

# 2011-2012 Catalog



## **PUEBLO CAMPUS**

900 West Orman Avenue  
Pueblo, CO 81004-1499  
719.549.3200  
Fax 719.562.7063

## **FREMONT CAMPUS**

51320 W Highway 50  
Cañon City, CO 81212  
719.296.6100  
Fax: 719.269.8936

## **SOUTHWEST COLORADO COMMUNITY COLLEGE, EAST CAMPUS**

The Commons  
701 Camino del Rio, Suite 201  
Durango, CO 81301  
970.247.2929  
Fax: 970.247.0854

## **SOUTHWEST COLORADO COMMUNITY COLLEGE, WEST CAMPUS**

33057 Highway 160  
Mancos, CO 81328  
970.564.6200  
Fax: 970.565.8450

**[www.pueblocc.edu](http://www.pueblocc.edu)**  
**888.642.6017**

**Statement of Non-Discrimination:**

PCC is an equal opportunity educational institution and does not discriminate on the basis of age, race, religion, color, national origin, sex, or disability in its activities, programs, or employment practices as required by Title VI, Title IX, Section 504, Age Discrimination Act, and Title II of the ADA. The College has designated the Director 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 Director of Human Resources, 900 West Orman Avenue, Pueblo, Colorado 81004; telephone and TDD 719.549.3220, or the Office for Civil Rights, U.S. Department of Education, Region VIII, Federal Office Building, 1244 North Speer Boulevard, Suite 310, Denver, Colorado 80204; Telephone 303.844.5695, TDD 303.844.3417.

**Americans with Disabilities Act Information:**

Reasonable accommodations will be provided upon request for persons with disabilities. To make a request, please notify the PCC Disability Resources Team at 719.549.3449 or [Disability.Resources@pueblocc.edu](mailto:Disability.Resources@pueblocc.edu) at least four working days before the event.

**Gainful Employment Information:**

The U.S. Department of Education requires disclosure of information for any financial aid eligible program that "prepares students for gainful employment in a recognized occupation." Go to [www.pueblocc.edu/Academics/DegreesCertificates/](http://www.pueblocc.edu/Academics/DegreesCertificates/) for additional program & employment outlook information.

**Higher Learning Commission Accreditation:**

Pueblo Community College is accredited by The Higher Learning Commission and is a member of the North Central Association ([www.ncacihe.org](http://www.ncacihe.org), 312.263.0456), 30 North LaSalle Street, Suite 2400, Chicago, IL 60602. In addition, several programs hold approval or accreditation from national and state level associations and agencies.

*Any item in this catalog is subject to modification at any time by proper administrative procedure.*

## Governance

Pueblo Community College is governed by the State Board for Community Colleges and Occupational Education, which comprises thirteen 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 accredited by The Higher Learning Commission and is a member of the North Central Association ([www.ncahlc.org](http://www.ncahlc.org), 312.263.0456), 30 North LaSalle Street, Suite 2400, Chicago, IL 60602. 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; Telephone: 800.624.9458.

### **Dental Assisting 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 Avenue, Chicago, IL 60611-2678; Telephone: 312.440.2500.

### **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 Avenue, Chicago, IL 60611-2678; Telephone: 312.440.2500.

### **Emergency Medical Services Program**

The Pueblo Community College Emergency Medical Services Program is accredited by the Commission on Accreditation of Allied Health Education Programs ([www.caahep.org](http://www.caahep.org)) upon the recommendation of the Committee on Accreditation of Educational Programs for the EMS Professions. (CoAEMSP)

### **Medical Coding Certificate Program**

Accredited by the American Health Information Association (AHIMA), 233 N. Michigan Avenue, 21<sup>st</sup> Floor, Chicago, IL 60601-5809; Telephone: 312.233.1100; Website: [www.ahima.org](http://www.ahima.org).

### **Nursing – Practical Nursing Program and Associate Degree Nursing Program**

Accredited by the National League for Nursing Accreditation Commission (NLNAC), 3343 Peachtree Road NE, Suite 850, Atlanta, GA 30326; Telephone: 404.975.5000, [www.nlnac.org](http://www.nlnac.org). Approved by the Colorado State Board of Nursing.

### **Occupational Therapy Assistant Program**

Accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association, 4720 Montgomery Lane, P.O. Box 31220, Bethesda, MD 20824-1220; Telephone: 301.652.2682.

### **Physical Therapist Assistant Program**

Accredited by the Commission on Accreditation of Physical Therapy Education (CAPTE) of the American Physical Therapy Association, 1111 North Fairfax Street, Alexandria, VA 22314; Telephone: 703.706.3245; email: [accreditation@apta.org](mailto:accreditation@apta.org); website: [www.apta.org](http://www.apta.org).

### **Polysomnography Certificate Program**

Accreditation being sought through the Commission on Accreditation of Allied Health Education Programs ([www.caahep.org](http://www.caahep.org)) with the recommendation of the Committee on Accreditation of Educational Programs for the Polysomnographic Technologist.

### **Psychiatric Technician Program**

Approved by the Colorado State Board of Nursing.

### **Respiratory Care Program**

The Pueblo Community College Respiratory Care Program is accredited by the Commission on Accreditation for Respiratory Care (CoARC), 12248 Harwood Road, Bedford, TX 76021-4244; Telephone: 817.283.2835.

## **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; Telephone: 703.669.6650.

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

Partner of I-CAR Training Alliance, I-CAR Education Foundation, 5125 Trillium Blvd., Hoffman Estates, IL 60192; Telephone: 800.422.7872.

### **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; Telephone: 703.669.6650.

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

### **Pueblo Law Enforcement Academy**

Certified by the Colorado Peace Officer Standards and Training Board (POST), 1525 Sherman Street, Denver, CO 80203; Telephone: 303.866.5692.

# Welcome to PCC

“The Journey of a Thousand Miles begins with **One Step.**”

Laozi



Congratulations on your commitment to create new opportunities for yourself through higher education at Pueblo Community College (PCC). Our faculty and staff welcome and fully support your quest. Our small, intimate campus communities located in Canon City, Durango, Cortez, and Pueblo will provide you a very personal and enriching educational experience.

In particular, we especially want you to know about the numerous services PCC provides to assist in your pursuit. These services often can make all the difference in timely and affordable achievement of your goals. Learning services, financial assistance, academic advising, career counseling, and student services are extremely valuable resources available to all students at PCC.

**Learning services** include free tutoring, focused learning groups, study skills enhancement, test taking strategies, accelerated basic skills development, open tutoring labs, or our “Pro Shop” tutoring. These programs are not “extras”; rather, they are key shortcuts to success. Your assertive participation in any of these programs may allow you to take a higher course load to 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 every student and generally require very simple applications, but to be eligible you must apply by specific deadline dates.

**Academic and career advising** are your roadmaps in your academic journey. Seek guidance early and often to keep on the shortest 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.

Finally, **student services** are available to provide critical support and to enrich your PCC experience. Involvement in Student Activities and Clubs helps you become more connected and engaged in your learning experience. Other student services provide critical resources to help you stay in school. Assistance in locating child care or transportation services is available to students through our partnerships with community agencies. Our new Health Clinic in Pueblo provides students access to a professional medical staff and discounted prescriptions, lab work, and immunizations. We have also taken initial steps to offer some health services at the Durango, Canon City, and Cortez Campuses, and plan to continue pursuing the addition of health clinics at those locations.

Please accept our heartfelt welcome to the PCC family. The abundant faculty and staff are committed to helping you achieve your dreams. We highly encourage you to begin planning for success by scheduling a visit to one of our campuses and learn to navigate the campus web site to include our “Banner” registration system. A focused Student Orientation can make a more enjoyable and smoother journey in your quest for a successful experience in higher education. Welcome to Pueblo Community College!

Sincerely,

A handwritten signature in cursive script, reading "Patty Erjavec". The ink is dark and the signature is fluid and legible.

Patty Erjavec, MNM  
President

For more information on any of these services or to arrange for a personal tour of PCC, please contact the Office of Recruitment on the main campus at 719.549.3116 or at [recruitment@pueblocc.edu](mailto:recruitment@pueblocc.edu). You may also contact the Fremont Campus at 719.296.6100 or the Southwest Colorado Community College Campuses at 970.247.2929 in Durango or 970.564.6200 in Mancos.

# Campus Locations

## **Pueblo Main Campus** - *Serving Pueblo County*

900 West Orman Avenue  
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

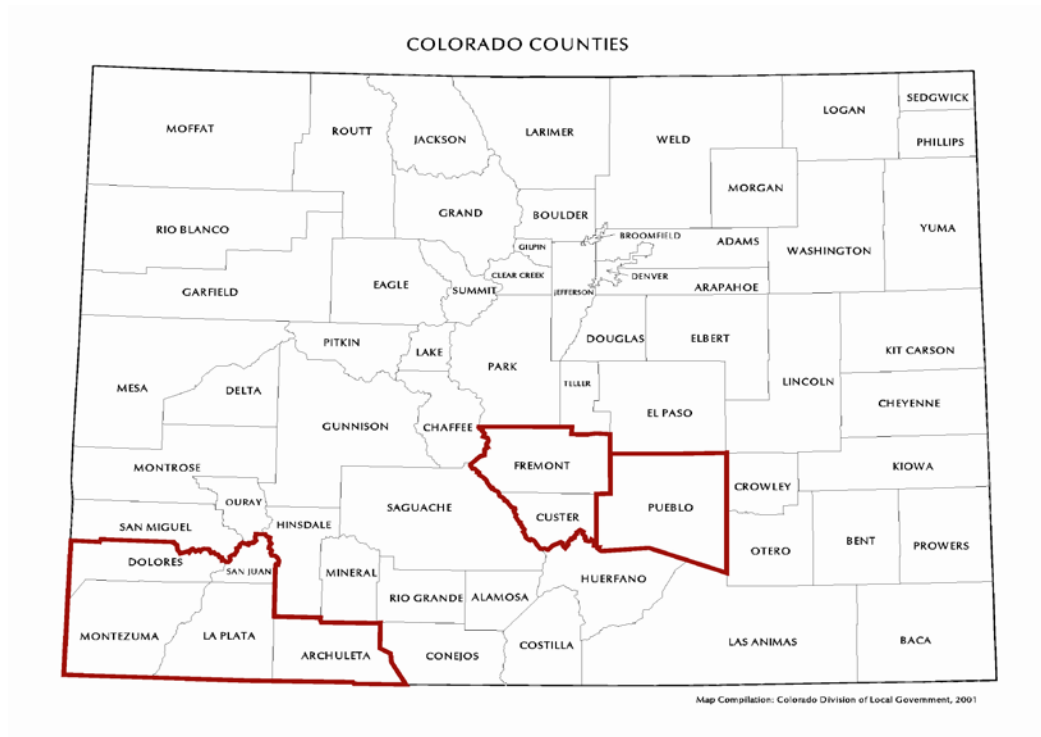
## **Southwest Colorado Community College** - *Serving Archuleta, Dolores, La Plata, Montezuma, and San Juan Counties*

### **East Campus**

The Commons  
701 Camino del Rio, Suite 201  
Durango, CO 81301  
970.247.2929

### **West Campus**

33057 Highway 160  
Mancos, CO 81328  
970.564.6200



# *Table of Contents*

Governance & Accreditation.....	3
Welcome.....	5
Campus Locations.....	6
Academic Calendar.....	9
About PCC.....	14
Getting Started at PCC.....	21
Applying for Admission.....	24
Transferring Credits.....	32
Financial Aid.....	35
Tuition and Fees.....	39
Basic Skills Assessment.....	42
Advising & Registration.....	45
Academic Regulations.....	49
The Virtual Campus – Twenty First Century Courses (TFC).....	55
Alternative Methods of Instruction.....	57
Academic Honors Program.....	58
Graduation Requirements.....	59
Services for Students.....	62
Economic & Workforce Development.....	69
Community Education Training & Pre-College.....	70
Student Activities.....	72
Important Legal Information.....	76
Degree and Certificate Programs.....	82
Course Descriptions.....	149
College Personnel.....	269
Index.....	283





# 2011-2012 Academic Calendar

## Semester Length

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

- Fall Session: Full Term (15 weeks), Fall I (7.5 weeks), and Fall II (7.5 weeks)
- Spring Session: Full Term (15 weeks), Spring I (7.5 weeks), and Spring II (7.5 weeks)
- Summer Session: Full Term (8 weeks), Summer I (4 weeks), Summer II (4 weeks), and an Intersession
- 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

### Campus Closure Philosophy

The College acts independently in making the decision to close a campus due to weather-related circumstances and does not mirror the actions of local school districts.

Pueblo Community College makes every effort to remain open and hold classes as scheduled. The Student Attendance Policy will be followed as normal any time the College is open. Students should exercise personal judgment in their decision regarding attendance due to inclement weather. Responsibility for class content, clinical/internship requirements\*\*, and exams remains with the student. It is the student's responsibility to communicate with their faculty/instructor. Please note that any missed time is required to be made up in accordance with Pueblo Community College Policy 602.

Faculty and staff will exercise personal judgment as required by the professional responsibilities of their positions in determining work attendance due to inclement weather condition.

\*\*Off campus clinical/internship reporting assignments will be adhered to as scheduled by the placement agency.  
Online classes are exempt from closure.  
Conference Services will be responsible for communicating with external customers who may have scheduled events on campus.  
Any scheduled educational "External Service Clinics" will follow campus closure, (e.g. Dental Hygiene Clinic).

### Closure Guidelines

PCC will take into consideration the temperature, amount of snowfall, road conditions and/or any sudden changes in weather conditions in determining whether or not to close a campus. **A campus will remain open unless the President makes a decision to close one or more campuses. The President will consider closing campus or a delayed start/early closure \*\*\* if any of the following conditions are present:**

- Temperature
  - Temperature is below zero degrees Fahrenheit with temperatures to be projected to continue beyond a 24-hour period in conjunction with measurable snowfall and/or icy road conditions.
- Snowfall
  - Closure based on road conditions, or snow accumulation reaching 8-24” or more within a short period of time.
- Sudden changes in weather/severe weather
  - When restricted travel is recommended by law enforcement and/or when situations arise that threaten the safety and security of the campus community.
- Power outages that cannot be rectified in a short period of time

\*\*\*Delayed starts or early closures will be based on time of day in accordance with the day’s prescribed schedule and will be clearly communicated to students, faculty, and staff.

# Summer 2011

## Intersession

Registration Begins	Monday	April 4
Classes Begin	Monday	May 9
End of Add Period	Monday	May 9
End of Refund Period/Census	Tuesday	May 10
Last Day to Withdraw	Wednesday	May 18
Classes End	Friday	May 20
Grades Due	Monday	May 23

## 8 Week Session

Registration Begins	Monday	April 4
Registration Ends	Friday	May 27
Classes Begin	Tuesday	May 31
End of Add Period	Thursday	June 2
End of Refund Period/Census	Tuesday	June 7
Independence Day Holiday	Monday	July 4
Last Day to Withdraw	Thursday	July 14
Classes End	Monday	July 25
Grades Due	Wednesday	July 27

## First 4 Week Session

Registration Begins	Monday	April 4
Registration Ends	Friday	May 27
Classes Begin	Tuesday	May 31
End of Add Period	Wednesday	June 1
End of Refund Period/Census	Friday	June 3
Last Day to Withdraw	Tuesday	June 21
Classes End	Monday	June 27
Grades Due	Wednesday	June 29

## Second 4 Week Session

Registration Begins	Monday	April 4
Classes Begin	Tuesday	June 28
End of Add Period	Wednesday	June 29
End of Refund Period/Census	Friday	July 1
Independence Day Holiday	Monday	July 4
Last Day to Withdraw	Wednesday	July 20
Classes End	Monday	July 25
Grades Due	Wednesday	July 27

## Fall 2011

### Full-Term

Registration Begins	Monday	April 4
Faculty Return	Monday	August 15
Registration Closes	Friday	August 19
Full-Term Classes Begin	Monday	August 22
Schedule Adjustment Period	Monday - Friday	Aug. 22 – Aug. 26
Labor Day Holiday	Monday	September 5
End of Refund Period/Census	Wednesday	September 7
Midterm Week	Monday - Friday	Oct. 10-Oct. 14
Last Day to Withdraw	Tuesday	November 15
Thanksgiving Break	Wednesday-Saturday	Nov. 23 –Nov. 26
Final Week of Classes	Monday-Saturday	Dec. 5–Dec. 10
Classes End	Saturday	December 10
Grades Due	Monday	December 12
Last Faculty Day	Monday	December 12
Holiday Break (Offices Closed)	Monday - Tuesday	Dec. 26-Jan. 2, 2012
All Staff Return	Tuesday	January 3, 2012

### Fall I

Session Begins	Monday	August 22
Registration Closes	Friday	August 19
Schedule Adjustment Period	Monday – Wednesday	Aug. 22 – Aug. 24
Labor Day Holiday	Monday	September 5
End of Refund Period/Census	Monday	August 29
Midterm	Saturday	September 17
Last Day to Withdraw	Monday	October 3
Classes End	Thursday	October 13
Grades Due	Friday	October 14

### Fall II

Session Begins	Monday	October 17
Schedule Adjustment Period	Monday – Wednesday	Oct. 17 – Oct. 19
End of Refund Period/Census	Monday	October 24
Midterm	Friday	November 11
Thanksgiving Break	Wednesday - Sunday	Nov. 23 –Nov. 26
Last Day to Withdraw	Wednesday	November 30
Classes End	Saturday	December 10
Grades Due	Monday	December 12
Last Faculty Day	Monday	December 12

# Spring 2012

## Full Term

Registration Begins	Monday	November 7, 2011
All Staff Return	Tuesday	January 3
Faculty Return	Monday	January 9
Registration Ends	Friday	January 13
Full-Term Classes Begin	Monday	January 16
Schedule Adjustment Period	Monday – Friday	Jan. 16 – Jan. 20
End of Refund Period/Census	Tuesday	January 31
Midterm	Monday - Saturday	Mar. 5 –Mar. 10
Spring Break	Monday - Saturday	Mar. 26-Mar. 31
Last Day to Withdraw	Friday	April 13
Final Week of Classes	Monday - Saturday	April 30 –May 5
Commencement (Pueblo & Fremont Campus)	Friday	May 4
Commencement (Durango & Cortez Campus)	Sunday	May 6
Classes End	Saturday	May 5
Grades Due	Monday	May 7
Last Faculty Day	Wednesday	May 9

## Spring I

Session Begins	Monday	January 16
Registration Ends	Friday	January 13
Scheduled Adjustment Period	Monday – Wednesday	Jan. 16 – Jan. 18
End of Refund Period/Census	Monday	January 23
Last Day to Withdraw	Saturday	February 25
Classes End	Tuesday	March 6
Grades Due	Thursday	March 8

## Spring II

Session Begins	Wednesday	March 7
End of Add Period/Late Registration	Friday	March 9
End of Refund Period/Census	Wednesday	March 14
Spring Break	Monday - Saturday	Mar. 26 – Mar. 31
Last Day to Withdraw	Tuesday	April 24
Classes End	Saturday	May 5
Grades Due	Monday	May 7
Last Faculty Day	Wednesday	May 9

# *About PCC*

## Welcome to Pueblo Community College

### **You've made the right choice!**

For 77 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 to transfer to a four-year school. We are a two-year community college accredited by The Higher Learning Commission – a member of the North Central Association ([www.ncacihe.org](http://www.ncacihe.org), 312.263.0456). We are one of thirteen colleges in the Colorado Community College System, the fastest-growing educational system in Colorado.

We offer more than 50 certificate and Associate Degree programs, and we are a state leader in health care education. The job-placement rate for graduates of our Health Professions programs is virtually 100 percent, and many are hired before they even graduate. In August 2007, we launched the new Massage Therapy program, Fire Science program, and the Energy Maintenance program. In March 2008, PCC continued to expand educational opportunities with the implementation of a Cosmetology program and in 2009, we began Health Information Technology.

Pueblo Community College has four locations to serve students' educational needs. The main campus is located in Pueblo serving Pueblo County. The Fremont Campus, located in Cañon City, serves Fremont and Custer counties. Southwest Colorado Community College (SCCC), a division of Pueblo Community College, has two campuses in southwest Colorado. SCCC West campus is located on Highway 160 between Mancos and Cortez and SCCC East campus is located in Durango. The SCCC campuses serve Archuleta, Dolores, La Plata, Montezuma, and San Juan counties.

The average age of our students is 28, and about one-third are first-time college students. Approximately 80 percent receive some kind of financial assistance in the form of grants, scholarships, work-study jobs, and/or student loans. Sixty-one percent of our students are female, 39 percent represent a minority and 57 percent are first generation to attend college. The U.S. 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 counseling and advising services, as well as a wide range of academic support services such as individual tutors, learning labs, workshops, and adaptive services for those with disabilities. Our health services include the PCC Health Clinic (Pueblo & Fremont campus), the Dental Assisting Restorative Clinic, and the Dental Hygiene Clinic, located on the Pueblo campus. Health services at the SCCC campuses are being 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. Customized training opportunities are coordinated through the Economic and Workforce Development Division.

PCC also offers hybrid courses. These classes provide an exciting and entertaining mix of learning environments that includes blending a part of the traditional classroom with online instruction. With video clips, online chat rooms, blogging, and online quizzes, many students are finding the new hybrid classes to be a great learning experience.

You can earn the first two years of coursework towards a teaching degree at PCC. 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 Community Education and Training Division, we offer non-credit courses, workshops, and seminars to the community and small business owners. We also offer the Alternative High School Diploma Program, Gateway to College Program, and GED Programs for those who do not have a high school diploma.

## Mission

Our mission is to foster higher learning, student success, and service to our communities.

## Our Vision

Pueblo Community College is a premier teaching institution providing students assured success pathways to relevant and progressive career, transfer, and personal growth opportunities.

## Our Values

We affirm the value of our students, our employees, and the diverse communities we serve. The following values inform and guide our daily work:

- Open access to higher education
- Focus on learning
- Personalized teaching strategies and relationships
- Effective communication
- Appreciation of diverse cultures and backgrounds
- Preservation and advancement of our Hispanic Serving Institution (HSI) designation
- Inventive thinking
- Digital-age literacy
- Responsible citizenship
- Institutional culture of continuous improvement

## Our 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

## Our 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.

## Our General Education Learning Objectives

Upon successful completion of general education requirements, our students will be able to do the following:

- Read, write, and speak effectively
- Interpret, evaluate, and synthesize information
- Use technology to achieve educational objectives
- Use interpersonal skills essential for their chosen fields
- Apply global and cultural perspectives

## Academic Quality Improvement Program (AQIP)

We strive constantly to improve the quality of our services to students and the community. To foster this improvement, we have adopted the Academic Quality Improvement Program (AQIP), sponsored by The Higher Learning Commission of the North Central Association ([www.ncahlc.org](http://www.ncahlc.org), 312.263.0456). Under this process, PCC is committed to continuous, systematic, and measurable quality improvement. To view our AQIP documents, visit <http://www.pueblocc.edu/Aboutus/QIPAssessmentPlanning/>.



# Assessment of Student Learning

We believe that the systematic assessment of student learning provides the most meaningful basis for decisions about program improvement and institutional change, which should always be evaluated in light of their effects on student achievement. In addition to formally assessing learning outcomes in each discipline, the Assessment of Student Learning program uses our general education learning objectives as “core competencies” and assesses them across a broad range of courses for both degree and non-degree seeking students. Each year, we publish an Annual Report on the Assessment of Student Learning to inform students and other PCC constituents of our results and recommended improvements. For more information, visit our Assessment homepage at <http://www.pueblocc.edu/AboutUs/AQIPAssessmentPlanning/StudentLearning/>.

## 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, and 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 simply as 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 both 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 one million dollars 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.

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<sup>th</sup>, 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 was drafted, Senate Bill 09-043, 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 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 Southwest Colorado Community College (SCCC), a division of Pueblo Community College.

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 38 acres where over 5,000 students attend classes working towards their degrees or certificates. The campus is wireless and has up-to-date technology in classrooms, laboratories, and extensive student support services towards academic excellence.

The extensive degree and certificate offerings can be located in the Degree and Certificate Programs section that will lead towards a career in business and industry or transfer to a four-year university.

## **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 full service 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 programs in full at the Fremont Campus:

- Associate of Science
- Associate of Arts
  - Emphasis in Business Management
  - Emphasis in Early Childhood Education
  - Emphasis in Social Work
  - Emphasis in Teacher Education
  - Emphasis in Psychology
  
- Associate of Applied Science and Associate of General Studies in Accounting, Computer Information Systems, Criminal Justice
- Associate of Applied Science in Office Administration
- Associate Degree of Nursing - RN
- Licensed Practical Nurse Certificate
- Phlebotomy Certificate
- Fire Science Certificate
- Certified Nurses Assistant Program
- Emergency Medical Services Program
- Certified Addiction Counselor
- Structural Welding Introduction Certificate

Courses supporting other PCC degrees and certificates are offered at the Fremont Campus. Students can begin many other PCC programs at the Fremont Campus, completing programs at a different campus. The campus offers a full complement of GT Pathways (General Education transfer courses).

## **Southwest Colorado Community College (SCCC), a division of Pueblo Community College**

The SCCC campuses provide educational programs and services to the citizens of Archuleta, Dolores, La Plata, Montezuma, and San Juan counties in the southwest corner of Colorado. Modern facilities, up-to-date technology, full service enrollment and academic advising centers (Go!Zone), and bookstores are located at both campuses. 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.

The “West Campus” is located in between Mancos and Cortez, and the “East Campus” is located in Durango at The Commons Building.

Currently, we offer the following degrees:

- Associate of Arts
- Associate of Arts in Early Childhood Education
- Associate of Science
- Associate of General Studies (Generalist)

- Associate of General Studies in Accounting, Business Management, Criminal Justice, and Early Childhood Education
- Associate of Applied Science, Early Childhood Education, Nursing, Respiratory Therapy, Emergency Medical Services-Paramedic, and Radiologic Technology

We offer numerous certificate options such as:

- Automotive Certificates
- Early Childhood Education, Director, Group Leader, and Infant Toddler Certificates
- Emergency Medical Services Certificates
- Southwest Regional Law Enforcement Academy Certificate
- Welding Certificates

We have developed several transfer articulation agreements with Fort Lewis College and can assist you with transferring to Fort Lewis College or to any other four-year college.

You are encouraged to check with an advisor to locate the degree or certificate option of your choice and the campus location where it is offered. Not all certificate or degree options are available at all campuses. Refer to the Degree and Certificate Programs section for a complete listing.



# *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 admissions in one of three ways:

- Apply online at [www.pueblocc.edu](http://www.pueblocc.edu). Find and click on the “Apply Today” icon
- If you do not have access to the Internet at home, go to any PCC registration station to apply for admission. Administrative personnel will help you
- Complete a hardcopy application for admission and send or take it to the Admissions Office of the campus you attend

Please refer to the *Applying for Admission* section of this catalog for detailed information about your application.

Step 3: Register for the College Opportunity Fund (COF)

Go to [www.CollegeInColorado.org](http://www.CollegeInColorado.org) or click on the COF link on the PCC homepage and sign up for the COF stipend. If you do not have access to the Internet at home, you may go to any campus registration station to sign up for COF. For more information about COF, please see the *Tuition and Fees* section of this catalog.

Step 4: Take the Accuplacer 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 the *Basic Skills Testing* section of this catalog for more detailed information.

