. This is a traditional prerequisite course to the calculus sequence. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2410 - Calculus I: GT-MA1

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): MAT 1420.
Formerly MAT 201 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. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

MAT 2420 - Calculus II: GT-MA1

Credit(s): 5
Lecture Hour(s): 5
Prerequisite(s): MAT 2410.
Formerly MAT 202 Continues the study of single variable calculus which will include techniques of integration, polar coordinates, analytic geometry, improper integrals and infinite series. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

Production Technician Certificate

CIP 48.0503

See list of Department Chairs on the Personnel page.

CERTIFICATE IS UNDER REVIEW

Total Credits: 20

Certificate Requirements

MAC 1002 - Print Reading for Machinists

Credit(s): 3
Lecture Hour(s): 3
Formerly MAC 102 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.

MAT 1150 - Technical Mathematics

Credit(s): 4
Lecture Hour(s): 4

Formerly MAT 108 Covers material designed for career technical or general studies students who need to study particular mathematical topics. Topics may include measurement, algebra, geometry, trigonometry, graphs and/or finance. These are presented at an introductory level and the emphasis is on applications.

MTE 1102 - Safety Manufacturing Environment

Credit(s): 1
Lecture Hour(s): 1
Formerly MTE 105 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 1110 - Applied Communication and Teamwork in Industry

Credit(s): 3
Lecture Hour(s): 3
Formerly MTE 110 Provides the student with an in-depth focus on the fundamental concepts and approaches required by industry to establish strong comprehensive and recognized skills in the areas of critical thinking, emotional intelligence, team dynamics, leadership roles, conflict resolution and results-oriented communication skills. This course is taught from a contextualized format.

MTE 1200 - Manufacturing Processes

Credit(s): 3
Lecture Hour(s): 3
Formerly MTE 120 Provides an overview of the different methods, tools, and machines which are used to manufacture industrial and consumer products.

MTE 1075-1077 - Special Topics

Credit(s): 0-12
Formerly MTE 175-177 Provides student with a vehicle to pursue in-depth exploration of a special topic of interest.

Professional Communication Certificate

Dr. Young Kim, Dean of Arts and Sciences

See list of Department Chairs on the Personnel page.

Career Opportunities

The Certificate of Professional Communication program prepares students for careers in management, human resources, nonprofit organizations, marketing, public relations and recruitment, as well as workplace advancement.

Program Description

The Certificate of Professional Communication program teaches students to write and speak to diverse publics, engage in critical thinking and problem-solving, work as part of a team and employ one-on-one conflict resolution strategies. The curriculum is designed to sharpen students' verbal and written communication abilities for the best practices of being part of a 21st-century workplace.

Disclaimer

The Certificate of Professional Communication will not appear as a certificate on official college transcripts. Courses taken toward the Certificate may apply to other programs on a degree-by-degree basis.

Program Requirements

Entrance Requirements:

Placement into ENG 1021 **or** successful completion of any CCR course with a grade of "C"/"S" **or** higher.

Graduation Requirements:

Successful completion of COM 2089 - Capstone.

Total Credits: 17

Certificate Requirements

Core Requirements (17 Credits)

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

or

COM 2062 - Communicating with Impossible People

Credit(s): 1
Lecture Hour(s): 1
Formerly COM 262 Introduces participants to the concepts regarding communication with "impossible" people and techniques to deal with them more effectively. Emphasizes active participation in skill-building activities.

COM 2063 - Conflict Resolution

Credit(s): 1
Lecture Hour(s): 1
Formerly COM 263 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 2068 - Problem Solving

Credit(s): 1
Lecture Hour(s): 1
Formerly COM 268 Focuses on solving problems in our personal and professional lives and developing the ability to think and act creatively in responding to a variety of situations. Introduces several different perspectives for group and individual problem solving and explores real situations and simulations.

COM 2300 - Intercultural Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 220 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. This is a statewide Guaranteed Transfer course in the GT-SS3 category.

COM 2089 - Capstone

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Must Have nine credits completed with a grade of "C" or higher towards the Certificate of Professional Communication or approval of the English & communication Department Chair.
Formerly COM 289 Provides a demonstrated culmination of learning within a given program of study.

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

or

ENG 1031 - Technical Writing I

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 131, then ENG 1020 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.

Programming Mini-Certificate

CIP 11.0101

See list of Department Chairs on the Personnel page.

Career Opportunities

The CIS program prepares you for careers in computer science, computer networking and electronic commerce. The AAS Degree with an emphasis in local area networking prepares you to work as a network technician on small and large networks. You may also administer smaller networks as a System Administrator. The AGS Degree with an emphasis in Computer Information Systems prepares you to transfer to a university to continue studies in Computer Science or Computer Information Systems.

Program Description

The CIS program provides training in basic technical computer and networking skills. You will study computer networking, programming and database technologies along with classes that teach the technical aspects of the Internet and data communications. Note: Students interested in transferring to a baccalaureate program in Computer Information Systems should refer to the Transfer Degree section.

Total Credits: 11

Certificate Requirements

CSC 1019 - Introduction to Programming

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CSC 119 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 1060 - Computer Science I: (Language)

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Prerequisite(s): CSC 1020.
Formerly CSC 160 Introduces students to the discipline of computer science. Covers algorithm development, data representation, logical expressions, sub-programs and input/output operations using a structured programming language. Requires intensive lab work outside of class time.

CSC 1061 - Computer Science II: (Language)

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Prerequisite(s): CSC 1060 or instructor approval.
Formerly CSC 161 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.

Psychiatric Technician Certificate

CIP 51.1502

See list of Department Chairs on the Personnel page.

Program Description

This program teaches you to use basic patient care and psychiatric principles to interact with and care for clients in a therapeutic manner and monitor treatment modalities. You will learn to perform basic nursing skills, administer medications, conduct one-to-one relationship development, and participate in group therapy.

The Psychiatric Technician program has a selective admissions process. The program application and requirements are available in the Nursing office or at Pueblo Community College Psych Tech from March 1—July 30. All Medical & Behavior Health Division programs have essential functions to help you be successful in the program and career.

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.

Career Information

The Psychiatric Technician Certificate Program provides you with knowledge and skills for employment as a psychiatric caregiver in health care settings.

Total Credits: 37

Spring (9 credits)

BIO 1006 - Basic Anatomy and Physiology

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly BIO 106 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, Paramedic Program, and the Medical Office Technology Program.

NUA 1001 - Nurse Aide Health Care Skills

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Formerly NUA 101 Prepares the student to perform the fundamental skills of the nurse aide. Basic nursing skills, communication 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 Aid Clinical Experience

Credit(s): 1
Vocational Clinic Hour(s): 1.5

Formerly NUA 170 Applies knowledge and skill gained in NUA 101 to patient care. Pass/fail grading (F).

Fall (14 credits)

PTE 1010 - Intro to Behavioral Health Care and Wellness

Credit(s): 3
Lecture Hour(s): 3
Formerly PTE 110 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.

NUR 1001 - Pharmacology Calculations

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): Admission to Practical Nurse Program.
Formerly NUR 101 Prepares nurse to provide safe, patient-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 1003 - Basic Assessment for the Pn

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): Admission to Practical Nurse Program.
Formerly NUR 103 Provides the theoretical knowledge and psychomotor skills used by the Practical Nurse performing a basic assessment of health status of stable adult patients with predictable outcomes, including collecting, reporting, and recording objective/subjective data, observing conditions or changes in condition, and differentiating normal from abnormal findings. Principles of therapeutic communication and patient teaching are included. Includes practice collecting basic assessment data in the nursing skills laboratory.

NUR 1005 - Practical Nursing Arts and Skills

Credit(s): 6
Lecture Hour(s): 3
Vocational Lab Hour(s): 9
Prerequisite(s): Admission to Practical Nurse Program.
Formerly NUR 105 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, patient-centered nursing care are applied to the care of patients across the lifespan with stable and predictable outcomes. The course applies guidelines related to the professional, legal, and ethical scope of practice of the Practical Nurse, including demonstrating safe performance of all psychomotor skills.

NUR 1010 - Pharmacology Practical Nursing

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to Practical Nurse Program.
Formerly NUR 110 Categorizes basic principles of pharmacology, including major drug classifications using prototype drugs, principles of medication administration including best practices for safe, quality, and patient-centered care. Discusses the legal and ethical responsibilities of the Practical Nurse related to medication administration. Application of this content is used throughout the program nursing courses.

Spring (14 credits)

PTE 1017 - Theoretical Concepts of Psychiatric Care II

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): PTE 1010
Formerly PTE 117 Explores psychiatric problems common to four (4) special populations: children/adolescents, developmentally disabled individuals, aging persons and forensic clients. The student will learn how to recognize and intervene with problems common to these four groups.

PTE 1018 - Psychiatric Management Principles

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): Admission into the Psychiatric Technician program, PTE 1017, PTE 1071.
Corequisite(s): PTE 1072.
Formerly PTE 118 Capstone: Explores principles of psychiatric unit management and professional behaviors in psychiatric care. Self-care issues and job-seeking skills are also discussed.

PTE 1020 - Application of Behavioral Health Care & Wellness

Credit(s): 5
Lecture Hour(s): 3
Vocational Lab Hour(s): 3
Prerequisite(s): PTE 1010
Formerly PTE 120 Explores basic etiology, symptoms, and interventions for common behavioral and mental health disorders. Provides the opportunity for students to experience the mileu of a behavioral health care setting while providing basic care to clients experiencing common behavioral and mental health issues.

PTE 1070 - Clinical Concepts of Psychiatric Care I

Credit(s): 2
Vocational Lab Hour(s): 3
Prerequisite(s): Program admission
Formerly PTE 170 Provides clinical application of theory and principles presented in PTE 116 through supervised clinical practice in a psychiatric care setting.

PTE 1071 - Clinical Concepts of Psychiatric Care II

Credit(s): 3
Vocational Lab Hour(s): 4.50
Prerequisite(s): Admission into the Psychiatric Technician program, PTE 1016 , PTE 1070, or permission of instructor.
Corequisite(s): PTE 1017.
Formerly PTE 171 Provides clinical application of theory and principles presented in PTE 1017through supervised clinical practice in a psychiatric care setting.

PTE 1072 - Psychiatric Management Clinical

Credit(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): Admission into the Psychiatric Technician program, PTE 1070, PTE 1071.
Corequisite(s): PTE 1018.
Formerly PTE 172 Synthesizes knowledge from prerequisite courses and provides clinical application of theory presented in PTE 1018.

1 Courses must be successfully completed to continue with the program
2 Course must be completed within 7 years of a possible start

Psychology, AA (with Designation)

CIP 24.0101

See list of Department Chairs on the Personnel page.

Career Opportunities

The Associate of Arts Degree with Designation in Psychology prepares students to transfer as a junior to a four-year institution in Colorado in order to pursue a Bachelor of Arts degree (BA) in psychology. Much of the coursework for

BA and BS degrees in psychology tends to overlap (for example, social science requirements and core courses), but those with a BA degree are geared toward more modern scientific psychology – how we adapt to rapidly changing social and physical environments. Students who opt for the Bachelor of Arts in Psychology can choose to work in the human services field (crisis intervention or case management) or in business areas (human resources, personnel or management). Once a BA is completed, students may pursue a higher degree in psychology, if interested.

Program Description

This program introduces the student to the field of psychology and includes the coursework to meet general education requirements that are common to all Colorado four-year institutions, as well a specific courses in various subfields of psychology. Upon transfer, students from Pueblo Community College who have earned the Associate of Arts (AA) Degree with Designation in Psychology will be ready to complete the last half of a BA in Psychology at a four-year institution.

Program Requirements

In addition to the requirements listed below, you must:

a. Earn a minimum of 60 semester hours of course work
b. Earn a minimum of 15 graded semester hours at PCC
c. Earn a minimum of "C" in all coursework for the degree

Consult with a PCC Arts and Sciences advisor or transfer advisor to find out which Colorado Statewide Guaranteed Transfer Courses (GT Pathways) or elective courses meet the degree requirements of the four-year college to which you plan to transfer.

To earn an AA degree with a designation in psychology, you must complete at least 60 college-level credits, as described below:

Total Credits: 60

** Refer to CCCS Guaranteed Transfer (GT) - Pathways Courses for a full list of all GT Pathway Courses*

General Education Core Requirements (34-36 Credits)

Written Communication (6 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3

Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

or

- ENG 1022 - English Composition II: GT-CP2 **Credit(s): 3 and** a GT C03 course

Mathematics (3-4 Credits)

- One GT Pathways course (GT-MA1), prefer MAT 1260 - Introduction to Statistics: GT-MA1, except:

Colorado Mesa University

- Colorado Mesa University requires either MAT 1240; or MAT 1340;

Colorado State University-Pueblo

- Colorado State University-Pueblo prefers MAT 1340;

Fort Lewis College

- Fort Lewis college requires MAT 1260;

University of Colorado Boulder

- University of Colorado Boulder requires MAT 1340 or higher;

University of Colorado, Colorado Springs

- University of Colorado, Colorado Springs requires MAT 1340;

Western State Colorado University

- Western State Colorado University requires MAT 1340

Natural and Physical Sciences (7-8 Credits)

- One GT Pathways Biology course. Must be GT-SC1 course with lab
- One GT Pathways GT-SC1 course of the student's choosing.

Arts and Humanities (9 Credits)

No more than two courses from any one category

- Select three GT Pathways Arts & Humanities Courses (GT-AH1, GT-AH2, GT-AH3, GT-AH4) *

Social and Behavioral Sciences (6 Credits)

- (Select two GT Pathways Social & Behavioral Science courses (GT-SS1, GT-SS2, GT-SS3) *

History (3 Credits)

- Select one GT Pathway course (GT-HI1) *

Additional Required Psychology Courses (18 Credits)

PSY 1001 - General Psychology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 101 Focuses on the scientific study of behavior including motivation, emotion, physiological psychology, stress and coping, research methods, consciousness, sensation, perception, learning and memory. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 1002 - General Psychology II: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 102 Focuses on the scientific study of behavior including cognition, language, intelligence, psychological assessment, personality, abnormal psychology, therapy, lifespan development and social psychology. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

- Three GT Pathways Psychology courses (GT-SS3) **Credits(s): 9** *

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

or

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

Electives (6-8 Credits)

Determined by transferring institution

Transfer Degrees

This degree transfers to the following Colorado public four-year institutions of higher education:

- Adams State University (B.A. Psychology; Developmental, Clinical, Sport Psychology, or Psychology emphasis)
- Colorado Mesa University (B.A. Psychology; Psychology or Counseling Psychology concentrations)
- Colorado State University-Pueblo (B.A. Psychology)
- Fort Lewis College (B.A. Psychology)
- Metropolitan State University of Denver (B.A. Psychology)
- University of Colorado, Boulder (B.A. Psychology)
- University of Colorado, Colorado Springs (B.A. Psychology)
- University of Colorado, Denver (B.A. Psychology)
- University of Northern Colorado (B.A. Psychology)
- Western State Colorado University (B.A. Psychology)

Psychology, AS (with Designation)

CIP 24.0199

See list of Department Chairs on the Personnel page.

Career Opportunities

The Associate of Science Degree with Designation in Psychology prepares students to transfer as a junior to a four-year institution in Colorado in order to pursue a Bachelor of Science degree (BS) in psychology. Much of the coursework for BA and BS degrees in psychology tends to overlap (for example, social science requirements and core courses), but BS degree graduates have a higher skill concentration in math, natural sciences and research methods. Students who opt for the Bachelor of Science in Psychology can find work with medical doctors, forensic psychologists, neuropsychologists and biologists. After a BS is completed, students may pursue a higher degree in psychology, if interested.

Program Description

This program introduces the student to the field of psychology and includes the coursework to meet general education requirements that are common to all Colorado four-year institutions, as well a specific courses in various subfields of psychology. Upon transfer, students from Pueblo Community College who have earned the Associate of Science (AS) Degree with Designation in Psychology will be ready to complete the last half of a BS in Psychology at a four-year institution.

Program Requirements

In addition to the requirements listed below, you must:

a. Earn a minimum of 60 semester hours of course work
b. Earn a minimum of 15 graded semester hours at PCC
c. Earn a minimum of "C" in all coursework for the degree

Consult with a PCC Arts and Sciences advisor or transfer advisor to find out which Colorado Statewide Guaranteed Transfer Courses (GT Pathways) or elective courses meet the degree requirements of the four-year college to which you plan to transfer.

To earn an AS degree with a designation in psychology, you must complete at least 60 college-level credits, as described below:

Total Credits: 60

** Refer to CCCS Guaranteed Transfer (GT) - Pathways Courses for a full list of all GT Pathway Courses*

General Education Core Requirements (38 Credits)

Written Communication (6 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

- ENG 1021 - English Composition I: GT-CO1 **Credit(s): 3**
  or
- ENG 1022 - English Composition II: GT-CP2 **Credit(s): 3 and** a GT Pathways Advanced Writing course (GT-CO3) *

Mathematics (4 Credits)

MAT 1340 - College Algebra: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 0300.
Formerly MAT 121 Explores topics including intermediate algebra, equations, and inequalities, functions and their graphs, exponential and logarithmic functions, linear and nonlinear systems, selection of topics from among graphing of the conic sections, introduction to sequences and series permutations and combinations, the binomial theorem and theory of equations. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

Natural and Physical Sciences (10 Credits)

BIO 1111 - General College Biology I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): ENG 1021
Formerly BIO 111 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.

CHE 1111 - General College Chemistry I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): MAT 1340, CHE 1011.
Corequisite(s): ENG 1021.
Formerly CHE 111 Focuses on basic chemistry and measurement, matter, chemical formulas, reactions and equations, stoichiometry. This course covers the development of atomic theory culminating in the use of quantum numbers to determine electron configurations of atoms, and the relationship of electron configuration to chemical bond theory. The course includes gases, liquids, and solids and problem-solving skills are emphasized through laboratory experiments.

Arts and Humanities (9 Credits)

PHI 1011 - Introduction to Philosophy: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 111 ompletion with a minimum C? grade guarantees transfer and application of credit in this GT Pathways category.

or

PHI 1012 - Ethics: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 112 Examines human life, experience and thought in order to discover and develop the principles and values for pursuing a more fulfilled existence. Theories designed to justify ethical judgments are applied to a selection of contemporary personal and social issues. This course is one of the statewide Guaranteed Transfer courses, GT-AH3.

- (Plus six (6) additional credits from at least two different categories of GT Pathways Arts & Humanities courses: (GT-AH1, GT-AH2, GT-AH3, GT-AH4) *

Social and Behavioral Sciences (6 Credits)

- Select two GT Pathway courses from any category (GT-SS1, GT-SS2, GT-SS3) *

History (3 Credits)

- Select one GT Pathways History course (GT-HI1) *

Additional Required Courses (9 Credits)

PSY 1001 - General Psychology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 101 Focuses on the scientific study of behavior including motivation, emotion, physiological psychology, stress and coping, research methods, consciousness, sensation, perception, learning and memory. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 1002 - General Psychology II: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 102 Focuses on the scientific study of behavior including cognition, language, intelligence, psychological assessment, personality, abnormal psychology, therapy, lifespan development and social psychology. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

or

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

Electives (13 Credits)

Determined by transferring institution

Transfer Degrees

Note: Students planning to transfer to University of Colorado Denver should complete both two-semester sequences of BIO 1111 & BIO 1112 and CHE 1111 & CHE 1112 at the community college; in addition, electives are restricted to non-Psychology courses.

This degree transfers to the following Colorado public four-year institutions of higher education:

- Colorado State University-Fort Collins (B.S. Psychology: General Psychology concentration)
- Colorado State University-Pueblo (B.S. Psychology)

- University of Colorado, Denver (B.S. Psychology)

Public Health, DwD

See list of Department Chairs on the Personnel page.

Total Credits: 60

Fall-Year 1 (15)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

PSY 1001 - General Psychology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 101 Focuses on the scientific study of behavior including motivation, emotion, physiological psychology, stress and coping, research methods, consciousness, sensation, perception, learning and memory. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

PHI 1012 - Ethics: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 112 Examines human life, experience and thought in order to discover and develop the principles and values for pursuing a more fulfilled existence. Theories designed to justify ethical judgments are applied to a selection of contemporary personal and social issues. This course is one of the statewide Guaranteed Transfer courses, GT-AH3.

HIS 1220 - U.S. History Since the Civil War: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 122 Explores events, trends, peoples, groups, cultures, ideas and institutions in United States history, including the multiple perspectives of gender, class and ethnicity, between the period of the American Civil War and

the present. Focuses on developing, practicing and strengthening the skills historians use while constructing knowledge in the discipline. This course is one of the statewide Guaranteed Transfer courses, GT-HI1.

Spring-Year 1 (17)

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

MAT 1260 - Introduction to Statistics: GT-MA1

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 135 Explores and applies data presentation and summarization, introduction to probability concepts and distributions, statistical inference estimation, hypothesis testing, comparison of populations, correlation and regression. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

BIO 1111 - General College Biology I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): ENG 1021
Formerly BIO 111 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.

PSY 2440 - Human Growth and Development: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 235 Examines human development from conception through death, emphasizing physical, cognitive, emotional and psychosocial factors. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PHI 1013 - Logic: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 113 Studies effective thinking using language-oriented logic. Provides tools and develops skills for creative and critical thinking. Emphasizes the development of decision-making and problem-solving. This course is one of the statewide Guaranteed Transfer courses, GT-AH3.

Fall-Year 2 (14)

BIO 1112 - General College Biology II with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Corequisite(s): ENG 1021.
Formerly BIO 112 A continuation of Biology I. Includes ecology, evolution, classification, structure, and function in plants and animals. This course includes laboratory experience.

SOC 2031 - The Sociology of Deviant Behavior: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 231 Examines the nature, identification, and explanation of deviant categories. Theories and philosophies, as well as methods of treatment related to deviancy, will also be considered. The course will study society's attempts to control, change and institutionalize those acts, individuals or groups that a population may deem unacceptable. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

LIT 1015 - Introduction to Literature I: GT-AH2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly LIT 115 Introduces students to fiction, poetry and drama. Emphasizes active and responsive reading. This course is one of the statewide Guaranteed Transfer courses, GT-AH2.

PSY 2221 - Social Psychology: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 226 Focuses on the behavior of humans in social settings, including attitudes, aggression, conformity, cooperation and competition, prejudice and interpersonal attraction. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

Spring-Year 2 (16)

PSY 2552 - Abnormal Psychology: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Corequisite(s): PSY 1001 or Department Chair Approval.
Formerly PSY 249 Examines abnormal behavior and its classification, causes, treatment and prevention. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2222 - Psychology of Death and Dying: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 227 Examines the philosophies of life and death, emphasizing dying, death, mourning and the consideration of one's own death. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

PSY 2333 - Health Psychology: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 240 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. This is a statewide Guaranteed Transfer course in the GT-SS3 category. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

SOC 2005 - Sociology of Family Dynamics: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 205 Develops an understanding of marriage, family and kinship. It examines the family as an institution and how social, cultural and personal factors influence family relations. The stability and diversity of the family will be explored, along with current trends and some alternative lifestyles. This course is one of statewide Guaranteed Transfer courses, GT-SS3.

BIO 2104 - Microbiology with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 204 Designed for health science majors. Examines microorganisms with an emphasis on their structure, development, physiology, classification and identification. The laboratory experience includes culturing, identifying and controlling microorganisms with an emphasis on their role in infectious disease.

Radiologic Technology BAS

See list of Department Chairs on the Personnel page.

Applicants must meet the following criteria:

- AAS in Radiologic Technology from a regionally accredited institution in radiologic technology
- Registered Radiologic Technologists with American Registry of Radiologic Technologist (AART) in good standing
- Minimum cumulative GPA of 2.00 (C) for all course work completed
- College transfer courses accepted for program entry require a cumulative GPA of 2.00 (C) on a 4.00 scale in related course work
- Meet PCC admissions criteria

Program Requirements:

The Bachelor's in applied Science Degree consists of 120 credit hours with transfer of AAS and general education courses.

BAS general education credits need to total a minimum of 30 credits

RTE AAS transcripts will be evaluated—credit amount will vary depending on the awarding institution

Students can receive prior learning credits for current registries

Additional 300/400 level courses earned through PCC

Any remaining credit hour can be earned through electives if necessary

Graduation Requirements

Students can use a combination of transcripted credits, prior learning assessment, current registry/certificates and additional bachelor level course work at Pueblo Community College to obtain the 120 credits required.

A minimum of 30 credits must be completed at PCC.

Students must complete all courses in their chosen track (MRI or CT) and all general education courses with a grade of C or better.

Internship Requirements

Documentation of current license

Evidence of current CPR

Evidence of professional liability insurance

Documentation of immunizations

Successful background check

Meet requirements of receiving institution

Total Credits: 120

Fall Semester (12 credits)

BIO 2101 - Human Anatomy and Physiology I with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 201 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, nervous and endocrine systems. Includes a mandatory hands-on laboratory experience covering experimentation, microscopy, observations and dissection. This is the first semester of a two-semester sequence.

BIO 2102 - Human Anatomy and Physiology II with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3

Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 202 Focuses on the integrated study of the human body and the histology, anatomy, and physiology of the following systems and topics: cardiovascular, hematology, lymphatic and immune, urinary, fluid and electrolyte control, digestive, nutrition, respiratory, reproductive and development. Includes a mandatory hands-on laboratory experience involving experimentation, microscopy, observations and dissection. This is the second semester of a two-semester sequence.

PHY 1105 - Conceptual Physics with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly PHY 105 Focuses on mechanics, heat, properties of matter, electricity and magnetism, light and modern physics. Incorporates laboratory experience. This course is one of the statewide Guaranteed Transfer courses, GT-SC1.

Spring Semester (14 credits)

MRI Tract

ENG 1031 - Technical Writing I

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 131, then ENG 1020 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.

CIS 1018 - Intro to PC Applications

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 118 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.

RTE 3011 - Sectional Anatomy for Medical Imaging

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): AAS in Radiologic Technology and ARRT Registered.
Formerly RTE 311 Identifies anatomy in various imaging planes of advanced modalities. Compares normal anatomy with gross pathology on advanced cross-sectional images. Evaluation of anatomy and pathology will include head, spine, thorax, abdomen/pelvis and extremities.

RTE 3021 - Theory and Application of MR Imaging I

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): AAS in Radiologic Technology and ARRT Registered.

Formerly RTE 321 Applies the fundamental principles of MRI in order to perform clinical MRI examinations of the human body with special consideration to image production, quality control, terminology, basic procedural steps and MRI equipment and safety.

HPR 4011 - Leadership and Management in Health Professions

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to BAS program
Formerly HPR 411 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.

CT Tract

ENG 1031 - Technical Writing I

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 131, then ENG 1020 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.

RTE 3011 - Sectional Anatomy for Medical Imaging

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): AAS in Radiologic Technology and ARRT Registered.
Formerly RTE 311 Identifies anatomy in various imaging planes of advanced modalities. Compares normal anatomy with gross pathology on advanced cross-sectional images. Evaluation of anatomy and pathology will include head, spine, thorax, abdomen/pelvis and extremities.

RTE 3041 - Theory and Application of CT Imaging

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): AAS in Radiologic Technology and ARRT Registered.
Formerly RTE 341 Applies the fundamental and advanced principles of Computed Tomography (CT) in order to perform clinical CT examinations of the human body with special consideration to image production, quality control, terminology, basic procedural steps and MRI equipment and safety.

RTE 3051 - CT Protocols and Procedures

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): AAS in Radiologic Technology and ARRT Registered.
Formerly RTE 351 Covers the skill and knowledge necessary to perform supplemental procedures for imaging various anatomical structures including the head, spine, chest, abdomen, pelvis and extremities utilizing Computed Tomography. It provides instruction on gross pathological conditions demonstrated on CT images.

HPR 4011 - Leadership and Management in Health Professions

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to BAS program
Formerly HPR 411 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.

Summer Semester (8 credits)

MRI Tract

RTE 4031 - Advanced MRI Protocols and Procedures

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): RTE 3031.
Formerly RTE 431 Examines specialized advancements in MRI. Emphasis will be placed on the heart and vasculature, functional imaging, contrast agents and their uses, enterography, pelvic run-off and breast imaging.

RTE 3081 - Internship: MRI I

Credit(s): 3
Internship Hour(s): 9
Prerequisite(s): AAS in Radiologic Technology and ARRT Registered.
Formerly RTE 381 Provides supervised hands-on training in MR imaging exams. The Internship allows the student to gain clinical experience and develop proficiency in MRI.

RTE 3012 - IV Certificate for Contrast Medium

Credit(s): 1
Lecture Hour(s): 0.50
Vocational Clinic Hour(s): 1

Prerequisite(s): AAS in Radiologic Technology and ARRT Registered.
Formerly RTE 312 Prepares the student to perform IV contrast administration including knowledge of arterial and venous anatomy, appropriate puncture sites, necessary equipment and supplies, understanding of different contrast media, injectors and administration safety.

CT Tract

RTE 4051 - Advanced CT Protocols and Procedures

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): RTE 3051.
Formerly RTE 451 Provides the skill and knowledge necessary to perform advanced specialty procedures for imaging

various anatomical structures utilizing Computed Tomography. It distinguishes vascular anatomy and incorporates contrast media injections and contraindication into complex imaging studies.

RTE 3012 - IV Certificate for Contrast Medium

Credit(s): 1
Lecture Hour(s): 0.50
Vocational Clinic Hour(s): 1

Prerequisite(s): AAS in Radiologic Technology and ARRT Registered.
Formerly RTE 312 Prepares the student to perform IV contrast administration including knowledge of arterial and venous anatomy, appropriate puncture sites, necessary equipment and supplies, understanding of different contrast media, injectors and administration safety.

RTE 3082 - Internship: CT I

Credit(s): 4
Internship Hour(s): 12
Prerequisite(s): AAS in Radiologic Technology and ARRT Registered.
Formerly RTE 382 Provides supervised hands-on training in Computed Tomography exams. The Internship allows the student to gain clinical experience and develop proficiency in CT.

Fall Semester (13 credits)

MRI Tract

RTE 4021 - Theory and Application of MR Imaging II

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): RTE 3021.
Formerly RTE 421 Examines in-depth knowledge of designing MRI pulse sequences, data manipulation, artifacts and quality control and quality assurance procedures. Special consideration will be given to methods to shorten scan time, k-space filling and reconstruction, Fast Fourier Transform and image transfer and storage systems used in healthcare facilities.

RTE 4031 - Advanced MRI Protocols and Procedures

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): RTE 3031.
Formerly RTE 431 Examines specialized advancements in MRI. Emphasis will be placed on the heart and vasculature, functional imaging, contrast agents and their uses, enterography, pelvic run-off and breast imaging.

HPR 4038 - Pedagogy in Health Professions

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to BAS program
Formerly HPR 468 Provides a general overview of the concepts and theory relative to education in health professions.

The course will introduce concepts in developing outcome centered objectives, syllabus, lesson planning, content delivery, test construction, and assessing student learning. The course explores various learning styles and technology available for delivery of course content.

RTE 4081 - Internship: MRI II

Credit(s): 7
Internship Hour(s): 21
Prerequisite(s): RTE 3081.
Formerly RTE 481 Provides continued hands-on training for the student to perform supervised exams, gain clinical experience and develop proficiency in MRI.

CT Tract

MAN 2025 - Managerial Finance

Credit(s): 3
Lecture Hour(s): 3
Formerly MAN 225 Examines the concepts and techniques used to analyze financial accounting information for managerial planning, decision making and control. The focus of the course is on decision-making relating to the areas of budgets, forecasts, cost volume production, ROI and financial statements.

OR

ECO 2001 - Principles of Macroeconomics: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly ECO 201 Focuses on the study of the American economy, stressing the interrelationships among household, business and government sectors. Explores saving and investment decisions, unemployment, inflation, national income accounting, taxing and spending policies, the limits of the market and government, public choice theory, the Federal Reserve System, money and banking, and international trade.

HPR 4038 - Pedagogy in Health Professions

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to BAS program
Formerly HPR 468 Provides a general overview of the concepts and theory relative to education in health professions. The course will introduce concepts in developing outcome centered objectives, syllabus, lesson planning, content delivery, test construction, and assessing student learning. The course explores various learning styles and technology available for delivery of course content.

RTE 4082 - Internship: CT II

Credit(s): 7
Internship Hour(s): 21
Prerequisite(s): RTE 3082.
Formerly RTE 482 Provides continued hands-on training for the student to perform supervised exams, gain clinical experience and develop proficiency in CT.

Miscellaneous Information

[1] One credit elective course to be used if additional course work is required for applicant

[2] Students are required to complete either HPR 411 Leadership & Management in Health Professions **OR** HPR 468 Pedagogy in Health Professions

[3] Offered in the first eight (8) weelks

[4] Offered in the second eight (8) weeks

Radiologic Technology, AAS

CIP 51.0911

See list of Department Chairs on the Personnel page.

Career Opportunities

The Radiologic Technology program prepares you for a career in radiologic technology (radiography). As a graduate of the program, you are eligible to take the American Registry of Radiologic Technologists (ARRT) national certification examination in radiography. You will specialize in radiographic procedures that demonstrate anatomy and pathologies on medical x-ray film, fluoroscopic screens and other electronic imaging devices. These images are, in turn, interpreted by radiologists and other physicians for the diagnosis and treatment of disease and injury.

Program Description

The AAS in Radiologic Technology prepares you to work as a critical member of today's health care team. We teach you important critical thinking/problem-solving techniques as well as interpersonal and communication skills that allow you to interact effectively with other health care team members, patients and families from a variety of professional, social, emotional, cultural and intellectual backgrounds. We provide you with the skills you need to work with highly complex medical imaging equipment, analyze acquired images for quality, assess patient condition and apply appropriate techniques of patient care and education, and achieve the highest degree of clinical competency. The program focuses on developing your intellectual abilities as well as the judgment you need to demonstrate a professional attitude and demeanor, display the highest moral and ethical standards, and foster the safety of yourself and your patients.

Program Requirements

Entrance Requirements:

Prerequisite Requirements: ENG 1021, BIO 1006, MAT 1140, RTE 1001, HPR 1038

Graduation Requirements:

PSY 2440, Arts/Humanities. In addition, students must complete all required Clinical Competencies.

Total Credits: 77

Degree Requirements

* Indicates prerequisite courses for program entry.

General Education Requirements (16 Credits)

BIO 1006 - Basic Anatomy and Physiology

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly BIO 106 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, Paramedic Program, and the Medical Office Technology Program.

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

MAT 1140 - Career Math

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 107 Covers material designed for career technical or general studies students who need to study particular mathematical topics. Topics may include measurement, algebra, geometry, trigonometry, graphs and/or finance. These are presented on an introductory level and the emphasis is on applications.

PSY 1001 - General Psychology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 101 Focuses on the scientific study of behavior including motivation, emotion, physiological psychology, stress and coping, research methods, consciousness, sensation, perception, learning and memory. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

or

PSY 2440 - Human Growth and Development: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 235 Examines human development from conception through death, emphasizing physical, cognitive, emotional and psychosocial factors. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

- Arts/Humanities **Credit(s): 3**
  or
- Social and Behavioral Science **Credit(s): 3**

Related Requirements (3 Credits)

RTE 1001 - Introduction to Radiography

Credit(s): 2
Lecture Hour(s): 2
Formerly RTE 101 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.

HPR 1038 - Intro to Medical Terminology

Credit(s): 1
Lecture Hour(s): 1
Formerly HPR 138 Introduces the student to the structure of medical terms with emphasis on using and combining the most common prefixes, roots and suffixes. Includes terms related to major body systems, oncology and psychiatry, as well as clinical laboratory and diagnostic procedures and imaging. Class structure provides accepted pronunciation of terms and relative use in the healthcare setting.

Core Curriculum Requirements (58 Credits)

Semester 1 – Fall

RTE 1011 - Radiographic Patient Care

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): RTE 1001.
Corequisite(s): RTE 1021, RTE 1031, RTE 1041, RTE 1081.
Formerly RTE 111 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 - Radiologic Procedures I

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Prerequisite(s): RTE 1001
Formerly RTE 121 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 1031 - Radiographic Pathology and Image Evaluation I

Credit(s): 1.50
Lecture Hour(s): 1.50
Prerequisite(s): RTE 1001.
Formerly RTE 131 Provides a detailed anatomic discussion of the respiratory, digestive, genitourinary systems and related medical terminology. The course will also cover the details of bony anatomy including bone structure, pathology and arthrology.

RTE 1041 - Radiographic Equipment/Imaging I

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Program admission, RTE 1001.
Formerly RTE 141 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 1081 - Radiographic Internship I

Credit(s): 5
Internship Hour(s): 15
Prerequisite(s): Program admission, RTE 1001.
Formerly RTE 181 Introduces the clinical education experience at the clinical education center. The student applies knowledge learned in the classroom to the actual practice of radiography. Introduces the clinical education experience at the healthcare facility. The course focuses on the application of knowledge to the actual practice of radiography.

Semester 2 – Spring

RTE 1022 - Radiologic Procedures II

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Prerequisite(s): RTE 1021.
Formerly RTE 122 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 1032 - Radiographic Pathology and Image Evaluation II

Credit(s): 1.50
Lecture Hour(s): 1.50
Prerequisite(s): RTE 1031.
Formerly RTE 132 Provides a detailed anatomic/pathologic discussion of the spine, circulatory system, nervous system and skull and related medical terminology.

RTE 1042 - Radiographic Equipment/Imaging II

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): RTE 1041.
Formerly RTE 142 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 1082 - Radiographic Internship II

Credit(s): 5
Internship Hour(s): 15
Prerequisite(s): RTE 1081.
Formerly RTE 182 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.

Semester 3 – Summer

RTE 1083 - Radiographic Internship III

Credit(s): 7
Internship Hour(s): 21
Prerequisite(s): RTE 1082.
Formerly RTE 183 Reinforces and builds independence in the clinical Internship experience. Applies radiographic knowledge learned in the classroom and prior clinical Internship experience.

Semester 4 – Fall

RTE 2021 - Advanced Medical Imaging

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): RTE 1022.
Formerly RTE 221 Introduces advanced imaging techniques including radiography of the cranium, facial bones and special radiographic procedures. These concepts are combined with the basic oral communication techniques necessary for the professional radiographer.

RTE 2031 - Radiation Biology/Protection

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): RTE 1042.
Formerly RTE 231 Provides the basic knowledge and understanding of the biologic effects of ionizing radiation and radiation protection and safety.

RTE 2081 - Radiographic Internship IV

Credit(s): 8
Internship Hour(s): 24
Prerequisite(s): RTE 1083.
Formerly RTE 281 Introduces the student to the radiographic specialty areas of pediatrics, geriatrics, the outpatient clinic, as well as increasing proficiency in general radiography.

Semester 5 – Spring

RTE 2082 - Radiographic Internship V

Credit(s): 8
Internship Hour(s): 24
Prerequisite(s): RTE 2081
Formerly RTE 282 Introduces the student to the radiographic specialty areas of pediatrics, geriatrics, the outpatient clinic, portable and trauma radiography, as well as increasing proficiency in general radiography.

RTE 2089 - Capstone

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): All core curriculum or permission of instructor.
Corequisite(s): RTE 2082.
Formerly RTE 289 Prepares the radiology technology student to effectively search for a job in radiography and sit for the American Registry of Radiologic Technologists examination.

Respiratory Therapy, AAS

See list of Department Chairs on the Personnel page.

Career Opportunities

The Respiratory Therapy program prepares you for a career in a variety of professional settings. The most familiar setting is in the hospital, where respiratory therapists care for patients with cardiopulmonary disorders. Beyond the hospital setting, you can find employment in long-term care facilities, rehabilitation hospitals/clinics, corporate health facilities, outpatient diagnostic centers, emergency medical transport, education and clinical researcher.

Program Description

The AAS Degree prepares you to provide respiratory therapy to patients and educate them in their continuing care. In our off-campus scheduled clinical hours, you will provide respiratory therapy for patients under the supervision of preceptor or clinical instructor who is a licensed and credentialed respiratory therapist.

A respiratory therapist can provide care to patients by gathering patient data, performing a physical assessment, and making a diagnostic clinical treatment plan, which can include oxygen therapy, airway clearance therapy, aerosol therapy, medication delivery, airway management, arterial blood sampling, and most importantly invasive and non-invasive mechanical ventilation.

Because of the high level of personal and professional responsibility required of a respiratory therapist, you must have integrity, maturity, individual motivation, good interpersonal skills, excellent manual dexterity and a solid science and general studies academic background to be successful in this program. We are firmly committed to fostering your intellectual growth and to developing well-qualified respiratory therapists with high professional standards and ethics.

Program Requirements

Entrance Requirements:

You must complete a current Respiratory Therapy program application and meet all minimum requirements and application timelines. The application is available through the Respiratory Therapy program, at the PCC Respiratory

Therapy website or in Admissions & Records. You should seek advisement from program faculty for assistance with applications, minimum requirements and required general education courses for admissions. In addition, all students entering the program will need a current American Heart Association CPR card good for 2 years.

If you are an AAS Respiratory Therapy student, you must complete all General Education/Related Requirements.

Note: All students are accepted provisionally pending completion of a criminal background check and cleared drug screen. 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.

Total Credits: 72.5

General Education Requirements (20 Credits)

Applicants must have all 6 general education courses completed with a "C" or higher, to begin the first fall semester of the program.

*All BIO courses must be within 7 years of submitting application

Fall (9 credits)

BIO 1111 - General College Biology I with Lab: GT-SC1

Credit(s): 5
Lecture Hour(s): 4
Academic Lab Hour(s): 2
Prerequisite(s): ENG 1021
Formerly BIO 111 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.

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

HPR 1038 - Intro to Medical Terminology

Credit(s): 1
Lecture Hour(s): 1
Formerly HPR 138 Introduces the student to the structure of medical terms with emphasis on using and combining the most common prefixes, roots and suffixes. Includes terms related to major body systems, oncology and psychiatry, as well as clinical laboratory and diagnostic procedures and imaging. Class structure provides accepted pronunciation of terms and relative use in the healthcare setting.

Spring (11 credits)

BIO 2102 - Human Anatomy and Physiology II with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 202 Focuses on the integrated study of the human body and the histology, anatomy, and physiology of the following systems and topics: cardiovascular, hematology, lymphatic and immune, urinary, fluid and electrolyte control, digestive, nutrition, respiratory, reproductive and development. Includes a mandatory hands-on laboratory experience involving experimentation, microscopy, observations and dissection. This is the second semester of a two-semester sequence.

BIO 2104 - Microbiology with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Prerequisite(s): BIO 1111.
Formerly BIO 204 Designed for health science majors. Examines microorganisms with an emphasis on their structure, development, physiology, classification and identification. The laboratory experience includes culturing, identifying and controlling microorganisms with an emphasis on their role in infectious disease.

PSY 1001 - General Psychology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 101 Focuses on the scientific study of behavior including motivation, emotion, physiological psychology, stress and coping, research methods, consciousness, sensation, perception, learning and memory. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

OR

PSY 2440 - Human Growth and Development: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 235 Examines human development from conception through death, emphasizing physical, cognitive, emotional and psychosocial factors. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

Core Curriculum Requirements (52.5 Credits)

First Fall (10 credits)

RCA 1005 - Introduction to Respiratory Care

Credit(s): 1
Lecture Hour(s): 1
Formerly RCA 105 Introduces the principles and practices of Respiratory Therapy, to include the study of: the profession's history, current and future roles of the respiratory therapist, working cohesively with other professional organizations, quality care and evidence-based practice, patient safety, effective communication with patients, patient health records, principles of infection control, and implications of legal and ethical practices.

RCA 1051 - Cardiopulmonary Anatomy and Physiology

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Department Approval Required
Formerly RCA 151 Examines the cardiopulmonary anatomy and physiology related to respiratory therapy. This course also includes the study and analysis of the functional interrelationships between the pulmonary and cardiovascular systems.

RCA 1056 - Application of Science in Respiratory Care

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to the program.
Formerly RCA 156 Applying the basic concepts of chemistry and physics in relation to the practices of Respiratory Therapy. Interpretation of laboratory data collected from an arterial and/or venous blood sample for identifying a patient's homeostasis with oxygenation and ventilation to maintain a normal acid-base balance. Applying an index of O2 calculation to determine how gases are exchanged and transported from the atmosphere to the body for the assessment of the cardiopulmonary patient.

First Spring (13 credits)

RCA 1032 - Basic Techniques in Respiratory Care II

Credit(s): 5
Lecture Hour(s): 3
Vocational Lab Hour(s): 3
Prerequisite(s): RCA 1041 or consent of the instructor
Formerly RCA 132 Introduces the principles and practices of respiratory therapy, to include the study and application of aerosol therapy for medication delivery, airway clearance, and lung expansion techniques to promote bronchial hygiene for patients with cardiopulmonary disease pathologies.

RCA 1053 - Cardiopulmonary Disease and Pathology

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Program admission.
Formerly RCA 153 Covers the pathological abnormalities and clinical manifestations associated with cardiopulmonary diseases. This course includes the study of patient assessment, treatment modalities, and management for both chronic and acute cardiopulmonary diseases.

RCA 1066 - Monitoring and Diagnostics of the Cardiopulmonary Patient I

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): Program admission.
Formerly RCA 166 Provides the student an introduction to the monitoring and diagnostics for the cardiopulmonary patient, to include an analysis of the various clinical procedures, laboratory tests, and monitoring devices.

RCA 1010 - Pharmacology of Respiratory Therapy

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Department approval required
Formerly RCA 110 Introduces pharmacology associated with respiratory therapy, to include the study and application of prescribed medications for the indications, administration, adverse reactions and calculations; a study of specific topics include patient education of medication delivery devices, patient monitoring devices, utilization techniques, and the standards for therapeutic efficacy in relation to asthma, chronic obstructive pulmonary disease, and smoking cessation.

Summer (6.5 credits)

RCA 2035 - Mechanical Ventilation I

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Prerequisite(s): Department approval required
Formerly RCA 235 Introduces the principles and practices of invasive and non-invasive mechanical ventilation, to include the study of respiratory failure and physiological effects of mechanical ventilation. This course covers the management of equipment for various types of mechanical ventilator systems.

RCA 2070 - Clinical I

Credit(s): 4.5
Vocational Clinic Hour(s): 13.5

Prerequisite(s): Department approval required.
Formerly RCA 270 Serves as the first patient care internship and focuses on the care and analysis of the noncritical patient. Includes procedures presented in RCA 131 and RCA 132.

Second Fall (11.5 credits)

RCA 2071 - Clinical II

Credit(s): 8
Vocational Clinic Hour(s): 24

Prerequisite(s): Department approval required.
Formerly RCA 271 Serves as the second patient care internship and focuses on the care and analysis of the critically ill patient. Rotations into specialty areas are carried out as the schedule permits.

RCA 2036 - Mechanical Ventilation II

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Prerequisite(s): Department approval required. **Elaborates on the principles and practices of mechanical ventilation in high-risk situations, to include the study of ventilator graphics, management of patient asynchrony**

with ventilator support, and long-term mechanical ventilation.
Formerly RCA 236 Elaborates on the principles and practices of mechanical ventilation in high-risk situations, to include the study of ventilator graphics, management of patient asynchrony with ventilator support, and long-term mechanical ventilation.

RCA 2046 - Neonatal and Pediatric Respiratory Care

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Department approval required
Formerly RCA 246 Introduces the theory and principles of respiratory therapy unique to pediatric and neonatology. This course examines fetal development, prenatal and antenatal assessment, and high risk delivery. Including the analysis of anatomy and physiology, clinical assessment, therapeutic modalities, and cardiopulmonary disorders for neonatal and pediatric patients.

Second Spring (11.5 credits)

RCA 2072 - Clinical III

Credit(s): 8
Vocational Clinic Hour(s): 24

Prerequisite(s): Department approval required.
Formerly RCA 272 Offers the clinical practicum required for the program.

RCA 2065 - Professional Development

Credit(s): 2
Lecture Hour(s): 2
Corequisite(s): RCA 2083 or consent of instructor.
Formerly RCA 265 Reviews the respiratory therapy concepts, theory, and therapeutic applications covered within the program curriculum to prepare for the national credential examination, job placement, and state licensure requirements.

RCA 2066 - Advanced Monitoring and Diagnostics of the Cardiopulmonary Patient II

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Prerequisite(s): Program admission.
Formerly RCA 266 Provides the student with an advanced opportunity for analysis and the monitoring and diagnosis of the cardiopulmonary patient, to include current medical diagnostic procedures, laboratory testing, and advance monitoring equipment.

Notes

[1] BIO 111 is a required prerequisite course for BIO 202

Respiratory Therapy, BAS

See list of Department Chairs on the Personnel page.

This program is designed for licensed and registered respiratory therapists who have completed an Associate Degree in Respiratory Therapy from an accredited (Commission on Accreditation for Respiratory Care; CoARC) program and wish to continue their education and obtain a Bachelor of Applied Science degree. Students will receive 5 to 25 Prior Learning Assessment (PLA) credits for Registered Respiratory Therapy (RRT) and current state licensure. This program provides a student centered on-line learning environment meant to enhance career opportunities. The students will engage in self-directed learning activities and gain specialized knowledge utilizing critical thinking, personal inquiry and reflective practice.

Admission Requirements:

Applicants must meet the following criteria:

- Graduated from an accredited respiratory care program (Commission on Accreditation of Respiratory Care (CoARC)
- Hold a current respiratory therapy license in any state
- Hold a current credential from the National Board of Respiratory Care (NBRC) as a Registered Respiratory Therapist (RRT)
- Have a cumulative GPA of 2.5 for Respiratory Therapy degree and all other required pre-requisite courses must be completed at a "C" level or better.
- Meet PCC admissions criteria

Program Requirements

- The Bachelor's in Applied Science Degree consists of 120 credit hours with the transfer of AAS and general studies courses.
- General studies courses take as AAS: (19 credit hours)
- RCA specific coursework taken as part of AAS in Colorado (54.5 credit hours)
- Additional 300/400 level courses earned through PCC (BAS RT – 28 credit hours)
- A total of 30 credits in general education between the AAS and BAS degree with a minimum of 15 credits in GT pathway designation. Including possible block transfer/Prior Learning Assessment (PLA) for Respiratory Therapy AAS degree, NBRC Registered Respiratory Therapist and current state licensure.
- Any remaining credit hours can be earned through electives if necessary.
- Transferring students from outside the CCCS system will have transcripts evaluated for meeting admissions requirements

Total Credits: 120

Respiratory Therapy-Degree Transfer Credits

Respiratory Therapy, AAS

Fall -- 15

MAT 1260 - Introduction to Statistics: GT-MA1

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 135 Explores and applies data presentation and summarization, introduction to probability concepts and

distributions, statistical inference estimation, hypothesis testing, comparison of populations, correlation and regression. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

OR

MAT 1340 - College Algebra: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 0300.
Formerly MAT 121 Explores topics including intermediate algebra, equations, and inequalities, functions and their graphs, exponential and logarithmic functions, linear and nonlinear systems, selection of topics from among graphing of the conic sections, introduction to sequences and series permutations and combinations, the binomial theorem and theory of equations. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

HPR 4003 - Critical Review of Healthcare Research

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to BAS program

Formerly HPR 403 Teaches how to evaluate and analyze published literature using a scientific approach to develop medical best practices, formulates and research clinical questions to effectively participate in medical discussions.

HPR 4038 - Pedagogy in Health Professions

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to BAS program
Formerly HPR 468 Provides a general overview of the concepts and theory relative to education in health professions. The course will introduce concepts in developing outcome centered objectives, syllabus, lesson planning, content delivery, test construction, and assessing student learning. The course explores various learning styles and technology available for delivery of course content.

RCA 4001 - Sleep Medicine

Credit(s): 3
Lecture Hour(s): 3
Formerly RCA 401 Develops a working knowledge in sleep medicine for health care professionals by reviewing and identifying diagnostic procedures, therapeutic interventions, and sleep disorders.

RCA 4000 - Current Topics in Pulmonary Disease

Credit(s): 3
Lecture Hour(s): 3
Formerly RCA 400 Analyze current issues related to respiratory disease, including pathophysiology, management, and outcomes.

Spring -- 18

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

SOC 1001 - Introduction to Sociology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 101 Examines the basic concepts, theories and principles of sociology as well as human culture, social groups, and the social issues of age, gender, class and race. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

HPR 4011 - Leadership and Management in Health Professions

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to BAS program
Formerly HPR 411 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.

HPR 3010 - Quality Improvement in Health Care

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Admission to BAS program
Formerly HPR 310 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.

RCA 4002 - Advanced Concepts in Respiratory Therapy

Credit(s): 3
Lecture Hour(s): 3
Formerly RCA 402 Evaluates and analyzes current monitoring and diagnostic procedures for the cardiopulmonary patient in the acute and non-acute care settings with an emphasis on quality control, correlation of patient data, application of technology, and analysis of therapeutic protocols and procedures.

- Choose GT course in college catalog. **Credit(s): 3**[3]

Summer -- 7

HPR 3001 - Communications in Health Care

Credit(s): 3
Lecture Hour(s): 3

Prerequisite(s): Admission to BAS program
Formerly HPR 301 Develops professional written and oral communication plans to ensure effective patient-centered outcomes between health care professionals, patients and caregivers.

RCA 4078 - Senior Seminar

Credit(s): 2
Lecture Hour(s): 2
Formerly RCA 478 Senior seminar for respiratory care creating a senior project that applies knowledge and concepts through the use of problem-based learning methods in the research and evaluation of industry best practices.

HPR 4089 - Inter-Professional Capstone

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): Department approval required.
Formerly HPR 489 Provides a demonstrated culmination of learning within a given program of study.

Notes

[1] Courses taught in the first 8 weeks of the semester

[2] Courses taught in the second 8 weeks of the semester

[3] GT Pathway courses can be found in the College Catalog

[4] Also offered spring semester

[5] Also offered fall semester

Secure Software Development BAS

Computer Information Systems

See list of Department Chairs on the Personnel page.

Bachelor of Applied Science -- Secure Software Development

120 Credit Hours

Total Credits: 120

General Educaton (30 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of

critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

MAT 1340 - College Algebra: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 0300.
Formerly MAT 121 Explores topics including intermediate algebra, equations, and inequalities, functions and their graphs, exponential and logarithmic functions, linear and nonlinear systems, selection of topics from among graphing of the conic sections, introduction to sequences and series permutations and combinations, the binomial theorem and theory of equations. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

- Choose one CCCS GT-SC1 **Credit(s): 4**

ECO 2001 - Principles of Macroeconomics: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly ECO 201 Focuses on the study of the American economy, stressing the interrelationships among household, business and government sectors. Explores saving and investment decisions, unemployment, inflation, national income accounting, taxing and spending policies, the limits of the market and government, public choice theory, the Federal Reserve System, money and banking, and international trade.

- Choose General Education Electives **Credit(s): 13**

Lower Division (51 credits)

CIS 2020 - Fundamentals of Unix

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 220 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 2040 - Database Design and Development

Credit(s): 3
Lecture Hour(s): 3
Formerly CIS 240 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)

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Prerequisite(s): CIS 2040, Database Design and Development
Formerly CIS 243 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 2087 - Cooperative Education

Credit(s): 1-12
Internship Hour(s): 3-36
Formerly CIS 287 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 works with the student to select an appropriate work site, establish learning objectives and to coordinate learning activities with the employer work site supervisor.

CNG 1024 - Networking I: Network +

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 124 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 1031 - Principles of Information Assurance

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 131 Delivers a comprehensive overview of network security, including general security concepts. Communication Security is studied, including remote access, email, 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 1032 - Network Security Fundamentals

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 132 Examines the field of information security to prepare information systems students for their future roles as business decision-makers. The course presents a balance of the managerial and the technical aspects of information security. The concepts covered in this course should be helpful for students working towards the Certified Information Systems Security Professional (CISSP) certification.

CNG 2012 - Configuring Windows Server

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Formerly CNG 212 Provides students with the knowledge and skills that are required to install and configure a Microsoft Windows Server. This course helps prepare students for a MTA (Microsoft Technology Associate) and/or MCSA (Microsoft Certified Solutions Associate) exams.

CSC 1029 - Introduction to Secure Coding

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Prerequisite(s): CSC 1060 , Computer Science I
Formerly CSC 129 Focuses on introduction to secure coding. Emphasizes concepts, principles, and 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)

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Prerequisite(s): CSC 1020.
Formerly CSC 160 Introduces students to the discipline of computer science. Covers algorithm development, data representation, logical expressions, sub-programs and input/output operations using a structured programming language. Requires intensive lab work outside of class time.

CSC 1061 - Computer Science II: (Language)

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Prerequisite(s): CSC 1060 or instructor approval.
Formerly CSC 161 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 2041 - Advanced Java Programming

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Prerequisite(s): CSC 2040 or instructor approval.
Formerly CSC 241 Continues the study of the Java programming language. Covers advanced programming topics including multithreading, network/Internet programming, database programming and JavaBeans. Enables the student to write advanced, large and complex programs.

CSC 2045 - Secure Software Development: (Language)

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Prerequisite(s): CSC 1061 OR Co-Requisite
Corequisite(s): CSC 1061 or Pre-Requisite
Formerly CSC 245 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

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Prerequisite(s): CSC 1019.
Formerly CSC 246 Learn how to develop mobile apps using key features and frameworks. Students will learn application design and development using a mobile development platform software development kit (SDK) and corresponding programming language. Main features include: handling UI triggered and touch events, data management, simple and complex UI views, drawing, location and application settings.

CSC 2067 - Object-Oriented Analysis and Design

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): CSC 1060, Computer Science I
Formerly CSC 267 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.

CWB 2005 - Client-Side Scripting: (Software)

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Formerly CWB 205 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.

Upper Division (39 credits)

CSC 3000 - Advanced Computer Architecture

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.5
Prerequisite(s): Department Chair Approval
Formerly CSC 300 Covers the analysis of advanced concepts in the applications of computer architecture and programming capabilities with keyboard and display controllers within programs. This course investigates the impact of exceptions and interrupts within a simulator, examines the hazards associated with a pipelined datapath, and uses the analysis of floating-point instructions.

CSC 3020 - Software Engineering Fundamentals

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.5
Prerequisite(s): Department Chair Approval
Formerly CSC 320 Focuses on the skills necessary to analyze, design, and implement software engineering projects. The course includes software engineering standards and processes, qualitative aspects including maintainability, extensibility, reusability, and robustness in every stage of the software-engineering life-cycle.

CSC 3022 - Security Fundamentals and Databases

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.5
Prerequisite(s): Department Chair Approval
Formerly CSC 322 Examines the vulnerabilities of databases to attack. Functional requirements and security testing, focusing on the interaction between a software user and the application, are analyzed. This course will investigate database platforms and provide database developers with an understanding of database development best practices for optimum security.

CSC 3024 - Secure Coding Vulnerabilities I

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.5
Prerequisite(s): Department Chair Approval
Formerly CSC 324 Focuses on analyzing and implementing software vulnerabilities. This course explores vulnerabilities through code evaluation and implementation of language-specific solutions.

CSC 3026 - Secure Scripting of Operating Systems

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Prerequisite(s): Department Chair Approval
Formerly CSC 326 Focuses on analyzing and configuring an environment and assessing configuration variables in multiple operating systems. Topics include using multiple utilities in order to assimilate information on a network, host and data communications, and creating scripts for evaluation.

CSC 3028 - Security Libraries in Programming Languages

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.5
Prerequisite(s): Department Chair Approval
Formerly CSC 328 Focuses on the issues surrounding security libraries within programming languages. This course analyzes static typing within a software program to assess integrity within a given programming library. The course will also explore what effect mutable resources have on security, along with encryption tools, and violation channels.

CSC 4022 - Secure Software Engineering

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.5
Prerequisite(s): Department Chair Approval
Formerly CSC 422 Focuses on the analysis and functionality of defective software and how to develop and implement secure software. The analysis performed by software engineers in order to detect, repair, and maintain safe systems will also be covered.

CSC 4024 - Secure Code Vulnerabilities II

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.5
Prerequisite(s): CSC 3024
Formerly CSC 424 Focuses on advanced implementation of software vulnerabilities. This course covers attack vectors frequently used by malicious actors such as email attachments, compromised "watering hole" websites, and other tools often relied on to take advantage of unpatched vulnerabilities found in widely-used software applications. Patching techniques will be deployed in order to repair vulnerabilities found in software components.

CSC 4026 - Secure Cloud Programming

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.5
Prerequisite(s): Department Chair Approval
Formerly CSC 426 Focuses on analyzing and implementing secure applications in the cloud. Topics covered will include designing and implementing applications via the cloud with a focus on security policies, analyzing computer models with recommendations to reduce the risks and security challenges surrounding programming, and data security within the cloud.

CSC 4028 - Software Security Testing

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.5
Prerequisite(s): Department Chair Approval
Formerly CSC 428 Focuses on testing software as it pertains to vulnerabilities within operating systems, libraries, and cloud applications. Topics covered include implementing testing environments through analytical assessments using tools that detect software inefficiencies and using reliable solutions in order to reduce security risks.

Security Mini-Certificate

CIP 11.0101

See list of Department Chairs on the Personnel page.

Career Opportunities

The CIS program prepares you for careers in computer science, computer networking and electronic commerce. The AAS Degree with an emphasis in local area networking prepares you to work as a network technician on small and

large networks. You may also administer smaller networks as a System Administrator. The AGS Degree with an emphasis in Computer Information Systems prepares you to transfer to a university to continue studies in Computer Science or Computer Information Systems.

Program Description

The CIS program provides training in basic technical computer and networking skills. You will study computer networking, programming and database technologies along with classes that teach the technical aspects of the Internet and data communications. Note: Students interested in transferring to a baccalaureate program in Computer Information Systems should refer to the Transfer Degree section.

Total Credits: 15

Certificate Requirements

CNG 1004 - Intro to TCP/IP

Credit(s): 3
Lecture Hour(s): 3
Formerly CNG 104 Covers the basic elements of the Transmission Control Protocol and the Internet Protocol, the basic technologies that implement the Internet and computer networking. In addition to TCP and IP the course covers networking media, link layer, network layer and transport layer protocols. Also included are routing, broadcast, multicast and network address translation. IP version 4 and IP version 6 are both covered.

CNG 1024 - Networking I: Network +

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 124 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 1031 - Principles of Information Assurance

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 131 Delivers a comprehensive overview of network security, including general security concepts. Communication Security is studied, including remote access, email, 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.

or

CNG 1033 - Network Security: Fire Walls and Intrusion Detection and Network Security

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 133 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 1032 - Network Security Fundamentals

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 132 Examines the field of information security to prepare information systems students for their future roles as business decision-makers. The course presents a balance of the managerial and the technical aspects of information security. The concepts covered in this course should be helpful for students working towards the Certified Information Systems Security Professional (CISSP) certification.

CNG 2024 - Microsoft Windows Wireless Network

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Prerequisite(s): CNG 1004 or instructor approval.
Formerly CNG 224 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.

Social Work, AA (with Transfer Articulation Agreement)

CIP 24.0101

See list of Department Chairs on the Personnel page.

Career Opportunities

The Associate of Arts degree with an emphasis in Social Work prepares students to transfer as a junior to a four-year institution in order to earn a bachelor's degree in social work. Social workers are professionals who are specially trained to work with people to provide a variety of services to individuals, families, groups or even communities. Social workers are employed in many different settings including schools, corrections, victims programs, child welfare, nursing homes, foster care agencies, domestic violence shelters and homeless programs.

Program Description

This program introduces students to the field of social work and includes general education requirements as well as specific courses in the area of social work. The courses included in this program are part of an articulation agreement with Colorado State University-Pueblo. Upon transfer to CSU-Pueblo, students who have earned the AA degree with an emphasis in social work will be ready to apply for admission to the social work program.

Program Requirements

Students interested in the field of social work should be aware that social workers must adhere to a strict code of ethics and values that are meant to protect the dignity and worth of clients and the profession. Social work students should be prepared to challenge their own attitudes, values and beliefs in order to be successful in the field.

Total Credits: 60

** Refer to CCCS Guaranteed Transfer (GT) - Pathways Courses for a full list of all GT Pathways Courses*

General Education Requirements (38 Credits)

Communication (9 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

Mathematics (3 Credits)

MAT 1260 - Introduction to Statistics: GT-MA1

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 135 Explores and applies data presentation and summarization, introduction to probability concepts and distributions, statistical inference estimation, hypothesis testing, comparison of populations, correlation and regression. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

Natural and Physical Sciences (8 Credits)

BIO 1005 - Science of Biology with Lab: GT-SC1

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly BIO 105 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 - as is the impact of biological science on society. Includes laboratory experiences. Designed for non-science majors.

- Select one additional GT Pathways Natural and Physical Science course. The course must include a laboratory component (GT-SC1) *

Arts and Humanities (9 Credits)

PHI 1012 - Ethics: GT-AH3

Credit(s): 3
Lecture Hour(s): 3
Formerly PHI 112 Examines human life, experience and thought in order to discover and develop the principles and values for pursuing a more fulfilled existence. Theories designed to justify ethical judgments are applied to a selection of contemporary personal and social issues. This course is one of the statewide Guaranteed Transfer courses, GT-AH3.

- Select two additional GT Pathways courses from either Arts and Expression, Literature and Humanities, Ways of Thinking **or** Foreign Languages (GT-AH1, AH2, AH3, **or** AH4) *

Social and Behavioral Sciences (9 Credits)

HIS 1220 - U.S. History Since the Civil War: GT-HI1

Credit(s): 3
Lecture Hour(s): 3
Formerly HIS 122 Explores events, trends, peoples, groups, cultures, ideas and institutions in United States history, including the multiple perspectives of gender, class and ethnicity, between the period of the American Civil War and the present. Focuses on developing, practicing and strengthening the skills historians use while constructing knowledge in the discipline. This course is one of the statewide Guaranteed Transfer courses, GT-HI1.

POS 1011 - American Government: GT-SS1

Credit(s): 3
Lecture Hour(s): 3
Formerly POS 111 Includes the background of the US Constitution, the philosophy of American government, general principles of the Constitution, federalism and civil liberties. Examines public opinion and citizen participation, political parties, interest groups and the electoral process, and the structure and functions of the national government. This course is one of the statewide Guaranteed Transfer courses, GT-SS1.

PSY 1001 - General Psychology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 101 Focuses on the scientific study of behavior including motivation, emotion, physiological psychology, stress and coping, research methods, consciousness, sensation, perception, learning and memory. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

Electives (28 Credits)

AAA 1009 - Advanced Academic Achievement

Credit(s): 3
Lecture Hour(s): 3
Formerly AAA 109 Examines theories and practices associated with successful learning to enhance college success. Recommended for new and returning students, this course study areas including education and career planning, effective communication, personal management, critical and creative thinking, development of community and awareness of diversity, leadership, and techniques for successful academic performance.

ETH 2024 - Introduction to Chicano Studies

Credit(s): 3
Lecture Hour(s): 3
Formerly ETH 224 Introduces students to skills development in multicultural education. Covers Chicano history, migration and labor, education, law and Chicano culture.

HWE 1062 - Health and Fitness

Credit(s): 3
Lecture Hour(s): 3
Formerly HWE 111 Studies health and fitness in the US today. The course will look at personal health issues, managing stress, nutrition and health lifestyles.

PSY 2440 - Human Growth and Development: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly PSY 235 Examines human development from conception through death, emphasizing physical, cognitive, emotional and psychosocial factors. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

SOC 1001 - Introduction to Sociology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 101 Examines the basic concepts, theories and principles of sociology as well as human culture, social groups, and the social issues of age, gender, class and race. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

SWK 1000 - Introduction to Social Work

Credit(s): 3
Lecture Hour(s): 3
Formerly SWK 100 Introduces students to the philosophy of the social work profession including the knowledge, values, ethics, roles and skills inherent to generalist social work.

SWK 2010 - Human Behavior in the Social Environment I

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of PSY 1001 and SOC 1001 .
Prerequisite(s)/Corequisite(s): SWK 1000.
Formerly SWK 201 Focuses on the person in environment throughout the lifespan with an examination of the relationship between biological, psychological, social, spiritual and cultural systems.

SWK 2020 - Human Behavior in the Social Environment II

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Successful completion of SWK 2010
Formerly SWK 202 Focus in this course is on an understanding and analysis of larger social systems which include the family, groups, communities and organizations. Emphasis on social systems as an organizing theoretical framework for understanding social functioning and change.

SWK 2050 - Social Welfare in the United States

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): SWK 1000 (concurrency allowed)
Prerequisite(s)/Corequisite(s): SWK 1000.
Formerly SWK 205 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.

WST 2000 - Introduction to Women's Studies: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly WST 200 Examines the nature and function of women in society from an interdisciplinary perspective, focusing on the similarity and diversity of women`s experience over time and across cultures. The course will examine topics such as sex role, socialization, political and philosophical perspectives on women`s issues, and women`s accomplishments in history, art, literature, science, health issues and the family. Students will gain an awareness of the limitations of traditional scholarship on women and gain a means of practical application of the new scholarship on women`s roles and nature. This course is one of the statewide Guaranteed Transfer Courses, GT-SS3.

Sociology, AA (with Designation)

CIP 24.0101

See list of Department Chairs on the Personnel page.

Career Opportunities

The Associate of Arts Degree with Designation in Sociology prepares students to transfer as a junior to a four-year institution in Colorado in order to pursue a Bachelor of Arts degree (BA) in sociology. Students who opt for a bachelor's degree in sociology may choose to work in the criminal justice system, business and industry, research and

planning, agencies, government, education or advocacy. Once a BA is completed, students may pursue a higher or graduate degree in sociology if interested.

Program Description

The Associate of Arts Degree with Designation in Sociology includes the course work to meet general education requirements that are common to all Colorado four-year institutions. The degree is designed for students who want to transfer to a four-year college or university to pursue a bachelor's degree in sociology. Completion of the AA degree completes the first two years of a bachelor's degree and guarantees transfer at junior standing with no more than 60 remaining credits to meet the graduation requirements for a bachelor's degree in sociology.

Program Requirements

In addition to the requirements listed below, you must:

a. Earn a minimum of 60 semester hours of course work
b. Earn a minimum of 15 graded semester hours at PCC
c. Earn a minimum of "C" in all coursework for the degree

Consult with a PCC Arts and Sciences advisor or transfer advisor to find out which Colorado Statewide Guaranteed Transfer Courses (GT Pathways) or elective courses meet the degree requirements of the four-year college to which you plan to transfer.

To earn an AA Degree with Designation in Sociology, you must complete at least 60 college-level credits, as described below:

Total Credits: 60

** Refer to CCCS Guaranteed Transfer (GT) - Pathways Courses for a full list of all GT Pathway Courses*

General Education Core Requirements (35-36 Credits)

Written Communication (6 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

or

- ENG 1022 - English Composition II: GT-CP2 **Credit(s): 3 and** a GT C03 course

Mathematics (3-4 Credits)

- One GT Pathways course (GT-MA1), prefer MAT 1260 - Introduction to Statistics: GT-MA1: except:

Adams State University

- Adams State University prefers MAT 1340 - College Algebra: GT-MA1:

Colorado Mesa University

- Colorado Mesa University requires either MAT 1240 - Mathematics for the Liberal Arts: GT-MA1 **or** MAT 1340 - College Algebra: GT-MA1;

University of Colorado Denver

- University of Colorado Denver requires MAT 1340 - College Algebra: GT-MA1 **or** MAT 1320 - Finite Mathematics: GT-MA1 **or** MAT 1260 - Introduction to Statistics: GT-MA1;

Western State Colorado University

- Western State Colorado University requires MAT 1240 - Mathematics for the Liberal Arts: GT-MA1 **or** MAT 1340 - College Algebra: GT-MA1

Natural and Physical Sciences (8 Credits)

- Select two GT Pathways Natural and Physical Sciences courses: GT-SC1 *

Arts and Humanities (9 Credits)

- Any three approved GT Pathways Arts & Humanities courses (GT-AH1, GT-AH2, GT-AH3, GT-AH4 *

Social and Behavioral Sciences (6 Credits)

- Select two GT Pathways Social and Behavioral Sciences courses (GT-SS1, GT-SS2, GT-SS3 *

History (3 Credits)

- Select one GT Pathways History course: GT-HI1 *

Additional Required Sociology Courses (18 Credits)

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

or

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

SOC 1001 - Introduction to Sociology I: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 101 Examines the basic concepts, theories and principles of sociology as well as human culture, social groups, and the social issues of age, gender, class and race. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

SOC 1002 - Introduction to Sociology II: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly SOC 102 Examines social institutions and organizations from the macro perspective. Emphasizes issues of social change, demography, social movements, and conflicts and trends within education, religion, family, political and economic structures. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

- Choose three additional GT Pathways SOC courses (GT-SS3) **Credit(s): 9** *

Electives (6-7 Credits)

Determined by transferring institution

Transfer Degrees

This degree transfers to the following Colorado public four-year institutions of higher education:

- Adams State University (B.A. Sociology; Criminology or Social Welfare emphasis)
- Colorado Mesa University (B.A. Sociology; Sociology concentration)
- Colorado State University-Fort Collins (B.A. Sociology; General Sociology concentration)
- Colorado State University-Pueblo (BA Sociology; B.S. Sociology)
- Fort Lewis College (B.A. Sociology; Human Services-General option)
- Metropolitan State University of Denver (B.A. Sociology)
- University of Colorado, Boulder (B.A. Sociology)

- University of Colorado, Colorado Springs (B.A. Sociology)
- University of Colorado, Denver (B.A. Sociology)
- University of Northern Colorado (B.A. Sociology; all emphasis)
- Western State Colorado University (B.A. Sociology)

Software Development and Security AAS

CIP 11.0101

See list of Department Chairs on the Personnel page.

Program Description

The Computer Information Systems program provides skills to ensure secure programming. You will learn about essential principles of programming, security maintenance, and troubleshooting. If you plan to transfer for a bachelor's degree, refer to the Transfer Degree or speak with an advisor.

Career Options

The CIS Software Development and Security degree provides training to become a computer programmer.

Total Credits: 60

Semester One , Fall (13 credits)

CIS 1015 - Introduction to Computer Information Systems

Credit(s): 3
Lecture Hour(s): 3
Formerly CIS 115 Focuses on an overview of the needs for and roles of computer information systems. Emphasizes computer requirements in organizations, history, hardware functions, programming, systems development and computer operations. Introduces computer applications.

CIS 1018 - Intro to PC Applications

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 118 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 2020 - Fundamentals of Unix

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50

Formerly CIS 220 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

Credit(s): 3
Lecture Hour(s): 1
Vocational Lab Hour(s): 3
Formerly CIS 223 Introduces students to the concepts of installing, configuring, and managing the Linux operating system. Topics covered include working with various desktops, use of filesystem commands, and management of user and group permissions.

MAT 1340 - College Algebra: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 0300.
Formerly MAT 121 Explores topics including intermediate algebra, equations, and inequalities, functions and their graphs, exponential and logarithmic functions, linear and nonlinear systems, selection of topics from among graphing of the conic sections, introduction to sequences and series permutations and combinations, the binomial theorem and theory of equations. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

Semester Two, Spring (15 credits)

CIS 2040 - Database Design and Development

Credit(s): 3
Lecture Hour(s): 3
Formerly CIS 240 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.

CNG 1042 - Introduction to Cloud Computing Concepts

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Formerly CNG 142 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.

CSC 1020 - Problem Solving with Java

Credit(s): 3
Lecture Hour(s): 3
Formerly CSC 120 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 1019 - Introduction to Programming

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CSC 119 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.

CWB 2005 - Client-Side Scripting: (Software)

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Formerly CWB 205 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.

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1031 - Technical Writing I

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 131, then ENG 1020 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.

Semester Three, Fall (16 credits)

CIS 2043 - Introduction to Structured Query Language (SQL)

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Prerequisite(s): CIS 2040, Database Design and Development
Formerly CIS 243 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.

CNG 1032 - Network Security Fundamentals

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 132 Examines the field of information security to prepare information systems students for their future roles as business decision-makers. The course presents a balance of the managerial and the technical aspects of

information security. The concepts covered in this course should be helpful for students working towards the Certified Information Systems Security Professional (CISSP) certification.

CSC 1060 - Computer Science I: (Language)

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Prerequisite(s): CSC 1020.
Formerly CSC 160 Introduces students to the discipline of computer science. Covers algorithm development, data representation, logical expressions, sub-programs and input/output operations using a structured programming language. Requires intensive lab work outside of class time.

CSC 2017 - Advanced Python Programming

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Prerequisite(s): CSC 1020
Formerly CSC 217 Continues program development and problem solving not covered in CSC119: Introduction to Programming. Students will create larger programs in the areas of advanced expression, iterator objects, parsing, and GUI applications.

CWB 2006 - Server-Side Scripting: (Software)

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Prerequisite(s): MGD 1041
Formerly CWB 206 Explores the creation of dynamic web pages and applications using server-side scripting with database interactivity, server-based scripting languages, and database manipulation languages.

Semester Four, Spring (16 credits)

CIS 2087 - Cooperative Education

Credit(s): 1-12
Internship Hour(s): 3-36
Formerly CIS 287 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 works with the student to select an appropriate work site, establish learning objectives and to coordinate learning activities with the employer work site supervisor.

CSC 1061 - Computer Science II: (Language)

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Prerequisite(s): CSC 1060 or instructor approval.
Formerly CSC 161 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 1029 - Introduction to Secure Coding

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Prerequisite(s): CSC 1060 , Computer Science I
Formerly CSC 129 Focuses on introduction to secure coding. Emphasizes concepts, principles, and 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 2025 - Computer Architecture/Assembly Language Programming

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.5
Prerequisite(s): CIS 2023, Linux, and CSC 1060, Computer Science I
Formerly CSC 225 Introduces concepts of computer architecture, functional logic, design and computer arithmetic. Focuses on the mechanics of information transfer and control within a computer system. Includes symbolic programming techniques, implementing high level control structures, addressing modes and their relation to arrays, subprograms, parameters, linkage to high level languages and the assembly process.

CSC 2067 - Object-Oriented Analysis and Design

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): CSC 1060, Computer Science I
Formerly CSC 267 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.

Software Development Certificate

See list of Department Chairs on the Personnel page.

Career Opportunities

The CIS program prepares you for careers in computers cience, computer networking, and electronic commerce. The AAS Degree with an emphasis in local area networking prepares you to work as a network technician on small and large networks. You may also administer smaller networks as a System Administrator. The AGS Degree with an emphasis in Computer Information Systems prepares you to transfer to a university to continue studies in Computer Science or Computer Information Systems.

Program Description

The CIS program provides training in basic technical computer and networking skills. You will study computer networking, programming and database technologies along with classes that teach the technical aspects of the Internet and data communications. Note: Students interested in transferring to a baccalaureate program in Computer Information Systems should refer to the Transfer Degree Section.

Total Credits: 30

Certificate Requirements

CSC 1020 - Problem Solving with Java

Credit(s): 3
Lecture Hour(s): 3
Formerly CSC 120 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 1019 - Introduction to Programming

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CSC 119 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 1060 - Computer Science I: (Language)

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Prerequisite(s): CSC 1020.
Formerly CSC 160 Introduces students to the discipline of computer science. Covers algorithm development, data representation, logical expressions, sub-programs and input/output operations using a structured programming language. Requires intensive lab work outside of class time.

CSC 1061 - Computer Science II: (Language)

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Prerequisite(s): CSC 1060 or instructor approval.
Formerly CSC 161 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 1029 - Introduction to Secure Coding

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Prerequisite(s): CSC 1060 , Computer Science I
Formerly CSC 129 Focuses on introduction to secure coding. Emphasizes concepts, principles, and 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 2017 - Advanced Python Programming

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Prerequisite(s): CSC 1020
Formerly CSC 217 Continues program development and problem solving not covered in CSC119: Introduction to Programming. Students will create larger programs in the areas of advanced expression, iterator objects, parsing, and GUI applications.

CSC 2025 - Computer Architecture/Assembly Language Programming

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.5
Prerequisite(s): CIS 2023, Linux, and CSC 1060, Computer Science I
Formerly CSC 225 Introduces concepts of computer architecture, functional logic, design and computer arithmetic. Focuses on the mechanics of information transfer and control within a computer system. Includes symbolic programming techniques, implementing high level control structures, addressing modes and their relation to arrays, subprograms, parameters, linkage to high level languages and the assembly process.

CIS 2040 - Database Design and Development

Credit(s): 3
Lecture Hour(s): 3
Formerly CIS 240 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)

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Prerequisite(s): CIS 2040, Database Design and Development
Formerly CIS 243 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.

CWB 2005 - Client-Side Scripting: (Software)

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Formerly CWB 205 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.

SQL Coding Certificate

See list of Department Chairs on the Personnel page.

The Structured Query Language (SQL) is the programming language that is used with most database applications. Knowledge of SQL gives the student opportunities in both database and programming jobs. Most modern businesses manage their data using a database and databases are found inalmost every industry. This two course certificate introduces the student to the basics of both SQL and database design.

Total Credits: 6

Courses

CIS 2043 - Introduction to Structured Query Language (SQL)

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Prerequisite(s): CIS 2040, Database Design and Development
Formerly CIS 243 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 2040 - Database Design and Development

Credit(s): 3
Lecture Hour(s): 3
Formerly CIS 240 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.

Steering and Suspension/Brakes Mini-Certificate

CIP 47.0604

See list of Department Chairs on the Personnel page.

To enter the automotive collision or automotive service program, you must successfully complete any CCR course or qualifying placement score or exemption.

Entrance into the program involves a screening and selection process. You can obtain an application and information by calling the Automotive Department at 719.549.3354.

Career Opportunities

The Automotive Service Technology program prepares you for a range of careers in automotive maintenance and repair.

Program Description

This program teaches you to perform general maintenance, as well as to diagnose and repair electrical, engine, transmission, suspension, brake and air conditioning systems. The program has met the National Institute for Automotive Technicians Education Foundation (NATEF) accreditation in the areas of Automatic Transmissions & Transaxles, Brakes, Electrical/Electronic Systems, Engine Performance, Engine Repair, Heating & Air Conditioning and Suspension & Steering. We also offer Automotive Services courses for students in the Concurrent Enrollment Program at Pueblo Community College, Cañon City High School, and PCC Southwest Campus in Mancos. We encourage you to take the Automotive Service Excellence (ASE) certification tests while enrolled at PCC. We offer a paid apprenticeship for high school students through the Automotive Youth Education System (AYES).

As a student in the program, you will become a member of the Skills USA club and participate in a number of leadership activities and competitions.

Program Requirements

Entrance Requirements:
Admissions to the Automotive Service Technology program is by application only. For admission requirements, please go to MT-129 and see the department chair.

Total Credits: 13

Certificate Requirements

ASE 1010 - Brakes I

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 110 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

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Prerequisite(s): ASE 1010.
Formerly ASE 111 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 1040 - Suspension and Steering I

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 140 Focuses on diagnosis and service of suspension and steering systems and components. This course meets MLR/AST/MAST requirements.

ASE 1041 - Suspension and Steering II

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 141 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 2010 - Automotive Power and ABS Brake Systems

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.5
Formerly ASE 210 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 2040 - Suspension and Steering III

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Formerly ASE 240 Covers operation of steering and power steering systems. It will also include different alignment types and procedures.

ASE 2182 - Internship: General (Summer)

Credit(s): 1
Internship Hour(s): 3
Formerly ASE 282 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 (FAST) Fundamental Automotive Systems Training (Chrysler) or others as required by the program track.

Structural Welder Certificate

CIP 48.0508

See list of Department Chairs on the Personnel page.

Program Description

Welders must be highly skilled and knowledgeable in a variety of welding processes to meet the challenges of advanced technology and new materials. Welding is not just a trade; it's a tool for many trades requiring a high level of training and technical knowledge. The Welding Technology program helps students develop skills through classroom studies and hands-on experience under close supervised instruction. Students learn about structural steel fabrication, layout work and pipe welding following detailed blueprints.

Total Credits: 21

Certificate Requirements

Core Requirements (21 Credits)

WEL 1000 - Safety for Welders

Credit(s): 1
Lecture Hour(s): 1
Formerly WEL 100 Covers the hazards of welding on health and safety.

WEL 1001 - Allied Cutting Processes

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Formerly WEL 101 Covers setting up equipment and performing cutting and gouging operations utilizing the oxyacetylene, air carbon arc, exothermic, and plasma arc cutting processes. This course will also provide an introduction to blueprint reading.

WEL 1002 - Oxy-fuel Joining Processes

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.5
Formerly WEL 102 Covers Oxy-fuel joining operations.

WEL 1003 - Basic Shielded Metal Arc I

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1002.
Formerly WEL 103 Covers Shielded Metal Arc Welding (SMAW) operation utilizing E-XX10 electrodes.

WEL 1004 - Basic Shielded Metal Arc II

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1003.
Formerly WEL 104 Covers Shielded Metal Arc Welding (SMAW) operation utilizing E-XX18 electrodes.

WEL 1006 - Blueprint Reading for Welders and Fitters

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Prerequisite(s): WEL 1001 or WEL 1002
Formerly WEL 106 Covers interpretation and creation of weld symbols and blueprints used in metal fabrication.

Studio Art, AA (with Designation)

CIP 24.0101

See list of Department Chairs on the Personnel page.

Career Opportunities

The Associate of Arts (AA) Degree with Designation in Art History prepares the student to transfer as a junior to a four-year institution in Colorado in order to pursue a Bachelor of Arts (BA) or Bachelor of Fine Arts (BFA) degree in Art or Studio Art. Students who opt for the Bachelor of Arts in Studio Art can choose to work in several occupational fields, including museums, galleries, commercial art, education, media, photography and academia. Once a BA or BFA is completed, students may pursue a higher or graduate degree in Art, if interested.

Program Description

This program introduces the student to the field of Studio Art and includes the course work to meet general education requirements that are common to all Colorado four-year institutions, as well a specific courses in various subfields of Studio Art. Upon transfer, students from Pueblo Community College who have earned the Associate of Arts (AA) Degree with Designation in Studio Art will be ready to complete the last half of a BA or BFA in Studio Art at a four-year institution.

Program Requirements

Refer to the course requirements listed below. Some courses may have prerequisites of lower level classes or assessment scores. Refer to the course descriptions for these prerequisites.

Total Credits: 60

** Refer to CCCS Guaranteed Transfer (GT) - Pathways Courses for a full list of all GT Pathway Courses*

General Education Core Requirements (31 Credits)

Written Communication (6 Credits)

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

ENG 1022 - English Composition II: GT-CP2

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021.
Formerly ENG 122 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 persuasive papers that incorporate research.

or

- ENG 1022 - English Composition II: GT-CP2 **Credit(s): 3 and** a GT Pathways Advanced Writing Course (GT-CO3) *

Mathematics (3 Credits)

- Select one GT Pathways Mathematics course (GT- MA1) *, prefer MAT 1240 - Mathematics for the Liberal Arts: GT-MA1

Natural and Physical Sciences (7 Credits)

- Select two GT Pathways Natural and Physical Sciences courses (GT-SC1, GT-SC2) *. At least one of these courses must include a laboratory component (GT-SC1) *

Arts and Humanities (6 Credits)

Note: Courses from the Arts and Expression category (GT-AH1) may not be used to meet this requirement

- Select two GT Pathways Arts and Humanities courses from any category (GT-AH2, GT-AH3, GT-AH4) *

Social and Behavioral Sciences (6 Credits)

- Select two GT Pathways Social and Behavioral courses from any category (GT-SS1, GT-SS2, GT-SS3) *

History (3 Credits)

- Select one GT Pathways History Course (GT-HI1) *

Additional Required Studio Art Courses (21 Credits)

ART 1111 - Art History Ancient to Medieval: GT-AH1

Credit(s): 3
Lecture Hour(s): 3

Formerly ART 111 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

ART 1112 - Art History Renaissance to Modern: GT-AH1

Credit(s): 3
Lecture Hour(s): 3
Formerly ART 112 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. This is a statewide Guaranteed Transfer course in the GT-AH1 category. GT-AH1

ART 1201 - Drawing I

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 121 Investigates the various approaches and media that students need to develop drawing skills and visual perception.