Step 5: Apply for Financial Aid

To apply for financial aid, complete the Free Application for Federal Student Aid (FAFSA) online at [www.fafsa.ed.gov](http://www.fafsa.ed.gov). 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 the *Financial Aid* section of this catalog for more information

## Step 6: Meet with an Academic Advisor

All new students to PCC should meet with an academic advisor to establish an educational pathway plan. You can meet with an academic advisor by going to the Go!Zone for walk-in service or call 719. 549.3006 for Pueblo; 719.296.6100 for Fremont; 970.247.2929 for SCCC-East or 970.564.6220 for SCCC-West, to schedule an appointment with an academic advisor. 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 academic advisor.

## Step 7: Register for Classes

Register for classes online at [www.pueblocc.edu](http://www.pueblocc.edu). Click on the “MY PCC” icon. Sign into the Portal and go to the Student tab, then to Registration Tools. 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, you must 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 AAA075 sections in the schedule of classes.

## Step 9: Obtain a PCC Panther One Card (ID Card) and Parking Permit

After registering and paying for your classes, visit the Student Center Office, CC-240 on the Pueblo Campus, Bookstore on the Fremont Campus and the Go!Zone at the Southwest Colorado Community College campuses to obtain your PCC Panther One Card. This card is required for identification at student sponsored events and at various offices and service centers at all of PCC’s campuses. **You will pay a one-time One Card fee during the first semester you attend.** If you lose your card, we will charge a replacement fee.

## Step 10: Activate Your PCC E-Mail Account

This is our primary way to communicate with you. All students must sign up for your own PCC email. Do not miss out on important announcements. Go to [www.pueblocc.edu](http://www.pueblocc.edu) and click on CURRENT STUDENT, to activate your new account. Need assistance, contact your Go!Zone Office.

## Step 11: Arrange to pay tuition and fees

Visit the Cashier’s Office 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

Register your vehicle if you are attending the Pueblo, Fremont, or Southwest campuses. You register your vehicle at the Student Center Office, CC-240 on the Pueblo Campus, Bookstore on the Fremont Campus and the Go!Zone at the Southwest Colorado Community College campuses. You may also register your vehicle when you pay tuition and fees. Your parking placard/hangtag is valid as long as you are enrolled at PCC. You must renew your validation tag each semester.

## Step 13: Purchase your textbooks at the College Bookstore

As early as possible before the beginning of the semester, go to the PCC Bookstore (there is one located on each campus) to obtain 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.

## Step 14: Be sure to attend your first day of class!



# Applying for Admission

## Admissions & Records

You will interact with the Admissions & Records Offices from the time you apply until you graduate. We provide the following services:

- Receive and process all admissions applications and supporting documents
- 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, PCC catalogs, and current class schedules
- 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 My PCC account on the PCC Website home page at [www.pueblocc.edu](http://www.pueblocc.edu), using your student ID number and your Password. You can also access an address change form from our home page (go to the Quick Links, then Forms: select “Address Change” or “Name Change”). Mail or drop off the completed form at your local PCC Campus Admissions and Registration office.

You will be required to show valid identity documentation when requesting access to your student records: Colorado driver’s license, Colorado identification card, a 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, VA card w/photo.

## Admission Policy

PCC has an open-door admission policy. This means we impose no admission requirements on you if you are 17 years of age or older. However, admission to the college does not guarantee that you can enroll in certain courses or programs that may have prerequisites or program admission requirements.

You may apply online at [www.pueblocc.edu](http://www.pueblocc.edu) (Find and click on the “Apply Today” icon), at any PCC registration station, or by filling out an application form and sending or taking it to the Admissions office of the campus you attend. The address of the main campus is

Admissions Office  
Pueblo Community College  
900 West Orman Avenue  
Pueblo, CO 81004



## Demonstrating “Lawful Presence” (U.S. Citizenship or Legal Permanent Resident Status)

According to HB 06S-1023, you must demonstrate “lawful presence” in the United States if you

- are a new student, 18 or older,
- apply for admission to PCC after August 1, 2006, and
- apply for a public benefit such as in-state tuition, COF (College Opportunity Fund) or financial aid.

To demonstrate lawful presence, you must produce one of the following documents:

- Valid Colorado Driver’s License or Colorado Identification Card
- U.S. Military or Dependent ID card
- U.S. Coast Guard Merchant Mariner Card
- Native American Tribal Document
- Birth Certificate
- Valid U.S. Passport

## 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 the College,
- satisfy the **Requirements for Classification** (listed below), and
- officially declare a major in an approved associate degree or certificate program. To declare a major, complete a Change of Major Form that is available from the Admissions and Records Office or online at [www.pueblocc.edu](http://www.pueblocc.edu), Quick Links, then Forms. Before doing so, please review the Change of Major information in the *Academic Regulations* section of this catalog.

- **Requirements for Classification:**

**If you are younger than 18, you will be Classified only if you have**

- received a high school diploma, or
- successfully completed the GED Examination.

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.

**If you are 18 or older and not enrolled in high school, you will be classified only if you have**

- received a high school diploma, or
- successfully completed the GED Examination, or
- successfully completed the ACCUPLACER Test at a level satisfying the federal “Ability-to-Benefit” (ATB) requirement
- satisfactory completion of 6 credit hours of college level course work that are applicable to a degree or certificate offered by PCC. Remedial courses are excluded.

**Note:** ATB ACCUPLACER pass scores are determined by the U.S. Department of Education annually. You must take the computer version of ACCUPLACER administered by PCC or other authorized testing center.

### **Changing Your Classification**

You may change from Unclassified to Classified status when you meet the classified requirements.

## **2. Class Rank**

Your class rank is based on the number of college-level semester credit hours you earn. PCC has two class ranks:

1. Freshman – fewer than 30 hours.
2. Sophomore – 30 or more hours.

## **3. Part-time/Full-time/Auditor Status**

### **Part-time Student**

You are a part-time student if you are carrying fewer than 12 credits.

### **Full-time Student**

You are a full-time student if you are carrying 12 or more credits.

### **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 for 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 must complete the basic skills assessment (ACCUPLACER) before you can declare a degree or major in any approved program. You may declare or change your degree or major online at [www.pueblocc.edu](http://www.pueblocc.edu), click on Quick Links and Forms or visit the Admissions or Advising offices at your local PCC or SCCC site. If you wish to change your major to a health program or Cosmetology, you must be accepted into the program through the department chair. Changing a declared degree or major may affect financial aid eligibility. You should consult with an academic advisor prior to making any changes.

## 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's 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 qualifying ACT, SAT, or ACCUPLACER scores. 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 the Center for Academic Advising in Pueblo at 719.549.3006; Fremont Campus – Marilyn Stodola at 719.296.6105; SCCC East – Jill Carithers at 970.247.2929, Ext. 7213; and SCCC West – Shanna Sasser at 970.247.2929, Ext. 7223 for more information, deadlines, and application packets.

Effective July 1, 2010, 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 an Application for Re-Admission. We will ask you to update your previous application and provide additional residency and/or transfer documentation.

## 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 West Orman Avenue  
Pueblo, CO 81004

For more information about transferring from another institution, see the *Transferring Credit* 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 Summer and Fall terms
- First Monday in November for Spring 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 West Orman Avenue  
Pueblo, CO 81004

You may apply online at [www.pueblocc.edu](http://www.pueblocc.edu) (find and click on the “Apply Today” icon).

- *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 these items:
  - Courses you took
  - Grades you earned
  - Length of your classes
  - Length of your school term

Your former schools or colleges must send all transcripts directly to the Admissions Office at the above address. We do not accept hand-carried transcripts. All transcripts must bear the official seal of the issuing institution. Also, please make sure that the issuing institution includes an explanation of all terminology that appears in your transcript.

- *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 and Office prior to the start of classes.
  - *English Placement Exam Scores:* If you are a first time freshman international student, and if you are from a country where English is not the only native language, you must meet one of these requirements:
    - *Test of English as a Foreign Language (TOEFL):* A total minimum score of 450 on the paper-based version or 133 on the computer-based version or Internet Based Test (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.
- *American Language Academy:* Successful completion of level four.
  - *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.
- 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:

Cosmetology	Physical Therapist Assistant
Dental Assisting	Phlebotomy Technician
Dental Hygiene	Polysomnographic Technologist
Emergency Medical Services	Psychiatric Technician
Massage Therapy	Pueblo Law Enforcement Academy
Medical Sonography	Radiologic Technology
Nursing	Respiratory Care Practitioner
Occupational Therapy Assistant	Southwest Regional Law Enforcement Academy
Pharmacy Technician	

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 health professions program. For further information including specific timelines for completion of the background check and drug screen, contact a health professions advisor.

Upon admission to a 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
- 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 Professions programs, latex products are used extensively, both 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 within 30 days of notification. 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.

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.

<i>Criteria for Residency</i>	<i>Example of Document</i>
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 in the PCC My PCC 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 web site at [www.sss.gov](http://www.sss.gov). Contact the Admissions Office for further information concerning Selective Service requirements.

# *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 West Orman Avenue  
Pueblo, CO 81004

We need to receive your transcripts as soon as possible; 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 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.
- We accept a maximum of 80 percent of the semester credits required for a degree or certificate.
- 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 certificate or 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.
- The department chair or dean of your program area will determine whether your transfer credits fall within acceptable time limits.
- 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 onto My PCC 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.



- 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 may contact the records office for a re-evaluation of your transcripts.

## 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 Admissions and Registrar.

## Credit for Prior Learning (CPL)

PCC recognizes several prior learning experiences. If you are enrolled in at least one semester credit hour, you may request an evaluation of these experiences for credit. You may apply for CPL at any time, but we will post CPL on your transcript only after you successfully complete one semester in your declared program. The following methods of nontraditional learning constitute prior learning experience:

ACT Proficiency Examination Program (PEP)  
 Advanced Placement (AP)  
 American Council on Education (ACE)  
 Armed Services Credit  
 Automotive Service Excellence (ASE)  
 Certified Professional Secretary (CPS)

College-level Examination Program (CLEP)  
 Credit by Challenge\*  
 Defense Activity for Non-Traditional Education Support (DANTES) Program  
 International Baccalaureate (IB)  
 Portfolio Assessment (Life Experience)

\*Credits awarded through any of the Credit for Prior Learning methods cannot be used to replace the prior grade or be used to recompute a previous grade earned through the traditional manner (cumulative GPA).

For additional information about CPL, visit the online Credit for Prior Learning Student Handbook (revised 09) at [www.cccs.edu/Docs/EdServices/Credit-for-Prior-Learning-Handbook.pdf](http://www.cccs.edu/Docs/EdServices/Credit-for-Prior-Learning-Handbook.pdf).

## Transferring AA or AS Degrees to Other Institutions

Colorado's agreement between public colleges and universities guarantees that when you complete your AA or AS degree – at least 60 approved credit hours of course work carrying a “C” grade or better in every course – you can transfer to any baccalaureate *Liberal Arts and Sciences major* (e.g., English, History, Mathematics) at a Colorado public college or university and graduate after earning an additional 60 credit hours. 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.

**This agreement does not apply to Business, Elementary Teacher Education, Early Childhood Teacher Education, or Engineering, as all four of these have statewide articulations that have specific lower division requirements. Save time by seeing your transfer advisor at your earliest opportunity for “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.

For a copy of the Colorado Department of Higher Education’s Transfer Policy, go to [www.cccs.edu/EdServices/Transferpolicy.html](http://www.cccs.edu/EdServices/Transferpolicy.html).

## Transcripts

You may obtain official transcripts from the Records Office ([www.pueblocc.edu/Admissions/ordertranscripts](http://www.pueblocc.edu/Admissions/ordertranscripts).) If you are a current student, log onto the My PCC Portal and click on the student tab. Normally, it will take us three to five days to issue your transcript; however, during end-of-the-semester grading periods, it may take up to three weeks. If you owe money to PCC or any other CCCS Community College, we will not issue your transcript until you clear the debt.



# *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](http://www.fafsa.ed.gov). If you have questions about financial aid guidelines and policies, contact the PCC Financial Aid Office at 719.549.3020 or by e-mail at [Financial.Aid@pueblocc.edu](mailto:Financial.Aid@pueblocc.edu).

## 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, (or, if you are 18 years old or older, you may demonstrate the Ability-to-Benefit by passing an independently administered test)
- 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
- 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
- have already earned a bachelor's-degree (unless you are applying for student loans).

If you do not have a high school diploma or its equivalent, you must take the Basic Skills Assessment Test (CPT ACCUPLACER®) to qualify for financial aid funds under the Title IV, Higher Education Act program. You must meet or exceed the minimum scores on each of the three approved tests in a single testing experience. If you do not meet or exceed the minimum scores, you must retake the complete set of three tests and pass all three tests in that administration.

The Financial Aid Office will make every effort to keep you informed about the status of your application; however, you should contact our 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.

#### *Colorado Leveraging Educational Assistance Partnership (CLEAP)*

This award is made up of federal and state funds. These limited funds are available only to Colorado residents with documented need.

### Work Study

The College Work Study Program (CWSP) provides employment for full- and part-time students for ten to twenty 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.

### Senior Citizen Scholarship

If you are a Colorado resident, sixty years of age or older, you may apply for a scholarship to take college-credit courses. This scholarship pays one-half of resident tuition after the COF stipend is applied and is based on financial need. To obtain an application, visit the Financial Aid Office.

## 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 Suspension

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 *suspension*. 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 suspension*, you are no longer eligible for financial aid.

Note: Financial aid warning/probation/suspension is different from 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 Benefits

With certain exceptions, PCC courses are approved for the training of veterans and eligible dependents. If you plan to use VA benefits, contact the Office of Veterans’ Affairs (located 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.

You are responsible for tuition, fees, and books, whether or not your VA benefit payments have started. If you request Advance Pay, you must enroll in classes before the Cashier will release the Advance Pay.

It is your responsibility to notify the Office of Veterans' Affairs 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.

#### *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.

#### **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—namely, the amount of in-state tuition. 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. According to the requirements of HB 06S-1023, all students 18 years or older must demonstrate lawful presence to be eligible for public benefits. All WUE students must execute an affidavit stating you are a United States citizen or Legal Permanent Resident and provide one form of approved ID. The affidavit is available in the Admissions or Records Offices.

Residents of the following states should contact the Admissions Office for further details: Alaska, Arizona, California, 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 [www.CollegeInColorado.org](http://www.CollegeInColorado.org). 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 \$44 per credit hour.

### Projected tuition costs for the 2011-2012 academic year\*:

Tuition	Total Tuition	Less Estimated COF Stipend	Student Share of Tuition
<b>Resident</b>	\$158.25/credit	\$62/credit	\$96.25/credit
Resident – CCC Online and PCC Online	\$232.15/credit	\$62/credit	\$170.15/credit
Resident – Nursing Courses	\$202.25/credit	\$62/credit	\$140.25/credit
Resident – Dental Hygiene and Aviation Maintenance Courses	\$250.85/credit	\$62/credit	\$188.85/credit
<b>Non-Resident</b>	\$413.60/credit	—	\$413.60/credit
Non-Resident – CCC Online and PCC Online	\$259.30/credit	—	\$259.30/credit

*\*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 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, also available online at [www.pueblocc.edu](http://www.pueblocc.edu), click on Quick Links and Forms.

# Fees

## Mandatory Student Fees

The following fees are assessed on a per-credit-hour basis up to a maximum of 12-credit hours:

Student Center Operations (cost of student facilities, including Bond Issue on Student Center Building)	\$ 6.39
Parking (maintenance and repair of parking facilities)	1.29
Associated Government (operation of student government)	1.50
Student Activities (activities for the student body)	1.36
Recreation Center Fee	<u>1.00</u>
<b>Total per credit hour</b>	<b>\$ 11.54</b>
<b>*Student Life Facility Fee</b>	<u>7.00</u>
	<b>\$ 18.54</b>
Registration fee per semester	11.45
Mandatory Health Clinic Fee (Minimum 6 credit hours)	<u>21.35</u>
<b>Total per semester</b>	<b>\$ 51.34</b>

**\*Student Life Facility Fee is mandatory for only the Pueblo and Mancos campuses.**

**Course Fees** - A course fee per credit hour will be charged for designated classes. Course fees are published in the current PCC Schedule of Classes.

## Miscellaneous Fees

The following miscellaneous fees will be charged where appropriate:

Additional Parking Permit	\$ 1.00
Deferred Payment	5.00 - 20.00
Health Professions (Malpractice insurance)	15.00
Return Check Charge	20.00 - 40.00
Student Identification Card	10.00
Student Identification Card (replacement)	10.00
Student Records (per copy in advance)	2.00
Testing - Basic Skills Assessment	10.00
Individual Assessment Tests (per test)	5.00
Late Payment Fees	5.00 - 40.00

***\*These estimated costs are subject to change without prior notice or obligation.***

# 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's fees, interest, or other costs. *If you have a financial obligation to PCC, we will not register you, give you your semester grades, or mail your official transcript to other institutions.*



## Methods of Payment

PCC accepts cash, checks, and valid third-party payments. You can also pay tuition and fees with Visa, Discover, MasterCard, or American Express.

## Drop for Non-Payment Policy

All students who have not paid their balance in full or who do not have financial aid or a third-party tuition/fee deferment will be dropped for non-payment after close of business of the tuition payment due date. Thereafter, non-deferred accounts will be dropped weekly, regardless of the class start date.

## Refunds

All refunds (disbursements) from Financial Aid and other credits will be sent to the refund option selected by student. Each student will need to select a refund option to either receive his or her disbursement through the CCCS Refund Card from Higher One or an ACH to an existing bank account of the student's choosing.

PCC will refund 100 percent of your tuition and fees for a particular term if you officially drop during the first 15 percent of that term (by the census date). You can find refund deadlines at any registration station, or at the Admissions & Records Office. 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, or
- Access [www.pueblocc.edu](http://www.pueblocc.edu) (click on the My Community Education icon and login).

We will process your refund to your refund option approximately two weeks following the end of the refund period



# *Basic Skills Assessment*

## How We Place You In Courses

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 co-requisites (CORQ) for college-level classes.

Students attending PCC must adhere to the Basic Skills Policy and may have to take the Basic Skills Assessment Test (CPT ACCUPLACER®) in Mathematics, Reading, and English (Sentence Skills) before your first semester of enrollment. We use this test to place you in appropriate college or developmental courses. You may take each basic skills test two times per semester; we will use the highest scores to place you in courses. If you wish to take the test more than twice during a semester, you may seek written permission from the chair of the specific discipline or show proof of progress in an approved tutorial program.

### **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 you must meet with an academic advisor. If you do not register for basic skills courses within your first 30 hours, PCC will place a hold on further registration until you meet with an academic advisor.*

The PCC Basic Skills Policy, based on CCHE's Statewide Remedial Education Policy and the Colorado Community College State Board Policy BP 9-41 (<http://www.cccs.edu/SBCCOE/Policies/SP/PDF/SP9-41.pdf>), further defines basic skills requirements for Pueblo Community College students.

1. If a student is required by State Board Policy to be assessed, Pueblo Community College requires that the assessment be completed prior to enrollment in the first semester of college. State Board Policy states that all first-time undergraduate students must take the basic skills test if they are
  - a. first-time, degree-seeking undergraduates;
  - b. non-degree-seeking undergraduates who change to degree-seeking status; and
  - c. non-degree-seeking first-time undergraduates who have graduated from a Colorado public or private high school (or its equivalent) during the previous academic year.
2. For certificate students, basic skills requirements will be identified by an approved certificate curriculum sheet.
3. All PCC students whose assessment scores do not meet college-level standards are required to meet with an advisor prior to enrolling in courses for the first time. The student should meet with an advisor each semester until he or she has completed all basic skills requirements.
4. If a degree-seeking PCC student places into any basic skills courses, the student must complete these basic courses within his or her first thirty credit hours of enrollment. Students who have not met this requirement must meet with an academic advisor.

5. If a student places into a basic skills reading course, the student must take the basic reading course during his or her first semester of enrollment. Students are not precluded from enrolling in other courses as long as they meet course prerequisites.
6. If a student is required to take two or more basic skills courses in math, English, and/or reading, he or she is also required to enroll in AAA 098, S.T.E.P.S. for College Success.
7. Students who successfully complete the highest level of basic skills classes or college-level courses in math, English, or reading at a **regionally accredited** post-secondary institution are exempt from assessment in these subject areas only. Successful completion means a satisfactory “S” or the letter grade of “C” or better.
8. 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.
9. Students may take each basic skills test two times per semester. Placement is based on the higher test score. A student who wishes to test more than twice must obtain written permission from the chair of the specific discipline.
10. PCC will provide written notice to all students whose assessment scores do not meet the basic skills standards. This notice will include the state institutions offering basic skills courses, the approximate course cost, and the relative availability of the courses, including any electronic online course. A written summary of this information will be provided to the student upon completing the Accuplacer.
11. The official results of the assessment tests are retained by the PCC Assessment Center for a minimum of five years. Assessment results (Accuplacer, ACT, and SAT) are valid for five years.

**You are also exempt from taking portions of the CPT ACCUPLACER® test if you:**

- are a high school student, unless testing is required as a course pre- or co-requisite, or unless there are existing agreements with your school district that require taking all or part of the CPT ACCUPLACER® assessments.

Please speak with an advisor if you have any questions about basic skills assessment.

## Cost of the Basic Skills Assessment Test

There is a charge to take the Basic Skills Assessment. Please refer to the current PCC Schedule of Classes for more information.

## Course Placement Based on Assessment Test Scores

For information about ACCUPLACER® scores, refer to the *Course Descriptions* section of this catalog.

## Basic Skills Assessment Test Score Key

The chart below shows the required assessment scores for placement into reading, English, and math classes. In addition, the assessment may satisfy other course prerequisites. For example, if you wanted to enroll in Dental Assisting (DEA) 120, the prerequisites are Reading 090, English 090, and Math 060. To meet these prerequisites through assessment scores, your scores must be in the following ranges:

Accuplacer Reading (ACCUR)	80 or above.
Accuplacer Sentence Skills (ACCUE)	95 or above.
Accuplacer Elementary Algebra (ACCUM-EA)	45 or above.

If your scores fall below these ranges, you must complete the prerequisite classes. ACT, SAT and Accuplacer results are good for five years from the date that the test was taken.

## Reading

<b>ACCUPLACER Reading Score</b>	<b>Required Courses</b>
0 – 24	Guided Placement: See Testing Center for referral
25 – 39	REA 030
40 – 61	REA 060
62 – 79	REA 090
80 – 120	No basic skills placement required

ACT reading score of 17 or SAT verbal score of 430 places in college level (no reading courses required)

## English

<b>ACCUPLACER Sentence Skills Score</b>	<b>Required Courses</b>
0 – 24	Guided Placement: See Testing Center for referral
25 – 49	ENG 030
50 – 69	ENG 060
70 – 94	ENG 090
95 – 120	ENG 121

ACT English score of 18 or SAT verbal score of 440 places into ENG 121

## Math

<b>ACCUPLACER Math Score</b>	<b>Required Course</b>
0 – 23 (AR)	Guided Placement: See Testing Center for referral
24 – 56 (AR)	MAT 030
57 – above (AR) and (EA) < 45	MAT 060
45 – 60 (EA)	MAT 090
61 – 84 (EA)	MAT 099
85 – 120 (EA)	MAT 121

ACCUPLACER Math Key: AR = Arithmetic EA = Elementary Algebra

SAT score of 460 places into MAT 121

<b>ACT Math Score</b>	<b>Course Placement</b>
19-20	MAT 099, MAT 120, MAT 155/156
21-22	MAT 135
23	MAT 121, MAT 123
24	MAT 122
25-27	MAT 125, MAT 166
28-above	MAT 201

# *Advising and Registration*

## Academic Advising

### **Academic Advising for New Students and Re-Admit**

For students to truly succeed at Pueblo Community College (PCC), all new or readmitted students enrolling in more than six credit hours must meet with an academic advisor prior to registering for classes. At an academic advising session, students can expect the academic advisor to:

- Review academic program and test scores
- Assist students in developing an educational pathway plan
- Help students register for first semester classes
- Assign a faculty advisor for guidance in future semesters
- Discuss and understand academic goals and how they relate to career interests
- Assist in transferring to a four-year college or university
- Refer student to career center for career exploration, clarification, and development

The Center for Academic Advising is also responsible for implementation of early advising programs, early grade check follow-up, attendance, working with financial aid suspension/probation students, basic skills advising, and advising health professions students until they transition to a health program, change of majors, and advisor re-assignments.

### **Advising for Continuing Students**

Continuing students (generally students who have completed 15 or more credits) will have an assigned faculty advisor in the student's program of study who is familiar with the requirements of the student's program of study. The Center for Academic Advising will provide the student his or her faculty advisor contact information. Students wishing to change their faculty advisor must go to the Center for Academic Advising prior to any change being approved. Advising is an ongoing process and students should consult regularly with their faculty advisor prior to registering for courses.

### **Undeclared Students**

An undeclared student is one who has not declared a degree or program of study and is not working toward a certificate or a degree at PCC. Undeclared students are generally not eligible to receive financial aid. All students at PCC will be declared into an AA/AS/AGS degree or approved certificate program in order to qualify for financial aid. Students who are not sure what program of study best suits their goals and ambitions will meet with a career counselor and advised through the Center for Academic Advising until a program of study is selected.

## 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 over the Internet through my PCC Portal. See registration information on the Portal. You may not register if you owe money to PCC or any other CCCS College (Colorado Community College System) or if you are on academic suspension.

## Required Signatures

Entry into closed classes: Instructor and Department Chair

Unmet prerequisites: Department Chair

Late registration: Instructor and Department Chair

After census: Instructor, Department Chair, and Division Dean (Not COF or FTE eligible)

Time conflicts: Both Instructors

Registration in excess of 18 credit hours: Division Dean (student may sign up for one (1) credit PED class without additional approval.)

## Class Schedule Changes and Course Registration

*You should secure an academic advisor's approval for all schedule changes.*

The responsibility for changing your schedule is yours alone; no instructor or staff member can assume this responsibility for you. To change your schedule, you must follow college regulations and obtain the appropriate signatures. You can change your schedule only during the Add and Refund periods each semester.

*If you change your schedule after submitting your graduation paperwork, you must notify an academic advisor so that an updated graduation planning sheet can be submitted. If you fail to notify an academic advisor of such changes, you may not be able to graduate on schedule.*

## Adding Courses

You may add regular courses only during the Add Period, specified on the Portal. You may add mini-courses or special-length courses up to the day the class starts. Registration after the census date will not be permitted due to COF 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 [www.pueblocc.edu](http://www.pueblocc.edu) (click on the “My PCC” icon and log into the Portal).

For add and drop deadlines for special-length courses, contact any registration station or the Admissions & Records Offices, or refer to the class schedule/bill you received at the time you registered.

Students **may** be dropped for no-show if they fail to attend classes before census. No-show lists are due to the records office by the census date for the courses. Students will receive a full refund. *Not attending a class does not constitute an automatic drop, refund, or withdrawal.* Students who may encounter unusual or extenuating circumstances may request a late drop past census. Extenuating circumstances may be military activation or TDY orders, health reasons, job changes and/or death in the family, to name a few. Normally, in these circumstances, a tuition appeal process is started; the student completes a form and submits this form along with documentation of the extenuating circumstances to the records clerk. The tuition appeals committee meets monthly to review the student appeals and has the authority to approve or deny the appeal. Students may re-appeal a denial with the Registrar. Students may only appeal a drop within a calendar year of the term in

question. The Registrar, in consultation with the Department Chair and Dean, may also approve late drops past census due to administrative errors, student health, or hospitalization situations with documentation.