ART 1002 - Visual Concepts 2-D Design

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 131 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

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 132 Introduces the fundamentals of three-dimensional design, form, and space. The course applies the elements and principles of design to three-dimensional problems.

ART 1202 - Drawing II

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 221 Explores expressive drawing techniques with an emphasis on formal composition, black and white, and color media and content or thematic development.

or

ART 1203 - Figure Drawing I

Credit(s): 3
Art Studio Hour(s): 6
Formerly ART 128 Introduces the basic techniques of drawing the human figure.

- Select one additional 3-credit Studio Art course **Credit(s): 3**

Electives (8 Credits)

Determined by transferring institution;

Note: Students planning to transfer to Colorado State University-Fort Collins will be required to complete two semesters of one foreign language for their electives, or be able to pass the CSU-FC foreign language placement exam for completion of the BA in Studio Art.

Transfer Degrees

This degree transfers to the following Colorado Public Four-Year institutions of higher education:

- Adams State University (B.A. Liberal Arts, Studio Art emphasis)
- Colorado Mesa University (B.F.A. Art, Studio Art concentration)
- Colorado State University-Ft. Collins (B.A. Art, Studio concentration)
- Colorado State University-Pueblo (B.A. Art)
- Fort Lewis College (B.A. Art, Art option)
- Metropolitan State University of Denver (B.A. Art)
- University of Colorado, Boulder (B.A. Studio Arts)
- University of Colorado, Colorado Springs (B.A. Visual and Performing Arts, Visual Art option)
- University of Colorado, Denver (B.A. Fine Arts, Studio Art emphasis)
- University of Northern Colorado (B.A. Art and Design, Art emphasis)
- Western State Colorado University (B.A. Art, Studio Art emphasis)

Surgical Technology, AAS

CIP 51.0909

See list of Department Chairs on the Personnel page.

Program Description

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).

The Surgical Technology program teaches students classroom and hands-on learning in surgical techniques, patient prep, and Operating Room (O.R.) prep. Students will learn how to create and maintain a sterile field. They will also learn how to scrub, gown, glove, drape, and case management. Students will be taught hemostasis, how to use sutures, needles, stapling devices, and how to handle specimens. In addition, students will learn pharmacology and anesthesia, wound care, and use the principles of infection control. How to handle sharps, pass instruments and supplies during procedures will also be taught. Training will include how to perform surgical counts, room turnover and terminal cleaning processes. You will also learn to properly process instruments. Finally, students will engage in extensive clinical work to gain experience working with surgeons and staff in a real O.R.

The Surgical Technology (STE) program has a selective admissions process. The program application and requirements are available in the Medical & Behavioral Health office or at Pueblo Community College STE from January 1 to May 15 All Medical & Behavioral Health programs have essential functions to help you be successful in the program and career.

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.

Career Information

A Surgical Technologist is a vital member of the operating room team and requires extensive commitment and special qualities for those who practice in this profession. A PCC Surgical Technology student will become prepared to immediately assume the wide range of entry-level responsibilities encompassed by the profession of Surgical Technology. Students will gain quality classroom and hands-on training for working in the field of Surgical Technology.

Total Credits: 63.5

First Semester (13 credits)

BIO 1006 - Basic Anatomy and Physiology

Credit(s): 4
Lecture Hour(s): 3
Academic Lab Hour(s): 2
Formerly BIO 106 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, Paramedic Program, and the Medical Office Technology Program.

COM 1105 - Career Communication

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 105 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.

This course is restricted. For exemptions or required basic skills assessment information, please see the Basic Skills Assessment page.

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

BIO 1016 - Introduction to Human Disease: GT-SC2

Credit(s): 3
Lecture Hour(s): 3
Formerly BIO 116 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.

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

First Fall (12.5 credits)

STE 1002 - Intro to Surgical Technology

Credit(s): 6
Lecture Hour(s): 6
Prerequisite(s): Program Admittance
Formerly STE 102 Introduces the principles and practices of surgical technology including standards of conduct, professional practice, communication, physical, psychological, social and spiritual needs of the surgical patient, death and dying, special populations, physical environment, safety standards, all-hazards preparedness, biomedical science, asepsis and sterile technique, hemostasis, emergency situations, surgical pharmacology and anesthesia, wound healing, sutures, needles, stapling devices and surgical instrumentation, equipment, and supplies. Perioperative technical skills of the surgical technologist will be demonstrated.

STE 1003 - Introduction to Surgical Technology Lab

Credit(s): 4
Vocational Lab Hour(s): 8
Prerequisite(s): Program Admittance
Formerly STE 103 Introduces hands-on skills in a mock operating room environment for the preoperative phase of surgical technology that includes scrubbing, gowning and gloving, assisting team members, creating and organizing a sterile field, setting up instrumentation on the mayo stand, surgical case management, operative routines, patient transport, patient positioning, prepping, and draping, as well as learning procedures for counting instruments, sponges, needles, sharps, and other items on the sterile field.

STE 1033 - Surgical Instruments Lab I

Credit(s): 1.5
Vocational Lab Hour(s): 3
Prerequisite(s): Program admittance.
Formerly STE 133 Introduces the history and materials used in the manufacture of surgical instruments, as well as the methods used to maintain, clean, and sterilize surgical instrumentation and equipment. Students will learn supplies, equipment, and the names, category, and use of instrumentation used in general, obstetric and gynecologic, otorhinolaryngology, oral, maxillofacial, plastic, reconstructive and ophthalmic surgical specialties. This course is the first of two courses.

COM 2063 - Conflict Resolution

Credit(s): 1
Lecture Hour(s): 1
Formerly COM 263 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.

First Spring (14 credits)

STE 1011 - Surgical Procedures and Case Management

Credit(s): 6
Lecture Hour(s): 6
Prerequisite(s): STE 1002
Formerly STE 111 Identifies the anatomy, physiology, pathology, and terminology, as well as specific variations in the preoperative, intraoperative, and postoperative care related to general, obstetric, gynecologic, ophthalmic, otorhinolaryngologic, oral, maxillary, plastic and reconstructive, genitourinary, orthopedic, cardiothoracic, peripheral vascular, and neuro surgery. Focus will also be placed on diagnostic procedures and tests, operating room set-up according to the surgical procedure, patient positioning, prepping, and draping, instrumentation, equipment, supplies and drugs, procedural steps, purpose and expected outcomes and possible complications.

STE 1051 - Surgical Procedures & Case Management Lab

Credit(s): 4.5
Vocational Lab Hour(s): 9
Prerequisite(s): STE 1002, STE 1003, STE 1033
Formerly STE 151 Introduces surgical case management and the skills required for the surgical technologist to perform in the first and second scrub role in a simulated surgical environment, as it relates to general, obstetric, gynecologic, ophthalmic, otorhinolaryngologic, oral, maxillofacial, plastic, genitourinary, orthopedic, cardiothoracic, peripheral vascular, and neurologic surgical specialties.

STE 1034 - Surgical Instruments Lab II

Credit(s): 1.5
Vocational Lab Hour(s): 3
Prerequisite(s): STE 1002, STE 1003
Formerly STE 134 Introduces the history and materials used in the manufacture of surgical instruments, as well as the methods used to maintain, clean, and sterilize surgical instrumentation and equipment. Introduces supplies, equipment, and the names, category, and use of instrumentation used for genitourinary, orthopedic, cardiothoracic, peripheral vascular, and neurologic surgical specialties.

STE 1005 - Pharmacology for the Surgical Technologist

Credit(s): 2
Vocational Lab Hour(s): 4
Prerequisite(s): Program admittance
Formerly STE 105 Discuss relevant knowledge as it pertains to surgical pharmacology including the metric system, pharmacology theory, drugs and aspects of anesthesia.

Summer (6 credits)

STE 2081 - Surgical Technology Clinical Internship I

Credit(s): 6
Internship Hour(s): 18
Prerequisite(s): STE 111, STE 112, STE 131, STE 141.
Formerly STE 281 Provides clinical hands-on experience for student to perform surgical technology duties in the first-scrub, second-scrub, and observation role during any given surgical procedure with proficiency and increased complexity while progressing towards entry-level graduate achievement. Clinical experience will be documented by procedure, date and student role while verifying case counts throughout the surgical rotation as defined by accreditation standards through a total of 120 cases. This is the first of three surgical technology clinical Internships.

Second Fall (10 credits)

STE 2082 - Surgical Technology Clinical Internship II

Credit(s): 6
Internship Hour(s): 18
Prerequisite(s): STE 2081.
Formerly STE 282 Provides clinical hands-on experience for student to perform surgical technology duties in the first-scrub, second-scrub, and observation role during any given surgical procedure with proficiency and increased complexity while progressing towards entry-level graduate achievement. Clinical experience will be documented by procedure, date and student role while verifying case counts throughout the surgical rotation as defined by accreditation standards through a total of 120 cases. This is the second of three surgical technology clinical Internships.

STE 2069 - CST Exam Review Course

Credit(s): 1
Lecture Hour(s): 1
Prerequisite(s): STE 2081.
Formerly STE 279, then STE 2079 Prepares students for the National Certification Exam administered by The National Board for Surgical Technology and Surgical Assisting (NBSTSA) by introducing test taking skills and strategies for success. Students will review major concepts in the surgical technology program in preparation for the CST examination.

HPR 1039 - Medical Terminology

Credit(s): 2
Lecture Hour(s): 2
Formerly HPR 139 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.

COM 2069 - Leadership

Credit(s): 1
Lecture Hour(s): 1
Formerly COM 269 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.

Second Spring (8 credits)

STE 2083 - Surgical Technology Clinical Internship III

Credit(s): 6
Internship Hour(s): 18
Prerequisite(s): STE 2082.
Formerly STE 283 Provides clinical hands-on experience for student to perform surgical technology duties in the first-scrub, second-scrub, and observation role during any given surgical procedure with proficiency and increased complexity while progressing towards entry-level graduate achievement. Clinical experience will be documented by procedure, date and student role while verifying case counts throughout the surgical rotation as defined by accreditation standards through a total of 120 cases. This is the third of three surgical technology clinical Internships.

STE 2089 - Surgical Technology Capstone

Credit(s): 2
Lecture Hour(s): 2
Prerequisite(s): STE 2082, STE 2069
Formerly STE 289 Outlines the skills needed in obtaining and keeping a job. Students will learn how to develop a personal marketing plan, set short and long term goals, manage targeted job searches, fill out paper and electronic applications, write a cover letter and resume, and practice mock interviews especially tailored to surgical technology. Students will also continue reviewing major concepts in the surgical technology program in preparation for the CST examination and take a final practice exam.

Vehicle Extrication Mini-Certificate

CIP 43.0203

See list of Department Chairs on the Personnel page.

Career Opportunities

The Fire Science Technology program prepares students for entry-level positions in the fire service industry.

Certificate Program Description

The Fire Science Technology Certificate Programs vary in semester hours. These programs are designed to prepare individuals who have little or no firefighting experience for entry-level positions in the fire service industry, as well as special training for advancement for those already in the fire service. Most of the classes in the certificates related to structural firefighting can be applied to the Fire Science Associate of Applied Science Degree offered by Pueblo Community College.

Program Requirements

Entrance Requirements:

Successful completion of any CCR course or qualifying placement score or exemption.

Graduation Requirements:

The Fire Science Technology Certificate Program requires 21 credits for completion.

A grade of "C" or higher is required in each course.

Total Credits: 3

Certificate Requirements

ALSO SEE WILDLAND FIREFIGHTER

FST 1026 - Vehicle Extrication Awareness Level

Credit(s): 1
Vocational Lab Hour(s): 1.50
Formerly FST 126 Provides the student with entry level knowledge and skills to safely operate at the scene of a vehicle/machinery extrication. Training in this course represents the minimum level of training needed to respond to a vehicle extrication incident.

FST 1027 - Vehicle Extrication Operations Level

Credit(s): 2
Lecture Hour(s): 0.50
Vocational Lab Hour(s): 2.25
Formerly FST 127 Expands and refines the objectives of FST 1026. Students shall be capable of hazard recognition, equipment use and techniques necessary to operate safely and effectively at incidents involving persons injured or entrapped in a vehicle or machinery.

Web Design and Development, AAS

CIP 09.0702

See list of Department Chairs on the Personnel page.

Career Opportunities

Careers in Media Communications are in demand and PCC offers an affordable way for students to begin their education. Some of the exciting career options within this field include: Graphic Designers; Web Developers; Broadcast Technicians; Film Video Editors; and Advertising & Promotion Managers.

Program Description

The Media Communications program teaches students to think critically and develop skills in Web Design, Graphic Design, Advertising, Videography, News Writing, and TV-Radio Production. Courses provide a solid foundation in these areas through a combination of lecture and hands on applications. There are multiple labs with state of the art

equipment and software for your area of emphasis. The Media Communications program provides a high technical skill attainment in this changing field of communication. Students have multiple options to pursue. The AAS degrees with emphases in Graphic Design and Web Design offer advanced technical skills in these areas. Certificates provide basic skill sets to enhance an existing degree or occupation. The AGS degree provides a transfer option to a four year university. If interested in this option, please refer to the Transferring Credits section of the catalog.

Total Credits: 60

Degree Requirements

General Education Requirements (15 Credits)

Communications

ENG 1021 - English Composition I: GT-CO1

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 121 Emphasizes the planning, writing and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative and persuasive/argumentative writing.

COM 1150 - Public Speaking

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): Placement at the ENG 1021 level or consent of the instructor.
Formerly COM 115 Combines the basic theories of communication with public speech performance skills. Emphasis is on speech preparation, organization, support, audience analysis, and delivery.

OR

COM 1250 - Interpersonal Communication: GT-SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly COM 125 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. GT-SS3

Mathematics

MAT 1260 - Introduction to Statistics: GT-MA1

Credit(s): 3
Lecture Hour(s): 3
Formerly MAT 135 Explores and applies data presentation and summarization, introduction to probability concepts and distributions, statistical inference estimation, hypothesis testing, comparison of populations, correlation and regression. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

OR

MAT 1340 - College Algebra: GT-MA1

Credit(s): 4
Lecture Hour(s): 4
Prerequisite(s): MAT 0300.
Formerly MAT 121 Explores topics including intermediate algebra, equations, and inequalities, functions and their graphs, exponential and logarithmic functions, linear and nonlinear systems, selection of topics from among graphing of the conic sections, introduction to sequences and series permutations and combinations, the binomial theorem and theory of equations. This course is one of the statewide Guaranteed Transfer courses, GT-MA1.

Gen Ed Elective

CIS 1018 - Intro to PC Applications

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CIS 118 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.

Social Behavioral Sciences

JOU 1005 - Introduction to Mass Media: GT SS3

Credit(s): 3
Lecture Hour(s): 3
Formerly JOU 105 Places the mass media in a historical and cultural perspective, considering the validity, integrity and influence of the media in a democracy. This course is one of the statewide Guaranteed Transfer courses, GT-SS3.

Digital Media Requirements

MGD 2080 - Internship

Credit(s): 3
Internship Hour(s): 9
Prerequisite(s): Department Chair Approval.
Formerly MGD 280 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 1015 - Typography & Layout

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly MGD 105 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 1043 - Motion Graphic Design I: (Software)

Credit(s): 3
Vocational Lab Hour(s): 4.5
Formerly MGD 143 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.

CNG 1024 - Networking I: Network +

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.50
Formerly CNG 124 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.

CWB 2009 - Web Content Management Systems

Credit(s): 3
Vocational Lab Hour(s): 4.50
Prerequisite(s): MGD 1041
Formerly CWB 209 Explores the use of open source Content Management Systems (CMS) to simplify the creation and maintenance of web sites.

MGD 1002 - Introduction to Multimedia

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly MGD 102 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 1011 - Adobe Photoshop I

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly MGD 111 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 1041 - Web Design I

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly MGD 141 Introduces website planning, design and creation using industry standards-based website

development tools. Screen-based color theory, web aesthetics, use of graphics editors and intuitive interface design are explored.

MGD 2041 - Web Design II

Credit(s): 3
Vocational Lab Hour(s): 4.50
Prerequisite(s): MGD 1041, or department chair approval.
Formerly MGD 241 Expands on previously learned fundamentals of HTML introducing cascading style sheets, DHTML, Java Scripts and CGI forms. Color usage and interface design principles are emphasized in this course. In this course we'll examine websites that employ more complex structures, optimal site architecture and navigation necessary for larger and more complex sites.

MGD 2068 - Business for Creatives

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): ENG 1021 or ENG 1031
Formerly MGD 268 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 2089 - Capstone

Credit(s): 3
Internship Hour(s): 9
Prerequisite(s): Department Chair Approval.
Formerly MGD 289 A demonstrated culmination of learning within a given program of study.

MGD 2042 - Web Architecture: Open Source Design

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly MGD 242 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. Topics may include current content management platforms such as WordPress and Drupal, how to identifying web scripting languages, and an overview of open source programming such as PHP and MySQL.

CWB 2006 - Server-Side Scripting: (Software)

Credit(s): 3
Lecture Hour(s): 2
Vocational Lab Hour(s): 1.5
Prerequisite(s): MGD 1041
Formerly CWB 206 Explores the creation of dynamic web pages and applications using server-side scripting with database interactivity, server-based scripting languages, and database manipulation languages.

MGD 1064 - Digital Video Editing I

Credit(s): 3
Vocational Lab Hour(s): 4.5
Formerly MGD 164 Introduces to digital nonlinear 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.

CWB 2008 - Web Application Development: (Development Tool(s))

Credit(s): 3
Vocational Lab Hour(s): 4.5
Formerly CWB 208 Teaches students how to work in the server-side scripting environment. Students learn the basics of application development, and general principles that apply to most development environments. Students develop applications using two different server-side application development tools: PHP Hypertext Preprocessor (PHP), and Cold Fusion. Students also learn key application standards such as source and revision control, coding stndards, code optimization and data integrity.

CSC 1020 - Problem Solving with Java

Credit(s): 3
Lecture Hour(s): 3
Formerly CSC 120 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.

MGD 2027 - Marcomm Practices

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): JOU 1005, or Department Chair Approval
Formerly MGD 227 Explores techniques and approaches in the practice of marketing communications (marcomm), including advertising, branding, direct marketing, packaging, promotion, publicity, sponsorship, public relations, sales, online marketing, social media marketing and more. Focuses on understanding the relationships between the different components of marketing communications to achieve maximum message effect.

Web Design Certificate

CIP 09.0702

See list of Department Chairs on the Personnel page.

Career Opportunities

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Total Credits: 18

Certificate Requirements

MGD 1002 - Introduction to Multimedia

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly MGD 102 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 1011 - Adobe Photoshop I

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly MGD 111 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 1041 - Web Design I

Credit(s): 3
Vocational Lab Hour(s): 4.50
Formerly MGD 141 Introduces website planning, design and creation using industry standards-based website development tools. Screen-based color theory, web aesthetics, use of graphics editors and intuitive interface design are explored.

MGD 1043 - Motion Graphic Design I: (Software)

Credit(s): 3
Vocational Lab Hour(s): 4.5
Formerly MGD 143 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 1064 - Digital Video Editing I

Credit(s): 3
Vocational Lab Hour(s): 4.5
Formerly MGD 164 Introduces to digital nonlinear 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 2041 - Web Design II

Credit(s): 3
Vocational Lab Hour(s): 4.50
Prerequisite(s): MGD 1041, or department chair approval.
Formerly MGD 241 Expands on previously learned fundamentals of HTML introducing cascading style sheets, DHTML, Java Scripts and CGI forms. Color usage and interface design principles are emphasized in this course. In this course we'll examine websites that employ more complex structures, optimal site architecture and navigation necessary for larger and more complex sites.

Welding Certificate

CIP 48.0508

See list of Department Chairs on the Personnel page.

Career Opportunities

The Welding program prepares you for a career in construction and manufacturing settings, small job shops, city and government welding centers and related sites. You may also work as a self-employed welder.

Program Description

The Welding AAS degree offers advanced instruction if you have finished the basic welding courses or if you are working at the trade and wish to upgrade your skills. We also give qualification tests if you wish to be become qualified in a welding process.

The Welding Certificate program provides training in the SMAW (Shielded Metal Arc Welding), GTAW (Gas Tungsten Arc Welding), GMAW (Gas Metal Arc Welding) and the Oxyacetylene cutting process. This training is also included in the degree program. This two-semester program stresses print reading and applied metal properties. It prepares you for employment in the industry in the shortest possible time.

Total Credits: 34

Certificate Requirements

MAT 1150 - Technical Mathematics

Credit(s): 4
Lecture Hour(s): 4
Formerly MAT 108 Covers material designed for career technical or general studies students who need to study

particular mathematical topics. Topics may include measurement, algebra, geometry, trigonometry, graphs and/or finance. These are presented at an introductory level and the emphasis is on applications.

WEL 1000 - Safety for Welders

Credit(s): 1
Lecture Hour(s): 1
Formerly WEL 100 Covers the hazards of welding on health and safety.

WEL 1001 - Allied Cutting Processes

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Formerly WEL 101 Covers setting up equipment and performing cutting and gouging operations utilizing the oxyacetylene, air carbon arc, exothermic, and plasma arc cutting processes. This course will also provide an introduction to blueprint reading.

WEL 1002 - Oxy-fuel Joining Processes

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.5
Formerly WEL 102 Covers Oxy-fuel joining operations.

WEL 1024 - Gas Tungsten Arc Welding I

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.5
Formerly WEL 124 Covers Gas Tungsten Arc Welding (GTAW) operations in various positions and joint designs.

WEL 1003 - Basic Shielded Metal Arc I

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1002.
Formerly WEL 103 Covers Shielded Metal Arc Welding (SMAW) operation utilizing E-XX10 electrodes.

WEL 1006 - Blueprint Reading for Welders and Fitters

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Prerequisite(s): WEL 1001 or WEL 1002
Formerly WEL 106 Covers interpretation and creation of weld symbols and blueprints used in metal fabrication.

WEL 2063 - Applied Metal Properties

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Formerly WEL 263 Introduces the study of metal properties, hardness testing, heat treatment, cold working microscopic examination and application of common commercial alloys in industry.

WEL 2050 - Layout and Fabrication

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1002.
Formerly WEL 250 Develops welding and associated skills in metal fabrication.

WEL 1004 - Basic Shielded Metal Arc II

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1003.
Formerly WEL 104 Covers Shielded Metal Arc Welding (SMAW) operation utilizing E-XX18 electrodes.

WEL 1050 - AWS Qualification Testing

Credit(s): 1
Lecture Hour(s): 1
Formerly WEL 150 Provides students with the opportunity to complete a welding qualification test in accordance with an American Welding Society code or specification.

Welding Multi-Process Certficiate

See list of Department Chairs on the Personnel page.

This Welding certificate offers training in Shielded Metal Arc and Gas Tungsten Arc Welding. Become familiar with cutting processes used in the field. Students can taking qualification exams at the end of the semester in various welding processes. This certificate is a fast track option. It can be completed in one semester. It is offered in the fall and spring semesters (and sometimes the summer semester).

Total Credits: 18

WEL 1000 - Safety for Welders

Credit(s): 1
Lecture Hour(s): 1
Formerly WEL 100 Covers the hazards of welding on health and safety.

WEL 1041 - Introduction to Multi Process Welding

Credit(s): 4
Lecture Hour(s): 1

Vocational Lab Hour(s): 4.50
Formerly WEL 141 Covers welding in the 1F and 1G positions on various joint configurations using the SMAW (stick), GMAW (mig), GTAW (tig) and the FCAW (flux core) welding process on carbon steel; adjusting parameters and operating equipment, utilizing the various filler materials for each process. Layout procedures will be introduced and practiced, along with welding safety, industry standard soft skills and AWS filler metal classification and selection. Basic math, measuring, computer skills and blueprint reading will be introduced.

WEL 1042 - Basic Multi Process Welding

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1041.
Formerly WEL 142 Covers welding in the 2F and 2G positions on various joint configurations using the SMAW (stick), GMAW (mig), GTAW (tig) and the FCAW (flux core) welding process on carbon steel, adjusting parameters and operating equipment utilizing the various filler materials for each process. Layout procedures, safety, blueprint reading skills and weld symbol identification will be practiced during this course.

WEL 1043 - Intermediate Multi Process Welding

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1042.
Formerly WEL 143 Covers welding in the 3FU and 3GU positions on various joint configurations using the SMAW (stick), GMAW (mig), GTAW (tig) and the FCAW (flux core) welding process on carbon steel, adjusting operating parameters and operating equipment utilizing the various filler materials for each process. Basic metallurgy will be presented.

WEL 1044 - Advanced Multi Process Welding

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1043.
Formerly WEL 144 Covers welding in the 4F and 4G positions on various joint configurations using the SMAW (stick), GMAW (mig), GTAW (tig) and the FCAW (flux core) welding process on carbon steel, adjusting operating parameters and operating equipment utilizing the various filler materials for each process. Resume writing and interview skills will be presented and practiced. Advanced blueprint reading will be focused on including study of complex print reading and weld symbols.

WEL 1050 - AWS Qualification Testing

Credit(s): 1
Lecture Hour(s): 1
Formerly WEL 150 Provides students with the opportunity to complete a welding qualification test in accordance with an American Welding Society code or specification.

Welding, AAS

CIP 48.0508

See list of Department Chairs on the Personnel page.

Career Opportunities

The Welding program prepares you for a career in construction and manufacturing settings, small job shops, city and government welding centers and related sites. You may also work as a self-employed welder.

Program Description

The Welding AAS degree offers advanced instruction if you have finished the basic welding courses or if you are working at the trade and wish to upgrade your skills. We also give qualification tests if you wish to be become qualified in a welding process.

The Welding Certificate program provides training in the SMAW (Shielded Metal Arc Welding), GTAW (Gas Tungsten Arc Welding), GMAW (Gas Metal Arc Welding) and the Oxyacetylene cutting process. This training is also included in the degree program. This two-semester program stresses print reading and applied metal properties. It prepares you for employment in the industry in the shortest possible time.

Total Credits: 64

Degree Requirements

General Education Requirements (15 Credits)

ENG 1031 - Technical Writing I

Credit(s): 3
Lecture Hour(s): 3
Formerly ENG 131, then ENG 1020 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.

MAT 1150 - Technical Mathematics

Credit(s): 4
Lecture Hour(s): 4
Formerly MAT 108 Covers material designed for career technical or general studies students who need to study particular mathematical topics. Topics may include measurement, algebra, geometry, trigonometry, graphs and/or finance. These are presented at an introductory level and the emphasis is on applications.

- Art/Humanities, **or** Social/Behavioral Science, **or** Communications, **or** Physical/Life Science **Credit(s): 8**

Core Curriculum Requirements (41 Credits)

WEL 1000 - Safety for Welders

Credit(s): 1
Lecture Hour(s): 1
Formerly WEL 100 Covers the hazards of welding on health and safety.

WEL 1001 - Allied Cutting Processes

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Formerly WEL 101 Covers setting up equipment and performing cutting and gouging operations utilizing the oxyacetylene, air carbon arc, exothermic, and plasma arc cutting processes. This course will also provide an introduction to blueprint reading.

or

WEL 1002 - Oxy-fuel Joining Processes

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.5
Formerly WEL 102 Covers Oxy-fuel joining operations.

WEL 1003 - Basic Shielded Metal Arc I

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1002.
Formerly WEL 103 Covers Shielded Metal Arc Welding (SMAW) operation utilizing E-XX10 electrodes.

WEL 1004 - Basic Shielded Metal Arc II

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1003.
Formerly WEL 104 Covers Shielded Metal Arc Welding (SMAW) operation utilizing E-XX18 electrodes.

WEL 1006 - Blueprint Reading for Welders and Fitters

Credit(s): 4
Lecture Hour(s): 2
Vocational Lab Hour(s): 3
Prerequisite(s): WEL 1001 or WEL 1002
Formerly WEL 106 Covers interpretation and creation of weld symbols and blueprints used in metal fabrication.

WEL 1024 - Gas Tungsten Arc Welding I

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.5
Formerly WEL 124 Covers Gas Tungsten Arc Welding (GTAW) operations in various positions and joint designs.

WEL 1025 - Introduction to Gas Metal Arc Welding

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1024.
Formerly WEL 125 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 2024 - Gas Tungsten Arc Welding II

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.5
Prerequisite(s): WEL 1024, WEL 1025.
Formerly WEL 224 Covers Gas Tungsten Arc Welding (GTAW) operations utilizing a variety of base metals and advanced joint designs.

WEL 2025 - Advanced Gas Metal Arc Welding

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1024, WEL 1025.
Formerly WEL 225 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 2033 - 2G-Horizontal Pipe A.P.I.

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1004 or equivalent.
Formerly WEL 233 Instruction in safety, theory and practical applications in joint fit-up, design and welding pipe in the 2-G horizontal position. Welding in accordance with the American Petroleum Institute Pipe Code using the SMAW process with E-XX10 type electrodes.

WEL 2050 - Layout and Fabrication

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1002.
Formerly WEL 250 Develops welding and associated skills in metal fabrication.

Related Requirements (8 Credits)

Option A (Orman Campus)

WEL 2051 - Design, Layout and Fabrication

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 1002, WEL 1024, WEL 2050.
Formerly WEL 251 Develops advanced welding and associated skills in the use of drawings and blueprints in planning. Includes designing and layout projects.

WEL 2063 - Applied Metal Properties

Credit(s): 4
Lecture Hour(s): 3
Vocational Lab Hour(s): 1.50
Formerly WEL 263 Introduces the study of metal properties, hardness testing, heat treatment, cold working microscopic examination and application of common commercial alloys in industry.

Option B (PCC Southwest Campus)

WEL 2034 - 5G-Vertical Down A.P.I.

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 2033.
Formerly WEL 234 Instruction in safety, theory and practical applications in joint fit-up, design and welding pipe in the 5-G Vertical down position. Welding in accordance with the American Petroleum Institute Pipe Code using the SMAW process with E-XX10 type electrodes.

WEL 2035 - 6G-45 Down A.P.I.

Credit(s): 4
Lecture Hour(s): 1
Vocational Lab Hour(s): 4.50
Prerequisite(s): WEL 2034.
Formerly WEL 235 Instruction in safety, theory and practical applications in joint fit-up, design and welding pipe in the 6-G 45 down position. Welding in accordance with the American Petroleum Institute Pipe Code using the SMAW process with E-XX10 type electrodes.

Wildland Firefighter Mini-Certificate

CIP 43.0299

See list of Department Chairs on the Personnel page.

Career Opportunities

The Wildland Firefighter Certificate will prepare students for a career with local and state fire departments and federal land management agencies (US Forest Service, etc.). Additionally, this certificate is designed for individuals with a general interest in wildland fire suppression; volunteer firefighters who would like to expand their knowledge and career opportunities; and currently enrolled students with an interest in supplementing their degrees.

Program Description

The Wildland Firefighter Program will provide students with a solid foundation in theory and application of wildland fire suppression concepts. This certificate will also provide training that exceeds the minimum requirements for prospective wildland firefighters as established by the National Fire Protection Association and the National Wildfire Coordinating Group.

Program Requirements

Entrance Requirements:

Successful completion of any CCR course or qualifying placement score or exemption.

Graduation Requirements:

Successful completion of all course work with a grade of "C" or better.

Total Credits: 12.75

Certificate Requirements

FSW 1000 - S-190 Introduction to Wildland Fire Behavior

Credit(s): 1
Lecture Hour(s): 1
Formerly FSW 100 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 FSW 1001 - S-130 Firefighting Training.

FSW 1001 - S-130 Firefighting Training

Credit(s): 2
Lecture Hour(s): 0.50
Vocational Lab Hour(s): 2.25
Formerly FSW 101 Provides entry-level firefighter skills. A version of the L-180, Human Factors on the Fire line, is included as part of the course. Credit should be issued for S-130.

FSW 1002 - S-131 Firefighter Type I

Credit(s): 0.50
Lecture Hour(s): 0.50
Formerly FSW 102 Designed to meet the training needs of the Firefighter Type 1. It contains several tactical decision modules designed to facilitate learning the objectives and class discussion. This course is designed to be interactive in nature. Topics include fire line reference materials, communications and tactical decision making.

FSW 1003 - D-110 Dispatch Recorder with Introduction to Ross

Credit(s): 1
Lecture Hour(s): 1
Formerly FSW 103 Trains potential dispatch recorders on the structure of an expanded dispatch organization and how to effectively perform within that organization. Course will provide the student with a working knowledge of the purpose and process of completing the resource order and other dispatch forms. It will also provide instruction on established dispatch procedures.

FSW 1004 - I-100 Introduction to ICS

Credit(s): 0.25
Lecture Hour(s): 0.25
Formerly FSW 104 Address the ICS organization basic terminology and common responsibilities. It provides a foundation upon which to enable entry-level personnel to function appropriately in the performance of incident-related duties. For students continuing through more complex ICS modules, this course may be used as pre-course work.

- FSW 140 - S-200 Initial Attack Incident Commander **Credit(s): 1**
- FSW 141 - S-203 Introduction to Incident **Credit(s): 2**
- FSW 142 - S-211 Portable Pumps and Water Use **Credit(s): 1.5**

FSW 1043 - S-212 Wildfire Chain Saws

Credit(s): 2
Lecture Hour(s): 1
Vocational Lab Hour(s): 1.50
Formerly FSW 143 Provides introduction to the function, maintenance and use of internal combustion, engine-powered chain saws and their tactical wildland fire application. Modules support entry-level training for firefighters with little or no previous experience in operating a chain saw and provide hands-on cutting in surroundings similar to fire line situations.

- FSW 155 - I-200, IS-200, Q-436 Basic ICS: ICS for Single Resources and Initial Action Incidents **Credit(s): 1.5**

CCCS Guaranteed Transfer (GT) - Pathways Courses

Dr. Jeffrey Alexander, Dean of Arts and Sciences

In December 2005, the Colorado Commission on Higher Education established a statewide transfer policy for general education course credits. This policy is also known as GT Pathways. The table below lists GT Pathways Courses that are included in this policy. Although Pueblo Community College does not offer all of the courses listed in the table below, if you are transferring any of these courses to PCC from an accredited post-secondary institution, these courses will be accepted at PCC.

CCCS Guaranteed Transfer (GT) - Pathways Courses

Introductory Writing Courses (GT-CO1)

- ENG 1021 - English Composition I: GT-CO1 **Credit(s): 3**
- ENG 1031 - Technical Writing I **Credit(s): 3**

Intermediate Writing Courses (GT-CO2)

- ENG 1022 - English Composition II: GT-CP2 **Credit(s): 3**

Advanced Writing Courses (GT- CO3)

- ENG 2001 - Composition III: Writing for Public Discourse GT-CO3 **Credit(s): 3**

Mathematics (GT-MA1)

- MAT 1240 - Mathematics for the Liberal Arts: GT-MA1 **Credit(s): 4**
- MAT 1340 - College Algebra: GT-MA1 **Credit(s): 4**
- MAT 1420 - College Trigonometry: GT-MA1 **Credit(s): 3**
- MAT 1320 - Finite Mathematics: GT-MA1 **Credit(s): 4**
- MAT 1400 - Survey of Calculus: GT-MA1 **Credit(s): 4**
- MAT 1260 - Introduction to Statistics: GT-MA1 **Credit(s): 3**
- MAT 2410 - Calculus I: GT-MA1 **Credit(s): 5**
- MAT 2420 - Calculus II: GT-MA1 **Credit(s): 5**
- MAT 2430 - Calculus III: GT-MA1 **Credit(s): 4**
- MAT 2431 - Calculus III with Engineering Applications: GT-MA1 **Credit(s): 5**
- MAT 2520 - Discrete Mathematics: GT-MA1 **Credit(s): 4**
- MAT 2561 - Differential Equations with Engineering Applications: GT-MA1 **Credit(s): 4**
- MAT 2560 - Differential Equations: GT-MA1 **Credit(s): 3**

Arts and Expression (GT-AH1)

- ART 1110 - Art Appreciation: GT-AH1 **Credit(s): 3**
- ART 1111 - Art History Ancient to Medieval: GT-AH1 **Credit(s): 3**
- ART 1112 - Art History Renaissance to Modern: GT-AH1 **Credit(s): 3**
- ART 1113 - Art History **Credit(s): 3**
- DAN 1050 - Dance History: AH1 **Credit(s): 3**
- DAN 1025 - Dance Appreciation: AH1 **Credit(s): 3**

- ENG 2021 - Creative Writing I **Credit(s): 3**
- MUS 1020 - Music Appreciation: GT-AH1 **Credit(s): 3**
- MUS 1021 - Music History Medieval Thru Classical Period: GT-AH1 **Credit(s): 3**
- MUS 1022 - Music History Early Romantic Period to the Present: GT-AH1 **Credit(s): 3**
- MUS 1025 - History of Jazz: GT-AH1 **Credit(s): 3**
- THE 1005 - Theatre Appreciation: GT-AH1 **Credit(s): 3**
- THE 2011 - Development of Theatre Greek-Renaissance: GT-AH1 **Credit(s): 3**
- THE 2012 - Development of Theatre Restoration to Modern: GT-AH1 **Credit(s): 3**
- THE 2015 - Playwriting: GT-AH1 **Credit(s): 3**

Literature and Humanities (GT-AH2)

- HUM 1003 - Introduction to Film Art: GT-AH2 **Credit(s): 3**
- HUM 1015 - World Mythology: GT-AH2 **Credit(s): 3**
- HUM 1021 - Humanities: Early Civilization: GT-AH2 **Credit(s): 3**
- HUM 1022 - Humanities: Medieval - Modern: GT-AH2 **Credit(s): 3**
- HUM 1023 - Humanities: Modern World: GT-AH2 **Credit(s): 3**
- LIT 1015 - Introduction to Literature I: GT-AH2 **Credit(s): 3**
- LIT 2001 - World Literature to 1600: GT-AH2 **Credit(s): 3**
- LIT 2002 - World Literature After 1600: GT-AH2 **Credit(s): 3**
- LIT 2005 - Race. Ethnicity, and Culture in U.S. Literature: GT-AH2 **Credit(s): 3**
- LIT 2011 - American Literature to Civil War: GT-AH2 **Credit(s): 3**
- LIT 2012 - American Literature After Civil War: GT-AH2 **Credit(s): 3**
- LIT 2025 - Introduction to Shakespeare: GT-AH2 **Credit(s): 3**
- LIT 2046 - Literature of Women: GT-AH2 **Credit(s): 3**
- LIT 2059 - Survey of African American Literature **Credit(s): 3**
- LIT 2068 - Celtic Literature **Credit(s): 3**

Ways of Thinking (GT-AH3)

- PHI 1011 - Introduction to Philosophy: GT-AH3 **Credit(s): 3**
- PHI 1012 - Ethics: GT-AH3 **Credit(s): 3**
- PHI 1013 - Logic: GT-AH3 **Credit(s): 3**
- PHI 1014 - Comparative Religions: GT-AH3 **Credit(s): 3**
- PHI 2014 - Philosophy of Religion: GT-AH3 **Credit(s): 3**
- PHI 2018 - Environmental Ethics: GT-AH3 **Credit(s): 3**
- PHI 2020 - Philosophy of-Death and Dying: GT-AH3 **Credit(s): 3**

World Languages (GT-AH4)

- SPA 2011 - Spanish Language III: GT-AH4 **Credit(s): 3**
- SPA 2012 - Spanish Language IV: GT-AH4 **Credit(s): 3**

History (GT-HI1)

- HIS 1310 - Western Civilization: Antiquity-1650: GT-HI1 **Credit(s): 3**
- HIS 1320 - Western Civ: 1650-present: GT-HI1 **Credit(s): 3**
- HIS 1110 - The World: Antiquity-1500: GT-HI1 **Credit(s): 3**
- HIS 1120 - The World: 1500-present: GT-HI1 **Credit(s): 3**
- HIS 1210 - U.S. History to Reconstruction: GT-HI1 **Credit(s): 3**
- HIS 1220 - U.S. History Since the Civil War: GT-HI1 **Credit(s): 3**
- HIS 2135 - Colorado History: GT-HI1 **Credit(s): 3**
- HIS 2015 - 20th Century World History: GT-HI1 **Credit(s): 3**

Economic or Political Systems (GT-SS1)

- AEC 1231 - Residential Construction Drawing **Credit(s): 4**
- ECO 2001 - Principles of Macroeconomics: GT-SS1 **Credit(s): 3**
- ECO 2002 - Principles of Microeconomics: GT-SS1 **Credit(s): 3**
- ECO 2045 - Environmental Economics: GT-SS1 **Credit(s): 3**
- POS 2020 - Introduction to Political Science: GT-SS1 **Credit(s): 3**
- POS 1011 - American Government: GT-SS1 **Credit(s): 3**
- POS 1025 - American State and Local Government: GT-SS1 **Credit(s): 3**

Geography (GT-SS2)

- GEO 1005 - World Regional Geography: GT-SS2 **Credit(s): 3**
- GEO 1006 - Human Geography: GT-SS2 **Credit(s): 3**

Human Behavior, Culture, or Social Frameworks (GT-SS3)

- ANT 1001 - Cultural Anthropology: GT-SS3 **Credit(s): 3**
- ANT 1003 - Introduction to Archaeology: GT-SS3 **Credit(s): 3**
- ANT 2115 - Native Peoples of North America: GT-SS3 **Credit(s): 3**
- PSY 1001 - General Psychology I: GT-SS3 **Credit(s): 3**
- PSY 1002 - General Psychology II: GT-SS3 **Credit(s): 3**
- PSY 2105 - Psychology of Gender: GT-SS3 **Credit(s): 3**
- PSY 2107 - Human Sexuality: GT-SS3 **Credit(s): 3**
- PSY 2221 - Social Psychology: GT-SS3 **Credit(s): 3**
- PSY 2222 - Psychology of Death and Dying: GT-SS3 **Credit(s): 3**
- PSY 2331 - Positive Psychology: GT-SS3 **Credit(s): 3**
- PSY 2440 - Human Growth and Development: GT-SS3 **Credit(s): 3**
- PSY 2441 - Child Development: GT-SS3 **Credit(s): 3**
- PSY 2333 - Health Psychology: GT-SS3 **Credit(s): 3**
- PSY 2552 - Abnormal Psychology: GT-SS3 **Credit(s): 3**
- PSY 2771 - Psychology of Personality: GT-SS3 **Credit(s): 3**
- SOC 1001 - Introduction to Sociology I: GT-SS3 **Credit(s): 3**

- SOC 1002 - Introduction to Sociology II: GT-SS3 **Credit(s): 3**
- SOC 2005 - Sociology of Family Dynamics: GT-SS3 **Credit(s): 3**
- SOC 2007 - Environmenetal Sociology: GT-SS3 **Credit(s): 3**
- SOC 2015 - Contemporary Social Problems: GT-SS3 **Credit(s): 3**
- SOC 2016 - Sociology of Gender: GT-SS3 **Credit(s): 3**
- SOC 2018 - Sociology of Diversity: GT-SS3 **Credit(s): 3**
- SOC 2031 - The Sociology of Deviant Behavior: GT-SS3 **Credit(s): 3**
- SOC 2037 - Sociology of Death and Dying: GT-SS3 **Credit(s): 3**
- WST 2000 - Introduction to Women's Studies: GT-SS3 **Credit(s): 3**

Natural & Physical Sciences: (GT-SC1)

Courses WITH Required Laboratory

- ANT 1005 - Biological Anthropology with Laboratory: GT-SC1 **Credit(s): 4**
- AST 1110 - Astronomy I With Lab: GT-SC1 **Credit(s): 4**
- AST 1120 - Astronomy II with Lab: GT-SC1 **Credit(s): 4**
- BIO 1005 - Science of Biology with Lab: GT-SC1 **Credit(s): 4**
- BIO 1111 - General College Biology I with Lab: GT-SC1 **Credit(s): 5**
- BIO 1112 - General College Biology II with Lab: GT-SC1 **Credit(s): 5**
- BIO 2101 - Human Anatomy and Physiology I with Lab: GT-SC1 **Credit(s): 4**
- BIO 2102 - Human Anatomy and Physiology II with Lab: GT-SC1 **Credit(s): 4**
- BIO 2104 - Microbiology with Lab: GT-SC1 **Credit(s): 4**
- CHE 1011 - Introduction to Chemistry I with Lab: GT-SC1 **Credit(s): 5**
- CHE 1012 - Introduction to Chemistry II with Lab: GT-SC1 **Credit(s): 5**
- CHE 1005 - Chemistry in Context with Lab: GT-SC1 **Credit(s): 5**
- CHE 1111 - General College Chemistry I with Lab: GT-SC1 **Credit(s): 5**
- CHE 1112 - General College Chemistry II with Lab: GT-SC1 **Credit(s): 5**
- GEO 1011 - Physical Geography: Landforms with Lab: GT-SCI **Credit(s): 4**
- GEO 1012 - Physical Geography: Weather and Climate with Lab: GT-SCI **Credit(s): 4**
- GEY 1111 - Physical Geology with Lab: GT-SC1 **Credit(s): 4**
- GEY 1112 - Historical Geology: GT-SC1 **Credit(s): 4**
- GEY 1135 - Environmental Geology with Lab: GT-SC1 **Credit(s): 4**
- PHY 1105 - Conceptual Physics with Lab: GT-SC1 **Credit(s): 4**
- PHY 1107 - Energy Science & Technology with Lab: GT-SC1 **Credit(s): 4**
- PHY 1111 - Physics: Algebra-Based I with Lab: GT-SC1 **Credit(s): 5**
- PHY 1112 - Physics: Algebra-Based II with Lab: GT-SC1 **Credit(s): 5**
- PHY 2111 - Physics: Calculus Based I with Lab: GT-SC1 **Credit(s): 5**
- PHY 2112 - Physics: Calculus-Based II with Lab: GT-SC1 **Credit(s): 5**
- SCI 1055 - Integrated Science I **Credit(s): 4**
- SCI 1056 - Integrated Science II **Credit(s): 4**

Natural & Physical Sciences: (GT-SC2)

Lecture Courses WITHOUT Required Laboratory

- BIO 1016 - Introduction to Human Disease: GT-SC2 **Credit(s): 3**
- SCI 1105 - Science in Society: GT-SC2 **Credit(s): 3**

About PCC

Welcome to Pueblo Community College

You've Made the Right Choice!