For a statement about PCC's refund policy, see the *Tuition and Fees* section of the catalog or the current PCC Schedule of Classes.

### **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.

- To withdraw from an individual course, you must complete a course withdrawal form, which you can obtain from an advisor, an instructor, or the Admissions or Records Offices, or you may withdraw online through MyCommunityEd.
- To withdraw from all courses, you must initiate the Official Withdrawal Form in the Admissions or Records Offices. Telephone requests cannot be honored.
- In emergency cases, write to the Records Office by certified mail to Pueblo Community College, 900 West Orman Avenue, Pueblo, CO 81004-1499, indicating the reason for withdrawal and requesting this matter be completed by mail.
- Not attending a class does not constitute an automatic drop, refund, or 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 Admission or Records Offices, 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, and a tuition waiver upon return, provided that you received an honorable discharge, enroll in the same major, and register for the same number of credit hours as before the interruption.
- 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, voluntary or involuntarily, are eligible to be readmitted to PCC with the same academic status when he or she last attended. This applies to service in the uniformed services, on 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.

### **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
- Five-week term: 7 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. You may take a one-credit course in physical activity without affecting your course load.

### **Course Prerequisites and Corequisites** (*also known as Concurrent Prerequisites*)

PCC has two kinds of enforceable entry requirements for particular courses:

- *Prerequisites* – You must satisfy prerequisites, or their equivalent, before registering for a course.
- *Corequisites* – You must enroll in a corequisite course at the same time you register in the other course. In most cases, you can register for the other course if you have already successfully completed the co-requisite.

### **Course Numbering**

Courses are numbered to indicate level of instruction. Freshman level courses are designated in the 100 sequence, and sophomore level courses are designated in the 200 sequence. Courses numbered less than 100 are considered remedial and do not apply to certificate and degree requirements.





# *Academic Regulations*

## Academic Integrity

*For complete information about Student Standards of Conduct, please refer to the PCC Student Handbook. PCC assumes that you have read the handbook and that you will adhere to PCC regulations, comply with the laws of the local community, and take personal responsibility for your conduct.*

PCC is committed to providing you a superior educational experience. Because academic integrity is a critical component of this experience, we expect you to maintain the highest standards of integrity while you are here. Please read and be aware of the following general information:

*The following violations of academic integrity will result in disciplinary action (this is not an exhaustive list of all acts of academic dishonesty; rather, it is a guide to help you understand what constitutes academic dishonesty):*

1. Any act of academic dishonesty, including
  - a. *Cheating* – intentionally using or trying to use unauthorized materials, information, or study aids in any work submitted for credit or hours.
  - b. *Fabrication* – deliberate falsification or invention of any information or citation in work submitted for credit or hours.
  - c. *Facilitating Academic Dishonesty* – helping another student violate a provision of the institutional code of academic integrity.
  - d. *Plagiarism* – the deliberate adoption or reproduction of ideas or words or statements of another person as one’s own without acknowledgment.
  - e. *Unauthorized Collaboration* – sharing information or working together in an academic exercise when such actions are not approved by the course instructor.
2. Unauthorized possession of examinations, answer keys, reserve library materials, computer software, computer codes, or laboratory materials.
3. Unauthorized changing of grades on an examination, or in an instructor’s grade book or grade report; or unauthorized access to academic computer records.
4. Nondisclosure or misrepresentation in filling out applications or other PCC records in, or for, academic departments or divisions.
5. Unauthorized selling or purchasing of examinations, papers, computer programs, and/or assignments.

## Attendance Policy

You may attend classes at PCC only if you have officially enrolled for those classes on either a credit or audit basis. You are expected to attend all scheduled meetings of your classes. If you miss a class, you must make arrangements with your instructor to make up any missed work.

**If you miss 20 percent of a lecture or laboratory class** beginning with the first official date of enrollment, your instructor may withdraw you from the course. If this happens, your instructor will assign you a “W” grade, and you will be liable for all tuition and fees related to that course. If your instructor does not withdraw you from the course, you may receive a failing grade for the course.

**It is your responsibility to drop a course if it becomes necessary.** If you do not want to be held liable for tuition and fees or have a transcript record created, you must drop the course before the last day for refund, whether or not you have attended class.

*Note: The attendance policy for certain programs, such as health programs, may differ from the general policy due to program requirements.*

## Grading System

At the end of each semester you may access your grades or order a transcript online at [www.pueblocc.edu](http://www.pueblocc.edu).

### 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). Credit for an “S” grade is earned but not used in the GPA calculation.

Letter Grade	Quality Points
A (Excellent or Superior)	4
B (Good)	3
C (Average)	2
D (Deficient)	1
F (Failure)	0
S (Satisfactory)	0
U (Unsatisfactory)	0
S/A, or 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	
AU - Grade designation used for courses that are audited	
W - Designation used when a student withdraws from a class	
SP - Satisfactory Progress designation used to show that although there was satisfactory progress, the grade is pending	

### S/A, S/B, S/C

Satisfactory grades are assigned only in developmental courses. These will not be calculated in your grade point average, but the credits earned in developmental courses will count toward your 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.

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

Unsatisfactory grades are assigned only in developmental courses. These will not be calculated in your grade point average, but the credits earned in developmental courses will count toward your 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 your 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 assigned.
- If you would have earned a letter grade higher than an F without completing the work, the instructor may submit that higher grade before the automatic conversion to F.

It is your responsibility to initiate the request for an “I” grade from 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 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. You and your instructor must complete and sign an “Incomplete Grade Contract” provided by your instructor. (The department chair will send you a copy of the Incomplete Grade Contract.)
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. Rather, 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 the “Part-time/Full-time/Auditor Status” section in the *Applying for Admissions* part of this catalog.

## **Satisfactory Progress Grades**

A grade of Satisfactory Progress (“SP”) is a temporary grade in an open entry/open exit course; it indicates that you have not completed the course requirements but that you have a satisfactory record in the work you have completed. A grade of “SP” entails the following conditions:

1. To assign an “SP” grade, your instructor must designate an “SP” grade on the official grade roster.

2. You must complete all requirements for removing the “SP” grade as set forth by the instructor, and you must also meet the time and attendance requirements set forth by PCC, within a time frame that is agreed upon by you and the instructor at the time of entry into the class. If you fail to complete the course work, your grade will become an “F.”
3. If you receive a grade of “SP,” you do not have to re-register for the course, and you do not have to pay additional tuition and fees.

### **Grade Changes**

Once a final grade is entered, it cannot be changed unless your instructor completes a Grade Change Form and has it signed by the department chair.

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, we 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. 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 the course 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.

## **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 (see the *Advising and Registration* section of this catalog for the course load policy.) Also, you must maintain at least a cumulative 2.000 grade point average (GPA) to remain in good standing. If your GPA drops below a 2.000, PCC will place you in one of the following categories to encourage you to improve:

**Academic Alert** – *GPA less than 2.000 after attempting 12 credit hours or fewer (including W’s).* You may continue to enroll in classes provided you meet with your academic advisor to discuss a plan for academic improvement.

### **Academic Probation**

Initial Academic Probation - *Cumulative GPA less than 2.000 after completing 13 or more credits in residence at PCC.* You may continue to enroll in classes provided you meet with your academic advisor to discuss a plan for academic improvement, and provided you earn higher than a 2.000 GPA in the next full semester.

Continuing Academic Probation – *Cumulative GPA less than 2.000 for all courses completed in residence, and the last term GPA is 2.000 or higher.*

### **Academic Suspension**

Initial Academic Suspension - *Cumulative GPA less than 2.000 for all completed courses, and the last term GPA is less than 2.000.* In this case, you may not register for the term following the term in which you are suspended. You may register after that only if you meet with an academic advisor.

Second Academic Suspension - *Cumulative GPA less than 2.000 for all completed courses, and the last term GPA is less than 2.000.* In this case, you may not register for two terms following the term in which you are suspended. You may register after that only if you meet with an academic advisor.

Third Academic Suspension - *Cumulative GPA less than 2.000 for all completed courses, and the last term GPA is less than 2.000.* In this case, you may not register for two calendar years following the term in which you are suspended.

If special circumstances result in academic suspension, you may appeal the suspension with the Registrar. If your appeal is upheld, you will be allowed to register without a break in enrollment. We will explain any rights and procedures of appeal in the notification letter we send you. All students returning from a suspension are placed on continuing probation.

Note: Academic probation/suspension is different from Financial Aid Warning/probation/suspension. Please see the *Financial Aid* section of this catalog for information about Financial Aid Warning/Probation/Suspension.

## **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 in the PCC Student Handbook, which you can find online at <http://www.pueblocc.edu/StudentServices/StudentHandbook> or in hard copy from the Vice President of Student Services Office. For information about arbitrary and capricious actions, contact the Vice President of Student Services Office.

## **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. To qualify for Academic Renewal, you must:

- wait for at least two calendar years after the coursework was completed to apply for Academic Renewal, and
- complete at least six graded semester credits with a 2.000 minimum term GPA during the term in which you apply for Academic Renewal.

You may have up to 30 credits of “below average” grades (D, F, WF) excluded from your cumulative GPA. These credits will continue to appear on your transcript, but they may not be used to satisfy the requirements of a certificate or degree. Should your performance once again fall below a 2.000 cumulative GPA, you will be placed on Academic Probation and will be required to follow the procedure outlined in the Academic Probation section of this catalog. You may apply only once for Academic Renewal.



# *The Virtual Campus*

Virtual campus courses involve either limited or no attendance at on-campus sessions, 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 on the web. In some cases, class meetings are conducted on the web as well. Your instructor may post examinations on the web or ask that you take them on site at the institution.

PCC's Virtual Campus Office offers three options of course delivery:

- Online Courses (web-based)
- Hybrid courses
- Two-way Interactive Classrooms to remote locations

Hybrid courses are a combination of online learning and classroom instruction. As a result, the amount of time in a traditional classroom setting is reduced.

## **Hybrid Courses (OHW)**

These courses are offered in the classroom with an online component. The online component is used to reduce the amount of time required in the classroom. The amount of reduced in-classroom time will be determined by the individual instructors.

## **Hybrid Courses with Lab (OHC)**

A weekly lab is required and the courses also involve additional online components. The lecture materials may be accessed online through the PCC Virtual Vault.

## **Two-way Interactive Classrooms**

Two-way interactive classes are taught by instructors at any campus location with students participating through video-conferencing. These courses may require you to participate in class using the Internet.

## **Online Courses**

Internet courses are offered in two ways:

1. **PCC Online:** PCC Online courses are developed and taught by PCC instructors. Refer to: [http://www.pueblocc.edu/Academics/AlternativeEducation/PCC\\_Online/PCC+Online.htm](http://www.pueblocc.edu/Academics/AlternativeEducation/PCC_Online/PCC+Online.htm)
2. **Colorado Community Colleges Online (CCCOonline)** is a shared educational resource of the Community College System. Through CCCOnline, students can earn fully-accredited Associate of Arts, Associate of Science, Associate of Applied Science, and Associate of General Studies degrees and certificates in various disciplines. The courses are offered as a shared resource by all members of the Colorado Community College System. All coursework is done via the Internet.

### **Registering for Virtual Campus Courses**

For maximum convenience, you should have a computer with an Internet connection at home. However, all PCC campuses provide access to computers at various times (check your campus site for lab days and times). Please refer to this catalog for information on prerequisites. Contact the course instructor or refer to the course syllabus for course requirements.





# *Alternative Methods of Instruction*

## Independent Study, Cooperative Experience, Internship, and Occupational Experience

Some PCC programs offer independent study, cooperative experience (COOP), 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, COOP, internship, and occupational experience courses must meet the following conditions:

1. The courses form a 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 the job-site officials.
6. The course requires that there will be at least one weekly meeting between the student and instructor.

# *Academic Honors Program*

Degree-seeking and transfer students of exceptional academic potential may enter the Honors Program. The Honors Program offers an enhanced educational experience in the following ways:

- more challenging academic work
- greater opportunities for independent study
- research under the guidance of Honors instructors
- opportunities to present, in oral or written form, the results of Honors projects
- participation in Honors conferences with other Honors students locally, regionally, and nationally

If you complete the requirements of the Honors Program, you will graduate with Honors credit designated as such on your transcript.

You must meet the following requirements in order to receive Honors credit:

## **1. Admission into the Honors Program**

The program seeks to involve students who have high potential for future growth and success, not just those who have demonstrated exceptional abilities in the past. Therefore, we use a holistic determination of potential based on the following factors:

- High school or college grade point average
- Instructor recommendation
- Written essay
- Interview with instructor and Honors Advisor

## **2. Completion of Honors Contracts in four courses**

Honors contracts allow you to receive Honors credit in your courses by developing and completing a special project under the supervision of the course instructor and with the approval of the Honors Advisor. Honors contract work may be substituted for some portion of the regular curriculum. When you complete the course and the contract, you will receive Honors credit for the course. For more information, call 719.549.3253.

# *Graduation Requirements*

## General Graduation Requirements

### **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 a minimum of 15 graded credits at PCC in a program area
- Satisfactorily complete all general education requirements
- Earn a cumulative grade point average of 2.000
- Be classified as a degree-seeking student
- **Meet all PCC financial obligations**

### **Certificate Requirements**

All candidates for certificates must meet the following requirements:

- If a program consists of 15 semester credit hours or more, a minimum of 15 graded credits must be satisfactorily completed at PCC in the program area; if a program consists of fewer than 15 semester credit hours, all graded credits must be completed at PCC in the program area
- Complete all major and 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
- **Meet all PCC financial obligations**

## Specific Grade Requirements for Graduation

### **Associate of Arts/Associate of Science Degrees**

Minimum grade of “C” in all coursework applying to the degree.

### **Associate of General Studies Generalist Degree**

Minimum of 30 general education transferable credits, 15 of which must be in the Colorado Statewide Guaranteed Transfer Courses (GT Pathways) curriculum. No more than 30 credit hours in vocationally prefixed courses. Minimum grade of “C” in all coursework within the 30 credits of required general education courses.

### **Associate of General Studies Technical/Pre-Professional Degrees**

Cumulative GPA of 2.000 or higher (3.000 or higher in the Accounting and Business Management AA transfer degrees to gain acceptance to CSU-Pueblo). Minimum grade of “C” in all coursework within the 30 credits of required general education courses.\*

### **Associate of Applied Science Degree**

Cumulative GPA of 2.000 or higher.\*

## Certificate Programs

Overall GPA for courses within the certificate program of 2.000 or higher.\*

*\*Exception: If you are a Health Professions student, you must earn a “C” or higher in all required courses (general education, technical, and related courses).*

If you earn a “D” in a general education course for the AA/AS/AGS Generalist degrees, you may continue in your program, but you will have to retake the course and earn at least a “C” before you can graduate.

## Graduation With Honors (Degree Students Only)

If your cumulative GPA\* falls within one of the following ranges at the end of the fall semester prior to the commencement ceremony, you will be recognized at the commencement ceremony. In order to be recognized, you must earn at least 15 graded credits at PCC. Designations are as follows:

- Summa cum laude (“with highest honor”) 4.000 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

*\*The GPA is carried to the third decimal as listed on the academic record (transcript).*

## Academic Recognition

If you are enrolled in 12 or more graded credit hours and earn a semester grade point average of 3.500 or higher, you will be placed on one of the following lists. Selection for this honor will be recorded on your permanent transcript.

- President’s List 4.000 Semester GPA
- Vice President’s List 3.750 to 3.999 Semester GPA
- Dean’s List 3.500 to 3.749 Semester GPA

## Preparing for Graduation

To be considered a candidate for graduation, you must complete the following steps no later than by the end-of-drop/census date (information posted on the My PCC Portal) for the semester you plan to graduate.

- Verify that your major, and your option or area of concentration, are listed correctly as the Current Academic Program on your transcript. If it is not correct, you must file a Change of Major form with the Director of Academic Advising.
- Verify that transfer and prior learning credit have been posted on your transcript.
- Verify with your advisor that previously requested course substitutions and/or waivers have been approved.
- Schedule an appointment with your advisor to complete a Graduation Planning Sheet and program curriculum sheet. These important documents record the courses you have completed and indicate your plan to complete any remaining courses. It should be finalized no later than the end-of-drop/census date for the semester you plan to graduate. *If you submit your planning sheet after the deadline, we will place it in the next term’s graduation file.*
- **Meet all PCC financial obligations.**

Once you have completed the Graduation Planning Sheet, it is your responsibility to notify your advisor immediately of any changes to your plan. You and your advisor will complete the Request for Modification Form and submit it to the Admissions and Records Office. You can modify your planning sheet only once; thereafter, you must complete a new planning sheet.

You may complete your graduation requirements any time during a term; however, 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 should obtain and keep a copy of the catalog under which you are admitted to PCC. You may graduate using the requirements of that catalog; 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 (summer sessions excluded) in the same program, 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 dean of instruction.

## 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 in a degree program
- are a graduation candidate in a certificate program that requires, at a minimum, 16 semester credit hours
- are a graduation candidate for the spring semester
- graduated the preceding fall semester
- will be graduating at the end of the following summer session

# *Services for Students*

Many of the services are also available at the PCC Fremont and Southwest Colorado Community College. Information is available by contacting each campus directly. To find out if the services described in this section exist at a PCC branch campus, contact your campus Go!Zone (Enrollment Services) Office.

## The Student Center and Auxiliary Services

The PCC Student Center is a multi-use facility that provides you with “one-stop shopping” for many Student Services programs. The Student Services Division office is located on the upper level, along with the Admissions & Records and Financial Aid offices. The lower level of the Student Center houses recreational and service facilities for the students. These include the bookstore, recreation center, televisions, Pueblo Joe’s Café, and student lounge areas. Wireless access throughout the building has been implemented. A ballroom is located in the upper level; it is designed to accommodate special dinners, social functions, and large group meetings for students, and community members. You can get involved in campus life through Associated Student Government, Student Activities Board, or one of many clubs and organizations. For more information please call 549.3061 or visit Room 240.

## Counseling Services and Career Services

Counseling and Career Services are both located in the Davis Academic Building, Room 154. Both offices provide a number of professional services, such as:

### **Assessment and Transcript Review**

If you are a prospective student, contact us and we can review your previous assessment test scores (SAT, ACT ACCUPLACER®, etc.). We can also help with reviewing your transcript if you are transferring into PCC with college credits from other schools.

### **Career Services**

We offer the following services:

- Career exploration
- Career planning and counseling
- Occupational information
- Job-seeking information
- Pre-employment skills development (resumes, cover letters, interviewing skills, etc.)
- Employment retention skills (communication skills, customer service, conflict resolution, etc.)

### **Counseling Services**

We provide crisis intervention and brief personal counseling. If you have needs beyond these, we can refer you to the appropriate off-campus resource.

### **Life Skills**

We offer assistance with dealing with life issues that can affect college performance. We offer both workshops and individual assistance with the following:

- College survival and college success
- Stress management
- Study skills
- Test taking and test anxiety reduction
- Time management

### **Drug and Alcohol Prevention Information**

PCC maintains drug prevention information and resources in cooperation with the referral sources available in the community. We also have information concerning alcohol abuse prevention. These resources are available to all employees and students. You can obtain information and confidential referrals from the Director of Counseling for Wellness Services.

## **Student and Judicial Affairs**

The Director of Student and Judicial Affairs is located in the Davis Academic Building, Room 154I. the director provides a number of services to college students, including:

- Mediation of conflicts with students or others on campus
- Resolution of disputes with other students or college offices
- Investigation of complaints of violations of the PCC Student Code of Conduct
- Promotion of civility on campus
- Promotion of academic integrity

## **TRiO Student Support Services/Project Success (TRiO SSS)**

TRiO Student Support Services/Project Success 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 Pueblo Community College is to provide to 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. PR/Award Number PO47A070682.

## 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. We offer day and evening classes year-round at both PCC and Pikes Peak Community College. We also help veterans who do not have high school diplomas prepare for the GED test. Other TRiO services on campus are available to all VUB participants. Finally, we offer application assistance, career and academic advising, transcript requests, financial aid assistance, basic skills testing, and individual tutoring. For more information, please contact the Veterans Upward Bound Office at 719.549.3077.

## Bookstore

The PCC and SCCC Campus Bookstores serve PCC students, faculty, staff, and community. We sell required course materials as well as general interest books, art, office, school supplies, calculators, greeting cards, clothing, glassware, and gift items. The Bookstore conducts a used book buy-back during the first and last week of the fall and spring semesters. We also sell used books, when they are available, for 75 percent of their original price.

## Children First: Child Care Referral Service

If you need a referral to a licensed child care facility, contact Children First. As a Qualistar Early Learning partner, Children First provides a referral service for all students/parents/guardians looking for licensed child care in this part of the state. We provide referrals based on type of care, age of children, location needed, special services needed, hours of care needed, vacancies, etc. To enable you to make an educated choice, our referral lists range from three to eight providers.

Children First also assists Early Childhood (EC) professionals by providing opportunities for continuous professional development through the support of Qualistar Rating System programs, and by scheduling trainings for EC professionals to meet licensing requirements and further their professional development.

In addition to child care resources, Children First maintains a list of community resources in southeastern Colorado. In addition to our Pueblo office, we have a satellite office at the PCC Fremont Campus. For more information, call us at 719.549.3411 in Pueblo, 719.296.6118 in Canon City, or toll free at 877.338.2273.

Army Child Care in Your Neighborhood project provides options that are convenient for those living outside the gates of Ft. Carson. Children First has the contract to train and locate high quality child care programs that serve Army families in Pueblo and Fremont counties.

## Office of Recruitment

The Office of Recruitment conducts an array of activities to create awareness of PCC programs and student life and assists prospective students through the enrollment process. These activities include conducting campus tours and visiting schools and organizations to deliver presentations. Student Ambassadors serve a key role in assisting with these efforts. This department also manages the Go!Zone help desk at the Pueblo campus, which is the first stop for new students. 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 call 719.549.3030.



## Dining Services

The Pueblo Joe's cafe is located in the lower level of the Student Center. It is open 7:30 a.m. to 8:00 p.m. Monday through Thursday, and until 4:00 p.m. on Fridays. Pueblo Joe's offers breakfast specials along with pastries and beverages. The lunch menu includes daily luncheon specials, deli sandwiches and grill items. The PCC Culinary Arts Program offers lunch in the GPA Dining Room area next to the cafeteria from 11:30 a.m. to 1:00 p.m. Tuesday through Friday. Pueblo Joe's and GPA Dining Room area are open to students, faculty, staff, and general public. The college also provides a complete catering service for large and small events scheduled at PCC.

## Learning Center

The PCC main, Fremont, and SCCC West campuses each have a Learning Center, and each Center offers various services. You may inquire about these services in the Learning Center at your campus.

Computerized learning assistance is available at all campuses. Learning Express Library (LEL) and PLATO are interactive computerized tutorial and testing programs that offer support for a huge variety of subjects from automotive to writing. LEL also offers career seeking services including interest inventories, career information, resume writing, and interview skills. These programs are internet based and available any time. For more information, contact the Learning Center at your campus.

The Pueblo campus Learning Center provides the following services:

### **Academic Testing**

We offer academic testing when it is arranged by your instructors on your behalf. The testing room offers a convenient, quiet, and monitored testing environment suited to your needs. To take a test in the Learning Center, you must bring photo identification.

### **Assessment Testing**

We conduct Basic Skills Assessment (CPT ACCUPLACER®) and pre-entrance examinations for admission to various health programs. You must have photo identification to take these tests.

### **Disability Resources**

If you have a documented disability (including a temporary disability such as a broken arm), you may qualify for accommodations. These accommodations include but are not limited to note taking services, alternative text formats, and sign language interpreting services. These services are available to students at all campuses.

The Disability Resources Center also offers courses in assistive technology. CIS 101, 102, 104, and 107 are small, self-paced courses that teach you how to use assistive technology such as voice recognition programs, screen readers, and other adaptive devices. You also have access to the assistive technology classroom during open lab hours. (Note: lab hours may vary from semester to semester.)

### **Student Computer Access**

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 they must remain in the Learning Center.

## **Tutoring**

If you are taking reading, English, or mathematics classes, you may visit the Learning Center for drop-in tutoring assistance. Math and English tutoring is also available on a drop-in basis at the Pro Shops, which are located at Pueblo Joe's and upstairs in the library. We offer additional tutoring services on an individual and group basis. Please inquire at the Learning Center to access these services.

## **Library**

The Fremont and Pueblo campuses have libraries that provide information and media resources to students, faculty, and community members. The library collections contain over 56,000 books, periodicals, microfilm documents, non-print media titles, online databases, and electronic books. At the PCC main campus, the library is located in the Mike Davis Academic Building and is designed to provide several learning support services in one area.

To check out materials or access online resources from off campus, you must be a registered borrower. To register in person, you must present one form of identification with photo to library staff. You may also register by going to the library webpage and filling out the online registration application. When you register, you will be able to use your "S" number to access online databases. As long as your account is in good standing (no overdue materials), you may access resources from an off campus computer during the semester you are a registered student. We provide the following services (please inquire about the services your own campus library provides):

### **Bibliographic Services**

You can access the PCC Library catalog and catalogs of other Colorado libraries by visiting [www.pueblocc.edu/CampusResources/Library/](http://www.pueblocc.edu/CampusResources/Library/).

### **Online Full Text Resources**

You have access to online full-text databases via the Library home page. Online Library Resources, a pathfinder available on the Library webpage, will guide you in the use of these databases. You can access the databases on any campus computer, or off-campus through the Library home page.

### **Reference**

Reference assistance is available online and in person for developing research strategies and identifying resources for class assignments or personal interests. Individual and group orientations are available. Research guides may be obtained in the Library; pathfinders and research guides are also available on the Library webpage.

### **Course Reserves**

We maintain textbooks, resource materials, and study materials provided by your instructors to assist you in your assignments.

### **Special Study Aids**

The main campus library provides laptop computers, media carrels, a photocopier, and study areas to help you complete assignments.

### **Access to Colorado Libraries**

The PCC Library is a Colorado Libraries Collaborate (CLC) member. When you are enrolled at PCC, you may check out materials from other participating Colorado libraries by showing your PCC identification card.

### **Interlibrary Loans**

Through this loan service, you may request books or journal articles from libraries statewide.

## Marketing and Public Relations Office

PCC's Marketing and Public Relations Office is responsible for media relations, advertising, marketing, public relations, and special events planning. We also are responsible for the content and design of PCC's internet and portal sites. We provide a number of student services including publishing the front sections of the class schedule on our website. We also publish timely news for and about PCC students on their sign-on page (the Panther Pause) and publish *FYI News*, a quick-read flyer that is posted in the restrooms.

## Public Safety

Please report all injuries, accidents, or other incidents requiring police or other safety/emergency assistance to the appropriate office on your campus.

**Pueblo Campus:** We are located in the Student Center, Room 160. We are available to assist anyone on campus and will escort students, staff, and faculty to designated locations, particularly during the evening hours. You can reach us by phone at 719.549.3144, cellular phone at 719.821.6563, or through the Facilities Services office at 719.549.3345 or 719.549.3291.