For 90 years, Pueblo Community College (PCC) has provided the education and training that gives our students the skills they need to qualify for good jobs or transfer to a four-year school. We are a two-year community college accredited by The Higher Learning Commission. We are one of 13 colleges in the Colorado Community College System, the fastest-growing educational system in Colorado. We offer more than 60 associate degree programs, more than 90 certificates, and five (5) Bachelor of Applied Science degrees, and a Bachelor of Science Nursing degree. We are a state leader in health care education.

Pueblo Community College has four locations to serve students' educational needs. The main campus is located in Pueblo and serves Pueblo County. The Fremont Campus, located in Cañon City, serves Fremont and Custer counties. Pueblo Community College has locations in southwest Colorado. The Pueblo Community College Southwest Campus is located on Highway 160 between Mancos and Cortez and the Pueblo Community College Southwest Site is located in Durango and serves Archuleta, Dolores, La Plata, Montezuma and San Juan counties.

The median age of our students is 27 years, of whom 16 percent are new first-time college students. In 2022, 67 percent of students were first generation, 69 percent were female, 38 percent were Hispanic, and 49 percent were minority. Approximately 60 percent of students receive some kind of financial assistance in the form of grants, scholarships, work-study jobs and/or student loans. The US Department of Education has designated PCC as a Hispanic-Serving Institution.

We offer a variety of scheduling alternatives to meet your needs. You can choose among day or evening classes, weekend classes and online/hybrid classes and degree programs. To support your education, we offer professional advising services, as well as a wide range of academic support services such as tutoring, learning labs, workshops and adaptive services for those with disabilities. Our services include the PCC Health Clinic the Dental Hygiene Clinic, Cosmetology, Simulation Center and the Anatomy Lab, located on the Pueblo campus. Health services at the Southwest campus are offered as scheduled.

If you are pursuing a four-year degree, PCC is a great place to spend your first two years of study. Our Associate of Arts and Associate of Science degrees are fully transferable to all Colorado public four-year institutions. We offer small classes, plenty of academic support and highly experienced instructors who are focused on helping you succeed.

PCC is a technologically advanced school that aims to provide a skilled and educated workforce to industry through its Gorsich Advanced Technology Center and Health Program facilities. Our partnerships with business and industry help provide the state-of-the-art equipment that enables students to acquire the highly technical skills needed to step right into the workforce upon graduating. PCC also offers hybrid courses. These classes provide an exciting and entertaining mix of learning environments that include blending a part of the traditional classroom with online instruction.

At PCC, you can earn the first two years of coursework towards a teaching degree. We offer Associate of Arts degrees in elementary education, elementary education with an Early Childhood endorsement and secondary education in science, math, English, social sciences, arts and music.

If you like working with people and want to be a social worker or psychologist, PCC is a great place to start. We offer social work classes that transfer to accredited social work programs across the nation. PCC also has great psychology classes that can jump start your path to a career as a psychologist.

PCC partners with a Small Business Development Center, providing free business services to new and prospective small business owners in Pueblo, Fremont and Custer counties. Through our Pueblo Corporate College we offer corporate training, lifelong learning and professional development classes. Our Pre-College Department provides the Gateway to College Program and GED preparation classes.

Established in 1981, the Pueblo Community College Foundation has supported learning for thousands of students. The foundation is committed to working with the college to bring positive changes to the lives of individuals, families and communities.

The Foundation's mission is to align funding for Pueblo Community College through Foundation-approved efforts that support and promote student success. Since its inception, the Foundation has raised more than $50 million to support PCC, its student scholars and its programs of academic excellence.

The PCC Foundation is honored to have the opportunity to work with alumni, businesses, individuals, and organizations in an effort to advance Pueblo Community College and the advancement of higher education in southern Colorado.

For more information on the PCC Foundation, please visit our Website or contact us via phone 719.544.0677 or email to Martha.simmons@pueblocc.edu.

Foundation Mailing Address:
900 W. Orman Avenue
Pueblo, CO 81004

Foundation Physical Address:
1018 W. Orman Avenue
Pueblo, CO 81004
719.544.0677

Vision

Pueblo Community College is the first choice for success.

Mission

Pueblo Community College transforms lives, enriches communities and strengthens the regional economy by empowering individual achievement through a continuum of education.

Core Values

- **Achievement:** We embrace a diverse student body attending our institution of higher education and support all individuals in attaining high-quality postsecondary credentials across our academic disciplines. Through our retention efforts across the college, we work to keep students engaged and focused on completing their coursework to become highly skilled professionals and gain the most from their educational pursuits to achieve success in the workforce by meeting the demands of a global economy.

- **Excellence:** We embrace continuous quality improvement and innovation in all areas of the institution. We deliver high-quality programs and services that respond to the needs of the communities we serve and prepare

students for success in an ever-changing, diverse and global workplace.

- **Integrity**: We advance our mission ethically and responsibly. We value fair and equitable treatment, participatory decision making and transparent resource management. We have an organizational culture that inspires high performance and accountability for behaviors, actions and results in a collaborative spirit.

- **Respect**: We provide a safe, caring and supportive environment conducive to the success and well-being of students, faculty and staff. We welcome diversity of backgrounds and opinions, recognize individual talents, encourage personal and professional growth, celebrate accomplishments and honor institutional traditions.

- **Scholarship:** We value and promote student, faculty and staff scholarship. We strive to create a student-centered learning environment that cultivates critical and creative thinking, problem solving, intellectual inquiry and global awareness. Through continuing development, we expect faculty and staff to be productive workers, responsible decision makers and servant leaders. We believe that scholarship should occur in all organizational levels through knowledge sharing and effective communication.

- **Teamwork:** We believe inclusive cooperative relationships are critical to the vitality and long-term success of our institution. We strategically pursue mutually beneficial partnerships to help students learn and advance other institutional priorities. We encourage active collaboration within and between departments and operational areas. We believe in the importance of nurturing student-to-student and student-to-faculty/staff interactions as a means of promoting student success.

Purposes

- Prepare students for entry into the workforce, career advancement or career change through certificate and associate degree programs
- Prepare students for transfer to baccalaureate institutions by providing transfer degrees, courses and services
- Provide opportunities to develop and continually update job skills to meet the demands of a technological and global economy
- Provide programs and experiences that foster individual and professional development
- Prepare students for entry-level college courses
- Provide comprehensive services to support the educational experience of a diverse student population
- Deliver instruction through traditional, alternative and distance learning methods
- Provide a quality learning environment supported by teaching excellence and freedom of inquiry
- Support the economic development of the community through business initiatives and partnerships
- Contribute to the community by participating in civic and professional activities

General Education Philosophy

General education at Pueblo Community College is an integral and important part of the student's college experience. General education provides degree-seeking students with a core of basic knowledge, critical thinking skills, intellectual concepts and attitudes that will enable them to function effectively in the community. General education also serves as a foundation to promote lifelong learning.

PCC Assessment of Student Learning

Assessment of Student Learning is a comprehensive initiative to evaluate learning with respect to goals and outcomes that we value and desire for our students and graduates. PCC aims to strengthen its programs by offering students plentiful and varied opportunities to develop, reinforce, and master these competencies throughout their studies.

Successful and meaningful Assessment of Student Learning is collaborative and faculty-driven, requiring the participation of all who are interested in the quality of the educational experience we offer at Pueblo Community College, including students, faculty, administrators, and community partners.

Institutional Student Learning Outcomes (ISLOs)

PCC's shared college-wide goals for student learning are known as Institutional Student Learning Outcomes (ISLOs). All programs emphasize experiences that promote learning in the following six areas. Upon completing a course of study at PCC, students will be able to demonstrate mastery of these core skills:

1. **Critical Thinking & Problem Solving**: the ability to interpret and analyze information, explore implications, construct logical conclusions, and consider alternate perspectives and solutions.
2. **Effective Communication**: the ability to organize and express ideas clearly, purposefully, and compellingly, attending to the needs of the audience and following disciplinary conventions.
3. **Quantitative Reasoning**: the ability to perform computations, represent and interpret numerical information, and formulate reasonable solutions through quantitative analysis.
4. **Literacy**: the ability to recognize, locate, evaluate, and select suitable information and materials for the application of proper methods in order to accomplish tasks.
5. **Professionalism**: the ability to demonstrate accountability, personal growth, integrity, and professional behavior.
6. **Social Consciousness**: the ability to participate productively in a diverse global society through effective interpersonal skills, cultural awareness, civic responsibility, and equitable and inclusive practices.

At Pueblo Community College, we believe that the systematic assessment of student learning is perhaps the most important aspect of teaching and knowing whether students are learning what we want them to learn as they graduate from a program of study or complete a course. Through assessment activities, faculty and administration may identify key areas of needed improvement in program or course design to improve student learning. Our accrediting body, the Higher Learning Commission, expects that we assess institutional student learning outcomes (ISLOs), program student learning outcomes (PSLOs) and course student learning outcomes (CSLOs) each year on a cycle determined by the faculty. In an effort to record student performance on these outcomes, PCC has adopted the nationally recognized elumen Assessment Management System to facilitate and record our results. The college publishes an annual report on the Assessment of Student Learning to inform all stakeholders of our results and recommended improvements. The PCC Assessment Committee, composed primarily of full-time faculty, develops the assessment plan, establishes the assessment cycle, and provides training materials. Each academic division also has an assessment lead to help faculty complete their assessment tasks each year. The chief academic officer (CAO) and the academic deans support college-wide assessment efforts by providing resources in the form of people, professional development and dedicated time to work on assessment activities.

Higher Learning Commission Open Pathway

The Open Pathway is one of two options institutions have for maintaining their accreditation with HLC. It follows a 10-year cycle and, like the Standard Pathway, is focused on quality assurance and institutional improvement. The Open Pathway is unique in that its improvement component, the Quality Initiative, affords institutions the opportunity to pursue improvement projects that meet their current needs and aspirations.

PCC Promise

- To always recognize and greet you with a smile
- To listen to you
- To respond to your needs
- To respect and value you
- To celebrate your accomplishments and successes
- To care for your health and safety in everything we do

Colorado Student Bill of Rights (C.R.S. 23-1-125)

Student bill of rights. The general assembly hereby finds that students enrolled in public institutions of higher education shall have the following rights:

(a) Students should be able to complete their associate of arts and associate of science degree programs in no more than sixty credit hours or their baccalaureate programs in no more than one hundred twenty credit hours unless there are additional degree requirements recognized by the commission;

(b) A student can sign a two-year or four-year graduation agreement that formalizes a plan for that student to obtain a degree in two or four years, unless there are additional degree requirements recognized by the commission;

(c) Students have a right to clear and concise information concerning which courses must be completed successfully to complete their degrees;

(d) Students have a right to know which courses are transferable among the state public two-year and four-year institutions of higher education;

(e) Students, upon completion of core general education courses, regardless of the delivery method, should have those courses satisfy the core course requirements of all Colorado public institutions of higher education;

(f) Students have a right to know if courses from one or more public higher education institutions satisfy the students' degree requirements;

(g) A student's credit for the completion of the core requirements and core courses shall not expire for ten years from the date of initial enrollment and shall be transferrable.

History of the College

Origins

Pueblo Community College traces its origin to 1933, when Southern Colorado Junior College (SCJC) was incorporated. SCJC classes were held on the top floor of the Pueblo County Courthouse and graduated the first class of 17 students in 1935. In 1936 the first building on the current Orman Avenue campus was built on land donated by the Colorado Fuel and Iron Corporation. One year later, local citizens made a commitment to support the institution with county taxes and organized the Pueblo County Junior College District. The institution was renamed Pueblo Junior College.

Pueblo County voters approved $210,000 for building facilities in 1938 and, over the next two years, work was completed on an Arts Building and a gymnasium. In 1946, the institution gained approval for vocational rehabilitation training and a new vocational-technical building opened four years later. The school was renamed Pueblo College.

Establishment of Southern Colorado State College

The Pueblo Junior College District was dissolved in 1961 when Colorado's General Assembly enacted legislation to change the status of Pueblo Junior College to a four-year, degree-granting institution governed by the Board of Trustees for State Colleges. The college was named Southern Colorado State College (SCSC). It grew rapidly and offered educational programs both at the Orman Avenue campus and at a newly developing campus north of Pueblo's Belmont residential district.

Development of the College for Community Services and Career Education

The need for additional secondary, post-secondary and adult vocational training in southern Colorado was recognized not only by the college administration but also by the community and many state agencies. Most of the Orman campus buildings had a vocational orientation and the decision to revitalize the campus as a vocational-technical training center was based on both past programs and functional accommodations. In 1974, Southern Colorado State College gave the name College for Community Services and Career Education to the vocational activities located on the Orman Campus. These vocational programs provided training to secondary, post-secondary, adult and special students.

In 1975, the Colorado General Assembly passed legislation that would allow Southern Colorado State College to operate the College for Community Services and Career Education as a technical community college. This change was made to enable the programs to be eligible for state and federal vocational funds within the state's Community College and Vocational System.

We Become Pueblo Community College

In 1978 the Colorado General Assembly passed a bill that changed the status of the College for Community Services and Career Education from a component of the University of Southern Colorado to a separate and free-standing educational entity. On July 1, 1979, Pueblo Vocational Community College became a State System Community College and on July 1, 1982, the name was officially changed to Pueblo Community College (PCC).

By 1987 PCC had become a comprehensive community college, offering a broad range of general, personal, vocational and technical education programs as well as providing two-year transfer programs to qualify students for admission to the junior year at other colleges and universities. Today we place equal emphasis on vocational and transfer degree programs.

PCC's history of offering courses in Cañon City blossomed into a more permanent presence in 1986 when we leased facilities on the grounds of the Holy Cross Abbey. A community fund drive that raised more than $1 million allowed us to secure $8.2 million in state funding for a stand-alone campus. Ground was broken on March 11, 2000, for a new 33,000 square-foot multi-functional building. Classes were first held in the new Fremont Campus facility in fall of 2001.

In October 1987, Pueblo Community College began providing community college educational opportunities to area residents in five southwestern Colorado counties. The campus was named the Southwest Center. The first classes were offered in the spring semester. In February 1988, the Colorado Commission on Higher Education placed the five southwestern counties within the service area of Pueblo Community College.

On January 30, 2008, San Juan Basin Technical College and Pueblo Community College (PCC) signed a Memorandum of Understanding forming an educational partnership to "solidify and enhance the working and long-term relationships between the two institutions ... and to maximize efficiencies and resources as appropriate." On April 14, 2008, the SJBTC Board of Control signed a resolution directing the administrative officers of SJBTC to do all things necessary to

effectuate a merger with PCC in as expedient a manner as possible, including working with elected representatives to carry the necessary legislation to make the alliance possible. Legislation for the merger (Senate Bill 09-043) was drafted with support and input from Senator Jim Isgar and Representative Ellen Roberts. The bill was unanimously supported by the Senate and the House Education Committees and signed by Governor Bill Ritter on May 20, 2009.

As a result of Senate Bill 09-043, the former San Juan Basin Technical College and the former Pueblo Community College Southwest Campus operate in Southwest Colorado, Region 9, as PCC Southwest Campus/Site.

Today, PCC is one of the most dynamic and progressive community colleges in Colorado. We continually strive to provide modern facilities, state-of-the-art equipment and comprehensive technical and transfer programs that prepare students to enter the job market or transfer to a four-year school. Our faculty and staff are committed to student success, offering quality classroom instruction and academic support at our four campuses.

Campuses

Pueblo Campus

The Pueblo campus located in Pueblo, Colorado, serves students in Pueblo County. The main campus for Pueblo Community College provides oversight of all college operational functions – eight buildings on 33 acres, where more than 2,432 students attend classes working towards their degrees or certificates. The campus is wireless and has up-to-date technology in classrooms and laboratories, as well as extensive student support services toward academic excellence.

The extensive degree and certificate offerings, which will lead toward a career in business and industry or transfer to a four-year university, can be located in the Degree and Certificate Programs section.

Fremont Campus

The Fremont Campus located in Cañon City, Colorado, provides educational programs and services to the citizens of Fremont and Custer counties. We offer modern facilities, up-to-date technology, a full-service enrollment and academic advising center, a learning resource center, a bookstore, comprehensive nursing and science labs and many student activities. We serve students who are preparing to transfer to four-year colleges as well as those preparing for careers in business and industry.

We offer the following degrees and certifications through the Fremont Campus:

- Associate of Science
- Associate of Arts
- Associate of Arts – Emphasis in Business Management or Social Work
- Associate of Arts – Criminal Justice, Early Childhood Education, Education, History and Psychology
- Associate of Applied Science – Nursing
- Associate of General Studies
- Certificate – Emergency Medical Technician, Emergency Medical-Intermediate, Nurse Aide, Phlebotomy, Fire Science (Wildland), and Structural Welding Introduction
- Emergency Medical Services Program

Courses supporting other PCC degrees and certificates are offered at the Fremont Campus. Students can begin many PCC programs at the Fremont Campus, but may need to finalize programs at a different campus. The campus offers a full complement of GT Pathways (General Education transfer courses).

PCC Southwest Campus

The Southwest Campus located between Cortez and Mancos, Colorado, provides educational programs and services to the citizens of Dolores, La Plata, Montezuma, and San Juan counties in the southwest corner of Colorado. The campus has modern facilities, up-to-date technology and full-service enrollment and academic advising center (Go!Zone), as well as an online bookstore for purchasing textbooks and other supplies. Students can enroll in transfer degree options or career and technical pathways to prepare for transfer to four-year colleges or a career in business and industry.

We offer the following degrees and certifications:

- Associate of Arts
- Associate of Arts – Early Childhood Education and Psychology
- Associate of Science
- Associate of General Studies
- Associate of Applied Science – Automotive Service Technology, Early Childhood Education, Nursing, and Welding
- Certificates – Agriculture, Automotive, Cosmetology, Early Childhood Education (Director, Group Leader and Infant Toddler), Emergency Medical, Nurse Aide, Practical Nursing, Law Enforcement Academy, Paramedic, and Welding

We have transfer articulation agreements with Fort Lewis College located in Durango, Colorado and can assist you with transferring to any other four-year college.

PCC Southwest Site

The Southwest Site located in Bayfield, Colorado, provides educational programs and services to the citizens of Archuleta County in the southwest corner of Colorado. Modern facilities and up-to-date technology are provided for students. A full-service enrollment and academic advising center (Go!Zone) are available. There is an online bookstore for purchasing textbooks and other supplies. Students can enroll in transfer degree options or career and technical pathways to prepare for transfer to four-year colleges.

We offer the following degrees and certifications:

- Associate of Arts
- Associate of General Studies
- Certificatres: Agriculture, Nurse Aid

You are encouraged to check with an advisor to locate the degree or certificate of your choice and the campus location where it is offered. Not all certificate or degree options are available at all campuses. For a complete listing of all Degree and Certificate Programs (and campuses that offer the programs), please visit the following website.

Student Personal Mobile Computing

Pueblo Community College is a Bring Your Own Device (BYOD) institution. Students should bring their own mobile device for use during all educational activities on campus. Not only will you find using your own device to be more comfortable and familiar, you will also see that most of what you can do with your own device on campus can be done from anywhere with an internet connection. To review minimum device specifications, please see the Student Handbook.

WiFi Access - All currently enrolled students have access to Wi-Fi at all PCC Campuses. There are no restrictions on mobile device type or quantity of devices connected per student. We do request that you respect other students' educational use of the wireless network when accessing non-educational web content.

To access the wireless network at any PCC Campus, simply connect your device to PCCGuest, then open a web browser and click through the Acceptable Use Policy. If you have trouble accessing the wireless network, please contact or visit the IT Department (see contact information on this page).

Remote Desktop Access - VMware Horizon connects students to a desktop computer on the college's production network from their personal mobile device; giving students the ability to access most software applications used on campus computers.

Printing from Mobile Devices - PCC offers students two ways to print from personal mobile devices:

Papercut Web Printing - Papercut gives students the ability to print from their personal mobile device by uploading a file to a web page. This makes it fast and convenient to print documents; however there are some limitations on file type and advanced print options. You can visit the Cashier's office at your respective campus to add funds to your Papercut account when needed. For more details about student printing, please log into the PCC Portal and scroll down to "Web Printing from Mobile Devices (Papercut)".

Printing from VMware Horizon - To print file types not supported by Papercut, or to use advanced print features, please log on to a VMware Horizon Remote Desktop (see above for description).

* For more information about VMware Horizon or Papercut, please visit the PCC Help channel on your Student Portal.

Software Availability - PCC strives to make the programs students use during the course of their educational experience available on their personal mobile device at no cost whenever possible. Due to licensing and technical limitations, this is not always possible. Listed below are options students have for accessing software for free as well as purchasing software at a reduced cost.

Office 365 - PCC students have access to more than just an e-mail account with Office 365. Online versions of the popular Microsoft Office suite, as well as online storage via Microsoft OneDrive and a host of other productivity tools, are available at no cost. Also, PCC Students are allowed to install the current version of Microsoft Office locally on up to five devices and use the software as long as they are students at PCC. Check out the Office 365 channel on the Student tab of your MyPCC Portal for more information.

OnTheHub - As much as we like to make the software students need available for free on their personal devices, this just isn't possible in all cases. Another benefit of being a PCC student is the ability to purchase popular software titles by Microsoft, Adobe, Corel and more at a reduced cost. To see what's available, visit PCC OnTheHub and sign in with your S# and Windows Network Password. (Please note: the PCC OnTheHub website is hosted and managed by a 3rd party. All sales transactions are conducted between the student and Kivuto Solutions Inc. and all sales inquiries should be handled through OnTheHub Help.)

Getting Started at Pueblo Community College

Step 1: START at the Go!Zone Enrollment Center Help Desk

Step 2: Apply for Admission

You may apply for admission one of two ways:

- Apply at the following site. Click Apply Online under the Academics tab.
- Visit any PCC registration station. Administrative personnel will help you apply.

Please refer to Applying for Admission for detailed information about your application.

Step 3: Register for the College Opportunity Fund (COF)

Apply for the COF on the online admissions application. If you do not have access to the internet, you may go to any campus registration station to sign up for the COF.

Step 4: Take the Basic Skills Placement Test

Contact the PCC campus closest to you for the Accuplacer basic skills test schedule. Under some circumstances, you may be exempt from taking the test. Please refer to Basic Skills Testing for more information.

Step 5: Apply for Financial Aid

To apply for financial aid, complete the Free Application for Federal Student Aid (FAFSA) online. We will base your financial aid award on the number of credits you register for each semester. All information, guidelines and policies related to financial aid are available from the PCC Financial Aid Office. Please refer to Financial Aid for more information.

Step 6: Meet with an Academic Advisor

All new students should meet with an academic advisor to establish an educational pathway plan. You can meet with an advisor by going to the Go!Zone for walk-in service or call 719.549.3177 (Pueblo), 719.296.6100 Fremont), 970.385.2001 (Southwest Site - Durango) or 970.564.6201 (Southwest Campus -Mancos) to schedule an appointment. Continuing students should contact their assigned faculty advisor prior to registering for classes. If you do not yet have a declared major, please visit with an advisor.

Step 7: Register for Classes

Register for classes online. Click on myPCC Portal at the top of the PCC webpage. Sign in to the Portal and click the navigate link on the dashboard tab. The "My Plan" tab will display the classes needed for your program of study. You can also go to the Student tab, then to Registration Tools. Click on the Look up Classes or Add or Drop Classes links to search for classes. Refer to the current PCC Catalog for more information.

Step 8: Attend New Student Orientation

If you are a new or transfer student who is enrolling in more than six (6) credit hours, it is highly recommended you attend an orientation session prior to the start of your first semester. During orientation you will receive valuable information about PCC policies, as well as information regarding college success, study skills, time management and services available to you. Contact the Go!Zone for dates and times or look up AAA 0070-0077 sections in the schedule of classes. An online orientation is also available.

Step 9: Obtain a PCC Panther One Card (ID Card)

The Panther One ID Card is required at all campus locations – the Main Campus, Southwest Campus and Site, and Fremont Campus.

The card is required for identification at student-sponsored events and in various offices at PCC. All first-time students will be assessed a one-time ID card fee during the first semester they attend. The only time students will be charged additional fees is if the card is lost or needs to be replaced.

Students can obtain a Panther One Card after they have registered for classes by visiting the Welcome Center on the Pueblo Campus or the Go!Zones at the Fremont Campus and Southwest Campus. Photo identification must be presented to obtain an ID card.

Faculty and staff must obtain and display a PCC Id card once they have completed the new hire process through Human Resources.

Step 10: Make Sure You Can Access Your PCC Email Account

This is our primary way to communicate with you. After you become a student, we will not send information to your personal email account. All students should regularly check their college-issued student email accounts so they don't miss important announcements. To access your student email, log in to the myPCC Portal and click the Student Email icon on the top right corner of the page. If you have problems opening your email, please call 1.888.800.9198 for assistance. Please note that student email accounts are created AFTER students register in classes.

Step 11: Arrange to Pay Tuition and Fees

Visit the Cashier's Office or go online to the myPCC Portal, Student Finance tab, and view Tuition Bill to pay your tuition and fees. PCC accepts cash, checks and valid third-party payments. You can also pay your tuition and fees with Visa, Discover, MasterCard or American Express.

Step 12: Register Your Vehicle to Receive a Parking Permit

PCC provides open parking on all campuses. Reserved or restricted parking will be identified with signage. Students, staff, and faculty are required to obtain and display a parking permit for their vehicles. Permits may be obtained at the Welcome Center on the Pueblo Campus or the Go!Zones at the Fremont Campus and Southwest Colorado Community College campuses. Any person utilizing handicap parking must display a state-issued handicap parking placard or handicap license plate.

Parking citations may be issued for violation of the PCC Parking Rules and Regulations. The complete PCC Parking Rules and Regulations can be found at the following website. They may also be obtained at the Welcome Center at the Pueblo Campus and the Go!Zones at the Fremont and Southwest campuses.

Step 13: Purchase Your Textbooks at the College Bookstore

As early as possible before the semester starts, go to the PCC Bookstore or website to obtain your required textbooks and supplies. The PCC bookstores also offer general interest books, art supplies, office supplies, basic school supplies, calculators, greeting cards, clothing, glassware, and gift items. Books can be purchased on campus at Pueblo and Fremont campuses. All students can purchase textbooks at the bookstore website.

Step 14: Complete PCC Safety Trainings (online) with Vector Solutions

Pueblo Community College is committed to providing a supportive learning environment that promotes your safety and healthy decision-making as it pertains to alcohol and other substance use and fostering safe, healthy relationships among our students. As part of this commitment, PCC complies with and upholds all federal, state, and local laws that regulate or prohibit the possession, use or distribution of alcohol or illegal drugs. Additionally, the college and members of our community will not tolerate offenses of dating violence, domestic violence, sexual assault, stalking, sexual violence, or any other type of sexual misconduct.

These courses and the college's partnership with Vector Solutions is intended to help you learn more about the impact of alcohol and other substances on your body, the resources that are available to you, the college policies on alcohol and other substances, and keeping our campuses safe. Also known as an institution of higher education, PCC has federal mandates to provide these trainings to our students each academic year. This course is about 45 minutes and is an investment in yourself, the college community, and beyond.

If you are looking for PCC policies, you can find them in the PCC Student Handbook located at this link https://pueblocc.edu/Student_Handbook. You can visit PCC's webpage on sexual misconduct and Title IX located at this link www.pueblocc.edu/Title-IX to access information on alcohol/drug referral programs and resources and learn more about procedures and/or student resources related to any type of sexual misconduct.

Look for the email which outlines this expectation, instructions on how to access the important safety trainings, and the deadline to complete these online courses.

Thank you in advance for doing your part to create and maintain a safe and supportive community.

Step 15: Be Sure to Attend Your First Day of Class!

Applying for Admission

- Admissions & Records
- Admission Policy
- Student Classification
- Change/Declaration of Degree or Major
- High School Students
- Transfer Applicants
- International Student Applicants
- Limited-Entry Programs
- Residency Classification
- Selective Service Registration Requirements

- Re-admission to PCC
- First-Year Experience Requirement

Admissions & Records

You will interact with the Admissions & Records Office from the time you apply until you graduate.

We provide the following services:

- Receive and process all admissions applications and supporting documents, to include legal name changes
- Administer all admissions policies
- Coordinate registration
- Process course adds, drops and withdrawals
- Maintain all student academic records, process all requests for transcripts and verify enrollment
- Receive and process Graduation Planning sheets and mail diplomas to graduates
- Provide residency requirements and petitions, student Privacy Act information and access to PCC catalogs and current class scheduling
- Provide information on general enrollment procedures
- Administer Veterans Assistance (VA) services related to student enrollment and VA educational benefits at PCC
- Evaluate credits for transfer students, including previous assessment test scores (ACT, SAT, etc.)

IMPORTANT NOTE: Your Student Records

You are responsible for verifying your records and ensuring that they are accurate and up to date. PCC cannot be held responsible for notifying you in a timely manner if your address and/or telephone number are incorrect. You can update your address and phone information by accessing your myPCC Portal account on the PCC home page using your student ID number and your password. You will be required to show valid identity documentation when requesting access to your student records: Colorado driver's license, Colorado identification card, valid U.S. passport, out-of-state driver's license, foreign passport w/photo, military ID/common access card, Certificate of Naturalization w/photo, valid I-551, valid EAH/temporary resident, Refugee/Asylee I-94 w/photo, BIA identification card w/photo or VA card w/photo.

Admission Policy

PCC has an open-door admission policy. This means there are no admission requirements if you are 17 years of age or older. However, admission to PCC does not guarantee that you can enroll in certain courses or programs that may have their own specific admission requirements.

You may apply online (click the Apply Online link under the Academics tab), in person at any PCC registration station. The address of the main campus is:

Admissions Office
Pueblo Community College
900 W. Orman Ave.
Pueblo, CO 81004

Student Classification

PCC uses several means of classifying students, depending on the purpose of the classification.

1. **Unclassified/Classified Status**

   When you apply for admission, we classify you in one of two ways:

   Unclassified – Unclassified students are not eligible for financial aid (including some scholarships).

   Classified – Classified students may be eligible for financial aid. Note: All financial aid recipients MUST be Classified.

   To become Classified, you must:
   - Be admitted to PCC,
   - Take the Accuplacer basic skills test or be exempted from testing; and
   - Officially declare a major in an approved associate degree or certificate program. To declare a major, complete the Change of Program form located on your Student tab in the myPCC Portal.

     Effective July 1, 2011, concurrently enrolled postsecondary students may enroll as regular students at PCC. Although concurrently enrolled students are not eligible for financial aid, they are eligible to declare a program of study and pursue a certificate or degree.
2. **Class Level**
   Your class level is based on the number of college-level semester credit hours you have earned. PCC has two class levels:
   1. Freshman – fewer than 30 hours
   2. Sophomore – 30 or more hours
   3. For financial aid purposes, students in the Bachelor degree programs may be classified at the Junior level.
2. **Part-time/Full-time/Auditor Status**

   Part-time student
   You are a part-time student if you are carrying fewer than 12 credits per semester.

   Full-time student
   You are a full-time student if you are carrying 12 or more credits per semester.

   Auditor
   When you audit a course, you enroll in a course for which you receive no formal transcript grade. As an auditor, you regulate your own course attendance, take no examinations and receive no credit. The symbol "AU" is recorded on your transcript in place of a grade. If you wish to audit a course, you must indicate your intent to audit at registration or before the refund/census period ends. Audited courses are not eligible for the COF stipend or financial aid; if you are a veteran, you will not receive veteran's benefits for audited classes. Therefore, you are responsible for the full in- or out-of-state tuition for any courses that you audit.

   You must tell your instructor that you are auditing a course.

Change/Declaration of Degree or Major

You may declare or change your degree or major online by completing the change of program form on your Student tab on the myPCC Portal. If you wish to change your major to a health or public safety program or cosmetology, you must

be accepted into the program by the department chair. Changing a declared degree or major may affect your financial aid eligibility. You should consult with an academic advisor prior to making any changes. Changes of major will be processed in the term in in which they are received until full term census changes received after census will take effect the following term.

High School Students

Concurrent Enrollment Programs

Pueblo Community College offers full-time and part-time concurrent enrollment options, which count both for high school and college credit. Students may take courses to complete mini-certificates, certificates, associate degrees or course requirements that transfer to a four-year university. There are hundreds of courses from which high school students may choose in academic or vocational and technical areas.

Students interested in attending Pueblo Community College while still in high school must demonstrate their ability to be successful in each course they take by meeting minimum requirements. First, students must have a qualifying ACT, SAT or Accuplacer. Second, students must meet the prerequisites for all courses they wish to take. Finally, students must meet the standards of the program to which they are applying as determined by their school district (i.e., GPA, class standing).

High school students interested in a Concurrent Enrollment Program through Pueblo Community College should contact their high school counselor or Concurrent Enrollment Department, call 719.549.3388, or email: EarlyCollege@pueblocc.edu for information, deadlines, and application packets.

Effective July 1, 2011, concurrently enrolled postsecondary students may enroll as regular students at PCC. Although concurrently enrolled students are not eligible for financial aid, they are eligible to declare a program of study and pursue a certificate or degree.

Re-admission to PCC

If you are a former PCC student who has not attended PCC for one year or more, you must complete a new application for admission with your current address, phone number, and residency information.

Transfer Applicants

If you have attended another college or university and are seeking admission to PCC for the first time, you are considered a Transfer Applicant. If you are seeking classified status and wish to transfer credit from your previous college, you must ask that college to mail your official transcripts to this address:

Records Office
Pueblo Community College
900 W. Orman Ave.
Pueblo, CO 81004
888.642.6017 – Ext. 3017

Hand-delivered transcripts will not be accepted. Transcripts must be received as soon as possible and within your first term of enrollment.

For more information about transferring from another institution, see the Transferring Credits section of this catalog.

International Student Applicants

An international student is one who attends PCC on a nonimmigrant student visa (usually an F, J or M nonimmigrant visa). Legally admitted immigrants and refugees are not considered international students. Generally, the policies described in this catalog apply to international students as well as domestic students. However, by federal law, some special policies apply only to international students.

Applying for Admission as an International Student

We will consider your application only if you submit all documents by the following deadline dates:

- First Monday in April for Fall semester
- First Monday in November for Spring and Summer semester

If you are a resident of another country, you must submit the following documents to apply for admission:

- An application for admission. You can get an application from this address:
  Admissions Office
  Pueblo Community College
  900 W. Orman Ave.
  Pueblo, CO 81004

- Two official transcripts of all work completed in high school, college or their equivalent. One transcript must be in your native language and the other must be in English. The transcripts must contain the following items:
  - Courses taken
  - Grades earned
  - Length of classes
  - Length of school term

In addition, please make sure that the issuing institution includes an explanation of all terminology that appears in your transcript. Your former schools or colleges must send all transcripts directly to the Admissions Office at the above address. We do not accept hand-delivered transcripts. All transcripts must bear the official seal of the issuing institution.

- A financial statement/affidavit with support describing all resources provided for you while you are in the United States. A certified bank statement in the name of the sponsor, issued from the sponsor's bank and dated within the last six (6) months, must be provided for each source of funding. **You cannot register without this statement.** PCC has no institutional funds to support international students. You must be able to meet all financial obligations while attending PCC.
- Verification of health insurance coverage. This insurance is mandatory. You may obtain it through PCC or from your home country. You are required to submit verification of current insurance coverage to the Admissions & Records Office prior to the start of classes.
- English Placement Exam scores. If you are a first-time freshman international student and you are from a country where English is not the only native language, you must meet one of these requirements:
  - T*est of English as a Foreign Language (TOEFL):* A total minimum score on the Internet Based Test of (TOEFL;Bt) 45-46. To register for the TOEFL, write to the Publications Office, P.O. Box 6154, Princeton, NJ 08540, USA; or check with the U.S. Embassy or the U.S. Information Service Center for TOEFL information.
  - The TOEFL code number for PCC is 4634. To have TOEFL scores sent directly to PCC, please enter 4634 on your answer sheets when you take the TOEFL examination. If you have already taken the test, enter 4634 on the Score Report Request Forms.
  - ELS Language Center: A score of 109.

If you are a **transfer international student**, you must meet one of the above English proficiency requirements and you must have an overall cumulative grade point average of 2.0 or above.

Note: When you submit a document to PCC, it becomes our property. We cannot return it to you. Therefore, please do not submit any document in its original form. Instead, submit an official or certified copy of the document. The official version is a copy of the original that has been notarized or certified by a recognized official source attesting that the document is a true copy of the original.

Other Requirements for International Students

- Complete PCC assessment tests, new student orientation and advising before registering for classes. Your scores on the placement tests will determine which classes you take in English, mathematics, reading and computer literacy.
- **Pay tuition and fees in full at the time of registration.** International students on F-1 visas pay the same tuition and fees as non-resident students.
- Comply with immigration requirements regarding the number of credit hours you take while attending PCC. U.S. Immigration Customs Enforcement regulations require that international students on F-1 visas carry and complete a minimum of 12 credit hours per semester and that they complete their educational objectives within a reasonable period of time. If you do not comply with ICE Regulations, we will report your status to ICE.
- Only degrees are approved for international students, certificates are not approved.
- Comply with the minimum grade point average requirements found under *Academic Probation* and Suspension in the Academic Regulations section of this catalog.

Limited-Entry Programs

If you want to apply for a limited-entry program, you must apply to the program itself (in addition to applying for admission to the college).

The following programs are limited entry:

Limited Entry Programs	**Limited Entry Programs**
Automotive	Cosmetology
Dental Hygiene – AAS & BAS	Emergency Medical Services
Fire Science Academy	Law Enforcement Academy
Medical Assistant	Medical Sonography
Nursing	Nursing Aid
Occupational Therapy Assistant	Pharmacy Technician
Physical Therapist Assistant	Phlebotomy
Psychiatric Technician	Radiologic Technology

Respiratory Care Practitioner	Surgical Technology

These programs have specific entrance requirements. You may not enroll in limited-entry program courses until you are formally accepted into the program.

Before you are admitted to a limited-entry program, you must complete a criminal background check and a drug screen. Certain felonies or misdemeanors will preclude you from entering a limited-entry program. For further information, including specific timelines for completion of the background check and drug screen, contact your program advisor.

Upon admission to a health professions limited-entry program, the following additional requirements must be completed:

- Submission of a health certification form documenting current immunizations, TB skin test, CPR training and receipt of Essential Job Functions
- Some program/clinical sites will require a flu and varicella (chickenpox) vaccine
- Purchase of liability insurance
- Purchase of supplies, equipment and/or uniforms specific to program (contact department for detailed information)

It is your responsibility to meet the medical requirements of the program you wish to enter. If you are allergic or sensitive to latex, be aware that in Health and Public Safety programs, latex products are used extensively during training and in the workplace. If you have an allergy or sensitivity, we will ask you to sign a release and you may have to observe special precautions.

Note: Some clinical courses may not be available when you want to take them because of changes occurring in the health care industry. This could extend the length of your program.

Residency Classification

When you are admitted or readmitted to PCC, we classify you as either a *resident* or a *non-resident* of Colorado for tuition purposes, according to the provisions of Title 23, Article 7, Colorado Revised Statutes, as amended. You have the right to challenge your tuition classification by the census date of each semester. To do so, obtain a Petition for In-State Tuition Classification from the Admissions Office and complete and return the petition with the required documentation to the Admissions Office. We will use the documents supplied by you, along with the answers to the residency questions on the petition, to make a final residency decision. Students who are under the age of 23 and unmarried are classified according to their parents' residency status. Contact Admissions for additional information.

To be classified as a *resident*, you must meet two tests of domicile:

1. **Presence**: You must have been physically domiciled in Colorado for twelve (12) continuous months prior to the first day of classes.
2. **Intent**: You must document that Colorado is your permanent state of residence.

It is not enough to document **presence** but not **intent**. Furthermore, you cannot rely on just one document to prove intent. Examples of the kinds of documents you might submit are listed in the following table.

Criteria for Residency	**Example of Document**
Employment in Colorado	Pay stub
Payment of Colorado state income tax	Colorado state tax return
Ownership of residential real estate in Colorado	Real estate tax bill

Primary residence in Colorado	Colorado state tax return
Graduation from a Colorado high school	High school diploma or transcript
Registration of motor vehicle in Colorado	Car registration
Acceptance of future employment in Colorado	Letter from your future Colorado employer offering you a job
Voter registration	Mailing you received from the County Clerk's Office prior to the last election or verification from the County Clerk's Office
Possession of Colorado driver's license	Copy of your Colorado driver's license or ID card

Deadline: Submit your petition with all supporting documents by the deadline date published on the myPCC Portal for the intended term. We will not review late petitions, those missing documentation and information, or those without a notarized signature.

Selective Service Registration Requirements

Before enrolling at PCC, male students must truthfully declare their selective service registration status on the Application for Admission. You may not enroll if you provide no information or false information. If your status changes in any way, you must notify the Admissions & Records Office. You may register for Selective Service or obtain proof of registration by using the website. Contact the Admissions Office for further information concerning Selective Service requirements.

First-Year Experience Requirement

In accordance with the CDHE policy of enrolling students into credit-bearing, college-level courses and to support the college's goals of persistence, retention, and graduation, effective Fall 2018, all Associate of Arts, Associate of Science, Pre-Nursing Associate of General Studies, and Associate of General Studies degrees without designation offered at Pueblo Community College will include AAA 1009 as a first-year-experience requirement.

Note that:

- The AAA 1009 First Year Experience course requirement applies to AA, AS, AGS degrees without designation, and the Pre-Nursing AGS degree (but excludes all other Pre-Health AGS programs)
- For new incoming students, AAA 1009 is required within the first 15 credits (i.e.: in the first year)
- The AAA 1009 First Year Experience course is also strongly recommended for all incoming transfer students, returning students, and students pursuing other programs.