**Fremont Campus:** Report incidents to the Fremont Campus administration office between 8 a.m. and 6 p.m. Monday through Thursday, and from 8 a.m. and 5 p.m. on Friday. During other times, students may report incidents to the Public Safety Officer who is available during evening and weekend hours. You can summon emergency services to the campus by calling 911 from any classroom phone or your personal cell phone.

**Southwest Colorado Community College Campus:** Report incidents to the Durango office during daytime hours. You may summon emergency services by calling 911 from your personal cell phone or from the faculty office if an instructor is available.

## Recreation Center

The PCC Recreation Center, located in the Student Center, Room 154 provides programs, facilities and equipment for students to physically, mentally and nutritionally improve one's health. This is accomplished through one of five of the Center's major program components:

**Individual Fitness:** Cardiovascular and weight training equipment. Over 60 pieces of high tech equipment are available to use.

**Group Fitness Classes:** Zumba, Belly Dancing, Salsa, Wii Just Dance, Yoga, encouraging our students to exercise and relax as a habit so they feel balanced.

**Intramurals Program:** Flag Football, Basketball, Disc Golf, Softball, Volleyball, and many more.

**Health and Wellness Program: Ready, Set, Go, 10 for Health at PCC:** Physical activity, stress relief, and nutritional education.

**Outdoor Adventure Leadership Program:** Field-based expeditions to enhance a student’s education outside of the classroom by learning leadership development skills in an outdoor experience. The program serves PCC students by providing low-cost outdoor activity-based trips, including whitewater rafting, kayaking, rock climbing, canoeing, caving, hiking, backpacking, mountain biking, skiing and snowboarding.

All students carrying one credit or more are admitted free to the Recreation Center. The Health Professions Division also offers in the Recreation Center one-credit courses in fitness conditioning that can be found in the course schedule each semester. For further information on any of the Recreation Center’s programs or current hours call 719.549.3063.



# *Economic & Workforce Development*

We provide a broad range of workforce education opportunities and services in Pueblo, Fremont, Custer, Dolores, Montezuma, La Plata, Archuleta, El Paso, Teller, and San Juan counties. Our flexible delivery options allow us to meet the specific needs of employers and their employees. We offer training on a non-credit or continuing education basis.

## **Economic Development**

We assist the Pueblo Economic Development Corporation (PEDCO) to assess new company prospects by addressing the workforce development needs. Specialized training programs can be developed specific to the company's need.

## **Workforce Development**

We can help you assess current workforce trends and identify skills needed as a result of changing technology and processes. We offer customized training in the following areas:

- CAD/CAM
- Construction
- Environmental
- Health
- Industrial Electrical
- Industrial Mechanical
- Management and Staff Development
- Oil and Gas Industry
- Public Safety
- Quality Improvement
- Safety & OSHA
- Welding
- World Class Manufacturing

Our knowledgeable and experienced instructors can integrate your own company-specific documents, drawings, parts, or process data into their instruction. Many of our courses incorporate hands-on activities; many can be delivered at your company location through our mobile learning labs.

## **City & State Training Grant Funds**

We assist local employers apply for training funds that may be available through the City of Pueblo or the Governor's Office of Economic Development & International Trade. These funds can only be used for non-credit customized training; the process is competitive, and funding is awarded based upon the impact on employers, employees, and the community at large.

For more information about any of our services, call 719.549.3320 or visit our website at [www.pueblocc.edu/tec](http://www.pueblocc.edu/tec).

# *Community Education Training & Pre-College*

## Community Education Training Division & Pre-College Programs

CETD is a division of PCC that serves the continuing education needs within the community. We offer programs that provide our customers with lifelong learning opportunities. You may contact us regarding any of the programs listed below at 719.549.3267 or visit our website at [www.pueblocc.edu/CommunityOutreach/CETD/](http://www.pueblocc.edu/CommunityOutreach/CETD/).

### **CETD Non-Credit Courses and Programs**

**Non-Credit Classes & Workshops:** CETD is committed to providing our students with a broad range of offerings which address current lifestyle needs. Classes and one day workshops help individuals stay current with job skills, professional and personal growth, change issues, and exciting leisure activities.

**Kids' College:** Kids' College combines learning and fun for children in 1<sup>st</sup> – 12<sup>th</sup> grades by providing hands-on instruction in small, learner-friendly class environments. The program is offered every summer and serves over 900 students each year. There are traditional classes in math, reading, science, and health-related topics. Kids' College also includes art, crafts, outdoor sports and games, music, cooking, computer classes, job skills, cartooning and animation, robotics, and other fun interactive courses.

**Senior Focus:** We offer courses specifically designed to meet the learning needs of our community. There are many offerings in computer training, personal interest and professional development that provide quality instruction and a positive learning environment for lifelong learners, 55 plus.

**Customer Service Academy and Professional Development:** CETD is an excellent resource for business, public entities, professional groups and organizations. Through quality staff and well-equipped facilities, we can assist in planning and delivering workshops, conferences, seminars and general meetings. General topics include customer service skills, leadership, and management. American Management Association classes and customized training in current methodologies and business practices are also offered.

**CETD Pre-College Programs:** The Community Education Training Division offers an array of opportunities for individuals seeking a high school diploma, GED, ESL, or a pathway into higher education. These programs are designed to meet the needs of the community and address the need for providing opportunities to lead to a more productive life.

**Alternative High School Diploma Program:** This program is designed for students between the ages of 17 and 20, who are self-motivated and committed to earning an alternative high school diploma. While enrolled, students are encouraged to seek higher educational opportunities, and are offered support and access to college admissions and financial services. This is a competency based program that requires a referral from your local school district.

**HOPE Bridge Project:** HOPE's focus is to assist prior offenders now on probation or parole that have a desire to change their life. This program helps prepare individuals for a substantial career, a productive life, and a positive future with services that guide them through the entry process into the college system to obtain a college degree.

**Gateway to College:** Gateway to College serves students ages 17-20 who have dropped out of high school but have a desire to get back on track and earn a diploma and more. What makes Gateway to College unique is that students will not only have a second chance to earn a traditional high school diploma, but Gateway participants will also earn college credits toward an associates degree or certificate.

**GED Preparation:** The GED Preparation Program is designed to assist individuals who have not earned a high school diploma to 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 GED Program assists students, 17 years or older, with preparation to successfully pass the Reading, Science, Social Studies, Math and Writing tests. Additionally, students can receive help in preparing for the Accuplacer test and pre-college advisement.

For those students interested in enrolling in PCC, our program provides students with initial college advisement and preparation for the Accuplacer exam. Students must take a pre-test before enrolling in the GED class.

**English as a Second Language (ESL):** English as a Second Language (ESL) classes are designed to provide non-native English speakers with instruction in the development of English language vocabulary, grammar, and basic literacy skills. Students in the ESL classes will develop skills that will help them be more successful in seeking and maintaining employment, accessing additional educational opportunities and functioning in daily life. Classes are available at the beginning, intermediate, and advanced levels. Individuals interested in enrolling in the ESL classes must take a pre-test before enrolling.

**Youth Academics:** The Community Education Training & Pre-college Programs Division at PCC offers Youth Academies to participants 16-21 years old in the following areas: Customer Service, Media, Health, and Technology professions. These programs introduce individuals to career opportunities, raise awareness of employer expectations, job skills and academic requirements in the related fields. These programs provide access to a college environment and prepare the youth for the workforce.

# *Student Activities*

We value you as a student and want you to feel that you are part of the college. We provide many opportunities for you to get involved in planning campus events and learning more about leadership. We have a dynamic student activities board that plans the Fall Festival, the Spring Fling, and other student-centered activities throughout the year. The Associated Student Government represents your interests to PCC's administration and oversees the student organizations on campus. We encourage you to participate in Associated Student Government meetings, run for offices, or get involved and active in one of the many student clubs.

## Student Governing Organizations

### **Pueblo Campus**

The Associated Student Government is the student governing body at the main campus. It supervises and appropriates designated Associated Student Government funds, coordinates special student activities, provides social programs, and represents student concerns to the administration and faculty. It also appoints student representatives to college and state committees. The Associated Student Government is composed of nine elected officers, five at-large senators, and senate representatives from the various student clubs.

### **Fremont Campus**

The Student Advisory Council (SAC) is the student governing body at the Fremont Campus. The SAC serves the student body and the Fremont and Custer County communities. It provides social, cultural, and community service projects as well as serving as the Student Activities Board for the Fremont Campus. Students in good standing are invited to join SAC general membership. Officers are elected at the beginning of the fall semester. The SAC also sanctions and includes representation from Fremont Campus student clubs, including the Art, Drama, Gaming Clubs, Movie, Nursing, and Sports.

## Student Activities Board

The Student Activities Board (SAB) is made up of members of the Associated Student Government and other PCC students. It recommends projects and funding levels to the Assistant Director of Student Life and Events and Director of Student Center & Auxiliary Services. The SAB sponsors educational events associated with Black History month and Women's History month, as well as other special educational events. We also sponsor recreational events such as the Fall Festival, Spring Fling, Casino Night, and Trick or Treat Street.

## Student Organizations

You may join any campus organization that is recognized by the Associated Student Government and advised by a member of the faculty, as long as you are in good standing and meet the entrance requirements of the organization.



**Art Club**

The Art Club seeks to enhance the cultural atmosphere of PCC, to provide artistic students with a forum where they can discuss art esthetics and technique, and to provide a voice in the Student Senate to represent the community of artists on campus.

**Campus Crusade for Christ**

Campus Crusade is a faith based inter-denominational organization aimed at helping students adjust to college life. Members with common spiritual interests connect with others and grow in their friendship and faith. We serve as a support group to lift up and encourage our members, and provide a sense of value and purpose.

**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 ADN's; it also helps them enhance the health of the public through education, action, and service.

**Cosmetology Club**

The Cosmetology Club is to introduce and help cosmetology students get involved and stay involved with campus life. The club is involved in community service work by visiting nursing homes and other organizations like Girl Scouts.

**Criminal Justice Club-LAMDA ALPHA EPSILON (LAE)**

The purpose of the Criminal Justice Club is to improve criminal justice through educational activities; foster professionalism in law enforcement personnel and agencies; promote professional, academic, and public awareness of criminal justice issues; encourage the establishment and expansion of higher education and professional training in criminal justice; provide a unified voice for professionals in, and students of, criminal justice; and promote high standards of ethical conduct, professional training, and higher education within the criminal justice field.

**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.

**Dental Assisting Student Organization (DASO)**

Participation in DASO offers the dental assisting student development in organizational leadership skills. The focus of the club is to promote the profession of dental assisting and dental health awareness through college activities and community service projects. Members also have opportunities to be active in state and national dental assistants' associations to promote their profession, seek personal and professional development, and enhance their awareness of lifelong learning.

**Future Educators Association (FEA)**

FEA provides resources and a support system to help students complete their journey to becoming teachers. Our activities focus on serving children in the Pueblo community, honoring teachers, and learning about the teaching profession. Membership is open to all interested students and alumni.

**History Society**

The History Society encourages the study and exploration of history through discussions, travel to historical sites, and research. It also recognizes excellence in the study of history through competitions and other academic forums.

### **Medical Imaging Student Society (MISS)**

The object of MISS is to promote and strengthen the members in the development of professionalism and leadership roles. Emphasis is applied to the development and organization of money-making projects to finance its educational, community, and college activities.

### **Performing Arts**

The purposes of the Performing Arts Club is to improve the performing arts through education and to promote and provide higher education within the music, theater, technical and dance fields; to encourage civic engagement and inter-group affiliation in order to actively participate in the performing arts on a community-wide basis; promote professional, academic, and more generalized skills such as cognitive, emotional, sensory and motor capacities in the lives of our members, as well as to encourage professional performing arts training for students; provide leadership and a unified voice; help finance student activities, such as talent shows, performances, field trips, competitions; provide theatrical and musical events for the community and to provide local recognition and respect for these events through engagement with other local entities; to share cultural, generational, and myriad diverse values and ideas in an open and accepting forum; and, encourage entrepreneurship in students active in the performing arts. This club shall exist to these ends. This is in the continuing goal of bringing the community together in a meaningful way and instilling in people knowledge of the power and value of the performing arts community.

### **Phi Beta Lambda (PBL)**

The PBL Chapter provides opportunities for post-secondary vocational business students to develop business leadership skills and competencies. PBL is an integral part of PCC's instructional business programs. In addition, PBL promotes a sense of civic and personal responsibility. Membership is encouraged for certificate and degree students in business-related programs. You can receive one credit for PBL membership when you enroll in BTE 157.

### **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, you must be a currently enrolled student 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, you may select standard or enhanced membership, which is determined by your level of participation in chapter activities. As a Phi Theta Kappa member, you will be honored at graduation for your outstanding academic achievements.

### **Physical Therapist Assistant (PTA) Club**

The PTA club is open to PTA program students and non-program students who are interested in pursuing a career in physical therapy. 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.

### **Psychology and Social Work Careers and Resources for Education (PS CARE)**

PS CARE offers a support system for students interested in the field of Psychology and Social Work. It offers awareness training, resources, and education. Activities include assisting PCC's Mental Health Committee, providing information and sponsoring events focusing on mental health and/or social issues, and raising funds to support various Pueblo community nonprofit organizations. Membership is open to all students, alumni, and honorary members.

### **Skills USA**

Skills USA is made up of students in the Auto, Auto Collision, Machining, and Welding programs. Skills USA equips its members with vocational and leadership skills. Skills USA are a local, state, national, and international organization.

### **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. To find out about the eligibility requirements, contact the Office of Recruitment in the Student Center or call 719.549.3182.

### **Student American Dental Hygienists Association (SADHA)**

Dental hygiene students are automatically members of SADHA, part of the American Dental Hygienists' Association. SADHA 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.

### **Student Association for Respiratory Care (SARC)**

The SARC club serves the academic and social welfare of current Respiratory Therapy and other interested students, promotes the respiratory health of the PCC and local communities, and promotes the Respiratory Care Program at PCC as well as in the local community.

### **Student Occupational Therapy Assistants Club**

This club acts as an advocate for occupational therapy to enhance the health of students and the general public. It participates in education, action, and service projects on campus and in the Pueblo community.

### **Veterans Club**

The Veterans Club provides support for all veterans attending PCC. We offer help with benefits, employment, and housing concerns, as well as academic, educational, and financial information. We also conduct activities with campus and community organizations. Our guiding principles are integrity and service. Membership is open to any PCC student, veteran or not, who is interested in veterans' issues.

### **Writer's Society Club**

The purpose of the Writer's Society is to build a community of writers on campus with opportunities to share work and participate in meaningful discussions about the writing experience. The organization also aims to foster relationships between student writers and established writers in the community. We participate in poetry readings on campus as well as events coordinated by the Southern Colorado Writing Project.

# *Important Legal Information*

## Your Privacy Rights

The Family Educational Rights and Privacy Act of 1974 (FERPA), commonly known as the Buckley Amendment, protects your right to privacy regarding your educational records. The Act helps protect the privacy of your records by requiring that PCC limit the disclosure of information from these records to third persons, as well as notify you of the right to review and correct your records.

*PCC may release the following directory information about you to the public:*

- Student name
- Participation in officially recognized activities and sports
- College issued e-mail account
- Major field of study
- Dates of attendance
- Degrees and awards received
- Birth year (birth day and month cannot be disclosed)

*If you do not wish PCC to release this information, you must file a written request with the Records Office. For more information about the Buckley Amendment, contact the Records Office.*

## Affirmative Action / Equal Opportunity

PCC is an equal opportunity educational institution and does not discriminate on the basis of age, race, religion, color, national origin, gender, sexual orientation, or disability 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 Director 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 Director of Human Resources, 900 West Orman Avenue, Pueblo, CO 81004 - Telephone: 719.549.3220; or the Office for Civil Rights, U.S. Department of Education, Region VIII, Federal Office Building, 1244 North Speer Boulevard, Suite 310, Denver, CO 80204, telephone 303.844.5695; TDD 303.844.3417.

## Sexual Harassment Notice

PCC does not tolerate or condone sexual harassment in any form. Unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature constitute sexual harassment when:

- 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; or participation in a class or program.
- Submission to or rejection of such conduct by an individual is used as the basis for academic or employment decisions affecting the student or employee.
- Creating an intimidating, hostile or offensive academic work environment; or unreasonably interfering with another's academic performance or work.

**Sexual harassment as defined above may include, but is not limited to, the following:**

- Sex-oriented verbal "kidding," abuse, or harassment.
- Unwelcome sexual advances or requests for sexual favors.
- Repeated remarks to a person with sexual or demeaning implications or the use of vulgarity.
- Unwelcome touching, such as patting, pinching or brushing against another's body.
- Suggesting or demanding sexual involvement, accompanied by implied or explicit threats concerning one's grades, employment status or similar personal concerns.
- Unwelcome posters, letters or other writings or communications of a sexual nature.
- Other verbal or physical conduct of a harassing nature.

Sexual harassment is illegal and is a violation of Title VII of the Civil Rights Acts of 1964, as amended, and Title IX, which prohibits sexual discrimination in educational programs or activities. PCC 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 is also a violation of this policy to knowingly make a false allegation of sexual harassment.

If you feel you have been subjected to sexual harassment and need information about what to do, contact the Director of Human Resources at 900 West Orman Avenue, Pueblo, CO 81004, Telephone: 719.549.3220 or the College President. All matters involving sexual harassment complaints are taken seriously and will be investigated. Complaints will remain confidential to the extent possible. Filing of a complaint or otherwise reporting sexual harassment, in good faith, will not reflect upon your status or affect future employment, work assignments, or grades.

## 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. 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, which you can find online at [www.pueblocc.edu/StudentServices/StudentHandbook/](http://www.pueblocc.edu/StudentServices/StudentHandbook/).

## Complaints

Pueblo Community College welcomes comments, suggestions or 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. If the concern or complaint is not resolved through an informal process, a written complaint may be submitted to the Vice President of Student Services.

## 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 Policy 550. The Office of Institutional Research (OIR) is responsible to review all proposed surveys and questionnaires; protect the rights of human subjects; ensure good survey methodology and design; prevent specific populations from being over-surveyed; avoid the collection of duplicated information; and encourage 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, 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 website is [www.pueblocc.edu/StudentServices/Security/](http://www.pueblocc.edu/StudentServices/Security/).

This website information addresses six 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 on sex offenses, 5) policies on the use, possession, and sale of alcohol 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 certificate and/or degree programs. Certain offenses will preclude you from enrolling in a health program. Students should check with the program chair for specific requirements and due dates.

## **Student Malpractice & Liability and/or Health Insurance**

If you are enrolled in health professions and service programs, you must carry malpractice & liability insurance. Personal health insurance coverage is strongly recommended and is required by some clinical affiliates. The 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 uniformly 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 advises 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-287, 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 Diagnostic Medical Sonography Majors with a 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 or registry eligibility due to a 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 Diagnostic Medical Sonographers, 51 Monroe Street, Plaza East One, Rockville, Maryland, 20850-2400; Telephone – 301.738.8401 or 800.541.9754; Website – [www.ardms.org](http://www.ardms.org).**

### **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 assumes 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 persons 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 Occupational Therapy Assistant Majors with a History of Felony**

The National Board for Certification for 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, Minnesota 55120; Phone – 651.687.0048; Website – [www.arrt.org/ethics](http://www.arrt.org/ethics).**

### **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.





# *Degree and Certificate Programs*

Associate of Arts (AA) .....	83
Transfer Degree, College / University Parallel .....	83
AA Degrees with Transfer Articulation Agreements .....	85
Associate of Science (AS) Transfer Degree, College/University Parallel .....	88
Associate of General Studies (AGS) .....	90
Generalist Degree .....	90
AGS Degree with Transfer Articulation Agreements .....	91
CCCS Guaranteed Transfer (GT) - Pathways Courses .....	94
Career and Technical Programs.....	96
Directory of AAS Degrees & Certificates.....	96
Associate of Applied Science (AAS) Degree & Certificate Programs .....	99

PCC grants 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."

# Associate of Arts (AA) Degree

## *Transfer Degree, College/University Parallel*

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The AA degree is designed for students who want to transfer to a four-year college or university to pursue a baccalaureate degree in the areas of arts, humanities, communications, and social sciences.

NOTE: This degree excludes majors in Business, Early Childhood Education, Education, Engineering, or Nursing.

Requirements for the AA Degree are as follows:

- Minimum of 60 semester hours of course work
- Minimum of 15 graded semester hours earned at PCC
- Minimum grade of "C" in all coursework for the degree

Consult with a PCC Arts & Sciences advisor or the PCC 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. Secure a current AA curriculum sheet for reference.

To earn an AA degree, you must complete at least 60 college-level credits, broken down as follows:

- 38 credits of Colorado Statewide Guaranteed Transfer Courses (GT Pathways)**
- 22 credits of Associate of Arts Electives**

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*Developmental courses are not included in these credits.*

Developmental courses are courses in reading, mathematics, and English that you may have to take before enrolling in college level courses.

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### **I. Colorado Statewide Guaranteed Transfer Courses (GT Pathways)**

You must take 38 credits from the following list:

#### **9 Credits Communication**

Select 2 English courses and 1 Speech course: ENG 121, ENG 122, COM 115 or COM 125\*

#### **3 Credits Mathematics**

Select from: MAT 120, MAT 121, MAT 122, MAT 125, MAT 135, MAT 155, MAT 156, MAT 201, MAT 202

#### **8 Credits Physical and Life Sciences**

Select two courses (credits over 8 will be applied to the electives category): AST 101, AST 102, BIO 105, BIO 111, BIO 112, BIO 201, BIO 202, BIO 204, CHE 101, CHE 102, CHE 105, CHE 111, CHE 112, GEY 111, GEY 121, MET 150, PHY 105, PHY 111, PHY 112, PHY 211, PHY 212, SCI 155, SCI 156

Note: These classes require a laboratory component.

\*COM 115 (Public Speaking) and COM 125 (Interpersonal Communications) are not State Guaranteed Transfer courses but a requirement of the Colorado Community College System. An approved Speech Communications course is required for the AA, AS, and AGS (Generalist) degrees.

#### **9 Credits Social and Behavioral Sciences**

Select 3 courses in at least 2 categories, one of which must be History:

Economics and Political Systems: ECO 201, ECO 202, POS 105, POS 111

Geography: GEO 105, GEO 106

History: HIS 101, HIS 102, HIS 111, HIS 112, HIS 201, HIS 202, HIS 247

Human Behavior and Social Systems: ANT 101, ANT 111, PSY 101, PSY 102, PSY 205, PSY 217, PSY 226, PSY 227, PSY 235, PSY 238, PSY 249, SOC 101, SOC 102, SOC 215, SOC 216, SOC 231, WST 200

#### **9 Credits Arts and Humanities**

Select 3 courses, with no more than 2 courses from any 1 category:

Arts: ART 110, ART 111, ART 112, ART 207, MUS 120, MUS 121, MUS 122, MUS 123, THE 105, THE 211, THE 212, SPA 211, SPA 212, GER 211, GER 212, FRE 211, FRE 212, ITA 211, ITA 212

Humanities and Literature: HUM 121, HUM 122, HUM 123, LIT 115, LIT 201, LIT 202, LIT 205, LIT 211, LIT 212, LIT 221, LIT 222

Ways of Thinking: PHI 111, PHI 112, PHI 113, PHI 114, PHI 214

### **II. Associate of Arts Electives**

You must take 22 elective credits. You can meet your elective requirements as follows:

- Select all electives with advisor approval.
- Take any of the above courses that are not used to meet the Colorado Statewide Guaranteed Transfer Courses (GT Pathways).
- Complete any of the following Approved Elective Courses:

ANT **	HWE 100
ART **	JOU **
AST **	LIT **
BIO 105 and higher	MAT 120 or higher
CHE 101 and higher	MGD 133, MGD 221, MGD 233
COM 115	MUS **
COM 125	PED ** or DAN ** (up to 2 credits)
ECE 101, ECE 102, ECE 205	PHI**
ECE 238, ECE 241	PHY**
ECO 105 and higher	PSY ** except PSY 106 & PSY 110
EDU **	POS **
ENG 121 and higher	SCI 155 & SCI 156
ETH **	SOC **
Foreign Languages 111 or higher	SPE **
GEO **	SWK **
GEY **	THE**
HIS **	WST
HUM **	

\*\* You may select any course number from this course prefix area.

## Sequencing of Classes

For the AA Degree, there is no required course sequence *except when classes have prerequisites*. You can take classes in any order so long as you meet the prerequisites for each class. The course schedule below is just an example of how you might arrange your schedule over four semesters. *It is only a suggested sequencing; your own schedule might differ depending on your scheduling needs. You should work with your advisor each semester, prior to registering, to ensure that you are enrolling in the proper courses in the most logical sequence.*

Note: This sequence of courses assumes you are a full time student and that you have completed all required developmental courses. If these conditions do not apply, you may need more than four semesters to complete your degree.

### Sample Associate of Arts Degree

**Note: This is only a sample. Do not use it to self-advise.**

#### 14 Semester One

- 3 ENG 121 English Composition I
- 4 MAT 120 Math for the Liberal Arts
- 4 BIO 105 Science of Biology or Physical/Life Sciences GT Pathways course
- 3 PSY 101 General Psychology I or Social/Behavioral Sciences GT Pathways course

#### 16 Semester Two

- 3 ENG 122 English Composition II
- 4 GEY 111 Physical Geology or GT Pathways course
- 3 HUM 121 Humanities: Early Civilizations or Arts/Humanities GT Pathways course
- 3 SOC 101 Introduction to Sociology I or Social/ Behavioral Sciences GT Pathways course
- 3 HIS 111 The World: Antiquity - 1500 GT Pathways course

#### 15 Semester Three

- 3 PHI 111 Introduction to Philosophy or Humanities GT Pathways course
- 3 COM 115 Public Speaking
- 3 HIS 112 The World: 1500 to Present GT Pathways course
- 3 ENG or LIT English or Literature or Arts/Humanities GT Pathways course
- 3 PSY or SOC Behavioral Science elective GT Pathways course

#### 15 Semester Four

- 3 ART Art elective (choose from options listed under AA electives above)
- 3 LIT Literature elective (choose from options listed under AA electives above)
- 3 THE Theater elective (choose from options listed under AA electives above)
- 3 PSY Behavioral Science elective (choose from options listed under AA electives above)
- 3 SOC Social Science elective (choose from options listed under AA electives above)

# Associate of Arts (AA) Degrees with Transfer Articulation Agreements

## Business Management

Joe Easton, Department Chair

Associate of Arts (AA) Degree

### Career Opportunities

The Associate of Arts degree in Business Management prepares you to transfer into bachelor's degree accounting programs at four-year colleges.

### Program Description

The Associate of Arts degree with an emphasis in Business Management prepares you to transfer to a bachelor's degree business management program. The PCC-CSU-Pueblo Transfer Agreement allows the AA Business Management graduate to transfer to the CSU-Pueblo Hasan School of Business with a junior standing. Contact the department chairperson for information about transferring to four-year institutions other than CSU-Pueblo.

Note: For students interested in a bachelor's degree in Accounting, the Pueblo Community College Pathway of Study is the AA degree in Business Management.