Transferring Credits

Transferring Credits to PCC

To transfer credits to PCC from another higher education institution, please ask your previous institution to **mail** your official transcript to this address:

Records Office
Pueblo Community College
900 W. Orman Ave.
Pueblo, CO 81004

** PCC will not accept hand-carried transcripts.

Electronic Transcripts Receipt Process

E-transcripts may be sent to registrar@pueblocc.edu.

Pueblo Community College will accept electronic transcripts.

Approved Mechanisms:

1. eSCRIP-SAFE transcript delivery network.
2. Electronic Certified.pdf Transcripts with a digital signature available through a secure password-protected database.

These transcripts are password protected, provided by the sender and accepted and handled as official documentation.

Transcripts sent via any other method or to any other email address will not be accepted as official documents and will not be used for transfer purposes.

We need to receive your transcripts as soon as possible and within your first term of enrollment at PCC; otherwise, you may have to re-take courses you took at your former institution or satisfy PCC assessment requirements.

We evaluate your transfer credits according to the following guidelines:

- You must be admitted as a Classified student (one with a declared major) before we can evaluate your transfer credit. We evaluate transfer credits based on the requirements of your major.
- You must submit official transcripts, mailed or electronically certified and delivered from your previous institutions, within your first term of enrollment at PCC. We will not accept hand-carried transcripts.
- We accept transfer credits from regionally accredited institutions recommended by the American Association of Collegiate Registrars and Admissions Officers, and as specified by legislated and CCCS articulation agreements.
- Forty-Five (45) credits is the maximum number of transfer credits that can be applied toward a degree. A minimum of 25 percent of the credits applied to a degree or certificate must be earned at Pueblo Community College.
- PCC will only evaluate credit for transfer on courses with a grade earned of C, P, S, or better.
- You must earn at least 15 graded semester credits at PCC in your program area to receive a degree. They cannot include transfer credits or credits earned for prior learning.
- Your instructional department will evaluate your transfer credits to determine whether they meet department requirements for graduation.
- Please note that some courses that are more than 10 years old may not be transferable. The department chair or dean of your program area will determine whether your transfer credits fall within acceptable time limits. Older credits may be evaluated by the appropriate department chair or dean and their decision will be final.

- We will accept credits you've earned in any Colorado state system community college, or any local district community/junior college which is in compliance with the State Board Policy on degree standards, as meeting degree or certificate requirements in comparable or equivalent programs at PCC.
- The registrar will determine if PCC can accept credits from qualified degree-granting institutions. In most cases, these will be 100- and 200-level courses. If you wish to transfer 300- or 400-level credits to PCC, the records coordinator, your department chair and/or dean will decide how PCC will apply those credits.
- If you are eligible for veterans' educational benefits, you must submit official transcripts from all colleges and universities previously attended or your benefits could be interrupted.
- If we accept your transfer credits, we will post them to your academic record (transcript) after you enroll at PCC. You may review your results online by logging on to your myPCC Portal account.
- The evaluation of previous college work must be completed prior to filing an Application for Graduation. You may appeal a transfer evaluation by contacting the Records Office.
- If you do not enroll in classes, PCC will only hold your transcripts for one year.
- Transfer credits will be awarded as governed by the Colorado Department of Higher Education and State Board policies and System President Procedures.
- If you change your degree or major, you must contact the records office for a re-evaluation of your transcripts.
- We cannot remove transfer credit once it has been posted to your records.

Transfer Appeals Process

Consistent with the requirements of the Colorado Department of Higher Education, CCCS Colleges have established a Transfer Appeals Process. Based upon initial transcript evaluation of transfer credits completed, a student may appeal any of the following:

1. A decision regarding the transferability of a specific course(s)
2. A decision regarding the placement of a specific course(s)
3. The college's failure to provide a transcript evaluation within the designated 30-day calendar period

To appeal a transfer evaluation, you should meet with the transcript evaluator and/or the Director of Enrollment Services and Registrar.

Prior Learning Assessment (PLA)

Students may earn college credit for non-college or experiential learning acquired through prior schooling, tests, work, or other life experiences. PLA is not awarded for experiences alone, but for the college-level learning that the student gained through the experiences. Such college-level learning must be comparable to PCC courses and must relate to the student's educational objectives and declared program. PLA credit may be earned through standardized tests, challenge exams, published guides or portfolio assessment. All credit assessed for PLA must meet or exceed "C" level work. Students who intend to transfer to another community college in the state system may have their prior learning credits transferred to that college as long as the credits are applicable to the student's declared certificate/degree program. Go to Pueblo Community College PLA Credit for college specific information.

Types of Credit

Standardized Tests

Advanced Placement Program (AP)

Students can receive credit through AP Exams completed in high school. Please visit the following site for a complete list of acceptable AP exams, AP exam cut scores and PCC course equivalencies

College Level Examination Program (CLEP)

The College Level Examination Program (CLEP) is a series of examinations that allows individuals to earn college credit for what they already know, regardless of where they learned it. Please visit the following sites, Site 1 and Site 2, for more information on what tests are available.

International Baccalaureate (IB)

PCC recognizes the International Baccalaureate program and reviews IB credentials on an individual basis. For information, please click on the following site for special conditions for acceptance.

DANTES Subject Standardized Tests (DSST)

Most DSSTs are recognized by PCC as acceptable exams for college credit. DSSTs may be taken at the PCC Testing Center. Call 719.549.3091 or email test_center@pueblocc.edu for more information.

To receive college credit, students who take any standardized test must request that their scores be sent directly to the PCC Records Office. There is no charge for PCC to evaluate standardized test results for credit.

Challenge Examinations

PCC-approved exams such as objective tests, essays, oral presentations or hands-on demonstrations may be used to evaluate students' competencies in specific courses listed in the PCC Catalog. These comprehensive exams are the equivalent of the final exam of the course challenged and are available at the option and approval of the appropriate dean. Only one exam for a particular course may be arranged per term. Challenges must be completed prior to registering in the course challenged. The cost for a Challenge Exam is $45 per credit hour.

Published Guides

ACE-Military

PCC uses the credit recommendations of the American Council on Education (ACE), as published in the Guide to the Evaluation of Educational Experiences in the Armed Services, to evaluate military training and learning experiences.

ACE-Workforce Training

PCC uses the credit recommendations from the ACE Workforce Training as documented on the ACE Transcript. See National Guide to College Credit for Workforce Training for information.

Non-Accredited Training

PCC used the credit recommendations from The National College Credit Recommendations Service as documented on the NCCRS transcript. Information can be found at the following site.

To receive college credit, students should request that the transcripts be sent directly to the PCC Records Office. There is no charge for PCC to evaluate credit from published guides.

Portfolio of Learning Outcomes

Admitted students who have declared a program of study may petition for credit by developing a portfolio that documents and details learning experiences comparable to those available in PCC courses. A faculty member in the appropriate program area will evaluate the portfolio and determine what, if any, credit will be given. Only one portfolio evaluation for a particular course will be permitted during any one semester. The cost for a portfolio evaluation is $65 per credit hour.

Graduation Requirements

Students may use PLA Credit to fulfill all degree/certificate graduation requirements except for the mandatory 25 percent residency requirement. For more information on PLA options, students should contact their faculty or academic advisor or the PCC Records Office at 719.549.3017.

Transferring Associate Degrees to Other Institutions

Colorado's Statewide Transfer Agreements (sometimes known as "Degrees with Designations" or "DwDs") guarantee that when you complete your AA or AS degree at PCC with at least 60 approved credit hours of course work with a C or better grade in every course, you can transfer to a baccalaureate liberal arts and sciences major (e.g., English, History, Math) at a Colorado public college or university and graduate after earning an additional 60 credits. While you are guaranteed not to have to take more than 60 hours to graduate, a variety of factors will determine whether or not you will receive your bachelor's degree in an additional two years. You must consult with your academic advisor to determine which courses to take at PCC to prepare you for your chosen bachelor's degree.

PCC also has multiple transfer and articulation agreements with several Colorado four-year institutions. Save time by seeing your transfer advisor at your earliest opportunity for the latest transfer guides.

This AA/AS transfer agreement applies to courses completed at any Colorado community college. Credit earned for prior learning, Advanced Placement, correspondence courses, CLEP and other tested-only credit may not apply. The institution to which you transfer will evaluate these credits according to its own policies. If you disagree with the institution's evaluation of your PCC credits, you may contact PCC to appeal our calculation of your transfer credits.

Transcripts

To order official transcripts, you may either order online through Parchment or print the "Request Official Transcript form" Please use the form for coursework prior to summer 1987 or San Juan Basin Technical College. Please contact your campus Go!Zone to see if transcript pick-up is available. There is a minimum fee of $3 per transcript.

Unofficial transcripts are available free of charge through the MyPCC Portal for one year after you leave PCC. If you are a current student, check your unofficial transcript prior to ordering official transcripts at the end of a term to ensure that your grades and/or degree have been posted.

PCC will not provide copies of your previous colleges' transcripts. If you need a copy of another college's transcript, please contact that college directly.

Financial Aid

Financial Aid Office

The PCC Financial Aid Office administers a comprehensive program of grants, scholarships and loans. Grants and loans are based on need. Scholarships are based mainly on academic ability and, in some cases, need. Work-study opportunities are based primarily on need.

To apply for financial aid, complete the Free Application for Federal Student Aid (FAFSA) online at www.fafsa.ed.gov. If you have questions about financial aid guidelines and policies, contact the PCC Financial Aid Office or call 719.549.3200.

Priority Deadlines for Applications

Complete the FAFSA application as early as possible. Our awards are subject to the availability of funds. We give top priority to full-time students who show exceptional financial need and who submit completed applications by the following dates:

Fall Semester	March 15
Spring and Summer Semesters	November 1

Though we do accept applications later than these dates, we give priority to those who meet these deadlines.

Eligibility for Financial Aid

To be eligible for financial aid, you must

- be a U.S. citizen, national or permanent resident
- have a high school diploma or GED
- be accepted to PCC as a degree-seeking (Classified) student
- be enrolled in an eligible program at least half time (six credit hours) for most Federal and State aid programs and full time (12 or more credit hours) for most scholarships
- submit a complete financial aid file that includes all required supporting documents
    - verification worksheets, tax transcripts from the IRS, W2s, social security cards, copies of high school diploma, or GED, etc.
- make satisfactory progress toward a degree or certificate and be within the regulatory limitations of maximum attempted credits, and
- clearly establish financial need for need-based financial assistance

You are not eligible for financial aid if you

- are concurrently enrolled in high school, or
- owe a refund on a federal grant, or
- are in default on a federal student loan, or
- are in a certificate program which is less than 16 credit hours, or
- have already earned a bachelor's degree (unless you are applying for student loans).

The Financial Aid Office will make every effort to keep you informed about the status of your application; however, you should contact the office to find out what information we might still need to complete your file.

Types of Awards

Grants

Federal Pell Grant
This is the basic award to which other federal and non-federal sources may be added. The amount of the Pell Grant depends on your financial need, the cost of education, and the amount of time you will be enrolled during the school year. As with all grants, you do not have to pay back a Pell Grant provided you do not withdraw during a semester.

Federal Supplemental Educational Opportunity Grant (FSEOG)
This grant provides additional financial assistance to exceptionally needy undergraduate students who are also Pell Grant recipients.

Colorado Student Grant (CSG)
This grant provides financial assistance to Colorado residents who otherwise would be unable to pursue postsecondary education. Priority for these funds goes to residents of Colorado who are eligible for a Pell Grant.

Work Study

The College Work Study Program (CWSP) provides employment for full- and part-time students for 10 to 20 hours of work per week. Most work study funds go to students who demonstrate financial need, with remaining funds available to employ other students in areas related to their academic and career goals. Funds are provided by the Federal Work Study Program and by the Colorado General Assembly.

Loans

The William D. Ford Federal Direct Loan Program provides low-interest loans to qualified students to help meet educational expenses. Loans are secured from and are insured by the Federal government. If you are a first-time borrower, you must complete Stafford Loan Entrance Counseling to qualify for this loan. Student loans are a supplement to other federal, state, institutional and private student financial aid programs and you must pay them back.

Scholarships

Scholarship funds are available from a variety of sources: the State of Colorado, the PCC Foundation, corporations, businesses, foundations, individuals, civic organizations, service clubs and similar organizations. We award scholarships based on academic ability, special educational interests, talent and, in some cases, need. Each scholarship has its own guidelines for application and selection; contact the PCC Financial Aid Office to obtain applications for the scholarships you might qualify for at the following site.

Return of Federal Title IV Financial Aid Funds

If you withdraw, officially or unofficially, during a semester in which you are receiving federal Title IV Financial Aid funds, you must return a portion of the funds. We use the Return of Title IV Funds Calculation to determine how much you owe. This calculation is based on how much of the semester you complete. If you complete more than 60 percent of the semester, you have earned all of your award and owe nothing to the College. If you complete 60 percent or less of the semester, you must return the unearned funds to the college. You also must pay any institutional charges that result when we return funds to the federal government. Contact the Financial Aid Office for more information.

Financial Aid Warning, Probation and Ineligibility

The Financial Aid Office monitors your academic progress if you are a recipient of federal, state or institutional financial aid. We monitor progress in three areas:

- Grade point average (GPA) – you must attain a minimum cumulative GPA of 2.0.
- Completion rate – you must complete 67 percent of all cumulative attempted credits.
- Maximum time frame – you must complete your degree/certificate by the time you have attempted 150 percent of the credit hours required in your program.

If you do not attain the minimum grade point average or completion rate, we will place you on warning or ineligibility. If you have 0 percent completion within a semester, you will become ineligible. If you are on financial aid warning or probation, you may continue to receive financial aid subject to approval. If you are on financial aid ineligibility, you are no longer eligible for financial aid.

Note: Financial aid warning/probation/ineligibility is different than academic probation/suspension. Please see the Academic Regulations section of this catalog for information about academic probation/suspension.

Contact the PCC Financial Aid Office for more information.

Other Benefit Programs

Veterans Administration Educational Benefits

With certain exceptions, PCC courses are approved for the training of veterans and eligible dependents. If you plan to use VA educational benefits, contact the Admissions staff in the Go!Zone at the Pueblo Campus or call 719.549.3013 immediately after deciding to attend PCC. You can expect a six- to eight-week VA processing time for your application.

*Y*ou are responsible for payment of book costs whether or not your VA educational benefit payments have started.

It is your responsibility to notify the Admissions staff in the Go!Zone of any address and/or enrollment changes such as course adds and drops, change of major, other schools attended and any other information related to your academic standing. The Military Benefits tab in your MyPCC Portal is the preferred way to notify Admissions staff of enrollment status. Contact 719.549.3013 for questions.

Veterans Attendance and Satisfactory Progress

If you do not attend regularly or make satisfactory, systematic progress toward an educational objective, you will have to repay the VA. If you are placed on academic suspension, the VA will discontinue your benefits for the duration of the suspension.

The school maintains a written record of the previous education and training of the veteran or eligible person and clearly indicates that appropriate credit has been given for previous education and training, with the training period shortened proportionately, and the veteran or eligible person and the Department of Veterans Affairs so notified.

VA students' records must be kept for 3 years following the ending date of the last period certified to VA. Referenced law: Title 38 CFR 21.4209(f))

Western Undergraduate Exchange

The Western Undergraduate Exchange (WUE) is a program allowing students in 14 participating states to enroll in designated two-year institutions at a special, reduced tuition rate applicable only to WUE students. PCC or CCC Online tuition rates are not reduced. Colorado is a WUE participating state. Entry is allowed to approved certificate and degree seeking students. Undeclared students are not WUE eligible. WUE students are not eligible for the College Opportunity Fund (COF) stipend.

Residents of the following states should contact the Admissions Office for further details: Alaska, Arizona, California, Commonwealth of the Northern Marianas Islands, Hawaii, Idaho, Montana, Nevada, New Mexico, North Dakota, Oregon, South Dakota, Utah, Washington and Wyoming.

Tuition and Fees

Calculating the Cost of Tuition: The College Opportunity Fund (COF)

The State of Colorado historically subsidized higher education for in-state students by giving money directly to the colleges. In 2004, the Colorado Legislature enacted a law establishing the College Opportunity Fund (COF) as a new way for Colorado to provide state financial support to eligible undergraduate students. With the start of fall semester 2005, this money is being set aside in the form of a stipend for each undergraduate student, in an account the student creates by signing up at the following COF website. The student designates which institutions of higher learning are to receive stipend funds on their behalf. The money is applied to the in-state student's tuition if the student applies for and authorizes the use of the stipend, and it will appear as a credit on the tuition bill. Currently the College Opportunity Fund (COF) stipend is estimated to be worth $104 per credit hour.

Projected tuition costs for the 2022-2023 academic year[1]:

Tuition	Tuition Only	Less Estimated COF Stipend	Student Share of Tuition
Resident	$260.40	$104	$156.40
Resident CCCOnline & PCC Online	$367.20	$104	$263.20
Resident - Nursing Courses*	$339.30	$104	$235.30
Resident - Dental Hygiene**	$415.20	$104	$311.20
Resident - Nursing Online***	$442.30	$104	$338.30
Active Duty Military, Online Courses	$354.00	$104	$250.00
Non Resident	$641.80		$641.80
Non Resident - CCCOnline and PCC Online	$401.25		$401.25
Non Resident Nursing	$656.50		$656.50
Non Resident Nursing Online	$477.40		$477.40
Non Resident - Dental Hygiene	$651.05		$651.05

*Includes nursing tuition differential $78.90/credit

**Includes dental hygiene tuition differential $154.80/credit

***Includes online NUR tuition differential - $75.10/credit

Bachelor Programs	Tuition Only	Less Estimated COF Stipidend	Student Share of Tuition
Resident Dental Hygiene	$425.75	$104	$321.75
Resident Respiratory Care	$425.75	$104	$321.75
Resident Radiologic Technology	$425.75	$104	$321.75
Resident Nursing	$461.00	$104	$357.00
Non Resident Resident Dental Hygiene	$417.60		$417.60
Non Resident Respiratory Care	$417.60		$417.60
Non Resident Radiologic Technology	$417.60		$417.60
Non Resident Nursing	$452.85		$452.85
Resident Advanced Paramedic Practictioner	$367.20	$104	$263.20
Non Resident Advanced Paramedic Practictioner	$401.25		$401.25
Resident Secured Software Development	$359.15	$104	$255.15
Non Resident Secured Software Development	$623.10		$623.10

Fees not included - see Mandatory Student Fees

[1]These estimated costs are subject to change without prior notice or obligation.

Tuition Rates for Armed Forces Members and Their Families

A member of the armed forces who is on active duty for more than thirty (30) days (during enrollment), whose permanent duty station is in Colorado, cannot be charged out-of-state tuition. Even if there is a change in the permanent duty station, as long as the person is continually enrolled they must still be charged in-state tuition (this also applies to their spouse and/or dependent children). Contact the Admissions Office for the Certification for Military Tuition Status form.

Fees

Registration Fee: $15.10 per semester

Mandatory Student Fees

The following fees are assessed on a per-credit-hour basis up to a maximum of 12 credit hours per campus/site.

Campus/Site Fees:	Amount
Student Use Fee	$3.64
Technology Fee	$10.88
Facility Site Use Fee (Bayfield, Durango	$1.63
Parking (Pueblo, Fremont, Mancos)	$1.63

Charges at Pueblo Campus Only	Amount
Student Center Fee	$8.19
Fitness Center Fee	$1.24
Student Life Facility	$9.06
Health Clinic Fee (6 credits and up, flat charge)	$5.43

Additional information on instructional program fees and course pass thru fees can be found on the PCC website under the Additional Fees tab.

Miscellaneous Fees *

The following miscellaneous fees will be charged where appropriate:

Additional Parking Permit	$1.00
Deferred Payment	$10.00-$30.00
Health Professions	$10.00
Return Payment Charge	$25.00-$40.00
Student Identification Card	$10.00
Student Identification Card (replacement)	$10.00
Student Records (per copy in advance)	$2.00
Accuplacer Exam (per test session)	$10.00

*** These estimated costs are subject to change without prior notice or obligation. Additional cost may be incurred as required by program (e.g., background check/drug screen, immunization, program-specific supplies, etc.). Students should check with their program for additional cost information.**

Financial Obligation

When you register for one or more classes, you must pay all of your tuition and fees unless you officially drop your courses within the first 15 percent of the term (by the end of the refund period). If you fail to pay tuition and fees, you might incur collection fees, attorney fees, interest or other costs. If you have a financial obligation to PCC, future registration will be withheld until your account is paid in full.

Billing

Statements can be obtained anytime through the myPCC Portal.

Methods of Payment

PCC accepts cash, check or credit card. (Visa, MasterCard, Discover and American Express) Bills may be paid at the Cashier Office, over the phone, online, or by mail.

Payment Plans are offered through the Cashier Office. Students must make a minimum down payment, sign a promissory note and pay the deferred payment fee. All payment plans are due before the end of the semester. Payment Plans

Third Party payments are also accepted. If you are working with a third party payer, please contact the Cashier Office to complete the required paperwork. Third Party Payments

Refunds

Tuition Refunds/Adjustments

To receive a tuition refund or adjustment, students must drop classes by the refund deadline listed in the Academic Calendar or on your class schedule/bill. You must authorize the drop in person by one of the following methods:

- Fill out an official drop form and submit it to the Admissions & Records Office.
- Login to your student account through the myPCC Portal to submit a drop request online.

Please Note: Not attending class does not constitute a drop and students will not automatically receive a refund. Students must officially drop their courses — at the Admissions Office (CC 224) or via online or telephone registration — no later than the Refund Period shown on the Academic Calendar or on the class schedule/bill given at registration.

Disbursements

When it comes to receiving financial aid refunds and other credit balances, you deserve choices! PCC delivers your refund with BankMobile Disbursements, a technology solution, powered by BMTX, Inc.. You will select your refund preference by logging into the myPCC Portal and selecting the BankMobile icon from the Student Tools portlet.

Learn more about BankMobile disbursements, a technology solution, powered by BMTX, Inc.

Basic Skills Assessment

How We Place You in Courses

We want you to be successful in achieving your educational goals. Therefore, you must have strong skills in reading, writing and/or math to succeed in college-level courses (courses at the 100 or 200 level). These skills are often listed as prerequisites (PRQ) or corequisites (CORQ) for college-level classes.

The PCC Basic Skills Policy is based upon these policies:

- Colorado Department of Higher Education's Statewide remedial education policy.
- Colorado Community College System Developmental Education Taskforce's 2013 redesign recommendations.
- Colorado Community College State Board policy BP 9-41.

Students attending PCC must adhere to the Basic Skills Policy and may need to take a placement test in mathematics, reading and writing before their first semester of enrollment. PCC uses this test to place students in appropriate college or basic skills courses. The test is not timed and is not pass/fail; it simply helps us establish which courses will be most appropriate for you.

Colorado's Remedial Education policy, which is based on *Title 23 - Postsecondary Education, State Universities and Colleges, Article 1 - Colorado Commission on Higher Education, § 23-1-113.3. Commission directive - basic skills courses*, requires the use of multiple measures in placing students into English and Math classes. Under this policy, the **primary evaluation** determines whether a student is college ready in English and mathematics and if the student will need remedial support or reassessment. Colorado accepts six assessment instruments for placement; institutions may choose to use any or all approved primary assessments, but must accept ACT or SAT. Accepted assessments include: ACT, SAT, Accuplacer, COMPASS, PARCC and Smarter Balanced. The **secondary evaluation** is institution-specific and incorporates the review of multiple measures to determine college readiness and course eligibility. The policy allows for institutional flexibility in determining the secondary evaluation. Under this policy, students' performance on standardized tests, high school achievement measures, advisor review and recommendation, and non-cognitive measures and essays are accepted as evidence of placement into college-level courses.

For the most up-to-date information about the Accuplacer Test, as well as prep materials, placement scores and fees, please visit the Testing Center's website.

Important Information Regarding Your Test Scores:

If you test into any basic skills courses, you must complete those courses within your first 30 credit hours of enrollment and meet with an academic advisor. If you do not register for basic skills courses within your first 30 hours, you will not be able to register for more classes until you meet with an academic advisor.

- If you have to take the Accuplacer, PCC requires that the test be completed before you meet with an academic advisor. All first-time undergraduate students must take the basic skills test or be exempt from assessment if they are seeking a degree (or are converting to degree-seeking status) or graduated from high school during the previous academic year.
- For certificate students, basic skills requirements will be identified in the college catalog.
- Students whose assessment scores do not meet college-level standards will need to meet with an advisor prior to registering in courses for the first time.

- Students who successfully complete the highest level of basic skills classes or college-level courses in math or English at a regionally accredited college or university are exempt from assessment in these subject areas only. Successful completion means a satisfactory "S" or a letter grade of "C" or better.
- High school students are exempt from assessment except when the scores are required as prerequisites for PCC or through specific agreements with districts/high schools.
- Students who have taken the ACT or SAT within the last five years may be exempt from the Accuplacer if their scores provide evidence of college readiness. Reading and English scores are valid for five years; math scores are valid for two years. Students should contact an academic advisor for required scores.

How to Take the Accuplacer

1. Students are encourage to schedule an appointment to take the Accuplacer. To make an appointment, contact your local campus Testing Center:

Location	Address	Phone Number
Pueblo Campus	900 W. Orman Ave., AB 134	719.549.3091
Fremont Campus	51320 W. Hwy. 50, L101	719.296.6116
Durango Site	2390 Main Avenue	970.385.2001
Southwest Mancos Campus	33057 Hwy. 160	970.564.6201

- The cost of the Accuplacer is a $10 no matter how many sections you are being tested on.
- Testing is permitted twice a semester. If you wish to take the Accuplacer more than twice, you must seek written permission from the Chief Academic Officer or designee and show proof of progress in an approved tutorial program.

How to Prepare for the Accuplacer

Practice and Get Prepared for Test Day
The Official Web-Based Study App

The ACCUPLACER web-based study app features practice tests in each test subject. It is accessible from most devices with internet access, and will help you become familiar with the content and format of the ACCUPLACER test questions.

- "Learn as you go" tests provide you with explanation of the correct or incorrect responses.
- Sample tests are similar to the real thing, so you'll know ahead of time what your experience will be like on test day.
- You can save your work at any time, and come back when it's convenient for you.
- You can review your score history to see what you're already doing well and what skills you should focus on improving.

ACCUPLACER STUDY GUIDES Website

Developmental Support Courses: Supplemental Academic Instruction (SAI)

PCC is committed to helping students with basic skills in reading, English and math. To ensure student success, the iGrad program provides students the ability to work on their basic skills by offering courses that are paired with 100-level courses.

PCC will provide written notice to all students whose Accuplacer scores do not meet the basic skills standards. This notice will include the state colleges offering basic skills courses, the course cost and the availability of the courses, including any online course. The official results of the tests are kept by the PCC Testing Center (Accuplacer, ACT, SAT and others) are valid for five years.

Please speak with an advisor if you have any questions about the basic skills test.

Course Placement Based on Assessment Test Scores or Exemption

ENGLISH EXEMPTION

- English 11 or higher English course within 2 years of completion with a grade of A/B & high school GPA of 3.0

ENG 0092

Accuplacer - Sentence Skills <50 placement

ENG 0094 or ENG 1021

Accuplacer - Sentence Skills 70-94 placement

ENG 1021 - English Composition I: GT-CO1

- Accuplacer - Sentence Skills ≥95 placement
- ACT - English 18 placement or SAT - Writing 460 placement
- AP - Language and Composition 3 exemption or IB-HL4 exemption

MATH EXEMPTION

- Placement in Career/Technical Math (MAT 1140, MAT 1120, MAT 1150 or MAT 1160)
    - 3.0 un-weighted high school GPA & A or B in Geometry & course within 18 months
- Placement in Career/Technical Math or Qualitative Math (MAT 1240 or MAT 1260)
    - 3.0 un-weighted high school GPA & A or B in Algebra II & course within 18 months
- Placement in Math 121
    - 3.0 un-weighted high school GPA & A or B in Pre-calculus & course within 18 months

MAT 0250 - Quantitative Literacy

- Accuplacer – Arithmetic ≥40 OR 30-60 Elementary Algebra placement

MAT 0300 - Algebraic Literacy

- Accuplacer - Elementary Algebra 60-84 placement

MAT 1140 - Career Math or MAT 1120 - Math for Clinical Calculations or MAT 1150 - Technical Mathematics or MAT 1160 - Financial Mathematics

- Accuplacer - Elementary Algebra ≥61 placement

- ACT - Math 19 placement or SAT - Math 500 placement

MAT 1240 - Mathematics for the Liberal Arts: GT-MA1

- Accuplacer - Elementary Algebra ≥ 61 placement
- ACT - Math 19 placement or SAT - Math 500 placement
- IB - HL4 exemption

MAT 1260 - Introduction to Statistics: GT-MA1

- Accuplacer - Elementary Algebra ≥61 placement
- ACT - Math 21 placement or SAT - Math 550 placement
- AP - 4 or 5 exemption

MAT 1340 - College Algebra: GT-MA1

- Accuplacer - Elementary Algebra ≥85 placement
- ACT - Math 23 placement or SAT - Math 570 placement
- IB - HL4 exemption

MAT 1420 - College Trigonometry: GT-MA1

- Accuplacer - CLM ≥63 placement
- ACT – Math 24 placement or SAT - Math 590 placement

MAT 1400 - Survey of Calculus: GT-MA1

- Accuplacer - CLM ≥63 placement
- ACT - Math 25 placement or SAT - Math 590 placement
- AP - 4 or 5 exemption

MAT 1220 - Integrated Math I/ MAT 1230 - Integrated Math II

- Accuplacer - Elementary Algebra ≥61 placement
- ACT - Math 19 placement or SAT - Math 500 placement

MAT 2410 - Calculus I: GT-MA1

- Accuplacer - CLM ≥103 placement
- ACT - Math 28 placement or SAT - Math 630 placement

Advising and Registration

Academic Advising

Academic Advising for New and Re-admitted Students

To truly succeed at PCC, all new or readmitted students enrolling in more than six credits must take an Accuplacer test (or have ACT/SAT scores on file with the Testing Center), attend a Getting Started Session and meet with an academic advisor before registering for classes. Here is what you can expect an advisor to do during a session:

- Review your academic program and test scores
- Assist you in developing an educational pathway plan

- Help you register for first-semester classes
- Assign a faculty advisor for guidance in future semesters
- Discuss and understand academic goals and how they relate to your career interests
- Help you transfer to a four-year college or university
- Refer you to the career center for career exploration, clarification and development

The Center for Academic Advising is also responsible for early advising programs, early grade check follow-up, attendance, working with financial aid suspension/probation students, basic skills advising, advising health professions students (until they transition to a health program), change of majors and advisor reassignments.

Advising for Continuing Students

Continuing students (generally students who have completed 15 or more credits) will have an assigned faculty advisor in their major who is familiar with that program's requirements. The Center for Academic Advising will provide the student his or her faculty advisor contact information. Students who want to change their faculty advisor must go to the Center for Academic Advising for approval. Advising is an ongoing process and students should consult regularly with their faculty advisor before registering for courses each semester. On the Fremont Campus, please meet with an academic advisor in the Go!Zone.

Undeclared Students

An undeclared student is one who has not declared a major and is not working toward a certificate or degree at PCC. Undeclared students generally are not eligible for financial aid. Students who are not sure what major best suits their goals will meet with a career counselor and be advised through the Center for Academic Advising until a major is selected. On the Fremont Campus, please meet with an academic advisor in the Go!Zone.

Registration

Registering for Courses

Once you are admitted to PCC and have met with an academic advisor, you may register for classes on campus or online through the myPCC Portal. (See registration information on the Portal.) You may not register if you owe money to PCC or any other Colorado Community College System school, are a male over the age of 18 not registered with the Selective Service, or if you are on academic suspension.

Required Signatures for:

Entry into closed classes – instructor and department chair
Unmet prerequisites – department chair
Late registration – instructor and department chair
Class time conflicts – both instructors
Registration in excess of 18 credit hours – division dean

Class Schedule Changes and Course Registration

You should secure your advisor's approval for all schedule changes.

The responsibility for changing your schedule is yours; no instructor or staff member can do it for you. To change your schedule, you must follow college regulations and obtain the appropriate signatures. You can change your schedule only during the schedule adjustment periods each semester.

Adding Courses

You may add regular courses only during the period specified on the myPCC Portal. You may add mini-courses or special-length courses up to the day the class starts. Registration after the census date is not permitted due to Colorado Opportunity Fund restrictions.

Dropping Courses

If you drop a regular course during the refund period listed on the Portal, you do not have to pay for the course. The dropped course will not appear on your permanent record. You may drop short courses, mini-courses or special-length courses without penalty before 15 percent of the course duration has passed.

You may add and drop courses in one of two ways:

- Visit any campus registration station. To add or drop a class in person, you must submit a signed schedule adjustment form.
- Log on to the myPCC Portal on PCC's website.

For add and drop deadlines for special-length courses, contact any registration station or the Admissions and Records offices, or refer to the class schedule/bill you received when you registered.

A student will be identified as a "no-show" and dropped from a course if he or she has not attended any class sessions between the start of the course and the census date or attended but did not participate in any academically related activity prior to the census. (For online courses, simply logging in is not "academically related activity.") Students will receive a full refund.

Withdrawing from a class after the drop deadline but before the withdrawal deadline will result in a W grade, and the student will be charged the full amount of tuition and fees. Students who are forced to withdraw from a class due to circumstances beyond their control (death of a family member, extended illness, employer-mandated change in work hours, etc.) can appeal tuition charges by submitting a Tuition Credit Request. Students must complete the Tuition Credit Request and submit it to the Records Office with documentation supporting the issue that forced the student to withdraw. The Tuition Credit Appeals Committee meets monthly to review and approve or deny the appeal. If the credit request is granted, the student balance will NOT be written off, refunded to the student, or reversed but will be processed in the following order:

- Refunded to any 3rd party that paid the original tuition;
- Repay to any federal financial aid owed to the college as a result of the appeal;
- Credit the student account for any remaining balance due caused by the withdrawal.

For any remaining tuition credit, the student may receive a voucher for tuition (not fees) for a future term to be used within the following three terms, or later as deemed appropriate in the circumstances. If the student is unable to attend in any future term and use their voucher by the expiration date, the student forfeits the value of such voucher. Please contact the Records Office at 719.549.3018 for additional information.

For a statement about PCC's refund policy, see the Tuition and Fees section of the catalog or the current PCC Schedule of Classes.

Withdrawal Policy

PCC has instituted the following policy on class withdrawals: It is the **student's** responsibility to initiate all withdrawals – from a course or the college – after meeting with their instructor. After that meeting, you should contact the Financial Aid office and begin the withdrawal process electronically or go to the college Go!Zone for assistance.

Withdrawing from Courses

Following the end of the refund period, you may withdraw from any or all of your courses and receive a grade of "W" if you withdraw before 80 percent of the course duration has passed. You may not withdraw from a course during the last 20 percent of the course duration. When you withdraw from a course, you must still pay tuition and fees. It is your responsibility to withdraw yourself from courses; instructors will not withdraw you.

- You may withdraw from individual courses through the myPCC Portal. It is recommended you meet with your instructor prior to withdrawing.
- To withdraw from all courses, you must initiate the official withdrawal form in the Go!Zone Enrollment Office. Telephone requests cannot be honored.
- In emergency cases, write to the Records Office by certified mail to Pueblo Community College, 900 W. Orman Ave., Pueblo, CO 81004-1499, indicating the reason for withdrawal and requesting this matter be completed by mail. You may also email the Registrar's inbox from your college-issued student email account to request a withdrawal.

Military Withdrawal

If you are a current member of the armed forces and your academic work is interrupted by TDY or other military obligations, we will make every effort to accommodate you. When you present valid military orders to the Records Office, you may choose one of the following options:

- Challenge a course by taking the final examination any time after midterm.
- Receive an incomplete grade for the term. Please see the Incomplete Grades section of the catalog.
- Receive a refund of tuition and fees (if you select this option, you must contact the Financial Aid Office prior to departure).

Students who are activated, voluntarily or involuntarily, are eligible to be readmitted to PCC with the same academic status and program as when they last attended. This applies to active duty in the armed forces, including the National Guard or Reserve, for a period of more than 30 days under a call or order to active duty of more than 30 days.

Degree requirements in effect at the time of each service member's enrollment will remain in effect for a period of at least one year beyond the program's standard length, provided the service member is in good academic standing and has been continuously enrolled or received an approved academic leave of absence. Adjustments to degree requirements may be made as a result of formal changes to academic policy determined by the institution or department.

In instances when courses or programs are no longer available or changes have been mandated by a state or accrediting body, the institution will work with affected service members to identify substitutions that would not hinder the student from graduating in a timely manner.

Course Cancellation for Low Enrollment

PCC may cancel or alter programs or course offerings when enrollments are too low. In such cases, we will make every effort to notify you as soon as possible to offer course alternatives.

Course Load

Normal course load is defined as follows:

- Full-length semester – 12-15 credits
- Eight-week term – 6 credits

You must get written permission from your dean to register for an overload (more than 18 credits). To be eligible to take an overload, you must have a 3.000 cumulative grade point average unless admitted into a program with defined GPA and course load requirements.

Course Prerequisites and Corequisites (Also Known as Concurrent Prerequisites)

PCC has two kinds of enforceable entry requirements for particular courses:

- Prerequisites – Prerequisites are requirements that must be met before you can enroll in a certain course.
- Corequisites – These are classes that should be taken at the same time. In most cases, you can register for one of the courses if you have already successfully completed the corequisite.

Course Numbering

Courses are numbered to indicate the level of instruction. Lower-division courses are numbered in the 1000s and 2000s; courses numbered 3000-4000 are upper division courses that apply to PCC's bachelor programs. Students may not enroll in upper-division courses without Department Chair permission.

Academic Regulations

Academic Integrity and Academic Dishonesty/Academic Issues

Pueblo Community College is committed to providing a superior educational experience for all students who attend the College. Ensuring academic integrity and honesty in all educational classrooms and programs is critical to providing this high level of education.

The College places a strong expectation on all students to act honestly in all situations. The College does recognize that some students will choose to commit acts of academic dishonesty, which places an expectation on all faculty and staff to confront these acts of dishonesty. When a student is suspected of committing an act of academic dishonesty, the College will follow the process listed below. The process is intended to uphold and respect the student's due process rights.

What is "Academic Dishonesty"? "Academic Dishonesty is any action that results in students giving or receiving unauthorized assistance in an academic exercise or receiving credit for work that is not their own." Academic dishonesty is a behavioral issue and considered an act of misconduct subject to the College disciplinary process as defined in the Student Code of Conduct, which is found in this Handbook and subject to the academic sanction as defined in an instructor's course syllabus.

Students who violate Pueblo Community College (PCC) rules on academic integrity are subject to disciplinary penalties, including the possibility of failure or removal from a course, disciplinary probation and/or dismissal from the College.

No-show/Drop/Withdrawal Definitions and Effects

	Definition	Initiated by	Is the student charged?	Does this show on Transcript?	Effect on financial aid	Effect on GPA
No Show	Students will be dropped as a no-show if they do not attend any class sessions or submit any substantial work between the start of the course and the census date. Students should be reported as a no-show on or before the census date for the course.	Faculty and Instructors	No	No	If a student is not dropped as a no-show on or before the census date for a course and is dropped as a no-show at a later time, the student could receive a financial aid disbursement for which they are not eligible. When late drops occur, a student's financial aid must be adjusted and the error could result in the student owing thousands of dollars to PCC.	None
Drop	Students can drop some or all of their courses prior to the census date for the course. Special length courses have different census dates. Please check the portal on the faculty tab and Important Dates	Student	No	No	Same effect as a No show	None
Withdrawal	A student may withdraw from any or all of their courses and receive a grade of "W". They must withdraw by the last day to withdraw of their course. Special length courses have different withdrawal dates. Please check	Student	Yes	Yes, as a "W"	Students are held financially liable for the withdrawn course. Does count as credits attempted; financial aid does cover the cost of a withdrawn course	None Does count as credits attempted

	the portal on the faculty tab and Important Dates					

*Students who stop attending class and do not drop or withdraw themselves will receive the grade that they earned at the end of the class. If the student receives a failing grade, the faculty/instructor must report the last date of attendance when entering the grade.

Drop for no-show

Students will be dropped as a no-show if they do not attend any class sessions or attend once but do not complete any academically related activity between the start of the course and the census date.

- Students should be reported as a no-show on or before the census date for the course.

Withdrawal

A student may withdraw from any or all of their courses and receive a grade of "W". Students are held financially liable for the courses from which they withdraw, and the course withdrawal is recorded on their transcripts. It is now the student's responsibility to withdraw themselves from their courses – instructors will no longer withdraw students due to poor attendance; however, speak with the instructor before withdrawing from any class. If students stop attending classes and do withdraw themselves, instructors should assign the students the grades they earned. If the grade is a failing grade, the instructor should report the last date of attendance.

Drop

Students can drop some or all of their courses prior to the census date for the course. If a student drops a course prior to its census date, the student is not charged for the course and the course does not appear on their transcripts. Consult with the instructor before dropping from any class.

If students stop attending their courses and do not drop themselves, instructors should assign the student the grade they earned. If a student receives a failing grade, the instructor needs to report the last date of attendance when entering the grade. A student should never be assigned a failing grade if they failed to attend a course and should have been dropped as a no-show. **Students cannot receive financial aid for courses where they have not established attendance.**

Impacts to Student's Financial Aid

- If a student is not dropped as a no-show on or before the census date for a course and is dropped as a no show at a later time, the student could receive a financial aid disbursement they are not eligible for. When late drops occur, a student's financial aid must be adjusted and the error could result in the student owing thousands of dollars to PCC.

Grading System

At the end of each semester, a student may access their grades or order a transcript online.

Letter Grades

At PCC, grades are expressed in letters which are equated to points used in calculating the cumulative grade point average. To calculate a grade point average (GPA), divide the total number of quality points by the total number of credit hours (the points associated with A, B, C, D and F grades). A "P" grade indicates that the quality of student work in the course is equivalent to "C" or better." A "P" grade will count in attempted and earned hours, but will not carry any quality points and will not be included in the calculation of GPA. Before a student registers into a class, they may select a pass/fail grading scheme, please contact the registrar's office to discuss this option. "P" grades may not be applied to any course in the Colorado Guaranteed Transfer Program for General Education (GT Pathways). With the exception of Physical Education courses, no course taken for a P/F grade may be applied to the AA or AS degree, and in that case, no more than two (2) credits may be applied to the AA or AS degree.

An "F" grade in the Pass/Fail mode indicates that the quality of student work in the course is equivalent to "Failure" in letter grade mode. An "F" grade may not be applied to any degree or certificate requirement.

Letter Grade	Quality Points
A (Excellent or Superior)	4
B (Good)	3
C (Average)	2
D (Deficient)	1
F (Failure)	0
P in P/F mode (Pass)	0
F in P/F mode (Fail)	0
S/A, S/B or S/C - Satisfactory Grade designation used only for Developmental Courses	
U/D or U/F - Unsatisfactory Grade designation used only for Developmental Courses	
I (Incomplete) - designation used to show that the coursework is not complete and an extension has been granted	
AU - Grade designation used for courses that are audited	
W - Designation used when a student withdraws from a class	

S/A, S/B, S/C

Satisfactory grades are assigned only in developmental courses. These will not be calculated for the grade point average but the credits earned in developmental courses will count toward the earned and attempted credits. The grades

received in developmental courses will not be used in calculating academic honors like the President's List, Vice President's List and Dean's List.

U/D, U/F

Unsatisfactory grades are assigned only in developmental courses. These will not be calculated for the grade point average but the credits earned in developmental courses will count toward earned and attempted credits. The grades received in developmental courses will not be used in calculating academic honors like the President's List, Vice President's List and the Dean's list.