## ASSOCIATE OF ARTS (AA) DEGREE

### Business Management

TOTAL CREDITS 60

#### 40 General Education Core Requirements

- 9 English/Speech  
ENG 121, ENG 122, COM 115
- 8 Mathematics  
MAT 121, MAT 125
- 8 Natural Science  
Choose from: AST 101, AST 102, BIO 105, BIO 111, BIO 112, CHE 101, CHE 102, CHE 111, CHE 112, GEY 111, GEY 121, PHY 111, PHY 112, PHY 211, PHY 212
- 9 Social and Behavioral Sciences  
ECO 201 and ECO 202 are required.  
Choose 3 additional credits from the following: HIS 101, HIS 102, HIS 201, HIS 202
- 6 Humanities  
Choose 6 credits in 2 different disciplines from: ART 110, ART 111, ART 112, HUM 121, HUM 122, HUM 123, LIT 115, LIT 201, LIT 202, MUS 120, MUS 121, MUS 122, PHI 111, PHI 112, PHI 113, THE 105, THE 211, THE 212

#### 20 Professional Requirements

- 4 ACC 121 Accounting Principles I
- 4 ACC 122 Accounting Principles II
- 3 BUS 115 Introduction to Business
- 3 BUS 216 Legal Environments of Business
- 3 BUS 217 Business Communication and Report Writing
- 3 BUS 226 Business Statistics

## Education

Donna Fitzsimmons, Department Chair

Associate of Arts (AA) Degree

### 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 elementary 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 the four year institution's teacher education program.

### Program Requirements

\*In addition to the requirements listed below, you must complete 30 hours of fieldwork in EDU 221: Introduction to Education. Schools used during the fieldwork in EDU 221 require students to successfully pass a background check.

## ASSOCIATE (AA) DEGREE

### Elementary Education

TOTAL CREDITS 60

#### 38 State Guaranteed Transfer Courses

- 9 Communications  
ENG 121 (with a grade of B or better), ENG 122, COM 115
- 3 Mathematics  
MAT 155
- 8 Natural Science  
SCI 155 and SCI 156
- 9 Social and Behavioral Sciences  
GEO 105, HIS 201 OR HIS 202, POS 111
- 9 Humanities  
ART 110 or THE 105, LIT 115, MUS 120 or THE 105

#### 22 Electives

- 4 BIO 105 Science of Biology  
OR
- 4 GEY 111 Physical Geology
- 3 EDU 221 Introduction to Education\*
- 3 EDU 261 Teaching, Learning, and Technology
- 3 HIS 111 World Civilization I  
OR
- 3 HIS 112 World Civilization II
- 3 LIT 255 Children's Literature
- 3 MAT 156 Integrated Math II
- 3 PSY 238 Child Development  
OR
- 3 PSY 235 Human Growth and Development

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

Listed above are the courses required by the Colorado State University-Pueblo Teacher Education Program. Students successfully completing degree requirements may be eligible for admission to CSU-P as juniors.

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

### Secondary Education

If you want to teach grades 7 through 12, 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

You should identify the four-year college or university to which you intend to transfer and the appropriate curriculum.

### 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 bachelors degree.

## Early Childhood Education

Rosemary Breckenfelder, Department Chair  
Associate of Arts (AA) Degree

### Career Opportunities

The AA with an emphasis in Early Childhood Education prepares you to transfer as a junior to a four year institution in Colorado in order to become a teacher. Please meet with an Early Childhood advisor for information on transferring to a specific four year institution. Adams State College is accepting Early Childhood graduates. At the completion of the program you will be eligible for entry-level employment. Students 18 years of age who complete the AA degree are qualified to be an Early Childhood Teacher in a child care facility, Head Start program, or local district preschool programs.

### Program Description

Classes emphasize thinking and academic skills, decision-making, problem solving, cooperative group learning, and creating hands on and age appropriate activities that are developmentally appropriate for early childhood education classrooms. You will learn from qualified mentors in early childhood lab sites in the community.

### Program Requirements

You should demonstrate an interest in the care and well-being of young children from birth to age twelve. You also need to be free from evidence of illness and conduct that would endanger the health, safety, or well being of children. You must earn a grade of "C" or better in the Early Childhood Education courses in order to progress through the program.

## TWO AA DEGREE PLAN OPTIONS WITH TRANSFER TO ADAMS STATE COLLEGE

### Option 1:

Emphasis in Elementary Education with Early Childhood Education Courses

TOTAL CREDITS 60

<b>41-42</b>	<b>General Education Requirements</b>
<b>9</b>	<b>Communications</b> ENG 121, ENG 122, COM 115
<b>6-7</b>	<b>Mathematics</b> (Choose one track) Track 1: MAT 120 or MAT 121 and MAT 135 Track 2: MAT 155, MAT 156
<b>8</b>	<b>Natural Science</b> SCI 155 and SCI 156 (OR two Lab Sciences from the following: BIO 105 or BIO 111, GEY 111, CHE 101 or CHE 111, PHY 105 or PHY 111 or PHY 211
<b>9</b>	<b>Social and Behavioral Sciences</b> GEO 105, HIS 201, POS 111
<b>9</b>	<b>Arts and Humanities</b> ART 110 or MUS 120, LIT 115, LIT 255
<b>16</b>	<b>Early Childhood Requirements</b>
<b>3</b>	ECE 101 Introduction to Early Childhood Education
<b>3</b>	ECE 102 Introduction to Early Childhood Lab Techniques
<b>3</b>	ECE 205 Nutrition, Health and Safety
<b>4</b>	ECE 238 Child Growth and Development
<b>3</b>	ECE 241 Administration: Human Relations for Early Childhood Education
<b>3</b>	<b>Electives</b> (Choose one course from the following): HIS 111 or HIS 112 OR PSY 101 or SOC 101

## **Option 2:**

Emphasis in Elementary Education  
TOTAL CREDITS 60

**38 General Education Requirements**

**9 Communications**

ENG 121, ENG 122, COM 115

**6 Mathematics**

MAT 155 and MAT 156

**8 Natural Science**

SCI 155, SCI 156

**9 Social and Behavioral Sciences**

GEO 105, HIS 201 or HIS 202, POS 111

**9 Arts and Humanities**

ART 110, LIT 115, MUS 120

**19 Electives**

EDU 221\*, MAT 135, HIS 111 OR HIS 112, LIT 255,  
ECE 238, ECE 225

**\*In addition to the requirements listed, you must complete 30 hours of fieldwork in EDU 221. Schools used during this fieldwork require students to successfully pass a background check.**

## **Emphasis in Social Work**

Donna Fitzsimmons, Department Chair  
Associate of Arts (AA) Degree

### **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, but not limited to, 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. To help students gain real world experience, SWK 222, Introduction to SWK Practice, requires 15 hours of volunteer work in an approved human services agency.

## **ASSOCIATE (AA) DEGREE**

### **Emphasis in Social Work**

TOTAL CREDITS 60

**38 General Education Requirements**

**9 Communications**

ENG 121, ENG 122, COM 115

**3 Mathematics**

MAT 135

**8 Physical and Life Sciences: (Select two courses)**

BIO 105 with Lab, select one additional course from the  
Statewide General Education Core

**9 Social and Behavioral Sciences**

HIS 202, POS 111, PSY 101

**9 Arts and Humanities**

LIT 205, PHI 112, Select one additional course from the  
Statewide General Education Core

**22 Electives**

- 3 ETH 224 Introduction to Chicano Studies
- 3 SOC 101 Introduction to Sociology 1: GT-SS3
- 3 SWK 100 Introduction to Social Work
- 3 SWK 201 Human Behavior in the Social Environment I
- 3 SWK 202 Human Behavior in the Social Environment II
- 3 SWK 205 Social Welfare in the US
- 3 SWK 222 Introduction to Social Work Practice
- 3 WST 200 Introduction to Women's Studies

# Associate of Science (AS) Degree

## Transfer Degree, College/University Parallel

The AS degree is designed for students who want to transfer to a four-year college or university to pursue a baccalaureate degree in the areas of natural science, physical science, mathematics, computer science, engineering, and health-related fields.

NOTE: This degree excludes majors in Early Childhood Education, Elementary Education, Business, Engineering, or Nursing.

Requirements for the AS Degree are as follows:

- Minimum of 60 semester hours of course work
- Minimum of 15 graded semester hours earned at PCC
- Minimum grade of "C" in all coursework for the degree

Consult with a PCC Arts & Sciences advisor or the PCC 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. Secure a current A.S. curriculum sheet for reference.

To earn an AS degree, you must complete at least 60 college-level credits, broken down as follows:

- 39 credits - Colorado Statewide Guaranteed Transfer Courses (GT Pathways)**
- 21 credits - Associate of Science electives**

*Developmental courses are not included in these credits.*

Developmental courses are courses in reading, mathematics, and English that one may be required to take before enrolling in college level courses.

### I. State Guaranteed Transfer Courses

You must take 39 credits from the following list:

#### 9 Credits Communication

Select 2 English courses and 1 Speech course: ENG 121, ENG 122, COM 115 or COM 125\*

#### 4 Credits Mathematics

Select from: MAT 121, MAT 122, MAT 125, MAT 201, MAT 202

#### 8 Credits Physical and Life Sciences

Select two courses (credits over 8 will be applied to the electives category): AST 101, AST 102, BIO 111, BIO 112, BIO 201, BIO 202, BIO 204, CHE 111, CHE 112, GEY 111, GEY 121, PHY 111, PHY 112, PHY 211, PHY 212

Note: Classroom laboratory components are necessary for these requirements.

\*COM 115 (Public Speaking) and COM 125 (Interpersonal Communications) are not State Guaranteed Transfer courses but a requirement of the Colorado Community College System. An approved Speech Communications course is required for the AA, AS, and AGS (Generalist) degrees.

### 9 Credits Social and Behavioral Sciences

Select 3 courses in at least 2 categories, one of which must be History:

Economics and Political Systems: ECO 201, ECO 202, POS 105, POS 111

Geography: GEO 105, GEO 106

History: HIS 101, HIS 102, HIS 111, HIS 112, HIS 201, HIS 202, HIS 247

Human Behavior and Social Systems: ANT 101, ANT 111, PSY 101, PSY 102, PSY 117, PSY 205, PSY 217, PSY 226, PSY 227, PSY 235, PSY 238, PSY 249, PSY 240, PSY 249, SOC 101, SOC 102, SOC 205, SOC 215, SOC 216, SOC 231, WST 200

### 9 Credits Arts and Humanities

Select 3 courses, with no more than 2 courses from any 1 category:

Arts: ART 110, ART 111, ART 112, ART 207, ITA 211, ITA 212, MUS 120, MUS 121, MUS 122, MUS 123, THE 105, THE 211, THE 212, SPA 211, SPA 212, GER 211, GER 212, FRE 211, FRE 212

Literature and Humanities: HUM 121, HUM 122, HUM 123, JOU 105, LIT 115, LIT 201, LIT 202, LIT 205, LIT 211, LIT 212, LIT 221, LIT 222, LIT 225

Ways of Thinking: PHI 111, PHI 112, PHI 113, PHI 114, PHI 214

### II. Associate of Science Electives

You must take 21 elective credits. You can meet your elective requirements as follows:

- Select all electives with advisor approval.
- Take any of the above courses that are not used to meet the Colorado Statewide Guaranteed Transfer Courses (GT Pathways).
- Complete any of the following Approved Elective Courses:

ANT **	JOU **
ART **	LIT **
AST **	MAT 120 or higher
BIO 105 and higher	MGD 133, MGD 221, MGD 233
CHE 101 and higher	MUS **
ECO 105 and higher	PED ** or DAN ** (up to 2 credits)
EDU **	PHI **
ENG 121 and higher	PHY **
ETH **	POS **
Foreign Languages 111 or higher	PSY ** except PSY 106 & PSY 110
GEO **	SCI 155 & SCI 156
GEY **	SOC **
HIS **	SPE **
HUM **	SWK **
HWE 100	THE **
	WST

\*\* You may select any course number from this course prefix area.



## Sequencing of Classes

For the AS Degree, there is no required course sequence except when classes have prerequisites. You can take classes in any order so long as you meet the prerequisites for each class. The course schedule below is just an example of how you might arrange your schedule over four semesters. *It is only a suggested sequencing; your own schedule might differ depending on your scheduling needs. You should work with your advisor each semester, prior to registering, to ensure that you are enrolling in the proper courses in the most logical sequence.*

Note: This sequence of courses assumes you are a full time student and that you have completed all required developmental courses. If these conditions do not apply, you may need more than four semesters to complete your degree.

## Sample Associate of Science Degree

**Note: This is only a sample. Do not use it to self advise.**

### 14 Semester One

- 3 ENG 121 English Composition I
- 4 BIO 111 Science of Biology or Physical/Life Sciences GT Pathways course
- 3 PSY 101 General Psychology I or Social/Behavioral Sciences GT Pathways course

### 17 Semester Two

- 3 ENG 122 English Composition II
- 4 MAT 125 Survey of Calculus or Math GT Pathways course
- 4 CHE 111 General College Chemistry I with lab or Physical/Life Sciences GT Pathways course
- 3 SOC 101 Introduction to Sociology I or Social/ Behavioral Sciences GT Pathways course
- 3 HIS 111 The World: Antiquity - 1500 GT Pathways course

### 15 Semester Three

- 3 LIT 115 Introduction to Literature or Arts/Humanities GT Pathways course
- 3 PHI 111 Introduction to Philosophy or Arts/Humanities GT Pathways course
- 3 COM 115 Public Speaking
- 3 PSY or SOC Social/Behavioral Sciences GT Pathways course
- 3 MUS 120 Music Appreciation or Arts/Humanities GT Pathways course

### 14 Semester Four

- 3 SCI Science elective (choose from options under AS electives above)
- 4 SCI Science elective (choose from options under AS electives above)
- 3 PSY Social/Behavioral Sciences elective (choose from options under AS electives above)
- 3 SOC Social/Behavioral Sciences elective (choose from options under AS above)
- 1 PED Physical Education or other approved elective from options under AS above

## Pre-Engineering

Roger Weitzel, Department Chair  
Associate of Science Degree  
TOTAL CREDITS 60

### 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. Completion of the Associate's Degree completes the first two years of an engineering Bachelor's Degree, and guarantees transfer at the junior level.

### 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 catalog and bulletin for specific course prerequisites.

### 39 General Education Core Requirements

- 9 Communications  
ENG 121, ENG 122, COM 115
- 4 Mathematics  
MAT 201
- 8 Physical and Life Sciences  
PHY 211 and PHY 212
- 9 Social and Behavioral Sciences  
Select 3 courses in at least 2 categories, one of which must be History: Economics & Political Systems, Geography, History, Human Behavior & Social Systems  
ECO 201, ECO 202, POS 105, POS 111, GEO 105, GEO 106, HIS 101, HIS 102, HIS 201, HIS 202, HIS 247, ANT 101, ANT 111, PSY 101, PSY 102, PSY 235, SOC 101, SOC 102
- 9 Art and Humanities  
Select 3 courses, with no more than 2 courses from any 1 category: Arts, Literature & Humanities, Ways of Thinking:  
ART 110, ART 111, ART 112, MUS 120, MUS 121, MUS 122, THE 105, THE 211, THE 212, SPA 211 and SPA 212, GER 211 and GER 212, ITA 211 and ITA 212, RUS 211 and RUS 212, JPN 211 and JPN 212, HUM 121, HUM 122, HUM 123, LIT 115, LIT 201, LIT 202, LIT 205, LIT 211, LIT 212, LIT 221, LIT 222, PHI 111, PHI 112, PHI 113

### 21 Guided Electives – see an academic advisor

- 5 CHE 111 General College Chemistry I
- 1 EGG 100 Introduction to Engineering
- 3 EGG 101 Engineering Graphics I
- 4 MAT 121 College Algebra
- 3 MAT 122 College Trigonometry
- 5 MAT 202 Calculus II

# Associate of General Studies (AGS) Degree

*Generalist Degree, Instituted Fall 2003*

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If your educational goals include a broad range of transfer and occupational interests, the AGS generalist degree allows you to pursue those interests without the constraints of specialization. However, transferability of this degree depends upon the courses you take and the requirements of the institution to which you transfer. If you complete the requirements listed below, you will receive an AGS degree with no major field specified on your transcript.

Requirements for the AGS degree include the following:

- a. Minimum of 60 semester hours of course work
- b. Cumulative GPA of 2.0 or higher
- c. No more than 30 credit hours of vocationally prefixed courses
- d. Minimum of 30 general education transferable credits. Fifteen of the 30 semester hours of general education must be in the Colorado Statewide Guaranteed Transfer Courses (GT Pathways) Curriculum
- e. Minimum of 15 graded semester hours earned at PCC in courses numbered 100 or higher.
- f. Minimum grade of "C" in the 30 credits of general education courses.

To earn an AGS generalist degree, you must complete at least 60 college-level credits, broken down as follows:

- I. **30 credits - General Education Courses**
- II. **30 credits - Vocational or Academic Electives**

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*Developmental courses are not included in these credits.*

Developmental courses are courses in reading, mathematics, and English that you may have to take before enrolling in college level courses.

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## I. General Education Courses

You must take 30 credits from the following list; 15 of those credits must be in Colorado Statewide Guaranteed Transfer Courses (GT Pathways) (marked with \*). Your advisor must approve all courses.

### 9 Credits Communications

Select 2 English courses and 1 Speech course: ENG 121\*, ENG 122\*, ENG 131, ENG 132, ENG 221, ENG 222, COM 115\*, COM 125\*, COM 216, COM 226

### 3 Credits Mathematics

Select from: MAT 107, MAT 108, MAT 120\*, MAT 121\*, MAT 122\*, MAT 125\*, MAT 135\*, MAT 155\*, MAT 156\*, MAT 201\*, MAT 202\*

### 3 Credits Physical and Life Sciences

Select from: AST 101\*, AST 102\*, BIO 105\*, BIO 106, BIO 111\*, BIO 112\*, BIO 143, BIO 201\*, BIO 202\*, BIO 204\*, CHE 101\*, CHE 102\*, CHE 104, CHE 105\*, CHE 111\*, CHE 112\*, GEY 111\*, GEY 121\*, GEY 135, HWE 100, MET 150\*, PHY 105\*, PHY 111\*, PHY 112\*, PHY 211\*, PHY 212\*, SCI 155\*, SCI 156\*

### 3 Credits Social and Behavioral Sciences

Select from: ANT 101\*, ANT 111\*, ANT 121, ANT 215, ECO 105, ECO 201\*, ECO 202\*, GEO 105\*, GEO 106\*, GEO 111, HIS 101\*, HIS 102\*, HIS 111\*, HIS 112\*, HIS 201\*, HIS 202\*, HIS 225, HIS 244, HIS 246, HIS 247\*, POS 105\*, POS 111\*, PSY 101\*, PSY 102\*, PSY 107, PSY 117\*, PSY 204, PSY 205\*, PSY 226\*, PSY 227\*, PSY 235\*, PSY 238\*, PSY 240\*, PSY 245, PSY 249\*, PSY 265, SOC 101\*, SOC 102\*, SOC 201, SOC 203, SOC 205\*, SOC 212, SOC 215\*, SOC 216\*, SOC 218, SOC 223, SOC 231\*, SOC 237, SOC 265, WST 200\*

### 3 Credits Arts and Humanities

Select from: ART 110\*, ART 111\*, ART 112\*, ART 114, ART 121, ART 122, ART 131, ART 132, ART 141, ART 142, ART 161, ART 162, ART 163, ART 207\*, ART 211, ART 212, ART 213, ART 244, ART 261, HUM 121\*, HUM 122\*, HUM 123\*, JOU 105\*, JOU 106, JOU 206, LIT 115\*, LIT 125, LIT 126, LIT 201\*, LIT 202\*, LIT 205\*, LIT 211\*, LIT 212\*, LIT 221\*, LIT 222\*, LIT 225\*, LIT 238, LIT 246, LIT 255, MUS 120\*, MUS 121\*, MUS 122\*, MUS 123\*, PHI 111\*, PHI 112\*, PHI 113\*, PHI 114\*, PHI 115, PHI 214\*, THE 105\*, THE 211\*, THE 212\*, ITA 111, ITA 211, ITA 212, FRE 111, FRE 112, FRE 211\*, FRE 212\*, GER 111, GER 112, GER 211\*, GER 212\*, SPA 111, SPA 112, SPA 211\*, SPA 212\*

### 9 Credits Selected General Education Electives

ANT **	HWE 100
ART **	JOU **
AST **	LIT **
BIO 105 and higher	MAT 107 or higher
CHE 100 and higher	MGD 133, MGD 221, MGD 233
ECE 101, ECE 102, ECE 205	MUS **
ECE 238, ECE 241	PED ** or DAN ** (up to 2credits)
ECO 105 and higher	PHI **
EDU **	PHY **
ENG 121 and higher	PSY ** except PSY 106 & PSY 110
ETH **	POS **
Foreign Languages 111 or higher	SCI 155 & SCI 156
GEO **	SOC **
GEY **	SPE **
HIS **	SWK **
HUM **	THE **
	WST

\*Colorado Statewide Guaranteed Transfer Courses (GT Pathways) Curriculum

\*\*You may select any course number from this prefix area.

## II. Vocational or Academic Electives

You must take 30 credits of approved electives. Select your electives from any vocational or academic course numbered at or above 100 which is offered by PCC.

# AGS Degree with Transfer Articulation Agreements

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The following AGS degrees are designed for students who have specialized in a technical pre-professional area and who plan to transfer into a baccalaureate degree program based on a written articulation agreement with a designated institution.

PCC offers six Technical Pre-Professional Transfer AGS degrees. Each degree is articulated to at least one Colorado four-year institution. Specific degree requirements are listed in this catalog for the following AGS degrees:

Computer Information Systems  
Criminal Justice  
Mass Communications

Minimum requirements for the Technical Pre-Professional Transfer AGS are as follows:

- a. Minimum of 60 semester hours of course work
- b. Cumulative GPA of 2.000 or higher (3.000 or higher for the Accounting and Business Management AGS transfer degrees)
- c. General education courses of 30 semester hours as determined by each curriculum
- d. Additional requirements of 30 semester hours as listed within the individual programs of study
- e. Minimum of 15 graded semester hours earned at PCC

## Computer Information Systems

Jennifer Sherman, Department Chair

Associate of General Studies (AGS) Degree

### 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.

### ASSOCIATE (AGS) DEGREE

#### Computer Information Systems

TOTAL CREDITS 62

#### 36 General Education Core Requirements

- 9 English/Speech  
ENG 121, ENG 122, COM 115
- 4 Mathematics  
MAT 121
- 8 Natural Science  
Choose from: AST 101, AST 102, BIO 105, BIO 111, BIO 112, CHE 101, CHE 102, CHE 111, CHE 112, GEY 111, GEY 121, PHY 105, PHY 111, PHY 112, PHY 211, PHY 212

- 9 Social and Behavioral Sciences  
Choose 9 credits from at least 2 different disciplines: ECO 201 and ECO 202 are recommended. ANT 101, ANT 111, GEO 105, HIS 101, HIS 102, HIS 201, HIS 202, POS 105, POS 111, PSY 101, PSY 102, SOC 101, SOC 102
- 6 Humanities  
Choose 6 credits from at least 2 different disciplines: ART 110, ART 111, ART 112, FRE 111, FRE 112, FRE 211, FRE 212, GER 111, GER 112, GER 211, GER 212, HUM 121, HUM 122, HUM 123, LIT 115, LIT 201, LIT 202, MUS 120, MUS 121, MUS 122, PHI 111, PHI 112, PHI 113, SPA 111, SPA 112, SPA 211, SPA 212, THE 105, THE 211, THE 212

#### 26 Core Requirements

- 3 CIS 115 Introduction to Computer Information Systems
- 3 CIS 118 Intro PC Applications
- 3 CIS 220 Fundamentals of UNIX
- 3 CIS 268 Systems Analysis and Design I
- 3 CNG 124 Networking I: Network+  
OR
- 3 ELT 202 Introduction to PC Servicing
- 3 CSC 116 Logic and Program Design
- 4 CSC 160 Computer Science I (JAVA)
- 4 CSC 161 Computer Science II (JAVA)

# Criminal Justice

Mary Kubeck, Department Chair

## Associate of General Studies (AGS) Degree+

### Career Opportunities

The CRJ 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 CRJ 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 a prior arrest and/or drug/alcohol history, you should discuss this history with a CRJ advisor prior to your admission into a criminal justice program. Neither PCC nor CRJ advisors will be held liable for your decision to continue in the program if you have such a history.

Your entrance into any CRJ course of study, or your subsequent graduation, is no guarantee, explicit or implied, that you are employable in the criminal justice system. Further, if you are cannot be placed and/or remain in the course CRJ 287, Cooperative Education Internship, after two good-faith attempts at placement, neither PCC nor its employees accept responsibility in respect to your fulfillment of the program.

Many criminal justice and related agencies require certain standards of prospective employees 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.

## ASSOCIATE (AGS) DEGREE

### Criminal Justice

TOTAL CREDITS 60

#### 39 General Education Core Requirements

- 9 English/Speech  
ENG 121, ENG 122, COM 115
- 4 Mathematics  
MAT 120
- 8 Natural Science  
Select two courses: AST 101, AST 102, BIO 105, BIO 111, BIO 112, CHE 101, CHE 102, CHE 111, CHE 112, GEY 111, GEY 121, PHY 105, PHY 111, PHY 112, PHY 211, PHY 212

- 9 Social and Behavioral Sciences  
Required: SOC 101 and one HIS course (HIS 101, 102, 201, or 202), and one other class from a different discipline (choose from ANT 101, ANT 111, ECO 201, ECO 202, GEO 105, POS 111, PSY 101, PSY 102, PSY 235)

- 9 Humanities  
Choose 9 credits from 2 different disciplines. Choose from: ART 110, ART 111, ART 112, FRE 111, FRE 112, FRE 211, FRE 212, GER 111, GER 112, GER 211, GER 212, HUM 121, HUM 122, HUM 123, LIT 115, LIT 201, LIT 202, MUS 120, MUS 121, MUS 122, PHI 111, PHI 112, PHI 113, SPA 111, SPA 112, SPA 211, SPA 212, THE 105, THE 211, THE 212

#### 21 Core Curriculum Requirements

- 3 CRJ 110 Intro to Criminal Justice
- 3 CRJ 111 Substantive Criminal Law
- 3 CRJ 112 Procedural Criminal Law
- 3 CRJ 135 Judicial Function
- 3 CRJ 145 Correctional Process
- 3 CRJ 210 Constitutional Law
- 3 CRJ 230 Criminology

# Mass Communications

Jennifer Sherman, Department Chair

## Associate of General Studies (AGS) Degree

### Career Opportunities

The Mass Communications program 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 non-linear 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 Mass Communications graduate to transfer to the Colorado State University-Pueblo Mass Communications Department with a junior standing.

Please see the certificate option under Broadcasting and Production Technology.