Incomplete Grades

A grade of Incomplete ("I") is a temporary grade in a regular course. It indicates the following:

- Due to circumstances beyond the student's control, you have not completed all course requirements but you have completed at least 75 percent of the coursework.
- You have a satisfactory record ("C" or better) in the work you have completed.
- You agree to complete all requirements for removing the incomplete grade, according to the description of requirements on the Incomplete Grade Agreement Form, within the next full-length semester after the class is offered (summer excluded).
- If you fail to complete the course work, a grade of "F" will be automatically posted to your transcript at the end of the next full-length semester.

It is your responsibility to initiate the request for an "I" grade with your instructor. If circumstances beyond your control prevent you from completing any coursework by the end of the term, you must immediately inform your instructor of those circumstances. Your instructor will determine whether you should be awarded additional time beyond the end of the semester to complete your coursework. If you and your instructor cannot reach a mutual agreement concerning an "I," contact your department chair and then, if no agreement is reached, the instructional dean.

Before the instructor can assign an "I," the following conditions must be met:

1. You must present to your instructor the documentation of circumstances justifying an "I."
2. Your instructor will complete an Incomplete Grade Agreement listing the coursework necessary to finish the Incomplete and receive a grade in the class. You will receive a copy of the Incomplete Grade Agreement when the instructor submits it to the Records Office.
3. Your instructor must record an "I" grade on the final grade roster at the end of the semester. If you receive an "I," do not re-register for the course and do not pay additional tuition and fees. Instead, make arrangements with your instructor to complete the requirements of the class.

If you are in the military or emergency management and are required to go on temporary duty status before you complete 75 percent of a course, contact your instructor to arrange special consideration for an "I" grade. For special consideration, you must provide documentation of your official temporary duty orders. Your instructional dean must approve the special consideration.

Audit Grade

Please see Part-time/Full-time/Auditor Status in the Applying for Admissions section.

Grade Changes

Once a final grade is entered, it cannot be changed unless the instructor who assigned the grade submits a Grade Change Form to the Records Office.

It is your responsibility to request a grade change from your instructor if you believe one is justified. Normally, we process grade changes during the following term. After one calendar year, the college will not approve a change of grade. "AU" grades may not be changed.

Final Examinations

Final examinations must be taken during a regularly scheduled class period in the last week of class unless approved by the appropriate dean.

Course Repeats

All college-level courses may be repeated, with the following limitations:

The following guideline applies to all students taking for-credit courses.

- Students will be limited in the number of times that they can take the same course.
- Certain courses are exempt from the repeat course procedure due to the nature/offering of the course.
- If a student has taken a course and attempts to register for the course a second time, the student will receive an automated notification of possible financial aid implications, available support services and how to access those services.
- If a student has taken a course twice and attempts to register for the course a third time, the student will not be able to register for that particular course until an action plan is created and approval granted by the college-appointed advisor. Please note that the student is able to register for other courses without needing an action plan or approval as per college rules and regulations.
- If the college advisor does not feel that the registration is warranted, the student may appeal through the college's designated appeal policy.
- If a student has taken a course three times and wants to register for the course a fourth time, the student must appeal through the college's designated appeal policy.

Each registration for the course and each grade received will be listed on the transcript. On the transcript a notation will follow the course, indicating that the course was repeated and designating whether it will be included in the GPA. The highest grade will be used in the 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.

In the event that 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. All other duplicate grades will be excluded from the term and cumulative GPA.

Repeated courses may be applied only one time to a certificate or degree, except for variable credit courses and designated courses that may be repeated for professional or personal development. Developmental courses are eligible to be repeated. All developmental courses will appear on the transcript.

For financial aid purposes, students may take course once and repeat it once but may not receive aid for subsequent repeats.

Academic Probation & Suspension

PCC wants you to succeed and encourages you to make responsible academic choices. Therefore, your course load will be appropriately limited as defined in the course load policy (found in the Advising and Registration section of this catalog). In addition, you must maintain at least a 2.000 Cumulative Grade Point Average (CGPA) to remain in good standing.

Academic Standings:

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." 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. 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." 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. 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. Summer term may NOT be used as a suspension term; however, Summer term may be used to improve the GPA in preparation to appeal a Fall suspension.

Note: Academic probation/suspension is different from financial aid warning/probation/ineligibility. Please see the Financial Aid section for information about that topic.

Academic Appeal

You may appeal an academic decision only if you believe it was based on illegal discrimination or arbitrary and capricious actions. For more information about illegal discrimination, refer to the Grievance Process, which you can find online or in hard-copy form in the Office of the Chief Student Services Officer. For information about arbitrary and capricious actions, contact the Office of the Chief Student Services Officer.

Academic Renewal

Academic Renewal is a program through which PCC can exclude previously earned "below average" grades from your cumulative GPA. Through this program, you have another chance to succeed without prior performance holding you back. You must meet the following six (6) conditions for Academic Renewal:

- A maximum of 30 hours can be excluded from the GPA.
- Courses and grades approved for Academic Renewal remain on the transcript but are excluded from the GPA calculations.
- Academic Renewal applies to "D" and "F" grades only.
- In order to apply for Academic Renewal, students cannot have been enrolled at PCC for at least two (2) calendar years from the last term being considered for Academic Renewal.
- Students must be enrolled and have completed at least six (6) hours with a 2.000 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 six (6) credit hours with a 2.0 term GPA during last semester of attendance at the four-year institution.
- Students can apply for Academic Renewal only once.
- The decision is not reversible.
- Academic renewals will be processed at the end of the term in which the student submitted the renewal.

myPCC eLearning

Our myPCC eLearning courses are either fully online or split between in-class and online, depending on the class. These courses allow you to use a computer at a place and time convenient for you to access course content, participate in threaded discussions, and respond to assignments posted online. Your instructor may post examinations online or ask that you take them at the school. PCC's online and hybrid courses are developed and taught by faculty to ensure that students have the information, academic experiences and instructional time necessary to meet course objectives.

PCC uses existing academic structures in the development of distance education courses and curricula. The college follows the Colorado state-mandated common course descriptions, competencies and outlines for any course offered, regardless of the method of delivery. An online course syllabus reflects the content and learning outcomes of the same face-to-face course. For every hour of credit, students must engage in a minimum of 12.5 hours of instructional time (15 week semester = 50 minutes per week, per credit). Students should have a computer with an Internet connection at home. However, all PCC campuses provide access to computers at various times (check your campus for lab days and times). Please refer to the catalog for information on prerequisites. Contact the course instructor or refer to the course syllabus for course requirements.

myPCC eLearning supports two options for online course delivery:

- Online courses (Internet based)
- Hybrid courses

Online Courses

1. PCC Online courses are developed and taught by PCC instructors. Any requirements for face-to-face meetings for online classes are limited to orientations, internships, specialized laboratory work, proficiency check-offs or final industry certifications. All coursework is done via the Internet.
2. **Colorado Community Colleges Online (**CCCOnline**)** is a shared educational resource of the Colorado Community College System. These courses are taught by instructors of the Colorado Community College System. All coursework is done via the Internet.

Hybrid Courses

Hybrid courses are a combination of online and classroom instruction. In a hybrid course, a portion of the seat time is spent in the classroom and the remainder of the class is conducted online.

Online Tuition and Related Costs

Tuition rates for online courses are different from those of traditional courses. Look up the tuition costs on the Tuition & Fees page. Some courses have lab and special course costs. View the Tuition & Fees page and click on the **Online Courses Fees tab** to see the list of online courses and their associated fees.

Methods of Instruction

Independent Study, Cooperative Experience, Internship and Occupational Experience

Some PCC programs offer independent study, cooperative experience (COP), internship or occupational experience courses. Internship and occupational experience courses are usually offered off campus; however, these courses maintain the same standards and provide the same quality of education as courses taken on campus.

Independent study, COP, internship, some clinical, and occupational experience courses must meet the following conditions:

1. The courses form part of an approved curriculum which is required for graduation.
2. The assigned credit value and contact time in class are in compliance with state guidelines and are the same as on-campus courses.
3. The courses are graded with the same criteria used for on-campus courses.
4. The courses have appropriate assignments with an outlined course of study.
5. While student supervision may be conducted by job-site officials, the course of study is supervised and controlled by PCC and not by those officials.
6. The course requires that there will be regular communication between the student and instructor.

Contact an academic advisor if you are interested in this form of instruction.

Common Instructional Methods at PCC

Please note that not every course offered fits precisely into the instructional method assigned, please contact your instructor, department chair, or advisor if you have questions about the instructional method being used in a course.

RM - Remote Real-Time

> Student Experience: Class will be taught in real-time, with 100% remote delivery at pre-determined times. There is no scheduled in person attendance and no room assigned on-campus. Class will be 100% real-time live meetings delivered remotely via technology.

RH - Remote Hybrid

> Student Experience: Class will have some live real-time remotely-delivered meetings at pre-determined times and some on-line components. Percentage of on-line versus remote-real time can vary by class. There is no scheduled in person attendance.

HF - HyFlex

> Student Experience: A highly flexible experience where the course is delivered entirely remotely in real-time, entirely in person in real-time, or a combination of the two. Some instructors will have specific schedules of flex days, others will leave the choice up to the student. Please contact your instructor for more information.

HL - HyFlex with Lab

> Student Experience: A highly flexible experience where the course is delivered entirely remotely in real-time, entirely in-person in real-time, or a combination of the two.
>
> Some part of this course will require in-person attendance, even if it is not strictly a lab. Please contact your instructor for more information.

CL - Classroom Based

> Student Experience: Class meetings are on-site and in-person.

CB - Competency Based

> Student Experience: Student's will have a fixed amount of time to meet specific competencies before receiving credit for the class.

HY - Hybrid

> Student Experience: Class will have some live in-person components, and some on-line components. Percentage of on-line versus in-person can vary by class.

ON - Online

> Student Experience: Class is entirely online with no real-time expectations.

Graduation Requirements

General Graduation Requirements

Bachelor Degree Requirements

All candidates for Bachelor degrees must meet the following requirements:

- Complete a minimum of 120 semester hours of credit
- Complete all program requirements for the Bachelor degree
- Satisfactorily complete at least 25 percent of the Bachelor degree requirements at PCC
- Online courses with registrations through the home college will be included in residency hours
- Complete all major and degree-related courses with a grade of "C" or better
- Earn a cumulative grade point average of 2.000
- Be classified as a degree-seeking student

Associate Degree Requirements

All candidates for Associate degrees must meet the following requirements:

- Complete a minimum of 60 semester hours of credit
- Complete all program requirements for the Associate degree
- Satisfactorily complete at least 25 percent of the Associate degree requirements at PCC
- Online courses with registrations through the home college will be included in residency hours
- Complete all major and degree-related courses with a grade of "C" or better
- Earn a cumulative grade point average of 2.000
- Be classified as a degree-seeking student

Certificate Requirements

All candidates for certificates must meet the following requirements:

- At least 25 percent of credits must be completed in residence
- Complete all major and certificate-related courses with a grade of "C" or better
- Earn a GPA of 2.000 or higher for all certificate courses
- Be classified as a certificate-seeking student

Multiple Academic Degrees

To earn multiple academic degrees, Associate of Arts, Associate of Science or Associate of General Studies at PCC, a student must complete a minimum of an additional 15 credits of coursework which have not been applied to any previously awarded degree. The additional coursework for each successive degree must be above and beyond the original 60 credits required for the first academic degree. These 15 credit hours must all apply toward the additional degree and must be completed through PCC. This includes the degrees with designation.

Graduation Honors

Graduation honors are awarded to students who complete the requirements for a Bachelor Degree, or for an Associate Degree and earn a 3.5 or better cumulative grade point average. Only college-level courses completed at the institution will be included in the GPA calculation. Students must earn at least 15 graded credits at PCC. The three (3) levels of recognition are defined as follows and will be posted on the student's transcript:

- Summa cum laude ("with highest honor") — 4.00 cumulative GPA
- Magna cum laude ("with great honor") — 3.750 to 3.999 cumulative GPA
- Cum laude ("with honor") — 3.500 to 3.749 cumulative GPA

Honors recognition at the commencement ceremony is based on the GPA through the prior **fall** semester.

Academic Recognition

If you are enrolled in 12 or more graded credit hours and earn a term grade point average of 3.500 or higher, you will be placed on one of the following lists. Graded credits are those classes set-up with the A-F grade mode. Classes that are graded with Pass/Fail grade mode are not counted in the 12 or more graded credits requirement. Selection for this honor will be recorded on your permanent transcript.

- President's List — 4.000 Term GPA
- Vice President's List — 3.750 to 3.999 Term GPA
- Dean's List — 3.500 to 3.749 Term GPA

Preparing for Graduation

To be considered a candidate for graduation, you must complete the following steps by the deadline date of the semester you plan to graduate. Dates are posted on the Graduation Planning Sheet form.

- Verify that your program of study is listed correctly on your Degree Check. If it is not correct, you must complete a Change of Major form available on the myPCC Portal.
- Verify that transfer and prior learning credit have been posted on your transcript.
- Verify with your faculty advisor or department chair that previously requested course substitutions have been approved.
- Review your DegreeCheck audit - if all your classes show as 'Complete' (green checkmark) or 'Complete Except for Classes in Progress' (blue half moon), YOU'RE READY!!
- Complete a Graduation Planning Sheet

Once you have completed the Graduation Planning Sheet, it is your responsibility to notify your faculty advisor or department chair immediately of any changes to your plan.

You may complete your graduation requirements any time during a term; however, if you plan to attend the commencement ceremony, your graduation planning sheet needs to be completed by March 1. You should anticipate at least a six-to eight-week delay following the submission of final grades before we verify your graduation status, post it on your transcript, and mail your diploma. The officially recognized graduation date posted on your transcript is the last day of the term as listed in the PCC Academic Calendar.

PCC has one formal graduation ceremony for all three terms. This ceremony is held once each year in the spring semester. Please refer to the Commencement section below for more information.

Catalog Requirements

You may graduate using the requirements of this catalog; you may also choose to graduate under the requirements of the catalog with which you started your degree. You may also choose to graduate under the requirements of a later catalog provided you are enrolled for college credit each semester on a continuous basis in the same program (summer sessions excluded), and provided you complete your graduation requirements within a period of five years. If you

change your major, you must follow the requirements of the catalog in effect at the time of the change. Any exceptions to this policy must have prior approval from the appropriate academic dean.

Commencement

PCC holds its commencement ceremony once each year at the end of spring semester. You are eligible to participate in commencement if you:

- are a graduation candidate
- are a graduation candidate for the spring semester
- graduated the preceding fall semester
- will be graduating at the end of the following summer session

PCC surveys graduates annually to ask for feedback about their experiences. We take the input very seriously, and our graduates' opinions are important to us. Not only can they help us to improve and refine our programs and services, they can also benefit current and future students. Topics include questions including but not limited to program of study, courses, current or future career plans, and ability to transfer successfully. The results are used to improve the academic programs and services that we offer for the next class of PCC graduates.

Services for Students

Services for students are available at PCC's Fremont, PCC Southwest, Durango, and Pueblo campuses; contact each campus directly. To find out if the services listed in this section exist at all campuses, contact the Go!Zone (Enrollment Services Office).

Bookstore

The PCC Bookstore serves PCC students, faculty, staff and the community. We sell all required textbooks and supplies, as well as general interest art, office and school supplies, calculators, greeting cards, computers, clothing and gift items. The bookstore conducts a used book buy-back at least once during each semester. Students can sell back their books year-round on our website. In order to serve our students, we offer both new and used textbook rentals as well as new and used textbooks for purchase. The Pueblo campus has a physical store open year round. The Fremont Campus has a store that is open at the beginning of each semester. Southwest students are invited to purchase from our website with direct ship to their homes. Students from all campuses can purchase all Textbooks, supplies and PCC imprinted items online.

Campus Dining

There are two (2) campus dining options. Rosario's at Pueblo Joe's is located in the lower level of the Student Center. Rosario's offers a daily lunch special, deli sandwiches, heat and eat meals, and grab and go snacks and beverages. Rosario's is open Monday – Friday from 10:00 a.m. - 2:00 p.m. with the meal of the day served from 11:00 a.m. - 1:00 p.m.

Einstein Bros. Bagels located in the Student Center with an exterior entrance off Harrison Street. Einstein Bros. is open Monday – Friday from 7:00 a.m. - 2:00 p.m. and offers a variety of freshly made bagels, pastries, sandwiches, salads, coffee, and beverages.

Catering options for campus events is also available. For more information please contact the PEAK office at 719.549.3066 or 719.549.3074.

Career and Transfer Services

Career and transfer services are offered to students and alumni through the Career and Transfer Center located in the Go!Zone, in the Student Center. Services include:

- Career exploration and planning
- Job posting and industry job fairs
- Employer networking and information sessions
- Resume and cover letter seminars
- Interview skills workshops
- Full-service career management system
- Four-year college and university information and visitations

Call 719.549.3036 for information.

Children First: Child Care Referral Service

If you need child care, Children First can provide free customized referrals to students, faculty and staff for licensed child care providers or programs that will meet your unique needs. Stop by our office in AB-174, call 1.877.338.2273 or check online. We can also help find trainings for parents or child care providers.

Children First also assists Early Childhood (EC) professionals by providing opportunities for continuous program enhancement through the support of the new Colorado Shines Quality Rating and Improvement System, and by scheduling trainings for EC professionals to meet licensing requirements and Professional Development Information System (PDIS) requirements to further their personal professional development.

Children First maintains a list of community resources in southeastern Colorado. Stop by our office to find out more. In addition to our Pueblo campus office, we have a satellite office at the PCC Fremont Campus. For more information, call 719.549.3411 in Pueblo or 719.296.6118 in Cañon City.

Customer Solutions Center/Downtown Studio

The Customer Solutions Center is a phone-based help center where prospective and current students can get answers regarding enrollment and services such as financial aid. The CSC can be reached by calling 719.549.3200. We are located in the Downtown Studio on the corner of City Center Dr. and Santa Fe Avenue in Pueblo. Staff members provide one-on-one enrollment services to assist veterans, displaced and low-wage earners with the transition to college life.

Disability Resources (AB 120)

If you have a documented disability (including temporary disabilities such as a broken arm), you may qualify for accommodations. These accommodations include, but are not limited to, allowance to record lectures, alternative text formats, and sign language interpreting services. These services are available to qualifying students at all campuses.

The Disability Resource Center also offers courses in assistive technology. The CIS 1004 is a small, self-paced course that teach you how to use assistive technology such as voice recognition programs, screen readers and other adaptive devices. You can also access to the assistive technology classroom during open lab hours. (Note: Lab hours may vary from semester-to-semester.)

Enrollment Events & Campus Tours

Prospective students and family tours. During your visit, you will learn about PCC's academic programs, enrollment process, and student life. After the presentation you will receive a guided tour of the campus from of of PCC's Student Ambassadors. To schedule tours please visit or https://pueblocc.edu/tours or call 719.549.3093. On the Fremont Campus, tours can be arranged by calling 719.296.6105.

Health Clinic

PCC has partnered with the Pueblo Community Health Center to provide Healthcare services on site for students, staff, family members, and community members. Services include, but are not limited to; sick/acute healthcare, physical/well exams, immunizations, minor injury treatment, health education, contraceptive counseling, medication management, referrals to specialists, tobacco cessation, and behavioral health referrals for: individual therapy, crisis services, coping skills, treatment for anxiety, depression, and substance abuse.

The PCC Health Clinic does bill health insurances and also accepts Medicaid, Medicare, CICP and most private insurances. If you do not have health insurance coverage, please call 719.549.3315 for information on how to apply for PCHC's sliding fee assistance and/or Medicaid benefits. Visit the PCC Health Clinic webpage for more information on services and support resources. Please call 719.549.3315 to schedule appointment.

Learning Center

The Pueblo, Fremont, Southwest campus each have a Learning Center and each center offers various services. You may inquire about these services on your campus.

Computerized learning assistance is available at all campuses. PrepSTEP is an interactive computerized tutorial and testing program that offers support for a wide variety of subjects. PrepSTEP also offers career-seeking services, including interest inventories, career information, resume writing and interview skills. This program is Internet based and available any time. For more information, contact the Learning Center on your campus.

The Learning Center provides the following services:

Student Computer Access (AB 042)

We have laptop computers that students may use to do required academic work. Our state-of-the-art computers have many software programs used in academic classrooms, as well as Internet service you may use to conduct academic research. Use of laptops requires a photo ID and laptops must remain in the Learning Center.

Testing Center (AB 134)

The Testing Center offers a distraction free environment for academic, placement, typing, high stakes, and professional exams. Our services include professional exams through PearsonVUE, Kryterion, Castle, IQT, ISO, MSSC, Prometric, Comira, Prior Learning Assessments and Credit by exam such as CLEP and DSST. The Testing Center at PCC is here to serve our students as well as the larger Southern Colorado Community. All services provided in the Testing Center require a valid state issued photo ID.

Tutoring (AB 056)

Tutorial Services offers free tutoring assistance to all students enrolled at PCC. Each campus offers different options. Students should contact their campus to inquire about what tutoring is offered for various courses.

At the Pueblo campus, there is a drop-in tutoring option known as Pro Tutoring – Writing Pro, Math Pro, Science Pro and IT/Computer Pro. Pro Tutoring services are available Monday through Friday during the Learning Center's normal operating hours. Pro Tutoring schedules are posted on the college website under Tutoring. Hard copy schedules are available in the Learning Center.

Tutoring for other courses may be requested by submitting a tutor request form in the Learning Center.

Limited online tutoring through Brainfuse is also available through the Desire2Learn (D2L) program. Brainfuse is free to all PCC students at all campuses.

Library

PCC's Pueblo and Fremont campuses have academic libraries providing materials and services to students, faculty and community members. The library collections contain more than 55,000 books, periodicals and nonprint materials, as well as digital resources such as online databases and eBooks. At the PCC Pueblo campus, the library is located in the Mike Davis Academic Building and is designed to provide several learning support services including private study rooms, laptops for use inside and out of the library, reference materials and research assistance from library professionals.

Currently enrolled students and PCC staff members automatically have a library account and their PCC ID card is used as a library card. Patrons checking out materials agree to the PCC Library Borrower's Agreement, which can be found on the PCC Library web page. Access to the library's online databases is permitted with the use of the student or staff member's S number. The Pueblo Campus Library provides the following services:

Features

The Pueblo Campus Library provides laptop computers and accessories, eReaders, digital recorders, scanners, laser printers, a photocopier and open and private study areas. One ADA-compliant computer work station is provided for wheelchair-bound patrons and some adaptive equipment is available upon request.

Library Catalog

Access to the PCC Library Catalog is made available through the PCC Library webpage from the Start Your Research Here menu option. Library materials are shared between the Pueblo and Fremont campus libraries and can be requested by students and staff at any PCC or Southwest campus.

Online Resources

Nearly fifty online resources are available to PCC students and staff, including library databases with full-text articles, streaming media and an eBook collection of more than 20,000 titles. Access the databases on any campus computer or off-campus through the PCC Library home page using your S number. The PCC Library also provides information literacy and research instruction via the PCC Library Classroom in the D2L learning management system.

Reference

Reference assistance is available for developing research strategies and identifying resources for class assignments or personal interests. Individual and group orientations are available to students and instructors. Time with a reference librarian can be scheduled by phone, email or the Book a Librarian option on the PCC Library webpage.

Course Reserves

Course reserves are meant to be utilized inside the library. This collection includes books and study materials provided by instructors to supplement course textbooks, as well as writing style manuals and other academic aids. Students may inquire at the library's service desk for course reserves.

Access to Colorado Libraries

The PCC Library is a Colorado Libraries Collaborate (CLC) member. PCC students and staff members at PCC are allowed to check out materials from other participating Colorado libraries by showing their PCC identification card.

Interlibrary Loans

Through this loan service, you may request books or journal articles from libraries statewide.

Marketing and Communications Office

PCC's Marketing and Communications Office is responsible for media relations, advertising, marketing, public relations, college branding and special events. The department is responsible for PCC's website and the myPCC portal. To keep PCC students and the college informed, Marketing and Communications publishes timely news via an electronic newsletter called the Panther Pause and FYI News, a quick-read flyer that is posted in the restrooms.

Office of Recruitment

The Office of Recruitment conducts an array of activities to create community awareness of PCC programs and the college in general. These activities include conducting campus tours and visiting schools and organizations to deliver presentations. Recruitment also assists prospective students through the enrollment process. Student Ambassadors serve a key role in assisting with these efforts. If you are interested in scheduling a campus tour for yourself or a group, or would like to meet with staff to assist you through the enrollment process, please stop by the New Student Studio, located in the Student Center, Room 251, or call 719.549.3116. To schedule tours please visit or https://pueblocc.edu/tours or call 719.549.3093. On the Fremont Campus, tours can be arranged by calling 719.296.6105. or schedule a tour. On the Fremont Campus, tours can be arranged by calling 719.296.6105.

OPTICA First Year Experience

The OPTICA First Year Coordinators are located in the Go!Zone in the Student Center on the Pueblo campus. The goal of OPTICA is to provide services to first year students to assist with the onboarding process that will ensure a smooth transition into college:

New Student Orientation: New Student Orientation is now completely online. Incoming students will learn about academic programs, support services, campus resources, and student life to successfully transition into the first year of college.

Technology Training: First Year Coordinators meet with new students after they are enrolled for their first term. The goal of this service is to provide students with information on the various PCC technology and accounts that will be used throughout college such as the myPCC Portal, Navigate, MyCourses, student email, and more.

Emotional Intelligence Coaching: First Year Coordinators are certified emotional intelligence coaches. New students can meet with First Year Coordinators to learn more about how their emotional intelligence skills relate to college. This service is helpful to guide students on how to make healthy decisions, problem solve, and cope with stress to maintain their academic and career goals.

Financial Literacy & Career Development: First Year Coordinators provide services to students to increase knowledge of financial literacy that will help reduce and/or eliminate the amount of loan debt that students graduate with. Coordinators also provide career development activities to help students identify pathways to desired careers.

PCC Student Handbook and Code of Student Behavioral Expectations and Responsibilities

The PCC Student Handbook serves as a guide for student-related topics that includes students' rights, responsibilities, and resources. Pueblo Community College is dedicated to working with its students to attain their academic goals in a safe and supportive college environment. The Pueblo Community College Student Handbook is an official PCC publication. All students are expected to know their rights and responsibilities and to work in collaboration for a positive learning environment. PCC encourages you to get involved on campus and contribute your talents, and to help ensure a diverse and dynamic environment. You, our PCC students, are important to us, and your faculty and staff are here to help ensure your success. Use your resources. Ask questions. Get involved. You will succeed!

Public Safety/PCC Police Department

Reporting a Crime

In the event of any crime, fire or emergency on campus or its surrounding area(s), students and employees should immediately notify the law enforcement entity for the respective location, as follows:

Pueblo Campus – PCC Police Department, Student Center, Room 152 at 719.549.3355, 911 or using one of eight Blue Emergency Phones located throughout the Pueblo campus.

City of Pueblo – Pueblo Police Department, 200 S. Main St, Pueblo, CO 81003, at 719.553.2538

Pueblo County – Pueblo County Sheriff's Office, 909 Court St., Pueblo, CO 81003, at 719.583.6250

Fremont Campus – PCC Police Department (Room FC115), at 719.296.6130 or 911

City of Cañon City – Cañon City Police Department, 161 Justice Center Road, Cañon City, CO 81212, at 719.276.5600

Fremont County - Fremont County Sheriff's Office, 100 Justice Center Road, Cañon City, CO 81212, at 719.276.5555

PCC Southwest Site/City of Bayfield – Bayfield Marshal's Office, 1199 Bayfield Pkwy, Bayfield, CO 81122, at 970.884.9636

PCC Southwest Site/City of Durango – Durango Police Department, 990 E. Second Ave., Durango, CO 81301, at 970.385.2900 or 911

PCC Southwest Campus/City of Cortez – Montezuma County Sheriff's Office, 730 E Driscoll St., Cortez, CO 81321, at 970.565.8452 or 911

Reporting a Crime to a Campus Security Authority (CSA)

Although Pueblo Community College encourages all criminal incidents be reported to law enforcement a student may report a crime to a Campus Security Authority; however, students may also report a crime to a Campus Security Authority (CSA) who is responsible for forwarding non-identifying information to the PCC Police Department for inclusion in the Annual Security Report, regardless of whether the victim chooses to file a report with law enforcement. CSAs are defined by Clery "as someone who has significant responsibility for students and campus activities." As outlined in the PCC Student Handbook, the College encourages and expects students, faculty, and staff to engage as active bystanders and report to College officials' incidents that involve infractions and/or concerning behavior outlined in the PCC Student Handbook. The following are a few examples of CSAs:

Club Sponsors	**Vice President of Student Success**
PCC Police Department	**Department Chairs**
Disability Resources and Services Staff	**Success Coaches**
Student Life Staff	**Title IX Coordinators**

Exemption from Reporting

Licensed professional mental health counselors and pastoral counselors (employed by religious organizations to provide confidential counseling) who are working within the scope of their license or religious assignment at the time they receive the crime report are exempt from reporting under the Clery Act. Individuals seeking confidential discussions of concerns may explore and utilize local professionals referenced above who are working within the scope of their license or religious assignment. Please refer to the Student Resource Guide Related to Sexual Misconduct, policies, procedures, and victim services located on the PCC Title IX & Sexual Misconduct webpage.

Anonymous & Confidential Crime Reporting

Victims and witnesses of a crime who wish to remain anonymous may call the following to report a crime anonymously. Please remember these are voice message systems only and immediate action will not be taken.

- Pueblo Campus - Pueblo Crime Stoppers at 719.549.7867
- Fremont Campus - Fremont County Crime Stoppers at 719.275.7867

- PCC Southwest Sites and PCC Southwest Campus - Durango-La Plata Crime Stoppers at 970.247.1112
- Safe2Tell: 1.877.542.SAFE (7233)
- PCC website to report a concern or incident at this link and choose to exclude their contact information from the report.

Referral Services and Student Support Resources

At PCC, we encourage you to utilize all of the support resources to help ensure your success. Whether you need to explore mental health and wellness support resources, navigating a crisis, meet with an academic advisor, learn more about student life on your campus, connect with a tutor, etc. You can explore a variety of referral services and student support resources at these PCC webpages Student Support Services, Referral Services, Victim Assistance and Drug/Alcohol Referral Programs and Resources, PCC Health Clinic webpage, and PCC Campus Police. You've got this – and we've got your back because we are Panthers caring for Panthers!

Drug & Alcohol Abuse Prevention Program

Pueblo Community College is committed to the health and well-being of its students and employees. As part of this commitment, PCC complies with and upholds all federal, state, and local laws that regulate or prohibit the possession, use or distribution of alcohol or illegal drugs. Violations of such laws that come to the attention of College officials will be addressed within the College or through prosecution in the courts, or both. Students violating this policy are subject to disciplinary suspension and/or expulsion from the College.

As a recipient of federal grants and contracts, PCC adheres to the provisions of the Drug-Free Workplace Act of 1988 and the Drug-Free Schools and Communities Act Amendment of 1989. Also, as a member of the Community Colleges of Colorado, PCC adheres to the State Board for Community Colleges and Occupational Education BP 3-24, Drug-Free Workplace Policy.

Accordingly, all PCC full-time and part-time students and employees are hereby notified of the standards of conduct that PCC will apply to all activities conducted on College-owned or College-controlled property and to all other College-sponsored activities.

Information on PCC's Drug & Alcohol Abuse Prevention Program can be found at https://pueblocc.edu/Drug-Alcohol-Policies; PCC policies and expectations for student behavior can be found in the PCC Student Handbook. Additionally, you can explore a variety of referral services and student support resources at these PCC webpages Student Support Services, Referral Services, Victim Assistance and Drug/Alcohol Referral Programs and Resources, PCC Health Clinic webpage, and PCC Campus Police

STEM Center

The STEM Center is located in the Academic Davis Building, Room 150 and provides students with state-of-the-art equipment to supplement their classroom experiences in Science, Technology, Engineering and Math. Equipment includes:

Computers and Laptops: Laptops can be checked out and retained in the STEM Center for your use with a student ID. Students can access the Internet, print assignments and access software programs that include CAD, SketchUp and Adobe. This software can be used to design 3D projects for our many 3D printers.

Nine 3D printers: The 3D printers in the STEM Center serve all of your design needs and include six Makerbots, two Afinias and one Mojo. These printers can be utilized by students to complete class projects as well as personal projects for a small fee.

Raspberry Pi Lab: Within the STEM Center is a Raspberry Pi Lab that is used in conjunction with the Engineering Methodologies class but can be utilized by students and faculty. It contains six stations with monitors, keyboard and mouse for Raspberry Pi hookup.

Three zSpace Computers: zSpace technology combines elements of virtual reality and augmented reality to create lifelike learning experiences on the computer. Applications include **Cyber Science**, which includes astronomy, botany, chemistry, Earth science, human anatomy, microbiology, mechanical, paleontology and zoology; **Cyber Anatomy**, which includes information on human anatomy; **Curie's Elements** (chemistry); **GeoGebra** (algebra); **Leopoly** (sculpting); **Newton's Park** (physics); and **Franklin's Lab** (circuitry).
Other Equipment: The STEM Center also houses two classrooms for science and math classes and contains other equipment such as Lego robotics, instant challenge supplies and meccanoid robotics.

Events: The STEM Center hosts many STEM events, including Technology Tuesdays, Science Thursdays and the Stars of STEM speaking series. Technology Tuesday provides hands-on opportunities to expose students, faculty and community members to new or existing technologies. Science Thursdays offers students, faculty and community members hands-on science inquiry. The Stars of STEM speaking series offers students, faculty and community members an inside look at what STEM professionals do in their careers and offers insight on the education required to obtain a position in that particular STEM field.

The Student Center and Auxiliary Services

The PCC Student Center is a multiuse facility that provides one-stop shopping for many student services. The Student Services Division is located on the upper level. The lower level of the Student Center houses recreational and service facilities; these include the Bookstore, Recreation Center, televisions, Pueblo Joe's Café, and student lounge areas. Wi-Fi access throughout the building has been implemented. A ballroom is located on the upper level; and is designed to accommodate Pueblo Community College events and community events such as conferences and symposiums, professional development and continuing education, testing services, training certifications and meetings. For more information, call 719.549.3066 or visit the Student Center, Room 234.

TRIO Student Support Services (TRIO SSS)

TRIO Student Support Services is a federally funded program that provides opportunities for academic development, assists students with basic college requirements, and serves to motivate students toward the successful completion of their postsecondary education. The goal of the program is to increase the college retention and graduation rates of its participants and help students make the transition from one level of higher education to the next. Services include instruction in basic study skills; tutorial services; academic, financial, and personal counseling; assistance in securing admission and financial aid for enrollment in four-year institutions; and guidance on career options.

TRIO Upward Bound

The vision of the Upward Bound Program at PCC is to provide eligible students the opportunity to increase the academic performance and graduate from high school, go to college and to motivate the students to be the first generation to graduate from college with a four-year degree. The Upward Bound grant is funded through a TRIO grant from the U.S. Department of Education.

TRIO Veterans Upward Bound

Veterans Upward Bound (VUB) is funded by the U.S. Department of Education to provide free college preparatory courses to qualified veterans beginning or returning to college. Day and evening classes are offered year-round at Pueblo Community College, Pikes Peak Community College and CSU-Pueblo. Assistance is offered to veterans who do not have high school diplomas prepare for the GED test. Application assistance, career and academic advising, transcript requests, financial aid assistance, basic skills testing and individual tutoring are offered to VUB veterans. For more information, please contact the Veterans Upward Bound Office at 719.549.3077 or Room 154 in the Davis Academic Building.

Webcast

Class will be delivered in a classroom at a campus, site, or high school. The class will be taught from a different location, and the faculty will appear locally by use of technology (WebEx, Zoom, Hologram, etc.)

Wellness and Recreation Center

The Pueblo campus Wellness and Recreation Center is located in the Student Center, Room 159. The Wellness and Recreation Center provides a facility to pursue your personal wellness goals. We strive to enhance healthy lifestyles and well-being on the PCC campus in a safe and welcoming environment. There are more than 60 pieces of cardiovascular and weight training equipment to start or continue your wellness goals.

All PCC students enrolled in on-campus (Pueblo) classes pay a Wellness and Recreation fee with their tuition and have access to the Wellness and Recreation Center at no additional cost. Students enrolled in online classes only, or in classes at other PCC campuses (Fremont, Mancos, Durango) may purchase a $20 monthly membership. All incoming new students, registered in on-campus classes, will have Wellness and Recreation Center access at the start of the semester, when classes begin. Wellness and Recreation Center access is granted only for the semester in which the student is enrolled in classes and has paid the recreation center fees. Students enrolled in fall and are registered for spring classes, will have access to the Recreation Center during the winter break. Students not enrolled in summer classes, but enrolled in fall and/or spring classes, will have to pay the $20 monthly membership fee for the summer months.

Visit the PCC Wellness and Recreation Center webpage for more information on hours of operations, wellness resources, work-study opportunities, etc. Also feel free to call the Wellness and Recreation Center at 719.549.3363 for more information.

Pueblo Corporate College

Pueblo Corporate College is committed to providing quality customized workforce training, professional development and personal enrichment opportunities throughout Pueblo Community College's campus communities.

Services available through Pueblo Corporate College include:

Customized Corporate Training and Consulting: Delivering customized education, training and consulting programs, Pueblo Corporate College provides existing workers and businesses with the tools to stay competitive in the global marketplace through a variety of options that meet the demands of today's industries.

Professional Development and Continuing Education: Offering educational opportunities for adults, Pueblo Corporate College provides short-term courses to assist professionals with upgrading their skills to advance their careers, renew licenses and prepare for certifications.

Lifelong Learning: Through unique opportunities, community individuals may participate in a variety of workshops and programs that provide personal enrichment and engagement with others.

Business and Entrepreneurial Training and Consulting: Committed to helping new and existing businesses grow, the **Southern Colorado Small Business Development Center**, a branch of Pueblo Corporate College, provides confidential consulting and state-of-the-art training programs tailored to meet the challenges and opportunities available for area companies.

The PEAK at Pueblo Community College offers multiple indoor and outdoor spaces for community events such as conferences and symposiums, professional development and continuing education, testing services, trainings, certifications, meetings and special events. Multiple venues and customizable diverse spaces include the Tony Fortino Ballroom, two (2) theaters, conference rooms, case rooms and classrooms. For more information, call 719.549.3066 or visit the Student Center, Room 234.

Pueblo Corporate College is committed to:

- Identifying the best solutions and measures of success for each customer
- Efficient and timely response to each engagement and contact with a dedicated single point of contact
- Accurate and measurable results
- Exceptional customer service by responding to customer needs with flexibility and comprehensive project management
- Access to a vast network of experts and resources, including grant opportunities through the Governor's Office of Economic Development and International Trade.

For additional information, contact Pueblo Corporate College at 719.549.3320 or 866.478.3256.

Pre-College Programs

Pre-College Programs offer an array of opportunities for individuals seeking a high school diploma, GED or pathway into higher education. These second-chance programs are designed to meet the needs of the community and address the need for providing opportunities for a more productive life.

Gateway to College – Gateway to College serves students ages 17-20 who have not experienced success in a traditional high school but have a desire to get back on track and earn a diploma and more. Students can earn a high school diploma while earning college credits toward an associate degree or certificate. Gateway to College students are college students, with college opportunities and college expectations.

GED Classes – The GED Preparation Class is designed to help individuals who have not earned a high school diploma earn a GED (General Education Development). A GED has become an essential first step for improving an individual's opportunities for employment and education. The curricula include the complete Steck-Vaughn Test Preparation for the 2014 GED series that is divided into four (4) subject area sections: Reasoning through Language Arts, Mathematical Reasoning, Social Studies and Science. GED Academy provides computer-based instruction and built-in assessment process that creates customized learning plans.

Student Life

The Student Life Department is committed to providing students every opportunity to make the most of their time here at PCC. Our aim is to enrich the student experience and promote lifelong learning by fostering an inclusive community that will empower students to lead and serve through meaningful involvement – whether it be helping plan an event, taking on a leadership role, participating in clubs or joining an intramural sports team.

The Associated Student Government

The Associated Student Government is the student governing body which is available at all campuses – Durango, Fremont, Mancos and Pueblo.

Mission Statement

Empower students by creating opportunities to become involved and provide leadership while collaborating with the college and community in order to establish a supportive environment for our PCC students so they become personally enriched.

Purpose Statement

The purpose of Pueblo Community College Associated Student Government is to represent the student population on all campuses by pursuing social, political, academic and administrative initiatives of interest to our growing and diverse student body. In addition, the Pueblo Community College Associated Student Government shall act as a liaison between the student body and the college administration, the overall college community, the local, state and federal governments and other individuals and organizations. The ultimate task of the Associated Student Government is to address the needs, problems and concerns of the student body and to carefully listen to suggestions from the student body.

Student Organizations

All PCC students are encouraged to join any campus/site organization that is recognized by the Associated Student Government and advised by a member of the faculty/staff. A student must be in good standing and meet the entrance requirements of the organization.

Fremont Campus

Automotive Club

The Pueblo Community College/Canon City High School Auto Club is designed to give students an opportunity to learn and gain experience in the automotive area outside of regular class time. The Auto Club is open to students currently enrolled in auto classes and students not able to take auto classes but interested in automotive.

Health Professions Club

The Student Nurse's Club is open to all pre-nursing, first-year and second-year nursing students. It is a service club that works with the Associated Student Government to support campus activities. Members also serve as volunteers for various community fairs and clinics, enhancing the health of the public through education, action and service.

Students Helping Students Club

Students Helping Students is a club of students getting together to help other PCC students by utilizing the talents and abilities of all its club members. This club's mission is to give advice or point students in the right direction.

Pueblo Campus

Colorado-ADN Club (Associate Degree Nursing Club)

PCC Nursing students and other interested students can join this club for the promotion of Associate Degree in nursing. The club acts as an advocate for student ADNs; it also helps them enhance the health of the public through education, action and service.

Culinary Arts Club

The Culinary Arts Club is composed of students and alumni of the Culinary Arts and Hospitality Studies Program. The club sponsors on-campus culinary arts activities and participates in local and statewide events, as well as travel and tourism opportunities for all members.

Dented Circle (Philosophy Club)

The purpose of the Dented Circle Philosophy Club is to exercise philosophical thought among club members and encourage critical thinking among the general public through outreach.

Fire Science Club

The purpose of the Fire Science Club is to promote fire safety awareness and to educate, prepare and demonstrate what to do in case of a fire-related emergency, how to safely handle emergency situations and to educate about the potential hazards found in households, businesses and the workplace.

History Club

The History Club encourages and promotes the study, exploration and appreciation of history through discussions, travel to historical sites and research. It recognizes excellence in the study of history through competitions and other academic forums.

Occupational Therapy Assistant (OTA) Club

This club acts as an advocate for occupational therapy to enhance the health and wellness of students and the general public. It participates in education, action and service projects on campus and in the Pueblo community.

Panther Players

The Panther Players aim to develop and encourage student interest, passion and education in the fine arts and spread the love of the fine arts to the PCC campus and beyond.

Pen & Quill (Writing Club)

The Purpose of **Pen & Quill** Writers club is to build a strong writing community that is dedicated to personal growth and producing professional excellence. This will be accomplished by participating in a positive, constructive, and productive workshop designed to peer review, enhance skills, and give helpful feedback. Moreover, members can share their own work as well as participate in community events. This organization will sharpen written communications skills, inspire imagination, boost creative thinking, and encourage members to strive towards realistic and attainable goals while harnessing effective creative, professional, and academic writing.

Phi Beta Lambda (PBL)

PBL seeks to develop competent and aggressive business leaders at Pueblo Community College through networking, creating business opportunities, and competition.

Phi Theta Kappa

Phi Theta Kappa is an international scholastic honor society for two-year community and junior colleges. Phi Theta Kappa recognizes student academic achievement at PCC and promotes academic excellence at the college. To be eligible for membership, a student must be currently enrolled with a 3.5 grade point average after completing 12 or more credit hours of college-level work. PCC's Alpha Rho Theta Chapter of Phi Theta Kappa is an active society, participating in many community service, scholarship and fellowship events. After induction, a student may select standard or enhanced membership, which is determined by the level of participation in chapter activities. As a Phi Theta Kappa member, you will be honored at graduation for outstanding academic achievements.

President's Leadership Program (PLP)

The President's Leadership Program provides a network of academic courses, co-curricular and service learning opportunities that address intellectual and pragmatic issues of leadership and followership in American life.

PS CARE

The mission of Psychology and Social Work: Careers and Resources for Education (PS CARE) shall be to provide students interested in the areas of psychology and/or social work with a student support system to help with awareness, resources and education for future careers. PS CARE offers member's opportunities to participate in activities designed to provide awareness of social issues and assistance for those in need in the Pueblo community.

Physical Therapist Assistant (PTA) Club

The PTA Club promotes physical therapy through various activities during the academic year, encourages participation in service activities for the community, and promotes professional and career development at the local, state and national level.

Respiratory Care

The PCC Respiratory Care Club will encourage and promote professional excellence, serve as an advocate for the students and the college, provide service to the community, and promote the profession of a Respiratory Therapist.

Science, Technology, Engineering and Mathematics (STEM) Club

The mission of the PCC STEM club shall be to mentor members, provide resources for scholarships and provide support for the science, technology, engineering and mathematics students at PCC. Assistance with proofreading of scholarship essays for admittance into four-year institutions is provided. As a club, we will also participate in campus and community events.

Space Grant Robotics Team

The Space Grant Team is in association with the Colorado Space Grant Consortium (COSGC), which is funded by NASA and is a statewide organization involving 17 colleges and universities in Colorado. COSGC hopes to inspire PCC students to become involved with engaging, hands-on experiences in programming and designing in many different endeavors such as balloon satellites, robotics and electronic wearables. This organization also gives students the opportunity to become involved in many areas of scientific research.

Student Ambassador Program

The Student Ambassador program allows PCC to recognize students and to employ their talents for the good of the college. Student Ambassadors – a key part of the Office of Recruitment team – help with campus tours, recruitment activities, special events and speaking engagements on the Orman and Fremont Campuses. To learn about eligibility requirements, contact the Director of Recruitment at the Orman Campus or email recruitment@pueblocc.edu.

Student Chapter American Dental Hygienists Association (SCADHA)

Dental Hygiene students are automatically members of SCADHA and associated with the American Dental Hygienists' Association. SCADHA meets monthly for business and professional development, as well as to organize community service and fundraising projects to finance its community and school activities. It emphasizes personal and professional development, encouraging students to assume responsibility for the procedural and financial aspects of managing a professional organization.

Thoreauly Well Read (Book Club)

Thoreauly Well Read seeks to bring reading alive so that it becomes more than simply a solitary hobby. The club seeks to unite those who take extra value to what literature has to offer, help those who have an interest in literature obtain proper materials, and involve the PCC community in activities that provide academic benefits and campus unity.

The League of TRIO Students

The League of TRIO Students provides students with experiences and opportunities to further their education through service learning projects, fundraising, and campus & community activities. Students strive to educate the Pueblo community about issues relating to first-generation, limited income, underrepresented students, and students with documented disabilities; all while advocating for their fellow TRIO participants.

TRIO Upward Bound

Provide students with experiences and opportunities to build their leadership skills to educate the Pueblo community about issues relating to TRIO programs and to be more visible on campus and within the Pueblo community.

Veteran Service Group

The primary purpose of the Pueblo Community College VSG is to provide a network of campus and community support for military veterans. The VSG will also work with PCC administration to ensure that the needs of current and prospective student veterans continue to be met.

PCC Southwest Campus

Student Nurse Association

Open to second-year nursing students. Members work with the area Colorado Nurse Association.

Important Legal Information

Family Education Rights and Privacy

Pueblo Community College Notification of Rights Under FERPA

The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their education records. FERPA rights are afforded to the students at the time of admission. These rights include:

1) The right to inspect and review the student's education records within 45 days of the day Pueblo Community College receives a request for access. A student should submit to the Records Office, a written request that identifies the record(s) the student wishes to inspect. The INSERT TITLE will make arrangements for access and notify the student of the time and place where the records may be inspected.

2) The right to request the amendment of the student's education records that the student believes are inaccurate, misleading, or otherwise in violation of the student's privacy rights. A student who wishes to ask **Pueblo Community College** to amend a record should write the Records Office, who will notify the college official responsible for the record, clearly identify the part of the record the student wants changed, and specify why it should be changed. If the College decides not to amend the record as requested, the College will notify the student in writing of the decision and the student's right to a hearing regarding the request for amendment using the Student Grievance Procedure SP 4-31. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

3) The right to provide written consent before Pueblo Community College discloses personally identifiable information from the student's education records, except to the extent that FERPA authorizes disclosure without consent. One exception which permits disclosure without consent is disclosure to College officials with legitimate educational interests. A College official is a person employed by the College or Colorado Community College System in an administrative, supervisory, academic or research or support staff position (including law enforcement unit personnel and health staff); a person or company with whom the College has contracted as its agent to provide a service instead of using college employees or officials (such as an attorney, auditor, or collection agent); a person serving on the College Board; or a student serving on an official committee, such as a disciplinary or grievance

committee, or assisting another school official in performing his or her tasks. **Pueblo Community College** has designated the National Student Clearinghouse as a College official. A College official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibilities for the College. Upon request, the College discloses education records, without a student's consent, to officials of another school, in which a student seeks or intends to enroll, or after enrollment.

The college may share educational records to parents in the following circumstances: for a student who is dependent under I.R.S. tax code; a student under 21 years old who has violated a law or the school's rules or policies governing alcohol or substance abuse; and when the information is needed to protect the health or safety of the student or other individuals in an emergency.

FERPA Annual Notice to Reflect Possible Federal and State Data Collection and Use
As of January 3, 2012, the U.S. Department of Education's FERPA regulations expand the circumstances under which a student's education record(s) and personally identifiable information (PII) contained in such records — including Social Security Number, grades, or other private information — may be accessed without student consent. First, the U.S. Comptroller General, the U.S. Attorney General, the U.S. Secretary of Education, or state and local education authorities ("Federal and State Authorities") may allow access to student records and PII without student consent to any third party designated by a Federal or State Authority to evaluate a federal- or state-supported education program. The evaluation may relate to any program that is "principally engaged in the provision of education," such as early childhood education and job training, as well as any program that is administered by an education agency or institution. Second, Federal and State Authorities may allow access to student education records and PII without student consent to researchers performing certain types of studies, in certain cases even when we object to or do not request such research. Federal and State Authorities must obtain certain use-restriction and data security promises from the entities that they authorize to receive student PII, but the Authorities need not maintain direct control over such entities. In addition, in connection with Statewide Longitudinal Data Systems, State Authorities may collect, compile, permanently retain, and share without student consent PII from student education records, and they may track student participation in education and other programs by linking such PII to other personal information about students that they obtain from other Federal or State data sources, including workforce development, unemployment insurance, child welfare, juvenile justice, military service, and migrant student records systems.

The Colorado Community College System considers the following to be directory information and **Pueblo Community College** staff may disclose this information, without prior consent, to anyone inquiring in person, by phone, or in writing: Student name; Major field of study; Dates of student attendance; Degrees / certificates and awards student has earned; Most recent educational institution attended by the student; enrollment status (full time, part time, etc.), Participation in officially recognized activities and sports; and if participating in an officially recognized activity or sport, height, weight, and high school attended.

Physical Addresses are considered PII and are not released as directory information except they may be released for the following limited purposes:

Graduation lists released to news media, which may include the student's city of residence only,

Other listings to the news media and College personnel for special awards, honors, and events,

Notification to Phi Theta Kappa Honor Society for students who are eligible to be considered for membership,

As may be needed by cash management service providers engaged by CCCS or the Colleges to process student refunds, or

To institutions who have a written agreement with the CCCS System Office or Pueblo Community College for early advising, scholarship, or admissions consideration. Credit hour threshold for release may be stipulated in system-wide or individual college agreements.

Email Addresses are considered PII and are not released as directory information except they may be released for the following limited purposes:

- Notification to Phi Theta Kappa Honor Society for students who are eligible to be considered for membership,

- As may be needed by cash management service providers engaged by the CCCS System Office or Pueblo Community College to process student refunds, or

- To institutions who have a written agreement with the System or a CCCS college for early advising, scholarship, or admissions consideration. Credit hour threshold for release may be stipulated in system-wide or individual college agreements.

  Phone numbers (including type) Date of Birth, Race/Ethnicity, and GPA are considered PII and are not released as Directory Information except for the following limited purpose:

- To institutions who have a written agreement with the CCCS System Office or Pueblo Community College for early advising, scholarship, or admissions consideration. Credit hour threshold for release may be stipulated in system-wide or individual college agreements.

Additionally, name, address, college issued e-mail address, phone number, date and place of birth, level of education, most recently attended college, field of study, and degree(s) received of students may be released to military recruiters upon request in accordance with the Solomon Amendment. All other information contained in student records is considered private and not open to the public without the student's written consent. Students who do not want their directory/public information released to third parties or students who do not want to be listed in the College online e-Directory should complete a form to suppress directory information available online or at the Registrar's Office or Office of Admissions and Records by the first day of the semester.

4) The right to file a complaint with the U.S. Department of Education concerning alleged failures by the College to comply with the requirements of FERPA. The name and address of the Office that administers FERPA is:

Student Privacy Policy Office

U.S. Department of Education

400 Maryland Avenue, SW

Washington, DC 20202-5901

In accordance with the Fair and Accurate Credit Transactions Act (FACTA) of 2003, **Pueblo Community College** adheres to the Federal Trade Commission's (FTC) Red Flag Rule (a Red Flag is any pattern, practice or specific activity that indicates the possible existence of identity theft.), which implements Section 114 of the FACTA and to the Colorado Community College System's Identity Theft Prevention and Detection Program, which is intended to prevent, detect and mitigate identity theft in connection with establishing new covered accounts or an existing covered account held by the Colorado Community College System (System or CCCS) or one of its thirteen (13) community colleges, and to provide for continued administration of the Program. If a transaction is deemed fraudulent, appropriate action will occur. Action may include, but is not limited to, canceling of the transaction, notifying and cooperating with law enforcement, reporting to the Student Code of Conduct Office, and notifying the affected parties. For more information on FACTA, Red Flag Rules and Identity Theft Consumer Information, please see the links provided below:

- Federal Trade Commission Statute
- Red Flag Rules
- Identity Theft Consumer Information

Solomon Amendment

Institutions of higher education receiving Federal grants and contracts are subject to the Solomon Amendment (10 U.S.C. 1983 § 549). It allows federal funding to be cut if military recruiters are prohibited from recruiting on campuses/sites or are prohibited from accessing student directory information for recruiting purposes.

Covered student directory information ("student recruiting information") is defined as name, address, telephone listing, age or year of birth, academic major and level of education (e.g. freshman, sophomore, etc., or degree awarded). Where there is a conflict between the Family Educational Rights and Privacy Act of 1974 (FERPA), the Solomon Amendment would supersede FERPA. A student who has requested nondisclosure of directory information to any party under FERPA remains protected.

Institutions must respond to each of the separate branches of the military services, but only need to do so once per academic semester to each branch. **Military recruiters can contact the Records office for more information on this student directory information.**

Affirmative Action/Equal Opportunity

PCC is an equal opportunity educational institution and the College does not discriminate on the basis of sex/gender, race, color, age, creed, national or ethnic origin, physical or mental disability, veteran status, pregnancy status, religion, genetic information, gender identity or sexual orientation in its activities, programs or employment practices as required by Title VII, Title IX, Section 504, Age Discrimination Act, and Title II of the ADA. The College has designated the Vice President of Human Resources as its Affirmative Action Officer with the responsibility to coordinate its civil rights compliance activities and grievance procedures.

For information, contact the Vice President of Human Resources, 900 W. Orman Ave., Pueblo, CO 81004, telephone: 719.549.3220; or the Office for Civil Rights, US Department of Education, Region VIII, Federal Office Building, 1244 N. Speer Blvd., Suite 310, Denver, CO 80204, telephone 303.844.5695, TDD 303.844.3417.

Sexual Harassment and Sexual Misconduct Notice

Sexual Harassment

The College is committed to upholding this policy prohibiting sexual harassment. Violation of this policy may be grounds for dismissal. While it is the purpose of this policy to protect all persons associated with the College from sexual harassment, it shall also be a violation of this policy to knowingly make false allegations of sexual harassment.

Sexual harassment is defined as unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature when one or more of the following criteria are met:

1. Submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment or of academic status in course, program,

or activity.

2. Submission to or rejection of such conduct by an individual is used as the basis for employment or academic educational decisions affecting such individual.

3. Such conduct is sufficiently severe, persistent, or pervasive to have the purpose for effect of unreasonably interfering with an individual's work/academic performance or creating an intimidating, hostile, or offensive working/learning environment.

Matters having sexual connotation, which arise as part of the legitimate educational curricula and do not exploit students to a private advantage would not violate college policy unless used in an improper manner. Examples of sexual harassment may include, but are not necessarily limited to:

1. Physical assault

2. Direct or implied threats that submissions to sexual advances will be a condition of employment, work status, promotion, grades, or letter of recommendation

3. Direct propositions of a sexual nature

4. Subtle pressure for sexual activity

5. A pattern of conduct intended to discomfort or humiliate, or both, a reasonable person at whom the conduct was directed that includes one or more of the following:

i. Touching, patting, hugging, or brushing against a person's body

ii. Remarks of a sexual nature about a person's clothing or body

iii. Remarks about sexual activity or speculation about previous sexual experience

iv. The display in the work or educational arena of sexually suggestive objects or pictures

Individuals who feel that they have been subjected to sexual harassment and are in need of further information as to the procedures, may contact the Vice President of Human Resources, 900 West Orman Avenue, Central Administration, Room 112, Pueblo, CO 81004; Phone: 719.549.3220. All matters involving sexual harassment complaints are taken seriously and shall be investigated. Complaints shall remain confidential to the extent possible. Filing of a complaint or otherwise reporting sexual harassment shall not reflect upon the individual's status or affect future employment, work assignments, or grades.

Sexual Misconduct

Sexual misconduct, including but not limited to sexual assault, sexual abuse, domestic violence, dating violence, and stalking, by any member of the College community is strictly prohibited and will not be tolerated. The College will respond in a firm and judicious manner to all reports of alleged incidents of sexual misconduct.

Definitions: Sexual assault is defined as sexual penetration by use of force or threat of force, or by taking advantage of a victim's helplessness (C.R.S. 18-3-402). Sexual abuse is defined as an act of a sexual nature not covered under sexual assault and which includes but may not be limited to fondling and touching of sexual body parts without consent. Domestic violence is defined as an act or threatened act of violence upon a person with whom the actor is or has been involved in an intimate relationship, or any other crime against a person, or against property, including an animal, or any municipal ordinance violation against a person, or against property, including an animal, when used as a method of coercion, control, punishment, intimidation, or revenge directed against a person with whom the actor is or has been involved in an intimate relationship.(C.R.S.18-6-800.3). Dating violence is defined as the physical, sexual, or psychological/emotional violence within a dating relationship. Stalking is defined as making a credible threat to another person and/or repeatedly follows, approaches, contacts, or places under surveillance that person, a member of that person's immediate family, or someone with whom that person has or has had a continuing relationship (C.R.S. 18-3-602). Consent is defined as cooperation in act or attitude pursuant to an exercise of free will and with knowledge of the nature of the act. A current or previous relationship shall not be sufficient to constitute consent. Submission under the influence of fear shall not constitute consent (C.R.S.18-3-401[1.5]).

Assistance for victims can be found in the Victim's Bill of Rights brochures (refer to the document associated with the student's closest campus) located at the bottom of the PCC Police webpage at this link https://pueblocc.edu/public-safety. Additional information on VAWA, Sexual Misconduct, and Title IX concerns is located on PCC's Sexual

Misconduct and Title IX webpage at this link https://pueblocc.edu/Title-IX to include policies, contact information for employees to learn about the process, student resource guide, how to report concerns, etc. Concerns for Sexual Misconduct, Title IX, VAWA, and other concerning behavior can be reported at the PCC webpage to report an incident or concern at this link https://pueblocc.edu/Concerns; the link to report an incident or concern is conveniently located at the bottom of any PCC webpage.

Violence Against Women Act (VAWA), Section 304

On March 7, 2013, President Barack Obama signed a bill that reauthorized the Violence Against Women Reauthorization Act (VAWA). Included in the bill is Section 304, which addresses sexual violence in higher education. Pueblo Community College fully supports VAWA by educating, preventing, and supporting the community about issues surrounding domestic violence, dating violence, sexual assault and stalking; defining consent; promoting options for bystander intervention; recognizing warning signs of abusive behavior; and promoting ways to avoid potential attacks. PCC offers mandatory Human Resources VAWA training for all staff and student-lead activities that bring awareness of these issues to the student community. PCC also provides important student online safety trainings to include topics on Sexual Misconduct, Title IX, VAWA, Bystander Training, and Alcohol/Other Drugs. Assistance for victims can be found in the Victim's Bill of Rights brochures (refer to the document associated with the student's closest campus) located at the bottom of the PCC Police webpage at this link https://pueblocc.edu/public-safety. Additional information on VAWA, Sexual Misconduct, and Title IX concerns is located on PCC's Sexual Misconduct and Title IX webpage at this link https://pueblocc.edu/Title-IX to include policies, contact information for employees to learn about the process, student resource guide, how to report concerns, etc. Concerns for Sexual Misconduct, Title IX, VAWA, and other concerning behavior can be reported at the PCC webpage to report an incident or concern at this link https://pueblocc.edu/Concerns; the link to report an incident or concern is conveniently located at the bottom of any PCC webpage.

For more information feel free to contact any of the following offices: Vice President of Human Resources/Title IX Coordinator, Vice President of Student Success, Dean of Students, and Chief of Public Safety.

Title IX Statement

Pueblo Community College (PCC) is committed to providing a learning environment that promotes personal integrity, civility and mutual respect free of sex discrimination and sexual misconduct. Title IX of the Educational Amendment Act of 1972 states that: **No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal assistance.** Sex discrimination violates an individual's fundamental rights and personal dignity. PCC considers sex discrimination in all its forms to be a serious offense. **This policy includes all forms of sex discrimination, including sexual harassment, sexual assault and sexual violence by employees, students or third parties.** This policy has been developed to reaffirm individual rights and responsibilities and to provide recourse for those individuals whose rights have been violated. It should serve as a guide on the expectations we have for sexual communication, sexual responsibility and sexual respect. Visit the PCC website for more information about the policy and for complaint procedures and forms.

All College employees, including student employees in certain roles, are mandatory reporters of sexual misconduct and discrimination. Mandatory reporters must ensure that any sexual misconduct or discrimination that they become aware of is reported to the College's Title IX Coordinator or designee. Reports may also be made to the College's Department of Public Safety at 719.549.3355. This policy applies to all sexual misconduct, discrimination or harassment regardless of the gender, gender identity or sexual orientation of the complainant or respondent.

Grievance Process

Pueblo Community College provides a grievance procedure for students, clients or volunteers who are providing a service to benefit the College under the supervision and control of a college employee (hereafter noted as grievant). A client or volunteer may only grieve a decision which bans him or her from the campus/site. A grievable matter is any alleged action which violates or inequitably applies written college policies or procedures. The grievant must be personally affected by such violation or inequitable action. Matters that are not grievable include those matters upon which the College is without authority to act, academic decisions (unless there is an allegation that the decision was motivated by illegal discrimination) and disciplinary actions.

For more information about the PCC grievance policy, refer to the PCC Student Handbook.

Complaints

Pueblo Community College welcomes comments, suggestions and feedback from students, clients or volunteers. Individuals are encouraged to provide feedback or seek resolution about any concern or complaint at the lowest informal level progressing through the appropriate chain of command at all PCC campuses/sites. If the concern or complaint is not resolved through an informal process, a written complaint may be submitted to the Chief Student Services Officer.

Complaint Procedures

If you are taking any Pueblo Community College courses and you have a complaint about your experience with PCC, you have two options:

1. You can follow Pueblo Community College's process for student complaints, which can be found in the PCC Student Handbook, or complaint procedure and forms, or you may contact the Higher Learning Commission, which is Pueblo Community College's accrediting agency.
2. If you are residing outside of Colorado while attending Pueblo Community College, in many cases you can file a complaint in the state where you are residing. As required by federal regulations, each state is required to share a list of agencies where complaints can be filed.

Before exercising either of the above options, you should know that most, if not all, external complaint processes require the student to exhaust all avenues of complaint internal to the institution before they will consider a grievance.

Surveys and/or Research at Pueblo Community College

While surveying students and conducting research can be important methods for advancing knowledge, Pueblo Community College reserves the right to endorse, allow or not allow surveys and research at the College, and the right to determine the timing of when surveys and research may be conducted as stated in PCC Operating Protocol & Procedure 112. The Office of Institutional Research (OIR) is responsible for reviewing all proposed surveys and questionnaires; protecting the rights of human subjects; ensuring good survey methodology and design; preventing specific populations from being over-surveyed; avoiding the collection of duplicated information; and encouraging sharing of survey results with the PCC community. The OIR is authorized to review, approve, require modifications in or disapprove surveys or questionnaires conducted by or through the College. All survey, questionnaire and research activity/project requests must be approved prior to administration. Contact the Office of Institutional Research (OIR) and submit the Survey/Questionnaire Request Form.

Student Right-To-Know & Campus Security Act

PCC strives to provide a safe and healthy environment that enhances the learning process. All students and employees should be able to attend classes, work on campus/site and/or participate in activities with a feeling that they are in an environment that is safe and secure. PCC provides to all prospective students and employees the Campus Security Policies and Procedures and the most recent campus crime statistics. This is part of the Federal Law No. 101-542, the Student Right-to-Know and Campus Security Act of 1990.

The information addresses six (6) topics related to campus crime and statistics: 1) a summary of PCC Crime Statistics, 2) policies regarding security, access to buildings and campus law enforcement, 3) procedures for reporting crimes and other emergencies, 4) information about sex offenses, 5) policies about the use, possession and sale of alcoholic beverages, and 6) programs about alcohol and drug abuse education, crime prevention and campus security policies.

Disclaimer Notices

Disclaimer for All Students

PCC disclaims liability of any kind for injury, illness, theft or damage of personal property of any student as a result of participation in field trips, shop or laboratory work, or classroom activities. Every reasonable effort is made to provide safe conditions for these activities.

Background and Drug Checks

Criminal background and drug checks are required of students entering all health and public safety certificate and/or degree programs. Additionally, the automotive program requires an application process to include screening. Certain offenses will preclude you from enrolling in a health program. Students should check with the program chair for specific requirements and due dates. Passing the background check and drug screening for admission and continuation in any PCC Health and Public Safety program does not guarantee that a graduate will pass the background check and/or drug screening for licensing or employment

Student Malpractice & Liability and/or Health Insurance

If you are enrolled in health professions and service programs, you must carry malpractice and liability insurance. Personal health insurance coverage is strongly recommended and is required by some clinical affiliates. The malpractice insurance coverage is available at a nominal cost through a group policy arranged by the College. Speak to your program advisor or the PCC Cashier about this type of insurance coverage.

Disclaimer for Criminal Justice Majors

Many criminal justice and related agencies require certain standards of prospective employees at the application stage. Job applications ask applicants if they have ever been arrested for any offense, either misdemeanor or felony. An affirmative response or finding on the part of a prospective employer may be grounds to deny employment. A second requirement may require applicants to take psychological tests, lie detector tests and medical tests in order to determine if applicants are suited for a particular position.

With respect to the above, the Criminal Justice Department and the Pueblo Law Enforcement Academy of PCC advise that entrance into any CRJ course of study or subsequent graduation is no guarantee, explicit or implied, that a student is employable. Further, should a student be unable to be placed and/or remain in the course CRJ 280, Cooperative Education/Internship, after two good faith attempts at placement, neither PCC nor its employees accept responsibility in respect to the student's fulfillment of this program.

In an attempt to appropriately advise prospective students, a prior arrest and/or drug and alcohol history should be discussed with a Criminal Justice advisor prior to the student's admission into the Criminal Justice Program. Neither PCC nor Criminal Justice advisors will be held liable for a student's decision to continue in the program.

Disclaimer for Dental Hygiene Majors with a History of Felony

The State of Colorado Board of Dental Examiners requires licensing dental hygienists to answer questions concerning felony history, excessive use or abuse of controlled substances/alcoholic beverages (within the last five years), and any physical or mental condition that may affect the ability to practice dental hygiene. Other questions asked by the State Board pertain to an applicant's history of malpractice judgment and any disciplinary action by any government or private agency. The PCC Department of Dental Hygiene assumes no responsibility for the denial of licensure by the Colorado State Board of Dental Examiners.

Disclaimer for Emergency Medical Services Majors with a History of Felony

The Colorado Department of Public Health and Environment – Prehospital Division, which is responsible for certification of emergency medical technicians in Colorado, requires a criminal background check. Certain felonies or misdemeanors may prevent you from obtaining certification. The Emergency Medical Services programs at PCC assume no responsibility for the denial of certification by the Colorado Department of Public Health and Environment. For further information, contact the CDPHE-Prehospital Division at 303.692.2980.

Disclaimer for Nursing Majors with a History of Felony

The Colorado State Board of Nursing, which is responsible for licensing nursing personnel in Colorado, has varied restrictions which may affect those with a history of a felony conviction. The PCC Department of Nursing assumes no responsibility for the denial of licensure by the State Board of Nursing. Prospective students are responsible for contacting the State Board of Nursing at 303.894.2432 concerning any questions regarding their eligibility for licensure.

Disclaimer for Surgical Technology Majors with Criminal History

The State of Colorado Board of Regulatory Agencies requires licensing surgical technologist applicants to answer questions concerning felony history. The PCC Surgical Technology Program assumes no responsibility for the denial of licensure from the State of Colorado Board of Regulatory Agency. For further questions, you may contact the agency at 303.894.7800.

Disclaimer for Occupational Therapy Assistant Majors with a History of Felony

The National Board for Certification in Occupational Therapy (NBCOT) requires applicants to answer questions concerning felony history. This information is then available to states with licensure. The PCC Occupational Therapy Assistant Program assumes no responsibility for the denial of licensure in states in which there are such requirements. For further information, contact the NBCOT at 301.990.7979.

Disclaimer for Radiologic Technology Majors with Criminal History

Applicants are advised that persons with a prior felony, gross misdemeanor or misdemeanor may be declared ineligible for registry certification. The program assumes no responsibility for the denial of registry eligibility due to prior criminal conviction. Applicants who have any questions concerning registration restrictions due to a prior felony, gross misdemeanor or misdemeanor convictions are encouraged to undergo a **Pre-application Review of Eligibility for Certification** through the American Registry of Radiologic Technologists, **1255 Northland Drive, Mendota Heights, MN 55120; telephone, 651.687.0048.**

Disclaimer for Respiratory Care Practitioner Majors with a History of Felony

The State of Colorado Board of Regulatory Agencies requires licensing respiratory therapy applicants to answer questions concerning felony history. The PCC Respiratory Therapy Program assumes no responsibility for the denial of licensure from the State of Colorado Board of Regulatory Agency. For further questions, you may contact the agency at 303.894.7851.

Personnel

College Personnel

Colorado State Board for Community Colleges & Occupational Education

Dr. Byron N. McClenney, Chair

Stratton Rollins "Rollie" Heath, Vice Chair

Presley F. Askew, member

Maria-Vittoria "Giugi" Carminati, member

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Terrance D. McWilliams, member

Dr. Russell J. Meyer, member

Hanna Skandera, member

Daniel Villanueva, member

Catherine Allen, State Student Advisor Committee representative

Kelly O'Dell, State Faculty Advisor Committee representative

Colorado Community College System

Joe Garcia, Chancellor

Diane Duffy, Senior Vice Chancellor and Chief Strategy Officer

Mark Superka, Vice Chancellor, Finance & Administration

Dr. Landon Pirius, Vice Chancellor, Academic and Student Affairs

Julie Ouska, Vice Chancellor/CIO, Information Technology

Angie Gramse, General Counsel

Fiona Lytle, Chief Communications Officer & Legislative Liaison

Christina Cecil, Chief Human Resources Officer

Adam Cermak, Executive Director, Foundation for Colorado Community Colleges

Pueblo Community College Advisory Council

Ron Wiley, Chair

Dr. Kevin Aten

Andrew Burns

Abel Chavez

Dr. Harold Deselms

Dr. Richard Duran

Cheryl Garcia

Ronda Rein

Dr. Velia Rincon

Jack Rink

John Roth

Wynona Sullivan

PCC Cabinet

Dr. Patricia (Patty) Erjavec, President PhD, University of Colorado-Colorado Springs MNM, Regis University BSBA, Colorado State University – Pueblo	**Dr. Andrew Miller** Dean Health Professions & Public Safety DHSc, A.T. Still University MA, Columbia College BS, William Woods University AA, Southeast Community College
Amanda Corum Executive Director, Pueblo Corporate College MBA, Colorado Technical University BS, Colorado State University-Pueblo AAS – Pueblo Community College	**Dana Moss** Vice President of Human Resources
Bryan Crawford Director, Information Technology MS, University of Utah BS, Adams State College	**Dr. Rajashree Pandit** Dean, Medical & Behavioral Health
Maria de la Cruz Shared Governance Co-Chair Academic Excellence Administrator BA, Adams State University AAS, Trinidad State Junior College	**Dr. Quincy Rose-Sewell** **Vice President, Academic Support**
Robert Gonzales Vice President, Administration & Finance MS, University of Colorado-Denver BS, Colorado State University-Pueblo	**Jennifer Sherman** Dean, Business and Advanced Technology MBA, BS, Colorado State University-Pueblo
Erin Hergert Director, Marketing & Communications MBA, Colorado Technical University	**Lisa Snyder** Executive Dean, PCC Southwest

BA, Colorado State University	
Julie C. Jimenez Executive Assistant to the President BS, Regis University	**Dr. Heather Speed** Vice President, Student Success PhD, MA, University of North Texas BA, Sam Houston State University
Richard Keilholtz Faculty Council Chair Department Chair/Faculty -- Social Sciences, Education, and Criminal Justice JD, Southern Illinois University-Carbondale BA, University of Iowa	**Tricia Vigil** Shared Governance Co-Chair Department Chair/Faculty -- Occupational Therapy Assistant MBA, Colorado Technical University BS, Utica College of Syracuse University
Dr. Young Kim Dean, Arts & Sciences PhD, Texas Tech University MS, BS, Hankuk University of Foreign Studies	

Directors

Robin Arwood Controller BSBA, Colorado State University-Pueblo	**Gabriel Lucero** Director, TRIO Upward Bound MBA, BSBA, Colorado State University-Pueblo
Barbara Benedict Director, Admissions and Records MSPM, Colorado Technical University BS, Colorado Christian University AAS, Pueblo College of Business and Technology	**Andrea Martinez** Director, TRIO Student Support Services MSW, University of Denver BA, California State University-San Bernardino
Cory Butts Director, Institutional Research PhD, University of Arkansas	**Joey Mathews** Director, STEM Career and Technical Education MS, BS, Colorado State University-Pueblo
William Brown	**Christina McGrath**

Director, Public Safety AAS, Aims Community College	Director, Library Services MLS, San Jose State University BS University of Maine-Augusta AAS, Pueblo Community College
Linda Capito Director, Dental Hygiene Program MS, Colorado State University-Global Campus BS, Oregon Institute of Technology	**Elizabeth "Liz" Medendorp** Director, Assessment Student Learning MA, University of Massachusetts Amherst BA, University of Michigan
Aaron Daniel Director, Academic Services, Fremont Campus MA, National University	**Lisa Molina** Regional Director, Student Success, PCC Southwest MA, MS, Central Michigan University
Brian Estrada Business Manager, Small Business Development Center BSBA, Colorado State University-Pueblo	**Melanie Parlett** **Director, Education for Justice Involved Individuals**
Michael Gage Director, Advising MEd, Arizona State University BA, Adams State College	**Oliver Hazard "Perry" Pepper IV** Regional Director, Academic Services- PCC Southwest MA, Adams State University BA, Fort Lewis College
Pamela Grable Director, Financial Aid BSBA, Colorado State University-Pueblo	**Angela Shehorn** Director, Children First BA, Regis University AAS, AA, Pueblo Community College
RaeAnn Gutierrez Director, OPTICA Grant MS, Colorado State University-Fort Collins BS, Colorado State University-Pueblo	**Jeanelle Soto-Quintana** Director, Pre-College Programs BS, MBA, University of Southern Colorado
Kimberly Hinkle Director, HIS Professional Development	**Eva Tapia** Director, Simulation Center

BS, Colorado State University-Pueblo	MSN, University of California-San Francisco BSN, University of Colorado
Richard Ince Director, Pueblo Downtown Studio Campus BSBA, Adams State College	**Chase Watts** Executive Director, Concurrent Enrollment, Secondary Engagement, & Recruitment
Ed Iniguez Director of Purchasing BS, Colorado State University-Pueblo	**Joseph Waneka** Director, Facility Services
Vernon James Dean, Students MEd, University of South Carolina BS, Presbyterian College	

Professional/Technical Staff

Alixandria Aguilar Advisor, Recruitment & Retention Math/Science MBA, BSBA, Colorado State University- Pueblo	**Trevor Hardin** Coordinator, Academic Advising MA, University of Colorado-Colorado Springs BSW, Colorado State University-Pueblo	**Brionna Rodas** Specialist, Recruiter
Paula Arellano Administrative Assistant, Children First	**Alvina Heath** Specialist, Pre-College Program Resource, PCC Southwest MA, New Mexico State University	**Jimmie Romero** Academic & Career Expert BA, Colorado State University-Pueblo
Rebekah Atnip Special Assistant, Executive Dean, PCC Southwest MA, Concordia University Irvine BA, Rhodes College	**Crystal Hernandez** Student Success Coach BS, Colorado State University-Pueblo	**Robin Romero** Specialist, Customer Solutions BA, Colorado State University-Pueblo AA, Pueblo Community College
Cassandra Aubuchon	**Heather Houk**	**Amanda Rosales**

Coordinator, STEM EDGE	Coordinator, Agriculture Programs, PCC Southwest	Teacher, Early Childhood Lead
Cheryl Ayala Specialist, Customer Solutions BS, Franklin University AGS, Pueblo Community College	**Bonnie Housh** Academic Excellence Administrator MS, BS, Colorado State University-Pueblo	**Adan Salinas** Senior Systems Administrator
Parker Banas Coordinator, STEM Outreach MS, BS, Michigan State University	**Becky Hunter** Coordinator, Transfer & Graduation BS, Colorado State University-Pueblo	**Eduardo Salinas** Coordinator, PCC Southwest Site (Durango)
Amber Bell Specialist, Pre-College Program	**Charles Hurley** Graphic Artist AAS, Pueblo Community College	**Jill Sanchez** Manager, Cashier's Office BSBA, Colorado State University-Pueblo AGS, Pueblo Community College
Rebecca Bellavia Navigator, Licensed Provider	**Maria Iverson** Transfer Coach	**Arlene Sanders** Administrative Assistant, Pre-College Programs
Cheyenne Berrios Manager, Talent Acquisition & Employee Relations BSBA, BS, AA, University of Maryland Global Campus	**Lindsey Jaquez** Coordinator, Science Lab BS, Colorado State University-Pueblo	**Melissa Santistevan** Special Assistant, Executive Dean-PCC Fremont BS, Colorado State University-Pueblo
Steve Bigley Coordinator, Photo Imaging AA, Madison Area Technical College	**Christopher Javornik** Advisor, Academics Math & Science MA, BA, University of Colorado-Boulder	**Eric Schwien** Advisor, Financial Aid BS, Colorado State University-Pueblo
Carlee Bradford Student Success Coach BA, Colorado State University-Pueblo AGS, Pueblo Community College	**Sterling Jenkins** Coordinator, Public Safety, Operations, & Safety – Fremont Campus MA, University of Colorado-Colorado Springs	**Michelle Shannon** Specialist, Pre-College Program Resource, PCC Southwest MS, Lamar University BS, Emporia State University

	BS, Colorado State University-Pueblo	
Taylor Brewer Advisor, Financial Aid BS, Colorado State University-Pueblo	**Lucas Johnson** Specialist, Senior Information Technology BS, Colorado State University-Pueblo	**Karyl M. Shawcroft** Assistant Director, Admissions & Records MA Ashford University BS, Adams State University AAS, Pueblo Community College
Justin Brown Instructional Designer	**Joshua Kienitz** Assistant Controller	**Andrea Shepard** Specialist, Recruiter
Angela Brubaker Coordinator, CTE BS, Colorado State University Global	**Christopher LaRose** Coordinator, STEM Outreach	**Barbara Simms** Coordinator, Enrollment Services BS, Colorado State University-Pueblo AS, Pueblo Community College
Juan Casaus Specialist, Event Set-up	**Robin Leach** Specialist, Multimedia Technology/Distance Education AAS, Pueblo Community College	**Toni Skilling** Director, Student Life & Leadership MBA, BS, Adams State University AGS, AA, Pueblo Community College
Anna Caesar Administrative Assistant, OPTICA Grant	**Alex Linden** Coordinator, Testing & Academic Support-- PCC Southwest	**Jeffrey Smith** Advisor, Financial Aid
Bonnie Clark Coordinator, Disability Resources BA, Regis University	**Aaron Lucero** Engagement Coach MS, Adams State University BS, University of Northern Colorado	**Dominique Son** Coordinator, Recruitment BA, Colorado State University-Pueblo
Daniel Colucci Coordinator, Fiscal Operations	**Laura Lucero** Coordinator, Admissions AAS, Pueblo Community College	**Shaylea Strickengloss** Coordinator, Concurrent Enrollment BA, Colorado State University-Pueblo AA, Pueblo Community College
Sara Cox Academic Excellence Administrator	**Kristina Lyon** Student Success Coach	**Tracy Swearingen** Program Manager, Law Enforcement Academy

	B.S., Colorado State University - Pueblo	
Matthew Dailey Advisor, Financial Aid	**Valerie Maldonado** Teacher, Early Childhood Lead	**Cruzita Tafoya** Student Success Coach BS, Colorado State University-Pueblo
Catlin Davis Program Manager, Welding BS, Colorado State University-Pueblo	**Mark Madic** Manager, Southern Colorado Innovation Link BS, Colorado State University-Fort Collins	**Jacquline Talbert** Coordinator, Business & Accounting MBA, BSBA, Colorado State University-Pueblo
Alejandra de Anda Coordinator, Youth Programs & Lifelong Learning BA, Colorado State University-Pueblo AA, Pueblo Community College	**Stephanie Martinez** Coordinator, Nursing Lab Simulation Tech	**Helen Taylor** Assistive/Alternate Media Technician
Maria de la Cruz Academic Excellence Administrator BA, Adams State University AAS, Trinidad State Junior College	**Amy Matthew** Coordinator, Public Relations BS, University of Southern Colorado	**Stephanie Testa** Administrative Assistant – Pueblo Corporate College
Ariana Delmerico Coordinator, Outreach & Special Projects	**Kimberly McCullah** Clinical Coordinator, Dental Hygiene MS, Regis University BS, Colorado State University-Pueblo	**Jay Tonne, Jr.** Coordinator, Renewable Energy
Lori Epperson Coordinator, First Year	**Paula McPheeters** Manager, Budget/Grant Compliance MPA, University of Colorado-Denver BS, University of Southern Colorado	**Lee Truan** Coordinator, Media Productions
Stacy Esparza Coordinator, Return to Earn BS, Colorado State University-Pueblo AA, Pueblo Community College	**Molly Milusnic** Specialist, Community Advisor	**Tony Trujillo** Assistant Director, Financial Aid

Jason Falsetto Coordinator, CTE Outreach BS, Colorado State University-Pueblo	**Hannah Moody-Goo** Academic Librarian San Jose State University BA, Metropolitan State University-Denver	**Crystal Tucker** Coordinator, Online Media AAS, Pueblo Community College
John Fazekas Coordinator, Lab	**Ashley Morlan** Nursing Laboratory and Clinical Coordinator/Simulation Technician	**Paul Valdez** Coordinator, First Year
William Franklin Technical Systems Analyst AAS, Pueblo Community College	**Paul Murphy** Manager, Core Technologies	**Logan Vineyard** Coordinator, CIS/HIT Programs - Fremont
Jenny Garces Student Success Coach	**Tracy Neve** ICAP Coach MA, University of Colorado-Colorado Springs BS, Colorado State University-Pueblo BS, University of Northern Colorado	**Dr. Robert Waggener** Supervising Dentist DDS, Northwestern University BA, University of Colorado-Boulder
Andrew Garcia Advisor, Recruitment & Retention BA, Colorado State University-Pueblo	**Andrew Nunn** Coordinator, E-sports & Tech Pathways MS, Colorado State University-Global	**Brenda Wallerstedt** Medical Assistant AAS, Intellitec College
Cristina Garcia Specialist, Pre-College Program Resource BA, Colorado College	**Ismael (Izzy) Ogaz** Coordinator, Projects	**Jennifer Walters** Community Advisor BSW, Colorado State University, Pueblo AA, Pueblo Community College
Philip Gates-Crandall Retention Coach MA, University of the Sunshine Coast - Australia BS, The University of Texas at Arlington	**Douglas Parker** Coordinator, Law Enforcement Academy- PCC Southwest BS, University of Colorado	**Rebecca Wasil** Advisor, Disability Resources BA, The Ohio State University

Nicole Gennetta Coordinator, Health & Pueblic Safety Simulation	**Melanie Parlett** Director, Education for Justice Involved Individuals	**Melissa Watters** Academic & Career Expert, PCC Southwest MS, Northwestern University BA, The University of Illinois at Chicago
Cheryl Gomez Academic Excellence Administrator MA, University of Phoenix BS, Colorado State University-Pueblo	**David Peralta** Student Success Coach BS, Colorado State University-Pueblo AA, Pueblo Community College	**John Webber** Program Manager, Fire Science AAS, Pueblo Community College
Brenda Gonzales-Rodriguez Advisor, Early Childhood Community AAS, Pueblo Community College	**Michelle Perez** Coordinator, Concurrent Enrollment SW	**Nazalee Workman** Coordinator, Nursing Lab AAS, Pueblo Community College
Pete Green Manager, Technical Services BA, University of California Irvine	**Bethany Powell** Coordinator, PCC Southwest Site, Bayfield MBA, New Mexico Highlands University BA, Fort Lewis College	**Kari Yalotz** Coordinator, Clinical & Laboratory BS, Adams State University AAS, Pueblo Community College
Cristina Guerra Coordinator, Tutoring/Learning Center BS, Colorado State University	**Jason Prescott** Advisor, Recruitment & Retention BFA, BS, Colorado State University-Pueblo	**Jill Young** Sales Manager, Conference & Event Services
Darla Hall Community Adviser	**Tonya Roberts** Coordinator, Go Zone Services BS, Colorado State University-Pueblo	**Shelby Zordel-Casarez** Staff Accountant

Faculty

Della Abeyta Faculty/Coordinator - Behavioral Health	**Joseph Jaburg** Faculty – Automotive Technology, PCC Southwest	**Joan Pope** Faculty/Coordinator – Nursing, Fremont

		MSN, University of Central Florida BS, University of Colorado
Kimberlee Ackles Faculty – Nursing, PCC Southwest BSN, University of Northern Colorado	**Cheri Johnson** Faculty – Nurse Aide, PCC Southwest AAS, Pueblo Community College Certificate, San Juan Basin Technical College	**Robert Reed** Faculty – Welding, PCC Southwest
Nicholas Alfonso Department Chair/Faculty – Science MS, BS, Colorado State University-Pueblo	**James Jones** Faculty-Welding	**Patricia Rello** Faculty/Clinical Coordinator – Radiologic Technology BS, University of Central Florida
Jeannie Almanza Faculty – Radiologic Technology MA, University of Phoenix BA, Ottawa University AAS, Hutchinson Community College & Area Vocational School	**Richard "Todd" Jones** Faculty-Emergency Medical Services BS, Colorado State University AA, Northeastern Junior College	**Liza Reyes** Faculty – Dental Hygiene
Adrian Banister Faculty – Business MBA, Colorado Technical University BSBA, Colorado State University-Pueblo AGS, Pueblo Community College	**Mary "Avia" Kallage** Faculty – Astronomy and Geology MS, BA, University of Colorado-Colorado Springs	**Lynne Ross, LMT** Faculty/Coordinator – Human Anatomy Learning Ctr (HALC) MS, Auburn University BS, State University of New York College at Cortland
Charles Bonfadini Faculty – Psychology MA, BA, Adams State College	**Richard Keilholtz** Department Chair/Faculty – Social Sciences, Education, and Criminal Justice JD, Southern Illinois University-Carbondale BA, University of Iowa	**Leigh Sand** Faculty/Coordinator, Nursing SW
Layla Borgens Faculty – Nursing MSN, Capella University	**Amanda Kuiken** Faculty – Biology, Fremont	**Tina Sandoval** Faculty – Mathematics MA, BS, Regis University