## ASSOCIATE (AGS) DEGREE

### Mass Communications

TOTAL CREDITS 60

#### 35 General Education Requirements

- 6 Communications  
ENG 121, ENG 122
- 3 Mathematics  
MAT 120, MAT 121, MAT 135
- 8 Physical and Life Sciences  
Select two courses from: AST 101, AST 102, BIO 105, BIO 111, BIO 112, CHE 101, CHE 102, CHE 111, CHE 112, GEY 111, GEY 121, PHY 111, PHY 112, PHY 211, PHY 212
- 9 Social and Behavioral Science  
Select 3 courses, in at least 2 categories, one of which must be history:  
Economics and Political Systems: ECO 201, ECO 202, POS 105, POS 111  
Geography: GEO 105  
History: HIS 101, HIS 102, HIS 201, HIS 202  
Human Behavior and Social Systems: ANT 101, ANT 111, PSY 101, PSY 102, SOC 101, SOC 102
- 9 Arts and Humanities  
Select 3 courses, with no more than 2 courses from any 1 category:  
Arts: ART 110, ART 111, ART 112, MUS 120, MUS 121, MUS 122, THE 105, THE 211, THE 212  
Literature and Humanities: HUM 121, HUM 122, HUM 123, LIT 115, LIT 201, LIT 202  
Ways of Thinking: PHI 111, PHI 112, PHI 113

#### 25 Core Curriculum Requirements

- 3 JOU 105 Introduction to Mass Media
- 3 JOU 206 Intermediate Newswriting and Editing
- 1 MGD 175 Special Topics: Media Lab
- 1 MGD 289 Capstone
- 2 RTV 100 Introduction to Telecommunications

Choose 15 credits below:

- 3 ART 143 Digital Photography I
- 3 CIS 167 Desktop Publishing
- 3 MAR 220 Principles of Advertising
- 3 MGD 102 Introduction to Multimedia
- 3 MGD 141 Web Design I
- 3 MGD 164 Digital Video Editing I
- 3 RTV 102 Beginning Television

\*Note: MGD 175 and RTV 100 will always be taken concurrently

# CCCS Guaranteed Transfer (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. 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 Pueblo Community College from an accredited post secondary institution, these courses will be accepted at Pueblo Community College.

## Introductory Writing Courses (GT-CO1)

ENG 121	English Composition I
ENG 122	English Composition II

## Mathematics (GT-MA1)

MAT 120	(AA) Mathematics for Liberal Arts
MAT 121	(AA & AS) College Algebra
MAT 122	(AA & AS) Trigonometry
MAT 123	(AA) Finite Mathematics
MAT 125	(AA & AS) Survey of Calculus
MAT 135	(AA) Introduction to Statistics
MAT 155	(AA) Integrated Math I
MAT 156	(AA) Integrated Math II
MAT 166	(AA) Pre-Calculus
MAT 201	(AA & AS) Calculus I
MAT 202	(AA & AS) Calculus II
MAT 203	(AA & AS) Calculus III
MAT 204	(AA & AS) Calculus II/with Engineering Applications
MAT 215	(AA & AS) Discrete Math
MAT 255	(AA & AS) Linear Algebra
MAT 261	(AA & AS) Differential Equations with Engineering Applications
MAT 265	(AA & AS) Differential Equations

## Arts (GT-AH1)

ART 110	Art Appreciation
ART 111	Art Hist Ancient to Midiev
ART 112	Art History Renaissance to 1900
ART 207	Art History - 1900 to Present
DAN 125	History of Dance
<b>FVT 100</b>	<b>Intro to Film Studies (NOT IN CCCNS DATABASE)</b>
MUS 120	Music Appreciation
MUS 121	Music History I
MUS 122	Music History II
MUS 123	Survey of World Music
THE 105	Theatre Appreciation
THE 211	Development of Theatre Greek - Renaissance
THE 212	Development of Theatre II

## Literature and Humanities (GT-AH2)

HUM 115	World Mythology
HUM 121	Humanities: Early Civ
HUM 122	Humanities: Medieval - Mod
HUM 123	Humanities: Modern World
LIT 115	Introduction to Literature I
LIT 201	World Literature to 1600
LIT 202	World Literature After 1600
LIT 205	Ethnic Literature
LIT 211	Survey of American Literature I
LIT 212	Survey of American Literature II
LIT 221	Survey of British Literature I
LIT 222	Survey of British Literature II
LIT 225	Introduction to Shakespeare
LIT 268	Celtic Literature

## Ways of Thinking (GT-AH3)

PHI 111	Introduction to Philosophy
PHI 112	Ethics
PHI 113	Logic
PHI 114	Comparative Religions
PHI 214	Philosophy of Religion

## Foreign Languages (GT-AH4)

FRE 211	French Language III
FRE 212	French Language IV
GER 211	German Language III
GER 212	German Language IV
ITA 211	Italian Language III
ITA 212	Italian Language IV
JPN 211	Japanese Language III
JPN 212	Japanese Language IV
RUS 211	Russian Language III
RUS 212	Russian Language IV
SPA 211	Spanish Language III
SPA 212	Spanish Language IV

## History (GT-HI1)

HIS 101	Western Civilization: Antiquity-1650
HIS 102	Western Civilization: 1650-Present
HIS 111	The World: Antiquity-1500
HIS 112	The World: 1500-Present
HIS 201	US History to Reconstruction
HIS 202	US History since Civil War
HIS 236	US History Since 1946
HIS 247	Contemporary World History
HIS 249	History of Islamic Civilization

## Economic & Political Systems (GT-SS1)

ECO 101	Economic of Social Issues
ECO 201	Principles of Macroeconomics
ECO 202	Principles of Microeconomics
ECO 245	Environmental Economics
POS 105	Introduction to Political Science
POS 111	American Government
POS 205	International Relations
POS 225	Comparative Government

## Geography (GT-SS2)

GEO 105	World Regional Geography
GEO 106	Human Geography

## Human Behavior & Social Systems (GT-SS3)

ANT 101	Cultural Anthropology
ANT 107	Introduction to Archaeology
ANT 111	Physical Anthropology
ANT 215	Indians of North America
ETH 200	Introduction to Ethnic Studies
JOU 105	Introduction to Mass Media
PSY 101	General Psychology I
PSY 102	General Psychology II
PSY 205	Psychology of Gender
PSY 217	Human Sexuality
PSY 226	Social Psychology
PSY 227	Psychology of Death and Dying
PSY 235	Human Growth & Development
PSY 238	Child Development
PSY 240	Health Psychology
PSY 249	Abnormal Psychology
SOC 101	Introduction to Sociology I
SOC 102	Introduction to Sociology II
SOC 205	Sociology of Family Dynamics

SOC 215 Contemporary Social Problems  
SOC 216 Sociology of Gender  
SOC 220 Sociology of Religion  
SOC 231 The Sociology of Deviant Behavior  
WST 200 Introduction to Women's Studies

**Physical & Life Sciences (GT-SC1)**

AST 101 (AA & AS) Astronomy I  
AST 102 (AA & AS) Astronomy II  
BIO 105 (AA) Science of Biology  
BIO 111 (AA & AS) General College Biology I with Lab  
BIO 112 (AA & AS) General College Biology II with Lab  
BIO 201 (AA & AS) Human Anatomy & Physiology I  
BIO 202 (AA & AS) Human Anatomy & Physiology II  
BIO 204 (AA & AS) Microbiology  
BIO 208 General College Microbiology  
BIO 220 (AA & AS) General Zoology  
BIO 221 Botany  
CHE 101 (AA) Introduction to Chemistry I  
CHE 102 (AA) Introduction to Chemistry II  
CHE 105 (AA) Chemistry in Context  
CHE 111 (AA & AS) General College Chemistry I  
CHE 112 (AA & AS) General College Chemistry II  
ENV 101 Introduction to Environmental Science  
GEO 111 Physical Geography-Landforms  
GEY 111 (AA & AS) Physical Geology-Landforms  
GEY 121 (AA & AS) Historical Geology  
MET 150 (AA & AS) General Meteorology  
NRE 251 General Oceanography 1  
PHY 105 (AA) Conceptual Physics  
PHY 111 (AA & AS) Physics: Algebra-Based I with Lab  
PHY 112 (AA & AS) Physics: Algebra-Based II with Lab  
PHY 211 (AA & AS) Physics: Calculus-Based I with Lab  
PHY 212 (AA & AS) Physics: Calculus Based II with Lab  
SCI 155 (AA) Integrated Science I – Physics and Chemistry  
SCI 156 (AA) Integrated Science II – Earth and Life Science

# Career and Technical Programs

## Directory of Associate of Applied Science (AAS) Degrees and Certificates

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### Associate of Applied Science (AAS) Degrees

#### *Occupational Degrees*

The AAS degree prepares you to enter a skilled and/or paraprofessional occupation or to upgrade/stabilize your employment. These programs are not intended for transfer to baccalaureate degree programs; however, certain courses may be accepted toward a bachelor's degree at other institutions. Consult an academic advisor for information about the transferability of specific courses.

Minimum requirements for an AAS degree include the following:

- a. Minimum of 60 semester hours of course work
- b. Cumulative GPA of 2.000 or higher
- c. 15 semester hours of general education courses
- d. Additional requirements of a minimum 45 semester hours as listed within the individual programs of study
- e. Minimum of 15 graded semester hours earned at PCC

Requirements for the AAS degrees are detailed in this section of the catalog. PCC offers AAS degrees in the following areas:

Accounting  
Applied Technology  
Auto Collision Repair  
Business Management  
    with Entrepreneurship Option  
    with Human Resources Option  
    with Retailing Sales Option  
Civil Engineering Technology  
Cosmetology  
Criminal Justice  
    with Adult and Juvenile Corrections Area of Emphasis  
    with Police Science Area of Emphasis  
Culinary Arts Management  
Culinary Arts Production  
Dental Assisting  
Dental Hygiene  
Digital Media  
Early Childhood Education  
Electromechanical Technology  
Emergency Medical Services  
Energy Maintenance Technology  
    with Solar Energy Option  
    with Wind Turbine Option

Engine Performance  
Fire Science Technology  
General Automotive Technology  
General Electronics Technology  
Interior Design  
Library Technician  
Local Area Networking (LAN)  
Machining Technology  
Manufacturing Engineering Technology  
Manufacturing Technology  
Medical Sonography  
Networking Security  
Nursing  
Occupational Therapy Assistant  
Office Management  
Physical Therapist Assistant  
Radiologic Technology  
Respiratory Care Practitioner  
Suspension/Drive Train  
Tourism, Conventions and Events  
Visual Communications  
Welding



# Certificates

PCC offers the following certificates. For more information, please contact the appropriate department chairperson.

- Accounting (Section)
  - Bookkeeping Option
  - QuickBooks Specialist Option
- Automotive Collision Technology (Section)
  - Automotive Customizing Option
  - Body Customizing Option
  - Collision Option
  - Custom Painting Option
  - Mechanical and Electrical Option
  - Nonstructural Option
  - Plastics Option
  - Refinishing Option
  - Structural Option
- Automotive Service Technology (Section)
  - Automotive Performance Option
  - Suspension/Drive Train Option
  - Engine and Electrical Option
  - Fuels and Emissions Option
  - Automatic Transmissions Option
  - Brakes Option
  - Manual Transmissions Removal and Replacement Option
  - Steering and Suspension Option
  - Preventative Maintenance Option
  - General Service Technician Option
- Broadcasting Media Production
  - with Broadcast Production I Option
  - with Broadcast Production II Option
  - with Film/Video Production I Option
  - with Film/Video Production II Option
- Broadcasting and Production Technology
- Business Education (Section)
  - Business Graphic & Web Communication Option
  - Creative Communications Specialist Option
- Business Management
  - with Business Fundamentals Option
  - with Entrepreneurship Option
- CISCO Networking
- Computer Information Systems (Section)
  - Forensic Computing Option
  - Information Assurance-Basic Option
  - Information Assurance-Advanced Option
  - MS Office Applications Option
  - Networking Option
  - Programming Option
  - Securities Option
- Construction Technologies (Section)
  - Built Green & Construction Option
  - Construction Essentials I Option
  - Construction Essentials II Option
  - Intro to Project Management Option
- Cosmetology (Section)
  - Cosmetology Option
  - Hairstylist Option
  - Manicurist Option
  - Esthetician Option
- Criminal Justice
  - Adult and Juvenile Corrections Option
  - Computer Forensics Option
  - Police Science Option
- Dental Assisting
- Diesel/Heavy Equipment Technology (Section)
  - Commercial Driver Training Option
  - Heavy Equipment Operator Option
- Early Childhood Education
  - with Director Option
  - with Early Childhood Teacher Option
  - with Infant Toddler Option
- Emergency Medical Services
  - with EMT Intermediate Option
  - with EMT Paramedic Option
- Energy Maintenance Technology
  - with Quick Start Option
  - with Solar Energy Option
  - with Wind Turbine Option
- Engineering Technology
  - with Rapid Production Development Option
  - with Surveying Option
  - with Architectural Design Option
- Fire Science Technology (Section)
  - Firefighter Academy Structural Option
- Hospitality Studies/Culinary Arts (Section)
  - Dining Service Option
  - Beginning Production and Baking Option
  - Intermediate Production Option
  - Beginning Tours and Events Option
  - Intermediate Tours and Events Option
- Industrial Electronics Technology
  - with Electromechanical Technology Option(s)
  - with Industrial Controls Technology Option
- Law Enforcement Academy
- Library Technician
- Machining Technology
  - with General Machining Option
- Massage Therapy
- Medical Assistant
- Medical Sonography
- Office Administration (Section)
  - Office Professional Option
  - Desktop Applications Specialist Option
  - Legal Office Specialist Option
  - Medical Coding and Billing
  - Medical Transcription Specialist Option
  - Medical Records, Insurance, Coding & Billing Specialist Option
- Polysomnography Technology
- Psychiatric Technician
- Small Business Management (Section)
  - Financial Analysis and Planning for the Small Business Option
  - Marketing and Risk Management for the Small Business Option
  - Marketing and Risk Management and E-Commerce for the Small Business Option
  - Records and Computerization for the Small Business Option
  - Small Business Planning Option

Visual Communications  
with Graphic Design Option  
with 3-D Rendering & Illustration Option  
with Digital Multimedia Option

Welding

Welding Technologies (Section)  
Structural Welder Option  
Fitter or Combination Welder Option  
Low Pressure Pipe Welder Option  
High Pressure Pipe Welder Option

Wildland Firefighter

Welding (Section)

Structural Welding Intermediate Option  
Structural Welding Introduction Option

**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.**

Business Education (Section)

Creative Communications Specialist

Computer Information Systems (Section)

MS Office Applications Option  
Networking Option  
Programming Option  
Securities Option

Criminal Justice (Section)

Career Enhancement: Corrections/Adult Option  
Career Enhancement: Corrections/Juvenile Option  
Career Enhancement: Criminal Justice Core Option  
Career Enhancement: Criminal Justice Process Option  
Career Enhancement: Criminal Justice System Option

Dental Hygiene (Section)

Local Anesthesia and Nitrous Oxide/Oxygen Sedation Option

Digital Media (Section)

Animation Option  
Digital Video Option  
Graphic Design Option  
Web Technologies Option  
Web Design Option

Emergency Medical Services (Section)

EMT Basic Option

Engineering Technology (Section)

Mechanical CAD Option  
Civil CAD Option  
Construction Basics Option

Fire Science Technology (Section)

Basic Fire Science Option  
Driver Operator Option  
Fire Investigator I Option  
Firefighter I Option  
Firefighter II Option  
Fire Officer I Option  
Fire Prevention & Public Education Option  
Fire Service Special Operations Option

Vehicle Extrication Option

Machining Technology (Section)

CNC Option  
CAD/CAM Option

Medical Assistant (Section)

Front Office Medical Assistant Option

Med Prep (Section)

Med Prep for Nursing Assistant Option  
Nursing Aide Option

Nursing Aide

Office Administration (Section)

Customer Service Academy Option  
Personal Computer Specialist Option

Pharmacy Technician

Phlebotomy Technician

# Associate of Applied Science (AAS) Degree and Certificate Programs

## *Occupational Degrees and Certificate*

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## Accounting

Joe Easton, Department Chair

### Associate of Applied Science (AAS) Degree

#### Career Opportunities

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

#### Program Description

This program offers you a comprehensive understanding of the theory and practice of modern accounting. It places particular emphasis on logical reasoning, enabling you to solve accounting problems and to make sound accounting policy decisions. It also teaches you to use computer software related to the accounting profession. You will learn to use state-of-the-art equipment through industry-standard instructional materials. The required occupational experience provides you the opportunity to obtain valuable on-the-job training. If you are pursuing bachelor's degree or a career as a Certified Public Accountant (CPA), check with your advisor concerning the transfer of courses to four-year colleges.

Note: Students interested in a bachelor's degree in Accounting, the Pueblo Community College Pathway of Study is the AA degree in Business Management.

### ASSOCIATE (AAS) DEGREE

#### Accounting

TOTAL CREDITS 67

#### 19 General Education Requirements

- 3 ECO 201 Principles of Macroeconomics
- 3 ENG 121 English Composition I
- 3 ENG 131 Technical Writing I
- 3 MAT 112 Financial Mathematics  
OR
- 4 MAT 121 College Algebra
- 3 COM 115 Public Speaking
- 3 Natural Science Elective

#### 31 Core Curriculum Requirements

- 3 ACC 115 Payroll Accounting
- 4 ACC 121 Accounting Principles I
- 4 ACC 122 Accounting Principles II
- 3 ACC 131 Income Tax  
OR
- 3 ACC 216 Governmental and Not-For-Profit Accounting
- 4 ACC 211 Intermediate Accounting I
- 4 ACC 212 Intermediate Accounting II
- 3 ACC 226 Cost Accounting
- 3 ACC 245 Computerized Accounting with a Professional Package
- 3 ACC 287 Cooperative Education

#### 18 Related Requirements

- 3 BUS 115 Introduction to Business
- 3 BUS 216 Legal Environment of Business
- 3 BUS 226 Business Statistics
- 3 CIS 118 Intro to PC Applications
- 3 CIS 218 Advanced PC Applications
- 3 MAN 226 Principles of Management

### CERTIFICATE PROGRAMS

TOTAL CREDITS 6-29

#### Bookkeeping

##### 3 General Requirement

- 3 MAT 112 Financial Mathematics  
OR
- 4 MAT 121 College Algebra

##### 26 Core Requirement

- 3 ACC 115 Payroll Accounting
- 3 ACC 121 Accounting Principles I
- 4 ACC 122 Accounting Principles II
- 3 ACC 245 Computerized Accounting with a Professional Package
- 3 BUS 115 Introduction to Business
- 3 BUS 216 Legal Environment of Business
- 3 BUS 226 Business Statistics
- 3 CIS 118 Intro to PC Application

##### 6 QuickBooks Specialist

- 3 ACC 125 Computerized Accounting
- 3 ACC 225 Advanced Computerized Accounting

# Applied Technology

Jennifer Sherman, Department Chair

## Associate of Applied Science (AAS)

### 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.

## ASSOCIATE (AAS) DEGREE

### Applied Technology

TOTAL CREDITS 60

#### 42-45 AVTS Certificate

#### 15-18 General Education Courses

- 3 English/Speech
- 3 Humanities
- 3 Mathematics
- 3 Natural Science
- 3 Social Science

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

# Automotive Collision Technology

Jim Torres, Department Chair

## Associate of Applied Science (AAS) Degree Certificates and Mini-Certificates

### Career Opportunities

The Automotive Collision and Refinishing Technology program prepares you for a career in structural and non-structural collision repair, refinishing, estimating, upholstery, paintless dent repair, glass installing, custom body, and refinishing.

### Program Description

This program teaches you to remove and replace exterior and interior panels, glass, and hardware; straighten frames and unibodies; weld panels and structural parts; repair electrical, brakes, suspension, and drive components damaged in a collision; estimate collision repair costs; repair plastics and fiberglass; and customize the body and finish of a vehicle.

The program is certified by the National Automotive Technicians Education Foundation (NATEF). You can receive I-CAR (Inter-Industry Conference on Auto Collision Repair) Gold Class points for completing most courses if you earn degree-of-trade competency in each unit. We encourage you to take the Automotive Service Excellence (ASE) certification.

As a student in this program, you will become a member of the "Skills USA" club and participate in a number of leadership activities and competitions.

Students will participate in a performance program in which they earn the tools needed to enter the workforce.

### Program Requirements

#### Entrance requirements:

Students must pass the "Ability to Benefit" assessment.

## ASSOCIATE (AAS) DEGREE

### Auto Collision Repair

TOTAL CREDITS 74

#### 19 General Education Requirements

- 3 ENG 121 English Composition I
- 3 MAT 107 Career Math
- 4 PHY 105 Conceptual Physics
- 3 PSY 101 General Psychology I
- 3 COM 115 Public Speaking
- 3 Guided Elective

#### 55 Core Curriculum Requirements

- 2 ACT 110 Safety in Collision Repair
- 3 ACT 111 Metal Welding and Cutting I
- 3 ACT 122 Panel Repair and Replacements
- 3 ACT 123 Metal Finishing and Body Filling
- 3 ACT 131 Structural Damage Diagnosis
- 3 ACT 132 Structural Damage Repair
- 1 ACT 141 Refinishing Safety
- 2 ACT 142 Surface Preparation I
- 2 ACT 143 Spray Equipment Operation
- 2 ACT 144 Refinishing I
- 1 ACT 151 Plastics and Adhesives I
- 1 ACT 180 Automotive Collision Repair Internship Level I

- 1 ACT 181 Automotive Collision Repair Level II Internship
- 3 ACT 205 Estimating and Shop Management
- 2 ACT 211 Metal Welding and Cutting II
- 4 ACT 220 Structural Repair II
- 2 ACT 221 Moveable Glass and Hardware
- 3 ACT 231 Advanced Structural Damage Diagnosis and Repair
- 2 ACT 232 Fixed Glass Repair
- 3 ACT 241 Paint Defects
- 2 ACT 242 Surface Preparation II
- 2 ACT 243 Refinishing II
- 2 ACT 244 Final Detail
- 1 ACT 251 Plastics and Adhesives II
- 1 ACT 280 Automotive Collision Repair Internship III
- 1 ACT 284 Automotive Collision Repair Internship IV

## CERTIFICATE PROGRAMS

TOTAL CREDITS 16-57

### 42 Certificate – Automotive Customizing:

- 3 ACT 160 Custom Painting
- 3 ACT 161 Automotive Graphics and Design
- 3 ACT 162 Automotive Air Brushing and Murals
- 3 ACT 163 Automotive Special Effects and Refinishing
- 3 ACT 165 Automotive Body Customizing I
- 3 ACT 166 Automotive Body Customizing II
- 3 ACT 167 Automotive Body Customizing III
- 3 UPH 100 Basic Upholstery Techniques
- 3 UPH 101 Auto Upholstery I
- 3 UPH 102 Auto Upholstery II
- 3 UPH 103 Auto Upholstery III
- 3 UPH 107 Advanced Upholstery Techniques I
- 3 UPH 108 Advanced Upholstery Techniques II
- 3 UPH 111 Upholstery Techniques II

### 9 Certificate BC – Body Customizing:

- 3 ACT 165 Automotive Body Customizing I
- 3 ACT 166 Automotive Body Customizing II
- 3 ACT 167 Automotive Body Customizing III

### 57 Certificate – C - Collision

- 2 ACT 110 Safety in Collision Repair
- 3 ACT 111 Metal Welding and Cutting I
- 3 ACT 122 Panel Repair and Replacements
- 3 ACT 123 Metal Finishing and Body Filling
- 3 ACT 131 Structural Damage Diagnosis
- 3 ACT 132 Structural Damage Repair
- 1 ACT 151 Plastics and Adhesives I
- 7 ACT 170 Automotive Collision Technology Lab Experiences
- 1 ACT 180 Automotive Collision Repair Internship Level I
- 3 ACT 205 Estimating and Shop Management
- 2 ACT 211 Metal Welding and Cutting II
- 4 ACT 220 Structural Repair II
- 2 ACT 221 Moveable Glass and Hardware
- 3 ACT 231 Advanced Structural Damage Diagnosis and Repair
- 2 ACT 232 Fixed Glass Repair
- 1 ACT 251 Plastics and Adhesives II
- 1 ACT 266 Restraint Systems
- 1 ACT 280 Automotive Collision Repair Level III Internship
- 1 ACT 284 Automotive Collision Repair Internship Level IV
- 3 ASE 110 Brakes I
- 2 ASE 120 Basic Automotive Electricity
- 3 ASE 140 Suspension and Steering I
- 3 ASE 163 Automotive Component Removal and Replacement

### 12 Certificate CP – Custom Painting:

- 3 ACT 160 Custom Painting
- 3 ACT 161 Automotive Graphics and Designs
- 3 ACT 162 Automotive Air Brushing and Murals
- 3 ACT 163 Automotive Special Effects and Refinishing

### 16 Certificate ME – Mechanical and Electrical

- 3 ASE 110 Brakes I
- 2 ASE 120 Basic Automotive Electricity
- 3 ASE 140 Suspension and Steering I
- 3 ASE 163 Automotive Component Removal and Replacement
- 3 ACT 205 Estimating and Shop Management
- 1 ACT 266 Restraint Systems
- 1 ACT 284 Automotive Collision Repair Internship Level IV

### 16 Certificate NS – Nonstructural:

- 2 ACT 110 Safety in Collision Repair
- 3 ACT 111 Metal Welding and Cutting I
- 3 ACT 122 Panel Repair and Replacements
- 3 ACT 123 Metal Finishing and Body Filling
- 1 ACT 180 Automotive Collision Repair Internship Level I
- 2 ACT 221 Moveable Glass and Hardware
- 2 ACT 232 Fixed Glass Repair

### 9 Certificate PR – Plastics:

- 1 ACT 151 Plastics and Adhesives
- 7 ACT 170 Automotive Collision Technology Lab Experiences I
- 1 ACT 251 Plastics and Adhesives II

### 29 Certificate R – Refinishing:

- 1 ACT 141 Refinishing Safety
- 2 ACT 142 Surface Preparation I
- 2 ACT 143 Spray Equipment Operation
- 2 ACT 144 Refinishing I
- 3 ACT 160 Custom Painting
- 3 ACT 161 Automotive Graphics and Designs
- 3 ACT 162 Automotive Air Brushing and Murals
- 3 ACT 163 Automotive Special Effects and Refinishing
- 1 ACT 181 Automotive Collision Repair Level II Internship
- 3 ACT 241 Paint Defects
- 2 ACT 242 Surface Preparation II
- 2 ACT 243 Refinishing II
- 2 ACT 244 Final Detail

### 17 Certificate RF – Refinishing:

- 1 ACT 141 Refinishing Safety
- 2 ACT 142 Surface Preparation I
- 2 ACT 143 Spray Equipment Operation
- 2 ACT 144 Refinishing I
- 1 ACT 181 Automotive Collision Repair Level II Internship
- 3 ACT 241 Paint Defects
- 2 ACT 242 Surface Preparation II
- 2 ACT 243 Refinishing II
- 2 ACT 244 Final Detail

### 16 Certificate ST – Structural:

- 3 ACT 131 Structural Damage Diagnosis
- 3 ACT 132 Structural Damage Repair
- 2 ACT 211 Metal Welding and Cutting II
- 4 ACT 220 Structural Repair II
- 3 ACT 231 Advanced Structural Damage Diagnosis and Repair
- 1 ACT 280 Automotive Collision Repair Level III Internship

# Automotive Service Technology

Robert Maez, Department Chair

Associate of Applied Science (AAS) Degree

Certificates and Mini-Certificates

## 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 offer Automotive Service courses for high school students at Cañon City High School. We also offer Automotive Services courses for students in the Advanced Vocational Education Partnership (AVEP) Program at Pueblo Community College and at East High School. 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:*

Pass the "Ability to Benefit" assessment.