BSN, University of Northern Colorado	MS, Colorado State University-Pueblo BA, University of Colorado-Boulder	
John Bradford (Brad) Bowers Faculty – History MA, Utah State University BA, Colorado State University-Pueblo	**Kimberly Kushner** Faculty – Science MS, BS, Colorado State University-Pueblo AS, Pueblo Community College	**Rosalia "Henri" Santiago** Faculty – Science MS, BS, University of Southern Colorado
Marisa Camper Faculty – Dental Hygiene BS, Oregon Institute of Technology AAS, Pueblo Community College	**Nadine LaForme** Faculty – Surgical Technology AS, Colorado Technical University	**Shawna Shoaf** Department Chair/Faculty – Communication/Digital Media/Broadcasting and Production Technology MA, Rocky Mountain College of Art and Design BS, Colorado State University-Pueblo AA, Collins College
James Cordova Department Chair/Faculty Automotive Collision Technology, Automotive Service Technology AAS, Pueblo Community College	**Catherine LaPorte** Faculty/Clinical Coordinator – Respiratory Care BAS, AAS, Pueblo Community College	**John Sinks** Faculty – Welding AAS, Pueblo Community College
Judy Costanza Faculty – Dental Hygiene BS, University of Missouri-Kansas City AAS, Pueblo Community College	**Kari Lee** Faculty – English/Communication MA, Colorado State University BA, Colorado State University-Pueblo AA, Trinidad State Junior College	**Carter Smith** Faculty/Coordinator – Emergency Medical Services, SCCC BS, Grand Canyon University AS, Pueblo Community College
Roger Cox Department Chair/Faculty – Radiology Technology MS, Kaplan University BS, Franklin University AS, Pueblo Community College	**Dawnelle Mathis** Department Chair/Faculty – Emergency Medical Services MS, New York Chiropractic College BS, Sioux Falls College	**Crystal Stark** Faculty – Nursing, Fremont MSN, Regis University BSN, Colorado State University-Pueblo

Nadine Donoho-Montoya Faculty, Communications	**Kathy Maurello** Department Chair/Faculty – Medical Assisting BS, Colorado State University-Pueblo AAS, Pueblo Community College	**Lisa Stiner** Faculty – Dental Hygiene MS, BS, Colorado State University-Global Campus AAS, Pueblo Community College
Dustin Dunaway Department Chair/Faculty – English/Communication MA, BA, University of Colorado-Colorado Springs	**Casey Mauth** Faculty, Emergency Medical Services – Fremont	**Joshua Strong** Faculty, Surgical Technology
John Duston Faculty – Auto Service Technology, Fremont AAS, Blair College	**Amanda Mayes** Faculty – Biology/Chemistry MS, BS, Colorado State University-Pueblo	**Joel Sturtevant** Faculty - Machining
Eahehart, Abigail Faculty – Emergency Medical Services	**Diana Montoya** Department Chair/Faculty – Surgical Technology BS, Colorado Technical University AA, University of Phoenix	**Michele Sweeney, M.D.** Faculty – Emergency Medical Services MD, Case Western Reserve University BA, Grinnell College
Michele Edwards Department Chair/Faculty – Cosmetology Certificate/License Cosmetology	**Chip Nava** Department Chair/Faculty – Mathematics MS, University of Northern Colorado BS, University of Southern Colorado	**Marilyn Tabor** Faculty – Nursing M.S., Colorado State University-Pueblo BSN, University of Phoenix
Claudia Estrada-Hickman Faculty - Nursing MSN, University of Phoenix BSN, University of New Mexico AND, New Mexico State University	**Mary Nicks** Faculty – Nursing MSN, Walden University BSN, University of Southern Colorado	**Shawna Tracy** Department Chair/Faculty – Respiratory Care MS, Northeastern University BS, Boise State University AAS, Pueblo Community College

Jacob Farmer Faculty, Mathematics	**Dr. Srinivas Nowduri** Faculty, Computer Science (BAS) PhD, Indian Institute of Science MS, Kakatiya University BS, Andhra University	**Andrea Valencia** Faculty – Cosmetology Certificate, Pueblo Community College
Craig Feigenbaum Faculty – Biology, PCC Southwest MS, Colorado State University	**Edwilyn O'Brien** Faculty – Nursing, PCC Southwest MSN, Post University, American Sentinel College of Nursing & Health Sciences BSN, The University of New Mexico. ADN, San Juan College	**Brandon Vialpando** Faculty, Industrial Technology Maintenance
Veronica Gallegos Faculty/Coordinator, Cyber Security	**Michelle Ohnemus** Department Chair/Faculty, Nursing Assistant	**Shanda Vidmar** Faculty – Science MS, Colorado State University BS, University of Southern Colorado
Timothy Gama Department Chair/Faculty – CIS/HIT BS, Trinity College	**Ann Oreskovich** Department Chair/Faculty – Fine Arts & Humanities MA, Eastern Illinois University MFA, Washington University BA, Grinnell College	**Tricia Vigil** Department Chair/Faculty – Occupational Therapy Assistant MBA, Colorado Technical University BS, Utica College of Syracuse University
Ronda Gasperetti Faculty -- Health Information Technology BSBA, Colorado Technical University	**Johanna Parkhurst** Faculty – First-Year Experience	**Daniel Vinci** Faculty – Welding, Fremont AAS, Pueblo Community College
Jennifer Geitner Coordinator/Faculty – Occupational Therapy MOT, Western New Mexico University BS, Colorado State University	**Travis Parkhurst** Faculty – Philosophy MA, Yale Divinity School	**Gregg White** Department Chair/Faculty – Machining/Welding ASC, Lower Colombia College

AAS, Pueblo Community College		
Dr. Bobbie Sue Glandt Faculty – Physical Therapy Assistant DPT, Creighton University	**Jamie Patti** Faculty – English/Communication MA, BA, University of Colorado AA, Pueblo Community College	**Jeffrey Wingham** Faculty – Biology DC, BS, Logan College of Chiropractic
Pamela Graham Faculty – Cosmetology	**Brett Pavlik** Faculty – Welding BA, Fort Lewis College	**Tracy Williams** Faculty – Psychology
Cody Hager Faculty – Welding, PCC Southwest	**Dr. Michael Payne** Faculty – Mathematics PhD, The University of New Mexico MS, BA. University of Colorado-Colorado Springs	**Cleary Wunder** Faculty/Coordinator – Nursing RN-BSN
Kristen Harshberger Department Chair/Faculty, Business & Accounting	**Roger Pfannenschmid** Faculty – Automotive AGS, Pueblo Community College AAS, Pueblo Communtiy College	**Dr. Adam Zaleski** Faculty – Psychology PhD, Colorado State University BA, San Diego State University
Gertrud "Marianne" Horvath Faculty/Coordinator – Health Information Technology BS, University of Colorado-Colorado Springs	**Janardan Pokharel** Faculty – Mathematics & Physics MS, University of North Dakota	

Classified Employees

Stefana Adcock Administrative Assistant III	**Tina T. Gold** Accounting Technician III MBA, Colorado Technical University-Pueblo	**Raymond Marquez** LTC Operations I
Stephanie Albers Custodian I	**Ronald Griffin** Materials Handler I	**Teresa F. Mathews** Administrative Assistant III

	AAS, Certificate, Pueblo Community College	
Susan Anger Administrative Assistant III	**Benjamin Hahn** IT Technician, Fremont	**Henderson McClure** Custodian I
Stephanie Armijo Custodian I	**William K. Hardwick** Laboratory Coordinator I AAS, Pueblo Community College	**Jamie Medina** Administrative Assistant III
Trina Jiron Belford Administrative Assistant III, Fremont BA, American Military University	**Deborah K. Herrera** Administrative Assistant III, Fremont AAS, Pueblo Community College	**Cynthia A. Miller** Materials Handler III
Gordon L. Bell Structural Trades II, Fremont	**Kiesa Howell** Administrative Assistant III, PCC Southwest	**Dwight Million** Grounds & Nursery I
Shirley D. Carey Program Assistant I AAS, Pueblo Community College	**Rebecca Hund** HR Specialist II	**Kari Monack** Administrative Assistant III
Darious Collins Custodian I	**Lorna Jackson** Administrative Assistant II	**Carma Moore** Administrative Assistant II, PCC Southwest
Amanda D. Dear Accounting Technician III	**Julie C. Jimenez** Program Assistant BS, Regis University	**Teresa Moore** Administrative Assistant II, PCC Southwest
Arlene K. Dockter Custodian I	**Kathleen J. Kaufmann** Administrative Assistant III	**Lisa A. Morales** Administrative Assistant III BSBA, Adams State University AAS, Pueblo Community College
Whitney M. Donovan Administrative Assistant III, Fremont AGS, Pueblo Community College	**Clayton LePlatt** Police Officer I	**Marcella R. Noriega** Administrative Assistant III
Nicki Eastin	**Jacob Lewis**	**Patricia Potter**

General Labor I, PCC Southwest	General Labor I, Fremont	Administrative Assistant III AAS, Pueblo Community College
Carolee Edmondson Accounting Technician III BS, Adams State University AAS, Pueblo Community College	**Leticia Lizardi** Accounting Technician III AGS, Pueblo Community College	**Dawn Reitz** Library Technician II
Kent Ervin Police Officer I	**William W. Lorimor** Structural Trades II	**Jose J. Renner** Police Officer I BS, Colorado State University-Global Campus AAS, Pueblo Community College
Brian K. Figueroa Structural Trades II	**Alicia Lovato** Administrative Assistant III AAS, Pueblo Community College	**Adrianna Sanchez-Montano** Administrative Assistant – Financial Aid
Bianca J. Flores Administrative Assistant III	**Ynette Lucero** Accounting Technician II	**Jimmie J. Sena** Grounds & Nursery I
Kelly Gagneaux Structural Trades II	**Natalie Lujan** Administrative Assistant II	**Celestino "Ray" R. Torres** Custodian I
Amanda Kiefer Garcia Custodian I	**Arthur A. Luna** IT Professional I AAS, Pueblo Community College	**Carl M. Vasquez** IT Professional I
Carol Garcia Human Resources Specialist II AAS, Pueblo Community College		

Emeritus Employees

Deborah Borchers Hired: Aug. 21, 1989	**Terry Hawkins** Hired: April 2, 1984 Retired: May 31, 2003

Retired: July 31, 2013 Department: English/Communications Department Chair/Faculty MA, University of Arizona BA, Carleton College	Department: Occupational Therapy Assistant Department Chair/Faculty MPH, OTR, University of Oklahoma Health Science Center BS, University of Kansas
Dr. Lana Carter Hired: Oct. 11, 1999 Retired: June 30, 2018 Department: Fremont Campus Executive Dean, Fremont Campus PhD, MS, Colorado State University	**Carol Himes** Hired: Aug. 25, 1983 Retired: May 31, 2015 Department: Culinary Arts & Hospitality Studies Department Chair/Faculty MEd, Boston University BA, Cornell University
Mary Chavez Hired: August 26, 1991 Retired: June 30, 2021 Department: Health Professions & Public Safety Dean, Health Professions & Public Safety MEd, University of Phoenix BS, University of Southern Colorado AAS Colby Community College	**Gail Kingrey** Hired: Aug. 24, 1987 Retired: May 13, 2016 Department: Science Faculty MS, New Mexico Institute of Mining & Technology BS, University of Southern Colorado
Elsa Eccles Hired: Jan 4, 2000 Retired: July 31, 2018 Department: Dental Hygiene	**Sara McKinnon** Hired: Aug. 24, 1987 Retired: June 30, 2014 Department: English/Communications

Department Chair/Faculty MEd, Regis University BS, MS University of Phoenix AAS Pueblo Community College	Faculty MA, BA, University of Illinois AA, Springfield College
David Edwards Hired: Aug. 25. 1992 Retired: June 30, 2018 Department: Fine Arts & Humanities Department Chair/Faculty MEd, Central State University BS, Harding College	**Lucinda "Cindy" Mihelich** Hired: Jan. 9, 1990 Retired: Sept. 30, 2012 Department: Physical Therapy Assistant Faculty MEd, Colorado State University BS, University of Colorado-Boulder
Gary Franchi Hired: Sept. 17, 1990 Retired: Nov. 20, 2015 Department: Marketing and Communications Coordinator, Public Relations BS, Central Michigan University	**Carol Montoya** Hired: Dec. 1, 1990 Retired: Jan. 1, 2007 Department: Learning Center Director, Learning Center MA, BA, Adams State College
Rita Friberg Hired: Oct. 1, 1994 Retired: May 15, 2015 Department: Management & Marketing Faculty MS, Colorado State University BS, Purdue University	**Rebecca Robler** Hired: Aug. 22, 1988 Retired: Aug. 31, 2007 Department: Occupational Therapy Assistant Department Chair/Faculty MEd, BS, OTR, Colorado State University
	Boyd Rodman

W. Jeanne Gardner Hired: April 9, 1984 Retired: Dec. 31, 2015 Department: Library Services Director, Library Services MA, BA, University of Missouri	Hired: Aug. 19, 1999 Retired: May 31, 2017 Department: Computer Information Systems Department Chair/Faculty MS, BS, Regis University AAS Pikes Peak Community College
Madelyn Guzelian Hired: July 1, 1971 Retired: Feb. 20, 2004 Department: Business and Office Technology Faculty MEd, Colorado State University BA, University of Southern Colorado	**Florencio Ruiz** Hired: Feb. 16, 1976 Retired: Feb. 29, 2004 Department: Business and Technology Senior Maintenance Mechanic AAS, Southern Colorado State College

Department Chairs

Program Name	Chair	Dean	AEA
Accounting, AAS	Vacant	Jennifer Sherman	Maria de la Cruz
Advanced Emergency Medical Technician	Dawn Mathis	Andrew Miller	Bonnie Housh
Advanced Emergency Medical Technology AAS	Dawn Mathis	Andrew Miller	Bonnie Housh
Advanced Paramedic Practitioner BAS	Dawn Mathis	Andrew Miller	Bonnie Housh
Air Conditioning Mini-Certificate	James Cordova	Jennifer Sherman	Maria de la Cruz
Anthropology, AA (with Designation)	Vacant	Young Kim	Vacant
Applied Technology, AAS	Vacant	Jennifer Sherman	Maria de la Cruz

Art History, AA (with Designation)	Shawna Shoaf	Young Kim	Vacant
Associate Degree Nursing	Eva Tapia	Andrew Miller (Acting)	Cheryl Gomez
Associate of Applied Science Degrees		Young Kim	Vacant
Associate of Arts Degrees		Young Kim	Vacant
Associate of General Studies Degrees		Young Kim	Vacant
Associate of Science Degrees	Nick Alfonso	Young Kim	Vacant
Automatic Transmissions Mini-Certificate	James Cordova	Jennifer Sherman	Maria de la Cruz
Bachelor of Science in Nursing	Eva Tapia	Andrew Miller (Acting)	Cheryl Gomez
Barbering Certificate	Michele Edwards	Andrew Miller	Bonnie Housh
Basic Fire Science Mini-Certificate	John Webber	Andrew Miller	Bonnie Housh
Basic Firefighter - Structural (Fire Academy)	John Webber	Andrew Miller	Bonnie Housh
Basic Wildland Firefighter Mini-Certificate	John Webber	Andrew Miller	Bonnie Housh
Behavioral Health AAS		Andrew Miller (Acting)	Cheryl Gomez
Biology, AS (with Designation)	Nick Alfonso	Young Kim	Vacant
Bookkeeping Certificate	Vacant	Jennifer Sherman	Maria de la Cruz
Broadcasting & Production Technology Certificate	Shawna Shoaf	Young Kim	Vacant
Business Fundamentals Certificate	Vacant	Jennifer Sherman	Maria de la Cruz
Business Management Certificate	Vacant	Jennifer Sherman	Maria de la Cruz
Business Management, AAS	Vacant	Jennifer Sherman	Maria de la Cruz
Business Office Professional	Vacant	Jennifer Sherman	Maria de la Cruz

Business Ownership AAS	Vacant	Jennifer Sherman	Maria de la Cruz
Business Ownership Certificate	Vacant	Jennifer Sherman	Maria de la Cruz
Business, AA (with Designation)	Vacant	Jennifer Sherman	Maria de la Cruz
CAD/CAM Mini-Certificate	Gregg White	Jennifer Sherman	Maria de la Cruz
Chemistry, AS (with Designation)	Nick Alfonso	Young Kim	Vacant
CNC Mini-Certificate	Gregg White	Jennifer Sherman	Maria de la Cruz
Communication, AA (with Designation)	Dustin Dunaway	Young Kim	Vacant
Computed Tomography, BAS	Roger Cox	Andrew Miller	Bonnie Housh
Computer Information Systems, AGS (with Transfer Articulation Agreement)	Vacant	Jennifer Sherman	Maria de la Cruz
Computer Science, DwD	Vacant	Jennifer Sherman	Maria de la Cruz
Construction Technician Basic Mini-Certificate	Gregg White	Jennifer Sherman	Maria de la Cruz
Cosmetology Barber Crossover	Michele Edwards	Andrew Miller	Bonnie Housh
Cosmetology Certificate	Michele Edwards	Andrew Miller	Bonnie Housh
Cosmetology, AAS	Michele Edwards	Andrew Miller	Bonnie Housh
Criminal Justice, AA (with Designation)	Vacant	Young Kim	Vacant
Criminology, AA (CSU-P Transfer)	Vacant	Young Kim	Vacant
Cyber Defense Certificate	Vacant	Jennifer Sherman	Maria de la Cruz
Dental Hygiene, AAS	Linda Blasi	Andrew Miller	Bonnie Housh
Dental Hygiene, BAS	Linda Blasi	Andrew Miller	Bonnie Housh

Digital Video Editing Certificate	Shawna Shoaf	Young Kim	Vacant
Early Childhood Assistant Teacher Certificate		Young Kim	Vacant
Early Childhood Director Certificate		Young Kim	Vacant
Early Childhood Education, AAS		Young Kim	Vacant
Early Childhood Teacher Certificate		Young Kim	Vacant
Early Childhood Teacher Education, AA (with Designation)		Young Kim	Vacant
Economics, AA (with Designation)	Vacant	Jennifer Sherman	Maria de la Cruz
Electromechanical Technology Certificate	Catlin Davis	Jennifer Sherman	Maria de la Cruz
Electromechanical Technology, AAS	Catlin Davis	Jennifer Sherman	Maria de la Cruz
Elementary Teacher Education, AA (with Transfer Articulation Agreement)		Young Kim	Vacant
Emergency Medical Services, AAS	Dawn Mathis	Andrew Miller	Bonnie Housh
Emergency Medical Technician Mini-Certificate	Dawn Mathis	Andrew Miller	Bonnie Housh
EMT Enhanced Certificate	Dawn Mathis	Andrew Miller	Bonnie Housh
Engine and Electrical Mini-Certificate	James Cordova	Jennifer Sherman	Maria de la Cruz
English, Literature Emphasis, AA (with Designation)	Dustin Dunaway	Young Kim	Vacant
Esthetician Certificate	Michele Edwards	Andrew Miller	Bonnie Housh
Fire Investigator I Mini-Certificate	John Webber	Andrew Miller	Bonnie Housh
Fire Officer I Mini-Certificate	John Webber	Andrew Miller	Bonnie Housh
Fire Prevention & Public Education Mini-Certificate	John Webber	Andrew Miller	Bonnie Housh
Fire Science Technology, AAS	John Webber	Andrew Miller	Bonnie Housh
Firefighter Academy Structural Mini-Certificate	John Webber	Andrew Miller	Bonnie Housh
Firefighter I Mini-Certificate	John Webber	Andrew Miller	Bonnie Housh

First Year Nursing - PN Certificate Option	Eva Tapia	Andrew Miller (Acting)	Cheryl Gomez
Fitter or Combination Welder Certificate	Catlin Davis	Jennifer Sherman	Maria de la Cruz
Forensic Computing Certificate	Vacant	Jennifer Sherman	Maria de la Cruz
Fuels and Emissions Mini-Certificate	James Cordova	Jennifer Sherman	Maria de la Cruz
General Automotive Technology, AAS	James Cordova	Jennifer Sherman	Maria de la Cruz
General Machining Technology Certificate	Gregg White	Jennifer Sherman	Maria de la Cruz
Geology, AS (with Designation)	Nick Alfonso	Young Kim	Vacant
Graphic Design, AAS	Shawna Shoaf	Young Kim	Vacant
Hairstylist Barber Crossover	Michele Edwards	Andrew Miller	Bonnie Housh
Hairstylist Certificate	Michele Edwards	Andrew Miller	Bonnie Housh
Healthcare Information Systems AAS	Vacant	Jennifer Sherman	Maria de la Cruz
High Pressure Pipe Welder Mini-Certificate	Catlin Davis	Jennifer Sherman	Maria de la Cruz
History, AA (with Designation)	Vacant	Young Kim	Vacant
HIT Medical Coding AAS	Vacant	Jennifer Sherman	Maria de la Cruz
HIT Medical Coding Certificate	Vacant	Jennifer Sherman	Maria de la Cruz
Industrial Technology Maintenance Level I Certificate	Gregg White	Jennifer Sherman	Maria de la Cruz
Industrial Technology Maintenance Level II Mini-Certificate	Gregg White	Jennifer Sherman	Maria de la Cruz
Industrial Technology Maintenance, AAS	Gregg White	Jennifer Sherman	Maria de la Cruz

Infant Toddler Supervisor Mini-Certificate		Young Kim	Vacant
Information Assurance Certificate	Vacant	Jennifer Sherman	Maria de la Cruz
Introduction to Agriculture	Vacant	Jennifer Sherman	Maria de la Cruz
Introduction to Health Information Technology	Vacant	Jennifer Sherman	Maria de la Cruz
Introduction to Media Communications Mini-Certificate	Shawna Shoaf	Young Kim	Vacant
IT Industry Certification Preparation CER	Vacant	Jennifer Sherman	Maria de la Cruz
IT Systems Administration AAS	Vacant	Jennifer Sherman	Maria de la Cruz
Law Enforcement Academy Certificate	Tracy Swearingen	Andrew Miller	Bonnie Housh
Law Enforcement, AAS	Tracy Swearingen	Andrew Miller	Bonnie Housh
Leadership Studies Mini-Certificate	Vacant	Jennifer Sherman	Maria de la Cruz
Library Technician Certificate		Young Kim	Vacant
Library Technician, AAS		Young Kim	Vacant
Local Anesthesia and Nitrous Oxide/Oxygen Sedation Mini-Certificate	Linda Blasi	Andrew Miller	Bonnie Housh
Low Pressure Pipe Welder Mini-Certificate	Catlin Davis	Jennifer Sherman	Maria de la Cruz
Machining Technology, AAS	Gregg White	Jennifer Sherman	Maria de la Cruz
Machining Technology, Inspection Certificate	Gregg White	Jennifer Sherman	Maria de la Cruz
Magnetic Resonance Imaging, BAS	Roger Cox	Andrew Miller	Bonnie Housh
Manicurist Certificate	Michele Edwards	Andrew Miller	Bonnie Housh

Manual Machining Certificate	Gregg White	Jennifer Sherman	Maria de la Cruz
Manual Transmissions Mini-Certificate	James Cordova	Jennifer Sherman	Maria de la Cruz
Mass Communications, AGS (with Transfer Articulation Agreement)	Shawna Shoaf	Young Kim	Vacant
Mathematics, AS (with Designation)	Chip Nava	Young Kim	Vacant
Med Prep for Nursing Assistant Mini-Certificate	Michelle Ohnemus	Andrew Miller (Acting)	Cheryl Gomez
Medical Assistant Certificate	Kathy Maurello	Andrew Miller (Acting)	Cheryl Gomez
Medical Assistant, AAS	Kathy Maurello	Andrew Miller (Acting)	Cheryl Gomez
Medical Sonography, AAS	Roger Cox	Andrew Miller	Bonnie Housh
MS Office Applications Mini-Certificate	Vacant	Jennifer Sherman	Maria de la Cruz
Multi-Process Fast Track Certificate	Catlin Davis	Jennifer Sherman	Maria de la Cruz
Networking Cyber Security, AAS	Vacant	Jennifer Sherman	Maria de la Cruz
Networking Mini-Certificate	Vacant	Jennifer Sherman	Maria de la Cruz
Nursing Aide Mini-Certificate	Michelle Ohnemus	Andrew Miller (Acting)	Cheryl Gomez
Nursing, LPN to ADN, AAS	Eva Tapia	Andrew Miller (Acting)	Cheryl Gomez
Occupational Therapy Assistant, AAS	Tricia Vigil	Andrew Miller	Bonnie Housh
Paramedic Option Certificate	Dawn Mathis	Andrew Miller	Bonnie Housh
Paramedic Prep	Dawn Mathis	Andrew Miller	Bonnie Housh
Paramedic to Associate Degree Nursing	Eva Tapia	Andrew Miller (Acting)	Cheryl Gomez
Pharmacy Technician Certificate		Andrew Miller	Bonnie Housh

Philosophy, AA (with Designation)	Dustin Dunaway	Young Kim	Vacant
Phlebotomy Technician Mini-Certificate		Andrew Miller	Bonnie Housh
Photovoltaic Panel Installation CER	Gregg White	Jennifer Sherman	Maria de la Cruz
Physical Therapist Assistant, AAS	Vacant	Andrew Miller	Bonnie Housh
Police Science Certificate	Tracy Swearingen	Andrew Miller	Bonnie Housh
Political Science, AA (with Designation)	Vacant	Young Kim	Vacant
Practical Nursing Certificate	Eva Tapia	Andrew Miller (Acting)	Cheryl Gomez
Pre-Engineering, AS (with Designation)	Nick Alfonso	Young Kim	Vacant
Production Technician Certificate	Catlin Davis	Jennifer Sherman	Maria de la Cruz
Professional Communication Certificate	Shawna Shoaf	Young Kim	Vacant
Programming Mini-Certificate	Vacant	Jennifer Sherman	Maria de la Cruz
Psychiatric Technician Certificate		Andrew Miller (Acting)	Cheryl Gomez
Psychology, AA (with Designation)	Vacant	Young Kim	Vacant
Psychology, AS (with Designation)	Vacant	Young Kim	Vacant
Public Health, DwD	Vacant	Young Kim	Vacant
Radiologic Technology BAS	Roger Cox	Andrew Miller	Bonnie Housh
Radiologic Technology, AAS	Roger Cox	Andrew Miller	Bonnie Housh
Respiratory Therapy, AAS	Shawna Tracy	Andrew Miller	Bonnie Housh
Respiratory Therapy, BAS	Shawna Tracy	Andrew Miller	Bonnie Housh
Secure Software Development BAS	Vacant	Jennifer Sherman	Maria de la Cruz
Security Mini-Certificate	Vacant	Jennifer Sherman	Maria de la Cruz

Social Work, AA (with Transfer Articulation Agreement)	Vacant	Young Kim	Vacant
Sociology, AA (with Designation)	Vacant	Young Kim	Vacant
Software Development and Security AAS	Vacant	Jennifer Sherman	Maria de la Cruz
Software Development Certificate	Vacant	Jennifer Sherman	Maria de la Cruz
Soils and Crop Sciences, A.S.		Jennifer Sherman	Maria de la Cruz
SQL Coding Certificate	Vacant	Jennifer Sherman	Maria de la Cruz
Steering and Suspension/Brakes Mini-Certificate	James Cordova	Jennifer Sherman	Maria de la Cruz
Structural Welder Certificate	Catlin Davis	Jennifer Sherman	Maria de la Cruz
Structural Welding Intermediate Mini-Certificate	Catlin Davis	Jennifer Sherman	Maria de la Cruz
Structural Welding Introduction Mini-Certificate	Catlin Davis	Jennifer Sherman	Maria de la Cruz
Studio Art, AA (with Designation)	Shawna Shoaf	Young Kim	Vacant
Surgical Technology, AAS	Diana Montoya	Andrew Miller (Acting)	Cheryl Gomez
Vehicle Extrication Mini-Certificate	John Webber	Andrew Miller	Bonnie Housh
Web Design and Development, AAS	Shawna Shoaf	Young Kim	Vacant
Web Design Certificate	Shawna Shoaf	Young Kim	Vacant
Welding Certificate	Catlin Davis	Jennifer Sherman	Maria de la Cruz
Welding, AAS	Catlin Davis	Jennifer Sherman	Maria de la Cruz
Wildland Firefighter Mini-Certificate	John Webber	Andrew Miller	Bonnie Housh

Bachelor Applied Science

Description:

The Bachelor of Applied Science degree is the designated degree for flexible baccalaureate programs that are designed to accommodate the unique demands for entry and advancement within specific workforce sectors. BAS programs provide degree completion opportunities for students from a variety of educational backgrounds, but primarily those with Associate of Applied Science (AAS) degrees or the equivalent. BAS degrees typically build on the curriculum requirements for an AAS degree. As such, BAS degrees are often considered to be stackable degrees, meaning that all of the requirements for the AAS degree are either included in, or receive full recognition and credit within the BAS program requirements. Consequently, both the technical and general education courses completed in an AAS degree count fully toward BAS degree requirements. Because the general education requirements often vary considerably for AAS degrees due to the targeted focus of their career and technical fields, PCC provides great flexibility to faculty in structuring AAS degree general education requirements. It is the intent of the general education philosophy for BAS degrees that all general education courses successfully completed by students in their AAS degrees count fully toward the overall BAS general education requirements.

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

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

Prerequisites:

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

Requirements for the BAS degree is detailed in this section of the catalog. PCC offers the following BAS degree:

Dental Hygiene, BAS
Radiologic Technology (Section)

> Computed Tomography, BAS Option
> Magnetic Resonance Imaging, BAS

Degree and Certificate Programs

PCC grants Bachelor of Applied Science (BAS), Associate of Arts (AA), Associate of Science (AS), Associate of General Studies (AGS) and Associate of Applied Science (AAS) degrees. PCC also grants Certificates of Completion (CERT).

PCC's programs are approved by the Colorado Department of Higher Education (CDHE), which approves degrees, and by the Colorado Community College System (CCCS), which approves certificates. The PCC Curriculum and Academic Standards Committee reviews and approves new programs or changes to existing programs before they are forwarded to these agencies for approval.

Each program requires a major area of concentration comprising a defined sequence of courses. An associate degree requires a minimum of 60 semester hours and a certificate requires a minimum of two courses.

General education courses are a part of every degree program regardless of major; these courses impart common knowledge, intellectual concepts and attitudes that every educated person should possess.

The general education courses for the AA, AS, generalist AGS and AAS degrees are identified in the general education curriculum of each of those degrees. The AGS technical pre-professional transfer degrees in Computer Information Systems, Criminal Justice and Mass Communications have particular general education requirements within each degree.

For AGS degrees, no designation of an emphasis area or concentration may appear on a transcript or diploma, other than "Liberal Studies."

Gainful Employment Information

The US Department of Education requires disclosure of information for any financial aid eligible program that "prepares students for gainful employment in a recognized occupation."

Technology Recommendations

Internet

• A Broadband (Cable, DSL, Fiber or LAN) connection at home is recommended (but not required) for optimal student experience. A broadband Internet connection with a connection speed of 1.5 MB/s or higher is recommended
• The use of satellite and cellular connections may result in slowness or errors (timeouts, access problems) when accessing the classroom and course materials.
• The use of public access computers and internet (for example, at libraries, public locations) may result in slowness or errors (timeouts or access problems) when accessing some classroom and course materials. Public access computers may not permit any access to certain course materials or systems due to security limitations.
• PCC provides free Internet access on campus to all PCC Students who bring their own computers on campus.
• Limited access to PCC computers is provided in some classrooms.

Computer

Every student is encouraged to bring a laptop computer (Windows or MAC Based) to campus for use in class.

Computer Specifications*:

- If at all possible use a computer that is less than 5 years old
- Intel Core i3 or AMD A8 or higher
- Processor speed: 2 GHz or faster
- RAM: 4 GB or greater
- Monitor and video card with 1024x768 or greater resolution.
- A web camera capable of video web conferencing
- Microphone and headset recommended but not required

*Program-specific requirements may be required for your degree program. Please see below.

Software and Applications

Other Required Software

- Adobe Acrobat Reader
- Adobe Flash Player
- Microsoft Silverlight player
- Microsoft Office 2010 or higher (Microsoft Office 365 is provided to all current PCC students. Students can download the current version of office to a personal computer.)
- Local administrative privileges to the operating system may be required
- A current antivirus application that is updated and scanned regularly

Mobile Recommendations

Courses at Pueblo Community College may be enhanced with media and applications that can be downloaded to your mobile device. Additionally, your course work may involve using applications on these devices. Therefore, it is recommended that students own a mobile device so that they may take advantage of these offerings. These devices will provide access to enhanced learning opportunities, but should not replace more suitable devices for productivity. Devices that satisfy this recommendation are:

Android

- Versions 2.2 or later
- 16GB or higher

iPhone

- Current OS version or one version previous; minimum 16GB
- Original (first generation) and 3G/4G iPhones cannot be supported

iPad

- Current generation or one generation previous; 16GB or higher
- iPad Mini
- 16GB or higher

Microsoft Surface

- Current generation or one generation previous

All Products

Students who choose to use systems or applications other than those listed do so knowing that faculty may be expecting and using the software listed above. It is and will be the student's responsibility to create and distribute correspondence and shared files in a format that can be read by faculty and fellow classmates.

Technology changes rapidly – as a result, these recommendations are subject to change without notice. It is the student's responsibility to continually check the PCC portal for changes to the above recommendations.

Program Specific Requirements

Math Courses

All students taking a math class are required to bring a computer to class meeting the above specifications.

Computer Aided Design Courses

Students are encouraged to have a MAC or PC meeting the specifications listed on the System requirements for AutoCAD 2015 web page.

Media Communications Courses

Students are encouraged to have a MAC or PC meeting the specifications listed on the Creative Cloud System requirements web page.

Nursing Programs on all Campuses

All students accepted into the Nursing Program are required to have a computer to bring to class that meets the above requirements. All Nursing Exams in all nursing courses will be administered electronically.

* Program specific requirements may be required for your degree program.

HIT Courses

Health Information Technologies

HIT 1001 - Health Information Management Science

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): HIT 1002 or Department Chair Approval.
Formerly HIT 101 Introduces the student to the health record, from inception to completion. Emphasis is on content and regulations impacting the health record in the various settings. Other areas to be discussed include the electronic health record and responsibilities of the health information department. This course also examines various health care delivery systems and healthcare practitioners. Professional and practice-related ethical issues are discussed, as well as evaluating the consequences of a breach of healthcare ethics.

HIT 1002 - Medical Vocabulary for Documentation

Credit(s): 3
Lecture Hour(s): 3
Formerly HIT 102 Introduces medical vocabulary through the study of word structures and phrases with reinforcement in writing narratives and the study of medical records. Anatomy and physiology of all body systems are reviewed with discussion of related diseases, diagnostic procedures, treatments and drugs. Emphasis on learning to read, pronounce and interpret medical documentation prepares the student for document review in HIT fields. Illustrates the importance of HIPAA in both physical and electronic dissemination of medical records.

HIT 1005 - Principles of Healthcare Reimbursement

Credit(s): 3
Lecture Hour(s): 3
Prerequisite(s): HIT 2020, HIT 2041
Formerly HIT 105 Provides students with the knowledge needed to perform necessary tasks involved in healthcare reimbursement systems, including payment methodologies, use of clinical data and compliance.

HIT 1011 - Health Data Management and Information Systems

Credit(s): 3
Lecture Hour(s): 3
Formerly HIT 111 Introduces the electronic health record (EHR)/components and health informatics including infrastructure, privacy, security and legal implications. Federal involvement and its impact on information technology regarding health data will be discussed. Students will study the roles and relationships, in the transformation of data into meaningful information, through research, vital statistics and epidemiology. Data quality, integrity, collection, access and retention will also be emphasized.

HIT 2064 - Data Visualization

Credit(s): 4
Lecture Hour(s): 4
Formerly HIT 264 Introduces data visualization tools and techniques software, as well as increasing proficiency in Excel. Students will be able to tell a story with data, communicating observations in a clear, compelling way that provides meaning and explanation. As part of this course, students are also required to complete a professional practicum experience to apply classroom knowledge in a clinical setting.

HIT 2065 - Data Analytics Applications

Credit(s): 3
Lecture Hour(s): 3
Formerly HIT 265 Deepens understanding of current and emerging practices in the application of data analytics. Topics include clinical, financial, operations and qualitative analytics; trends in practices; customer expectations; regulations that affect analytics; and ethical issues in gathering, analyzing and reporting healthcare data. Explore the roles and applications of descriptive, retrospective and prescriptive analytics in various settings.

HIT 2089 - HIT Capstone Course

Credit(s): 3
Internship Hour(s): 9

Prerequisite(s): Department approval required
Formerly HIT 289 Provides a demonstrated culmination of learning within a given program of study.

Legend of the Course Descriptions

The credit courses offered by the College are listed in alphabetical order by discipline/program area. A general description of the content of each course is included. Special Topics are courses that are numbered 075-077, 175-177 and 275-277 provide students with a vehicle to pursue in-depth exploration of special topics of interest. The credits and grade scheme will vary depending on course content. The description and outline is approved by the dean and filed with the registrar.

Instructional Course Type Guideline

Note: The CDHE (Colorado Department of Higher Education, formerly Colorado Commission on Higher Education) definition for a base contact hour is 750 minutes of section meeting time. CDHE has minimum guidelines expressing the minimum number of weekly contact hours expected to receive 1 credit. This varies depending upon the instruction type (e.g., lecture, lab). For example, a 3-credit-hour lecture course would need to meet the equivalent of three 50-minute blocks each week (for a total of 2,250 minutes per semester.)

The US Department of Education Higher Education Re-authorization Act requires institutions to define expectations for out-of-class student work for each credit hour. CCCS has defined the expectation as a minimum of two hours of out of class student work each week for one hour of classroom or direct faculty instruction time.

Course Type	Banner Codes	Description	Notes	Minimum Guidelines for Weekly Contact Hours Expected to Receive 1 Credit	Minimum Guidelines For Out-of-Class Study Expectation Per 1 Credit
Clinical		Participation in client and client-related services that are an integral part of an academic program. Clinical instruction occurs in or outside an institutional setting and involves work with clients who receive professional services from students serving under direct supervision of a faculty member and/or approved member of the agency staff.	Course maximum enrollments may vary according to accreditation standards, pedagogical limitations, level of offering, availability of clinical sites, etc.	2.0 Hours = 1 credit (2:1) Contact Ratio	4 hours
Directed Study		Faculty and student negotiate an individualized plan of study.	A Directed Study is not to replace an existing course. If a course is offered on	0.75 Hour = 1 credit	1.5 hours

			an individualized basis the faculty and student complete a Non-Scheduled course form.	(.75:1) Contact Ratio	
Field Instruction		Instructional activities conducted by the faculty and designed to supplement and/or extend an individual course or classroom experience.		2.5 Hours = 1 credit (2.5:1) Contact Ratio	5 hours
Internship		Applied and supervised field-based learning experience where students gain practical experience following a negotiated and/or directed plan of study.	Student may or may not be paid for Internship.	3.0 Hours = 1 credit (3:1) Contact Ratio	N/A
Lab		Instructional activities conducted by the faculty which require student participation, experimentation, observation or practice.	Course maximum enrollments may vary according to accreditation standards, pedagogical limitations, level of offering, availability of laboratory stations, equipment, etc.	2.0 Hours = 1 credit (2:1) Contact Ratio	4 hours
Lecture		Faculty member responsible for delivery and discussion of learning material and related instructional activities.	Course maximum enrollments may vary by level, discipline, classroom availability, course delivery format (online), etc.	1.0 Hour = 1 credit (1:1) Contact Ratio	2 hours
Physical Educ./Recreation		Participation in or the performance of some form of physical activity. Knowledge associated with the proper performance of the activity is presented.	Course maximum enrollments may vary by level of instruction, type of activity, safety considerations, availability of facilities, etc.	2.0 Hours = 1 credit (2:1) Contact Ratio	4 hours
Practicum		Practical student work under the supervision of a faculty		2.0 Hours = 1 credit	4 hours

		member or under supervision of a professional in the student's field and regular consultation with faculty member.		(2:1) Contact Ratio	
Private Music Instruction		Formal presentation in a one-to-one relationship between student and instructor.	NASM guidelines list .5 = 2 credits (.25 = 1 hour)	0.25 Hour = 1 credit (.25:1) Contact Ratio	0.5 hours
Seminar		A highly focused course that may include student presentations and discussions of reports based on literature, practice, problems, or research (e.g., a capstone course)	Typically at the upper division or graduate level.	1.0 = 1 credit (1:1) Contact Ratio	2 hours
Lab/CTE		Instructional activities involving training for employment with an active faculty teaching role		1.5 Hours=1 credit (1:5) Contact Ratio	3 hours
Student Classroom Observation		Teacher candidates observe, participate in, analyze and reflect on issues in education.		2.0 Hours = 1 credit (2:1) Contact Ratio	4 hours
Studio		Lab-type activities conducted by faculty (e.g., music ensembles, art studio, theatrical productions, etc.)		2.0 = 1 credit (2:1) Contact Ratio	4 hours
Online Delivery				**Follows Same Guidelines as Traditional Delivery**	
Hybrid Delivery				**Follows Same Guidelines as Traditional Delivery**	

Most courses in the following sections have prerequisites. Prerequisites are requirements that you must complete before enrolling in the course. You can satisfy prerequisites in one of two ways: 1) by completing prerequisite courses, or 2) by attaining assessment scores that place you ABOVE the listed prerequisite course's skill level.

Restricted Courses

Restricted courses indicate specific course offerings that are limited offerings due to location restrictions. These courses will be indicated with two asterisks (**). Completion of a degree and/or certificate as listed on Degree and Certificate Programs is not impacted by restricted courses as the requirements do not include such courses.

GT Pathways Courses

In December 2005, the Colorado Commission on Higher Education established a statewide transfer policy for general education course credits. This policy is also known as GT Pathways which are listed in the table on CCCS Guaranteed Transfer (GT) - Pathways Courses under the Degree/Certificate programs section. Although Pueblo Community College does not offer all of the courses listed on CCCS Guaranteed Transfer (GT) - Pathways Courses if you are transferring any of these courses to Pueblo Community College from an accredited post-secondary institution, these courses will be accepted at Pueblo Community College.

Catalog Home

Welcome to Pueblo Community College's Online Catalog

This online catalog provides current and prospective students with the most up-to-date information about academic programs and offers advisors and faculty members a number of tools to support their work with student and program planning.

To navigate through the catalog, please use the links on the right side of this page.

Visitors to this site can also take advantage of the "My Portfolio" management tool located at the bottom of the navigation menu to the right. With this function, students have the ability to identify departments, programs and courses they have interest in and store that information for later viewing.

Pueblo Community College's catalog contains general information about the college and its programs, courses, services, staff and policies. Information is subject to change between catalog updates. It is the student's responsibility to become familiar with all academic and administrative regulations and procedures that relate to his or her course of study.

Archived Catalogs

See below for PDFs of archived catalogs by academic year.

- 2021-22 Catalog (Archived)
- 2020-21 Catalog (Archived)
- 2019-20 Catalog (Archived)
- 2018-19 Catalog (Archived)
- 2017-18 Catalog (Archived)