## ASSOCIATE (AAS) DEGREE Engine Performance

TOTAL CREDITS 65

### 16 Engine Performance General Education Requirements

- 3 ENG 131 Technical Writing I
- 3 MAT 107 Career Math
- 4 PHY 105 Conceptual Physics
- 3 PSY 101 General Psychology I
- 3 COM 125 Interpersonal communications

### 49 Core Requirements

- 2 ASE 120 Basic Automotive Electricity
- 2 ASE 123 Automotive Battery, Starting, and Charging Systems
- 2 ASE 124 Advanced Ignition System Diagnosis & Repair
- 2 ASE 130 General Engine Diagnosis
- 2 ASE 132 Ignition System Diagnosis and Repair
- 2 ASE 134 Automotive Emissions
- 5 ASE 161 Engine, Disassembly Diagnosis and Assembly
- 2 ASE 220 Specialized Electronics Training
- 2 ASE 231 Automotive Computers
- 4 ASE 233 Fuel Injection and Exhaust Systems
- 2 ASE 234 Advanced Automotive Emissions
- 1 ASE 235 Drivability Diagnosis
- 4 ASE 236 Advanced Drivability Diagnosis/Repair
- 2 ASE 260 Advanced Engine Diagnosis
- 1 ASE 280 Internship: Basic Electrical and Engine Performance

- 1 ASE 283 Internship: Advanced Electrical and Engine Performance
- 4 ASE 170 Laboratory Experience I
- 4 ASE 171 Laboratory Experience II
- 5 ASE 265 Automotive Heating and Air Conditioning

## ASSOCIATE (AAS) DEGREE General Automotive Technology

TOTAL CREDITS 69

### 16 General Education Courses

- 3 COM 125 Interpersonal Communication
- 3 ENG 131 Technical Writing I
- 3 MAT 107 Career Math
- 4 PHY 105 Conceptual Physics
- 3 PSY 101 General Psychology

### 53 Core Requirements

- 3 ASE 110 Brakes I
- 2 ASE 120 Basic Automotive Electricity
- 2 ASE 123 Automotive Battery, Starting, and Charging Systems
- 2 ASE 130 General Engine Diagnosis
- 2 ASE 132 Ignition System Diagnosis and Repair
- 3 ASE 140 Suspension and Steering I
- 2 ASE 151 Automotive Manual Transmissions/Transaxles and Clutches
- 2 ASE 152 Differentials and 4WD/AWD Service
- 1 ASE 160 Automotive Engine Removal and Installation
- 3 ASE 163 Automotive Component Removal and Replacement
- 4 ASE 170 Laboratory Experience I
- 4 ASE 171 Laboratory Experience II
- 3 ASE 210 Brakes II
- 2 ASE 220 Specialized Electronics Train
- 2 ASE 231 Automotive Computers
- 4 ASE 233 Fuel Injection and Exhaust Systems
- 1 ASE 235 Drivability Diagnosis
- 3 ASE 240 Suspension and Steering II
- 1 ASE 250 Automatic Transmission/Transaxle Service
- 5 ASE 265 Automotive Heating and Air Conditioning
- 1 ASE 281 Internship: Basic Heavy Duty and Power Train
- 1 ASE 282 Internship: General

## ASSOCIATE (AAS) DEGREE Suspension Drive Train

TOTAL CREDITS 66

### 16 General Education Requirements

- 3 ENG 131 Technical Writing I
- 3 MAT 107 Career Math
- 4 PHY 105 Conceptual Physics
- 3 PSY 101 General Psychology I
- 3 COM 125 Interpersonal Communications

### 50 Core Requirements

- 3 ASE 110 Brakes I
- 2 ASE 120 Basic Automotive Electricity
- 3 ASE 140 Suspension and Steering I
- 2 ASE 151 Automotive Manual Transmission/Transaxles and Clutches
- 2 ASE 152 Differentials and 4WD/AWD Service
- 1 ASE 160 Automotive Engine Removal and Installation
- 3 ASE 163 Automotive Component Removal and Replacement
- 2 ASE 165 Automotive Machining
- 2 ASE 170 Laboratory Experience I
- 3 ASE 172 Laboratory Experience III

- 3 ASE 210 Brakes II
- 2 ASE 220 Specialized Electronics Training
- 2 ASE 231 Automotive Computers
- 3 ASE 240 Suspension and Steering II
- 1 ASE 250 Automatic Transmissions/Transaxle Service
- 5 ASE 251 Automatic Transmission/Transaxle Diagnosis and Assemblies
- 2 ASE 252 Advanced Automatic Transmissions/Transaxles
- 2 ASE 253 Advanced Manual Transmission/Transaxles
- 5 ASE 265 Automotive Heating and Air Conditioning
- 1 ASE 281 Internship: Basic Heavy Duty and Power Train
- 1 ASE 282 Internship: General

## CERTIFICATE PROGRAMS

### Automotive Performance

TOTAL CREDITS 8-49

#### 49 Core Requirements

- 2 ASE 120 Basic Automotive Electricity
- 2 ASE 123 Automotive Battery, Starting, and Charging Systems
- 2 ASE 124 Advanced Ignition System Diagnosis and Repair
- 2 ASE 130 General Engine Diagnosis
- 2 ASE 132 Ignition System Diagnosis and Repair
- 2 ASE 134 Automotive Emissions
- 5 ASE 161 Engine, Disassembly Diagnosis and Assembly
- 4 ASE 170 Laboratory Experience I
- 4 ASE 171 Laboratory Experience II
- 2 ASE 220 Specialized Electronics Training
- 2 ASE 231 Automotive Computers
- 4 ASE 233 Fuel Injection and Exhaust Systems
- 2 ASE 234 Advanced Automotive Emissions
- 1 ASE 235 Drivability Diagnosis
- 4 ASE 236 Advanced Drivability Diagnosis/Repair
- 2 ASE 260 Advanced Engine Diagnosis
- 5 ASE 265 Automotive Heating and Air Conditioning
- 1 ASE 280 Internship: Basic Electrical and Engine Performance
- 1 ASE 283 Internship: Advanced Electrical and Engine Performance

#### 45 Option B: Suspension and Drive Train Certificate

- 3 ASE 110 Brakes I
- 2 ASE 120 Basic Automotive Electricity
- 3 ASE 140 Suspension and Steering I
- 2 ASE 151 Automotive Manual Transmission/Transaxles and Clutches
- 2 ASE 152 Differentials and 4WD/AWD Service
- 1 ASE 160 Automotive Engine Removal and Installation
- 3 ASE 163 Automotive Component Removal and Replacement
- 2 ASE 165 Automotive Machining
- 2 ASE 170 Laboratory Experience I
- 3 ASE 172 Laboratory Experience III
- 3 ASE 210 Brakes II
- 2 ASE 220 Specialized Electronics Training
- 2 ASE 231 Automotive Computers
- 3 ASE 240 Suspension and Steering II
- 1 ASE 250 Automatic Transmission/Transaxle Service
- 5 ASE 251 Automatic Transmission/Transaxle Diagnosis and Assemblies
- 2 ASE 252 Advanced Automatic Transmissions/ Transaxles
- 2 ASE 253 Advanced Manual Transmission/Transaxles
- 1 ASE 281 Internship: Basic Heavy Duty and Power Train
- 1 ASE 282 Internship: General

#### 17 Option C: Engine and Electrical Certificate

- 2 ASE 120 Basic Automotive Electricity
- 2 ASE 123 Automotive Battery, Starting, and Charging Systems
- 2 ASE 130 General Engine Diagnosis
- 2 ASE 132 Ignition System Diagnosis and Repair
- 5 ASE 161 Engine, Disassembly Diagnosis and Assembly
- 2 ASE 124 Advanced Ignition System Diagnosis and Repair
- 2 ASE 260 Advance Engine Diagnosis

#### 17 Option D: Fuels and Emissions Certificate

- 2 ASE 134 Automotive Emissions
- 2 ASE 220 Specialized Electronics Training
- 2 ASE 231 Automotive Computers
- 4 ASE 233 Fuel Injection and Exhaust Systems
- 1 ASE 235 Drivability Diagnosis
- 2 ASE 234 Advanced Automotive Emissions
- 4 ASE 236 Advanced Drivability Diagnosis/Repair

#### 12 Option E: Automatic Transmissions Certificate

- 1 ASE 250 Automatic Transmission/Transaxle Service
- 5 ASE 251 Automatic Transmission/Transaxle Diagnosis and Assemblies
- 2 ASE 252 Advanced Automatic Transmissions/Transaxles
- 1 ASE 280 Internship: Basic Electrical and Engine Performance
- 3 ASE 172 Laboratory Experience III

#### 14 Option F: Brakes Certificate

- 3 ASE 110 Brakes I
- 2 ASE 165 Automotive Machining
- 3 ASE 210 Brakes II
- 1 ASE 282 Internship: General
- 5 ASE 265 Automotive Heating and Air Conditioning

#### 11 Option G: Manual Transmissions/Removal and Replacement Certificate

- 2 ASE 151 Automotive Manual Transmission/Transaxles and Clutches
- 2 ASE 152 Differentials and 4WD/AWD Service
- 1 ASE 160 Automotive Engine Removal and Installation
- 3 ASE 163 Automotive Component Removal and Replacement
- 2 ASE 253 Advanced Manual Transmission/Transaxles
- 1 ASE 281 Internship: Basic Heavy Duty and Power Train

#### 9 Option H: Steering and Suspension Certificate

- 3 ASE 140 Suspension and Steering I
- 3 ASE 240 Suspension and Steering II
- 2 ASE 170 Laboratory Experience I
- 1 ASE 283 Internship: Advanced Electrical and Engine Performance

#### 8 Option I: Preventative Maintenance Certificate

- 4 ASE 170 Laboratory Experience I
- 4 ASE 171 Laboratory Experience II

## General Service Technician

TOTAL CREDITS 8-14

### 29 Core Requirements

- 2 ASE 101 Auto Shop Orientation
- 2 ASE 102 Introduction to the Automotive Shop
- 3 ASE 110 Automotive Brakes I
- 2 ASE 120 Basic Automotive Electricity
- 2 ASE 123 Automotive Battery, Starting, & Charging Systems
- 2 ASE 130 General Engine Diagnosis
- 2 ASE 132 Ignition System Diagnostic & Repair
- 3 ASE 140 Suspension and Steering I
- 2 ASE 151 Automotive Manual Transmission/Transaxles & Clutches
- 3 ASE 163 Automotive Component Removal and Replacement
- 2 ASE 231 Automotive Computers
- 1 ASE 250 Automatic Transmissions & Transaxle Service
- 3 ASE 275 Special Topics

## Broadcasting Media Production

Jennifer Sherman, Department Chair  
Certificate

### Program Description

The Broadcast Media Production Program prepares individuals to communicate dramatic information, ideas, moods, and feelings through the making and producing of films and videos. Classes include instruction in theory of film, film technology and equipment operation, film production, film directing, film editing, cinematographic art, film audio, techniques for making specific types of films and/or videos, the use of computer applications to record or enhance images, audio or effect and the planning and management of film/video operations.

### Broadcast Media Production

TOTAL CREDITS 62

- 3 FVM 155 Writing the Short Script
- 3 FVM 160 Video Post Production I
- 3 FVM 164 Introduction to Digital Editing
- 3 FVM 185 Documentary Film & Video
- 3 FVM 200 Video Production II
- 3 FVM 205 Film/ Video Camera
- 3 FVM 206 Film/Video Lighting & Grip
- 3 FVM 208 Sound for Film/Video
- 3 FVM 209 Production Management Techniques
- 3 FVM 215 Video Post Production II
- 3 FVM 265 DVD Authoring & DVD Studio Production
- 3 FVM 275 Special Topics
- 3 RTV 102 Beginning Television
- 3 RTV 103 Writing for TV and Radio
- 3 RTV 108 Principles of Audio
- 4 RTV 182 Internship Radio Sta./Audio Production
- 4 RTV 183 Internship - TV Studio/Video Production Co.
- 3 RTV 269 Video Field Production
- 6 RTV 275 Special Topics

### 15 Broadcast Production I

- 3 FVM 164 Introduction to Digital Editing
- 3 RTV 102 Beginning Television
- 3 RTV 103 Writing for TV and Radio
- 3 RTV 108 Principles of Audio
- 3 RTV 269 Video Field Production

### 16 Broadcast Production II

- 3 FVM 155 Writing the Short Script
- 3 FVM 160 Video Post Production I
- 3 FVM 205 Film/ Video Camera
- 3 FVM 275 Special Topics
- 4 RTV 183 Internship - TV Studio/Video Production Co.

### 15 Film/Video Production I

- 3 FVM 185 Documentary Film & Video
- 3 FVM 206 Film/Video Lighting & Grip
- 3 FVM 208 Sound for Film/Video
- 3 FVM 215 Video Post Production II
- 3 FVM 265 DVD Authoring & DVD Studio Production

### 16 Film/Video Production II

- 3 FVM 200 Video Production II
- 3 FVM 209 Production Management Techniques
- 4 RTV 182 Internship Radio Sta./Audio Production
- 6 RTV 275 Special Topics



# Broadcasting and Production Technology

Jennifer Sherman, Department Chair  
Certificate

## Career Opportunities

The Broadcasting and Production Technology program prepares you for an entry-level career in broadcasting production. You will be prepared to work as a camera operator in a television studio or as a videographer in a mobile setting.

## Program Description

This program teaches you to apply the concepts and principles of broadcasting production in the changing field of multi-media production. The certificate program prepares you to immediately enter the career field. It emphasizes practical application of the concepts and principles of broadcasting production. A fully-equipped video control room and a mobile production truck provide multi-camera working classrooms. An editing lab offers a wealth of experience you can apply in the broadcasting field.

Note: You can use this certificate to easily segue into the AGS degree in Mass Communications, in which you can select broadcasting as an emphasis in a transfer degree. Students interested in transferring to a baccalaureate program in Mass Communications should refer to the Transfer Degree section of this catalog.

## CERTIFICATE PROGRAM

### Broadcasting and Production Technology

TOTAL CREDITS 30

#### 30 Broadcasting and Production Technology Certificate Requirements

- 3 JOU 105 Introduction to Mass Media
- 3 MAR 220 Principles of Advertising
- 3 MGD 143 Web Motion Graphic Design I
- 3 MGD 164 Digital Video Editing I
- 3 MGD 175 Special Topics: Introduction to Electronic Media
- 3 MGD 275 Special Topics: Media Lab
- 3 ART 143 Digital Photography I
- 3 RTV 102 Beginning Television
- 3 RTV 108 Principles of Audio
- 3 RTV 175 Special Topics: Basic Video Production

# Business Education

Joe Easton, Department Chair  
Certificate

## Program Description

Business Education offers certificate programs that prepare individuals for gainful employment in business occupations. The program provides a comprehensive background that prepares the student for a variety of business occupations. Students without previous keyboarding, mathematics, or English background may be required to take entry-level courses in addition to the listed program requirements.

The Business Graphic and Web Communication Certificates prepares students to design a business's communications with its customers in print as well as on the Internet with web pages. *Prerequisites: either pass a competency test or take classes in Beginning Keyboarding and Beginning Computers*

Creative Communications Specialist Certificate provides the basics of producing business and web materials for businesses.

## Business Graphic & Web Communication

TOTAL CREDIT HOURS 36

### 27 Core Requirements

- 2 BTE 287 Cooperative Education Internship
- 3 BUS 217 Business Communication & Reporting Writing
- 3 CIS 129 Advanced Windows
- 3 CIS 167 Desktop Publishing
- 1 ENG 119 Writing Resumes
- 3 MAR 160 Customer Service
- 3 MGD 111 Adobe Photoshop I
- 3 MGD 112 Adobe Illustrator I
- 3 MGD 141 Web Design
- 3 MGD 241 Web Design II

### 9 Electives

- 1 BTE 157 Leadership
- 3 CIS 104 Word Processing with Assistive Technology
- 1 CIS 107 Voice Recognition: Dragon
- 3 CIS 118 Introduction to Computers
- 5 CNG 127 IT Essentials I: PC Hardware & Software
- 1 SBM 101 Starting a Small Business

## Creative Communications Specialist

TOTAL CREDIT HOURS 15

### 15 Core Requirements

- 3 CIS 167 Desktop Publishing
- 3 MGD 111 Adobe Photoshop I
- 3 MGD 112 Adobe Illustrator I
- 3 MGD 141 Web Design I
- 3 MGD 241 Web Design II

# Business Management

Joe Easton, Department Chair

## Associate of Applied Science (AAS) Degree Certificates and Mini-Certificate

### 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 Associate of Applied Science (AAS) Degree teaches you the basic skills needed to qualify for business management positions, with an emphasis on practical application of the concepts and principles of management. In addition to lecture and group-participation teaching techniques, the Business Management Department relies on guest speakers from the business world to describe real-world applications of academic concepts.

The Business Management Certificate program teaches you job-performance skills related to careers in business. It is a short, intensive course of study which prepares you for entry-level work. You can apply all course work for this certificate to the AAS Degree in Business Management. 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.

The Entrepreneurship Certificate program prepares you to open your own business. The certificate comprises six classes that introduce you to the fundamentals of sales, marketing, management, and accounting. You can apply all course work for this certificate to the AAS Degree in Business Management.

The Real Estate Mini-Certificate prepares you to obtain the Colorado Real Estate License so you can pursue a career in the real estate field. The most popular career choice is real estate sales, but you can also work as a property manager, title researcher, or loan document closer. The six real estate classes total 168 classroom hours to meet Colorado requirements; they cover Real Estate Law, Contracts, Regulations, Closings, Recordkeeping, and Practical Applications. To earn the Real Estate Associate Broker's License, you must complete the classes, pass the State of Colorado Real Estate Associate Broker's Examination, and submit the appropriate licensing application to the Colorado Real Estate Commission. After you receive your Associate Broker's license, you must attach your license to an employing real estate broker who agrees to supervise your work for the first two years in the field.

Note: Students interested in transferring to a baccalaureate program in Business Management should refer to the Transfer Degree section of this catalog.

## ASSOCIATE (AAS) DEGREE

### Business Management

TOTAL CREDITS 65

#### 15 General Education Requirements-All Options

3	ECO 201	Principles of Macroeconomics
3	ECO 202	Principles of Microeconomics
3	ENG 121	English Composition I
	OR	
3	ENG 131	Technical Writing I
3	MAT 112	Financial Mathematics
	OR	
3	MAT 121	College Algebra
3		Natural Science Elective

#### 47 Core Curriculum Requirements

4	ACC 121	Accounting Principles I
4	ACC 122	Accounting Principles II
3	BUS 115	Introduction to Business
3	BUS 204	Introduction to E-Business
3	BUS 216	Legal Environment of Business
3	BUS 217	Business Communication & Report Writing
3	CIS 118	Intro to PC Applications
3	CIS 218	Advanced PC Applications
3	COM 115	Public Speaking
1	MAN 102	Business Ethics and Values
1	MAN 103	Managing Business Change
1	MAN 104	Managing Workplace Stress
3	MAN 216	Small Business Management
3	MAN 200	Human Resource Management I
3	MAN 226	Principles of Management
3	MAR 111	Principles of Sales
3	MAR 216	Principles of Marketing

#### 3 Electives (Choose 3)

1	COM 262	Communicating with Impossible People
1	COM 263	Conflict Resolution
1	COM 264	Negotiation
1	MAN 102	Business Ethics and Values
1	MAN 103	Managing Business Change
1	MAN 104	Managing Workplace Stress
1	MAN 117	Time Management
1	MAN 125	Team Building
1	MAR 158	Basic Customer Service

## Entrepreneurship

TOTAL CREDITS 68

#### 15 General Education Requirements-All Options

3	ECO 201	Principles of Macroeconomics
3	ECO 202	Principles of Microeconomics
3	ENG 121	English Composition I
	OR	
3	ENG 131	Technical Writing
3	MAT 112	Financial Mathematics
	OR	
3	MAT 121	College Algebra
3		Natural Science Elective

**43 Core Curriculum Requirements**

- 3 ACC 115 Payroll Accounting
- 4 ACC 121 Accounting Principles I
- 3 BUS 102 Entrepreneurial Operations
- 3 BUS 115 Introduction to Business
- 3 BUS 217 Business Communication & Report Writing
- 3 CIS 118 Intro to PC Applications
- 3 CIS 218 Advanced PC Applications
- 3 COM 115 Public Speaking
- 1 MAN 104 Managing Workplace Stress
- 3 MAN 116 Principles of Supervision
- 1 MAN 117 Time Management
- 1 MAN 125 Team Building
- 3 MAN 216 Small Business Management
- 3 MAR 111 Principles of Sales
- 3 MAR 216 Principles of Marketing
- 3 MAT 112 Financial Mathematics

**10 Electives (See Department Chair)**

- 3 ACC 115 Payroll Accounting
- OR
- 4 ACC 122 Accounting Principles II
- 3 MAN 116 Principles of Supervision
- OR
- 3 MAN 216 Small Business Management

**Human Resources**

TOTAL CREDITS 65

**15 General Education Requirements-All Options**

- 3 ECO 201 Principles of Macroeconomics
- 3 ECO 202 Principles of Microeconomics
- 3 ENG 121 English Composition I
- OR
- 3 ENG 131 Technical Writing
- 3 MAT 112 Financial Mathematics
- OR
- 3 MAT 121 College Algebra
- 3 Natural Science Elective

**49 Core Curriculum Requirements**

- 3 ACC 115 Payroll Accounting
- 4 ACC 122 Accounting Principles II
- 3 BUS 115 Introduction to Business
- 3 BUS 216 Legal Environment of Business
- 3 BUS 217 Business Communication & Report Writing
- 3 BUS 226 Business Statistics
- 3 CIS 118 Intro to PC Applications
- 3 CIS 218 Advanced PC Applications
- 3 COM 115 Public Speaking
- 1 COM 262 Communicating with Impossible People
- 1 COM 263 Conflict Resolution
- 1 COM 268 Problem-Solving
- 3 MAN 128 Human Relations in Organizations
- 3 MAN 200 Human Resource Management I
- 3 MAN 201 Human Resource Management II
- 3 MAN 215 Organizational Behavior
- 3 MAN 226 Principles of Management
- 3 MAR 216 Principles of Marketing

**1 Elective (See Department Chair)****Retailing Sales**

TOTAL CREDITS 64

**15 General Education Requirements-All Options**

- 3 ECO 201 Principles of Macroeconomics
- 3 ECO 202 Principles of Microeconomics
- 3 ENG 121 English Composition I
- OR
- 3 ENG 131 Technical Writing
- 3 MAT 112 Financial Mathematics
- OR
- 3 MAT 121 College Algebra
- 3 Natural Science Elective

**44 Core Curriculum Requirements**

- 4 ACC 121 Accounting Principles I
- 4 ACC 122 Accounting Principles II
- 3 BUS 115 Introduction to Business
- 3 BUS 216 Legal Environment of Business
- 3 BUS 226 Business Statistics
- 3 CIS 118 Intro to PC Applications
- 3 CIS 218 Advanced PC Applications
- 3 COM 115 Public Speaking
- 3 MAN 116 Principles of Supervision
- 1 MAN 117 Time Management
- 1 MAN 125 Team Building
- 3 MAR 111 Principles of Sales
- 3 MAR 117 Principles of Retailing
- 1 MAR 158 Basic Customer Services
- 3 MAR 216 Principles of Marketing
- 3 MAR 220 Principles of Advertising

**5 Electives**

- 3 ACC 115 Payroll Accounting
- OR
- 4 ACC 122 Accounting Principles II
- 1 COM 262 Communicating with Impossible People
- 1 COM 263 Conflict Resolution
- 1 COM 264 Negotiation
- 1 MAN 102 Business Ethics and Values
- 1 MAN 103 Managing Business Change
- 1 MAN 104 Managing Workplace Stress
- 3 MAN 116 Principles of Supervision
- OR
- 3 MAN 226 Principles of Management
- 1 MAN 117 Time Management
- 1 MAN 125 Team Building
- 1 MAR 158 Basic Customer Services
- 3 MAT 112 Financial Mathematics
- OR
- 3 MAT 121 College Algebra

**CERTIFICATE PROGRAMS****Business Management**

TOTAL CREDITS 19-35

**35 Business Management Certificate Requirements**

- 4 ACC 121 Accounting Principles I
- 3 BUS 115 Introduction to Business
- 3 BUS 216 Legal Environment of Business
- 3 BUS 226 Business Statistics
- 3 COM 115 Public Speaking
- 3 ECO 201 Principles of Macroeconomics
- 3 ENG 131 Technical Writing I
- 3 MAN 200 Human Resource Management I
- 3 MAN 226 Principles of Management
- 3 MAR 216 Principles of Marketing
- 4 MAT 121 College Algebra

**25 Business Fundamentals Certificate Requirements**

- 3 ACC 101 Fundamentals of Accounting
- 1 ACC 103 Fundamentals of Accounting Lab
- 3 ACC 115 Payroll Accounting
- 3 BUS 115 Introduction to Business
- 3 BUS 216 Legal Environment of Business
- 3 BUS 217 Business Communications and Writing
- 3 MAN 200 Human Resource Management I
- 3 MAN 216 Small Business Management
- OR**
- 3 MAN 128 Human Relations in Organizations
- 3 BUS 226 Business Statistics

**19 Entrepreneurship Certificate Requirements**

- 4 ACC 121 Accounting Principles
- 3 BUS 102 Entrepreneurial Operations
- 3 MAN 216 Small Business Management
- 3 MAR 111 Principles of Sales
- 3 MAR 216 Principles of Marketing
- 3 MAN 226 Principles of Management

# Computer Information Systems

Jennifer Sherman, Department Chair

## Associate of Applied Science (AAS) Degree Certificates

**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 of this catalog.

**ASSOCIATE (AAS) DEGREE****Local Area Networking**

TOTAL CREDITS 62

**17 General Education Requirements**

- 3 ECO 202 Principles of Microeconomics
- 3 ENG 121 English Composition I
- OR**
- ENG 122 English Composition II
- 4 MAT 108 Technical Mathematics
- OR**
- MAT 121 College Algebra
- 3 COM 115 Public Speaking
- 4 Natural Science Elective

**45 Core Requirements**

- 3 BUS 115 Introduction to Business
- 3 CIS 115 Introduction to Computer Information Systems
- 3 CIS 118 Intro to PC Applications
- 1 CIS 178 Seminar/Workshop: Sophomore Seminar
- 3 CIS 220 Fundamentals of UNIX
- 3 CIS 268 Systems Analysis and Design I
- 2 CIS 287 Cooperative Education
- 3 CNG 104 Intro to TCP/IP
- 3 CNG 124 Networking I: Network +
- 3 CNG 131 Network Security Fundamentals
- 4 CNG 212 Implementing Windows 2000 Professional and Server
- 3 CSC 116 Logic and Program Design
- 4 CSC 160 Computer Science I (JAVA)
- 4 CSC 161 Computer Science II (JAVA)
- 3 ELT 202 Introduction to PC Servicing

## ASSOCIATE (AAS) DEGREE

### Networking Security

TOTAL CREDITS 61

#### 17 General Education Requirements

- 3 ECO 202 Principles of Microeconomics
- 3 ENG 121 English Composition I
- OR**
- ENG 122 English Composition II
- 4 MAT 108 Technical Mathematics
- OR**
- MAT 121 College Algebra
- 3 COM 115 Public Speaking
- 4 Natural Science Elective

#### 40 Core Requirements

- 3 BUS 115 Introduction to Business
- 3 CIS 115 Introduction to Computer Information Systems
- 3 CIS 118 Intro to PC Applications
- 1 CIS 178 Seminar/Workshop: Sophomore Seminar
- 3 CIS 220 Fundamentals of UNIX
- 3 CIS 268 Systems Analysis and Design I
- 2 CIS 287 Cooperative Education
- 3 CNG 104 Intro to TCP/IP
- 3 CNG 124 Networking I: Network +
- 3 CNG 131 Network Security Fundamentals
- 3 CNG 133 Network Security: Fire Walls and Intrusion Detection and Network Security
- 4 CNG 212 Implementing Windows 2000 Professional and Server
- 3 CNG 224 Microsoft Windows Wireless Network
- 3 ELT 202 Introduction to PC Servicing

#### 4 Electives

- 3 CNG 136 Guide to Disaster Recovery
- 3 CNG 251 Anti-Virus Concepts
- 3 CNG 254 Data Encryption
- 4 CNG 258 Computer Forensics

## CERTIFICATE PROGRAMS

### Forensic Computing

TOTAL CREDITS 23

- 3 CNG 124 Networking I: Network +
- 3 CNG 131 Network Security Fundamentals
- 3 CNG 133 Network Security: Fire Walls and Intrusion Detection and Network Security
- 4 CNG 212 Implementing Windows 2000 Professional and Server
- 3 CNG 224 Microsoft Windows Wireless Network
- 4 CNG 258 Computer Forensics
- 3 CRJ 250 Computer Crime Investigation

### Information Assurance - Basic

TOTAL CREDITS 18

- 3 CNG 104 Intro to TCP/IP
- 3 CNG 124 Networking I: Network +
- 3 CNG 131 Network Security Fundamentals
- 3 CNG 133 Network Security: Fire Walls and Intrusion
- 3 CNG 224 Microsoft Windows Wireless Network
- 3 CRJ 250 Computer Crime Investigation

### Information Assurance - Advanced

TOTAL CREDITS 29

- 3 CIS 220 Fundamentals of Unix
- 3 CNG 124 Networking I: Network
- 3 CNG 131 Network Security Fundamentals
- 3 CNG 133 Network Security: Fire Walls and Intrusion
- 4 CNG 212 Implementing Windows 2000 Professional and Server
- 3 CNG 224 Microsoft Windows Wireless Network
- 4 CNG 258 Computer Forensics
- 3 CRJ 250 Computer Crime Investigation
- 3 ELT 202 Introduction to PC Servicing

### MS Office Applications

TOTAL CREDITS 6

- 3 CIS 118 Intro to PC Applications
- 3 CIS 218 Advanced PC Applications

### Networking

TOTAL CREDITS 13

- 3 CIS 220 Fundamentals of Unix
- 3 CNG 104 Intro to TCP/IP
- 3 CNG 124 Networking I: Network
- 4 CNG 212 Implementing Windows 2000 Professional and Server

### Programming

TOTAL CREDITS 11

- 3 CSC 116 Logic and Program Design
- 4 CSC 160 Computer Science I: (Language)
- 4 CSC 161 Computer Science II: (Language)

### Securities

TOTAL CREDITS 15

- 3 CNG 104 Intro to TCP/IP
- 3 CNG 124 Networking I: Network
- 3 CNG 131 Network Security Fundamentals
- 3 CNG 133 Network Security: Fire Walls and Intrusion
- 3 CNG 224 Microsoft Windows Wireless Network

# Computer Information Systems

Jennifer Sherman, Department Chair

## Cisco Certified Network Associate Certificates

### Career Opportunities

The Cisco Network Certificate Program prepares you for entry level jobs in computer networking, working primarily with vendor-specific equipment. Cisco Systems is the number one manufacturer of networking hardware in the world.

### Program Description

The Certificate program teaches the basics of computer networking including the design, installation, and configuration of networking hardware. Completing the two semester program prepares you to take the Cisco Certified Networking Associate exam. Passing the exam enables you to work in business and industry positions that maintain and support local and wide-area networks.

Cisco provides course work for a complete range of basic through advanced networking concepts – from pulling cable through complex concepts such as subnet masking rules and strategies.

### Program Requirements

#### Entrance requirements:

Admission to PCC is the only program requirement. However, we encourage you to complete any identified remedial material before starting the Cisco Program.

#### Graduation requirements:

You must complete 20 credits of Cisco classes to graduate from the program.

## CERTIFICATE PROGRAM

### Cisco Networking

TOTAL CREDITS 20

#### 20 Certificate Requirements

5	CNG 260	Cisco Network Associate I
5	CNG 261	Cisco Network Associate II
5	CNG 262	Cisco Network Associate III
5	CNG 263	Cisco Network Associate IV

# Construction Technologies

Jamie Gage, Department Chair

## Certificate

### Program Description

The Construction Technology program prepares students to enter the construction trades industry. There are many facets in the construction trades industry and the student will learn the entry-level skills necessary to obtain employment in any one of these facets. Students will learn the basics of CAD, estimating, accounting, safety, proper tool usage, math and science in the construction industry, qualities and characteristics of building materials, building codes and construction management. Also included in these courses is the study of built green products and incorporating elements of sustainable design in modern construction practices. Job site experience is an integral part of this program.

### Built Green & Construction

TOTAL CREDIT HOURS 14

#### 14 Core Requirements

4	CON 105	Construction Technology
4	CON 110	Introduction to Construction Part I
3	CON 120	Building Materials and Environmental Impacts
1	CAR 170	Clinical: Construction Lab I
1	CAR 171	Clinical: Construction Lab II
1	CAR 172	Clinical: Construction Lab III

### Construction Essentials I

TOTAL CREDIT HOURS 28

#### 28 Core Requirements

4	CON 105	Construction Technology
4	CON 110	Introduction to Construction Part I
3	CON 120	Building Materials and Environmental Impacts
1	CAR 170	Clinical: Construction Lab I
1	CAR 171	Clinical: Construction Lab II
1	CAR 172	Clinical: Construction Lab III
3	CAR 175	Special Topic
5	CAR 180	Internship
6	CAR 181	Internship II

### Construction Essentials II

TOTAL CREDIT HOURS 28

#### 28 Core Requirements

4	CON 111	Introduction to Construction Part II
3	CON 140	Introduction to Building Codes and Enforcement
4	CON 245	Project Management
1	CAR 270	Clinical: Construction Lab I
1	CAR 271	Clinical: Construction Lab I
1	CAR 272	Clinical: Construction Lab I
3	CAR 275	Special Topic
5	CAR 280	Internship
6	CAR 281	Internship

### Intro to Project Management

TOTAL CREDIT HOURS 14

#### 14 Core Requirements

4	CON 111	Introduction to Construction Part II
3	CON 140	Introduction to Building Codes and Enforcement
4	CON 245	Project Management
1	CAR 270	Clinical: Construction Lab I
1	CAR 271	Clinical: Construction Lab I
1	CAR 272	Clinical: Construction Lab I

# Cosmetology

Beth Ingo-Rider, Department Chair

## Associate of Applied Science (AAS) Degree and Certificates

### 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

Program requirements are REA 060, ENG 060 and MAT 060 or equivalent Accuplacer Scores of Reading Comprehension 62, Sentence Skills 70, Math 45 EA

## ASSOCIATE (AAS) DEGREE

### Cosmetology

TOTAL CREDITS 75

#### 15 General Education Requirements

3	Communication Course
3	Math Course
3	Humanities/Science/Social Science
3	Humanities/Science/Social Science
3	Humanities/Science/Social Science
1	COS 103 Shampoo/Rinses/Conditioners I
2	COS 110 Introduction to Hair Coloring
2	COS 120 Introduction to Hair Cutting
2	COS 130 Introduction to Hair Styling
1	COS 140 Introduction to Chemical Texture
1	COS 150 Laws, Rules and Regulations
2	COS 160 Introduction to Disinfection, Sanitation and Safety
3	NAT 110 Introduction to Manicures & Pedicures

2	NAT 111	Intermediate Manicures & Pedicures
3	EST 110	Introduction to Facials and Skin Care
2	COS 111	Intermediate: Hair Coloring
2	COS 121	Intermediate I: Haircutting
2	COS 131	Intermediate I: Hair Styling
1	COS 141	Intermediate I: Chemical Texture
1	COS 161	Intermediate I: Disinfection, Sanitation & Safety
1	COS 203	Shampoos/Rinses/Conditioners II
2	COS 210	Intermediate II: Hair Coloring
2	COS 220	Intermediate II: Haircutting
2	COS 230	Intermediate II: Hair Styling
1	COS 240	Intermediate II: Chemical Texture
1	COS 250	Management, Ethics, Interpersonal Skills & Salesmanship
2	COS 260	Intermediate II: Disinfection, Sanitation and Safety
5	NAT 211	Application of Artificial Nails
2	EST 111	Intermediate Facials & Skin Care
2	COS 211	Advanced Hair Coloring
2	COS 221	Advanced Hair Cutting
1	COS 231	Advanced Hair Styling
1	COS 241	Advanced Chemical Texture
1	COS 261	Advanced Disinfection, Sanitation & Safety
2	NAT 210	Advanced Manicures & Pedicures
2	EST 210	Advanced Massage & Skin Care
1	EST 211	Facial Make-up
3	EST 212	Hair Removal

## CERTIFICATE PROGRAMS

### Cosmetology

TOTAL CREDITS 60

1	COS 103	Shampoo/Rinses/Conditioners I
2	COS 110	Introduction to Hair Coloring
2	COS 120	Introduction to Hair Cutting
2	COS 130	Introduction to Hair Styling
1	COS 140	Introduction to Chemical Texture
1	COS 150	Laws, Rules and Regulations
2	COS 160	Introduction to Disinfection, Sanitation and Safety
3	NAT 110	Introduction to Manicures & Pedicures
2	NAT 111	Intermediate Manicures & Pedicures
3	EST 110	Introduction to Facials and Skin Care
2	COS 111	Intermediate: Hair Coloring
2	COS 121	Intermediate I: Haircutting
2	COS 131	Intermediate I: Hair Styling
1	COS 141	Intermediate I: Chemical Texture
1	COS 161	Intermediate I: Disinfection, Sanitation & Safety
1	COS 203	Shampoos/Rinses/Conditioners II
2	COS 210	Intermediate II: Hair Coloring
2	COS 220	Intermediate II: Haircutting
2	COS 230	Intermediate II: Hair Styling
1	COS 240	Intermediate II: Chemical Texture
1	COS 250	Management, Ethics, Interpersonal Skills & Salesmanship
2	COS 260	Intermediate II: Disinfection, Sanitation and Safety
5	NAT 211	Application of Artificial Nails
2	EST 111	Intermediate Facials & Skin Care
2	COS 211	Advanced Hair Coloring
2	COS 221	Advanced Hair Cutting
1	COS 231	Advanced Hair Styling
1	COS 241	Advanced Chemical Texture
1	COS 261	Advanced Disinfection, Sanitation & Safety
2	NAT 210	Advanced Manicures & Pedicures
2	EST 210	Advanced Massage & Skin Care
1	EST 211	Facial Make-up
3	EST 212	Hair Removal

## Hairstylist

TOTAL CREDITS 40

1	COS 103	Shampoo/Rinses/Conditioners I
2	COS 110	Introduction to Hair Coloring
2	COS 120	Introduction to Hair Cutting
2	COS 130	Introduction to Hair Styling
1	COS 140	Introduction to Chemical Texture
1	COS 150	Laws, Rules and Regulations
2	COS 160	Introduction to Disinfection, Sanitation and Safety
2	COS 111	Intermediate: Hair Coloring
2	COS 121	Intermediate I: Haircutting
2	COS 131	Intermediate I: Hair Styling
1	COS 141	Intermediate I: Chemical Texture
1	COS 161	Intermediate I: Disinfection, Sanitation & Safety
1	COS 203	Shampoos/Rinses/Conditioners II
2	COS 210	Intermediate II: Hair Coloring
2	COS 220	Intermediate II: Haircutting
2	COS 230	Intermediate II: Hair Styling
1	COS 240	Intermediate II: Chemical Texture
1	COS 250	Management, Ethics, Interpersonal Skills & Salesmanship
2	COS 260	Intermediate II: Disinfection, Sanitation and Safety
2	COS 211	Advanced Hair Coloring
2	COS 221	Advanced Hair Cutting
1	COS 231	Advanced Hair Styling
1	COS 241	Advanced Chemical Texture
1	COS 261	Advanced Disinfection, Sanitation & Safety
3	COS 262	Advanced II: Disinfection, Sanitation & Safety

## Manicurist

TOTAL CREDITS 20

1	COS 150	Laws, Rules and Regulations
2	COS 160	Introduction to Disinfection, Sanitation and Safety
3	NAT 110	Introduction to Manicures & Pedicures
2	NAT 111	Intermediate Manicures & Pedicures
1	COS 161	Intermediate I: Disinfection, Sanitation & Safety
1	COS 250	Management, Ethics, Interpersonal Skills & Salesmanship
2	COS 260	Intermediate II: Disinfection, Sanitation and Safety
5	NAT 211	Application of Artificial Nails
1	COS 261	Advanced Disinfection, Sanitation & Safety
2	NAT 210	Advanced Manicures & Pedicures

## Esthetician

TOTAL CREDITS 20

1	COS 150	Laws, Rules and Regulations
2	COS 160	Introduction to Disinfection, Sanitation and Safety
3	EST 110	Introduction to Facials and Skin Care
1	COS 250	Management, Ethics, Interpersonal Skills & Salesmanship
2	COS 260	Intermediate II: Disinfection, Sanitation and Safety
3	COS 262	Advanced II: Disinfection, Sanitation & Safety
2	EST 111	Intermediate Facials & Skin Care
2	EST 210	Advanced Massage & Skin Care
1	EST 211	Facial Make-up
3	EST 212	Hair Removal

## Criminal Justice

Mary Kubeck, Department Chair

Associate of Applied Science (AAS) Degree  
Certificates and Mini-Certificates

### Career Opportunities

The CRJ program prepares students for careers in federal, state, and local adult correctional institutions, juvenile corrections and treatment facilities, law enforcement, forensics, private security, and private investigations.

### Program Description

The CRJ 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 empathetic awareness of cultural diversity.

The AAS degree prepares you for entry level positions in adult and juvenile corrections, police science, and related fields.

The program also offers seven Certificates designed as career entry or career enhancement programs. They include a 37-credit Law Enforcement Academy leading to certification as a peace officer; an 18-credit certificate in adult and juvenile corrections; and five 9-credit certificates for career enhancement.

### Disclaimer

If you have a prior arrest and/or drug/alcohol history, you should discuss this history with a CRJ advisor prior to your admission into a criminal justice program. Neither PCC nor CRJ advisors will be held liable for your decision to continue in the program if you have such a history.

Your entrance into any CRJ course of study, or your subsequent graduation, is no guarantee, explicit or implied, that you are employable in the criminal justice system. Further, if you cannot be placed and/or remain in the course CRJ 287, Cooperative Education/Internship, after two good-faith attempts at placement, neither PCC nor its employees accept responsibility in respect to your fulfillment of the program.

Many criminal justice and related agencies require certain standards of prospective employees 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

CRJ degree and certificate programs are open enrollment with the exception of the Law Enforcement Academy. To enroll in the Academy, you must formally apply to the director of the Academy, meet minimum basic skills requirements, undergo a criminal history background check, and appear before an oral interview board.

#### Graduation requirements:

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



## ASSOCIATE (AAS) DEGREE

### Criminal Justice

TOTAL CREDITS 66-67

#### 21-22 General Education Requirements

- 3 ENG 121 English Composition I
  - 3 ENG 131 Technical Writing I
  - 3 MAT 107 Career Math (or higher)
  - 3 COM 115 Public Speaking
  - 3-4 Natural Science (see Advisor)
  - 6 Social and Behavioral Sciences
- Choose from 2 different disciplines: ANT 101, ANT 111, ECO 201, ECO 202, GEO 105, HIS 101, HIS 102, HIS 201, HIS 202, POS 105, POS 111, PSY 101, PSY 102, PSY 235, SOC 101, SOC 102

#### 27 Core Curriculum Requirements

- 3 CRJ 110 Intro to Criminal Justice
- 3 CRJ 111 Substantive Criminal Law
- 3 CRJ 112 Procedural Criminal Law
- 3 CRJ 125 Law Enforcement Operations
- 3 CRJ 135 Judicial Function
- 3 CRJ 145 Correctional Process
- 3 CRJ 210 Constitutional Law
- 3 CRJ 230 Criminology
- 3 CRJ 287 Cooperative Education/Internship

Select one of the CRJ areas of emphasis:

#### 18 Corrections Certificate: Adult and Juvenile

- 3 CRJ 146 Community Based Corrections
- 3 CRJ 215 Constitutional Rights of Inmates
- 3 CRJ 216 Juvenile Law and Procedures
- 3 CRJ 220 Human Relations and Social Conflict
- 3 CRJ 225 Crisis Intervention
- 3 CRJ 249 Penology

#### 37 Police Science Certificate\*

- 6 LEA 101 Basic Police Academy I
- 12 LEA 102 Basic Police Academy II
- 2 LEA 103 Basic Law Enforcement Academy III
- 8 LEA 105 Basic Law
- 3 LEA 106 Arrest Control Techniques
- 3 LEA 107 Law Enforcement Driving
- 3 LEA 108 Firearms

\*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.

## CERTIFICATE PROGRAMS

### Criminal Justice

TOTAL CREDITS 18-37

#### 18 Corrections Certificate: Adult and Juvenile

- 3 CRJ 146 Community Based Corrections
- 3 CRJ 215 Constitutional Rights of Inmates
- 3 CRJ 216 Juvenile Law and Procedures
- 3 CRJ 220 Human Relations and Social Conflict
- 3 CRJ 225 Crisis Intervention
- 3 CRJ 249 Penology

#### 32 Certificate G: Computer Forensics

- 3 CRJ 110 Intro to Criminal Justice
- 3 CRJ 111 Substantive Criminal Law
- 3 CRJ 112 Procedural Criminal Law
- 3 CRJ 210 Constitutional Law
- 3 CNG 131 Network Security Fundamentals
- 3 CNG 132 Principles of Information Security
- 3 CNG 133 Network Security: Fire Walls and Intrusion Detection and Network Security
- 4 CNG 212 Managing a MS Windows Server Environment
- 4 CNG 258 Computer Forensics
- 3 CRJ 250 Computer Crime Investigation

#### 37 Certificate A: Police Science

- 6 LEA 101 Basic Police Academy I
- 12 LEA 102 Basic Police Academy II
- 2 LEA 103 Basic Law Enforcement Academy III
- 8 LEA 105 Basic Law
- 3 LEA 106 Arrest Control Techniques
- 3 LEA 107 Law Enforcement Driving
- 3 LEA 108 Firearms

## MINI-CERTIFICATES

### Criminal Justice

TOTAL CREDITS 9

#### 9 Certificate B: Career Enhancement: Corrections/Adult

- 3 CRJ 146 Community-Based Corrections
- 3 CRJ 215 Constitutional Rights of Inmates
- 3 CRJ 249 Penology

#### 9 Certificate C: Career Enhancement: Corrections/ Juvenile

- 3 CRJ 216 Juvenile Law and Procedures
- 3 CRJ 220 Human Relations and Social Conflict
- 3 CRJ 225 Crisis Intervention

#### 9 Certificate D: Career Enhancement: Criminal Justice Process

- 3 CRJ 110 Intro to Criminal Justice
- 3 CRJ 111 Substantive Criminal Law
- 3 SOC 101 Introduction to Sociology I

#### 9 Certificate E: Career Enhancement: Criminal Justice System

- 3 CRJ 112 Procedural Criminal Law
- 3 CRJ 135 Judicial Function
- 3 HIS 201 U.S. History I

#### 9 Certificate F: Career Enhancement: Criminal Justice Core

- 3 CRJ 210 Constitutional Law
- 3 CRJ 230 Criminology
- 3 POS 111 American Government

# Dental Assisting

Janet V. Trujillo, Department Chair

## Associate of Applied Science (AAS) Degree Certificate

### Career Opportunities

The Dental Assisting program prepares you for a career in general chair side and specialty office dental assisting. Specialty offices include orthodontics, periodontics, oral maxillo facial surgery, pediatric dentistry, and endodontics. You can also seek a career as a dental business office administrator/manager. Other career opportunities include dental sales and insurance networking. We offer national board certification preparation in office management, and general chair side assisting.

### Program Description

This program teaches you to function effectively as an integral member of the dental health team. We prepare you to perform chair side assisting procedures and patient care, perform tray set-ups for specific procedures, and maintain accurate patient and dental charting records. We also teach rubber dam and matrix band application, dental material manipulation and application, patient education and post operative instructions, coronal polishing and fluoride application, and infection control procedures. Our radiation health and safety curriculum meets the certification requirements of the Colorado Dental Practice Act. Graduates are eligible to take the Dental Assisting National Board Examination.

An advanced certificate in Expanded Functions Dental Assisting is offered to graduates of the program and community chair side dental assistants. Course work and clinical practice prepare the dental assistant with advanced skills to perform restorative procedures of amalgam and composite restorations, provisional crown and bridge fabrication, and the adjunct procedures necessary in restorative dentistry

### Program Requirements

#### Entrance requirements:

Certificate: Meet basic skill requirements of the Accuplacer® Examination; successfully complete CIS 110 and HPR 102; submit a supplemental Dental Assisting application within the stated deadline date.

AAS Degree: Meet basic skill requirements of the Accuplacer® Examination; submit a supplemental Dental Assisting application with the stated deadline date; complete 17 credits of general education.

EFDA Certificate: Graduate of an ADA accredited program, certified dental assistant (CDA), or 2 years of full time documented chair side experience (3,500 hours) and current CPR card (American Red Cross Professional Rescuer CPR or American Heart Association Basic Life Support.)

### ASSOCIATE (AAS) DEGREE

#### Dental Assisting

TOTAL CREDITS 63

#### 17 General Education/Related Requirements

- 4 BIO 105 Science of Biology
- 1 CIS 110 Introduction to the PC
- 3 ENG 121 English Composition I
- 3 MAT 107 Career Math
- 3 PSY 101 General Psychology I
- 3 COM 115 Public Speaking

#### 45 Core Curriculum Requirements

##### Fall Semester

- 3 DEA 102 Principles of Clinical Practice
- 1 DEA 120 Introduction to Dental Practice
- 3 DEA 121 Dental Science I
- 3 DEA 122 Dental Science II
- 3 DEA 123 Dental Materials I
- 3 DEA 125 Dental Radiography
- 3 DEA 126 Infection Control
- 4 DEA 200\* Introduction to Expanded Functions
- 4 DEA 205\* Expanded Functions for the Dental Auxiliary

##### Spring Semester

- 2 DEA 104 Specialties in Dentistry
- 2 DEA 111 Dental Office Management
- 3 DEA 124 Dental Materials II
- 3 DEA 127 Dental Science III
- 3 DEA 131 Advanced Dental Radiography
- 2 DEA 132 Medical Emergencies
- 2 DEA 134 Prevention and Nutrition in Dentistry
- 2 DEA 175 Special Topics: Practice of Clinical Chair side Assisting
- 1 DEA 181 Clinical Internship I

##### Summer Semester

- 6 DEA 182 Clinical Internship II and Seminar

##### Electives:

- 1 DEA 140 Dental Assisting National Board Review (Elective)

\*The advanced certificate in Expanded Functions Dental Assisting is designed to be completed in two special length courses and in collaboration with dental auxiliary employment. Courses may run in additional semesters depending on enrollment and community needs. Please contact the dental assisting department for requirements of enrollment.

### CERTIFICATE PROGRAM

#### Dental Assisting

TOTAL CREDITS 46

Consists of all Dental Assisting Core Curriculum Courses. The program is designed to be completed in three semesters.

#### 46 Core Curriculum Requirements

##### Fall Semester

- 3 DEA 102 Principles of Clinical Practice
- 1 DEA 120 Introduction to Dental Practice
- 3 DEA 121 Dental Science I
- 3 DEA 122 Dental Science II
- 3 DEA 123 Dental Materials I
- 3 DEA 125 Dental Radiography I
- 3 DEA 126 Infection Control

##### Spring Semester

- 2 DEA 104 Specialties in Dentistry
- 2 DEA 111 Dental Office Management
- 3 DEA 124 Dental Materials II
- 3 DEA 127 Dental Science III
- 3 DEA 131 Advanced Dental Radiography
- 2 DEA 132 Medical Emergencies
- 2 DEA 134 Prevention and Nutrition in Dentistry
- 2 DEA 175 Special Topics: Practice of Clinical Chair Side Assisting
- 1 DEA 181 Clinical Internship I

### Summer Semester

- 6 DEA 182 Clinical Internship II and Seminar Electives:  
1 DEA 140 Dental Assisting National Board Review (Elective)

- 4 DEA 200\* Introduction to Expanded Functions  
4 DEA 205\* Expanded Functions for the Dental Auxiliary

These courses can be offered during the fall, spring or summer semesters depending on enrollment.

## Dental Hygiene

Elsa Eccles, Department Chair

### Associate of Applied Science (AAS) Degree Mini-Certificate in Local Anesthesia and Nitrous Oxide/Oxygen Sedation

#### 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.

## ASSOCIATE (AAS) DEGREE

### Dental Hygiene

TOTAL CREDITS 92.5

#### 28 General Education Requirements

- 4 BIO 201 Human Anatomy and Physiology I\*
- 4 BIO 202 Human Anatomy and Physiology II\*
- 4 BIO 204 Microbiology \*
- 4 CHE 109 General, Organic, and Biochemistry\*
- 3 COM 115 Public Speaking
- 3 ENG 121 English Composition I
- 3 PSY 101 General Psychology I
- 3 SOC 101 Introduction to Sociology I

\*Within five years of application

#### 64.5 Core Curriculum Requirements

##### First Year-Fall Semester

- 2 DEH 101 Preclinical Dental Hygiene Lecture
- 3 DEH 102 Preclinical Dental Hygiene Care
- 3 DEH 103 Dental Anatomy and Histology
- 3 DEH 104 Dental Radiology
- 2 DEH 202 Applied Nutrition in Dentistry

##### First Year-Spring Semester

- 2 DEH 111 Dental and Medical Emergencies
- 2 DEH 122 Periodontics I
- 1 DEH 123 Head and Neck Anatomy
- 3 DEH 126 Dental Materials
- 2 DEH 153 Clinical Theory of Dental Hygiene I
- 4.5 DEH 170 Clinical Practice of Dental Hygiene I

##### Second Year-Summer Semester

- 2 DEH 133 Local Anesthesia
- 1 DEH 134 Advanced Clinical Skills
- 1 DEH 138 Nitrous Oxide/Oxygen Sedation
- 2 DEH 171 Clinical Practice of Dental 1-A

##### Second Year-Fall Semester

- 2 DEH 132 Applied Pharmacology
- 2 DEH 204 Community Dental Health I
- 3 DEH 213 General and Oral Pathology
- 2 DEH 268 Clinical Theory of Dental Hygiene II
- 6 DEH 270 Clinical Practice of Dental Hygiene II
- 1 DEH 282 Periodontics III

##### Second Year-Spring Semester

- 2 DEH 221 Ethics and Practice Management
- 1 DEH 225 Community Dental Health II: Field Experience
- 2 DEH 242 Periodontics II
- 2 DEH 259 Advanced Dental Hygiene Theory
- 6 DEH 271 Clinical Practice of Dental Hygiene III
- 2 DEH 285 Clinical Theory of Dental Hygiene III

\*\* .5 DEH 136 Clinical Dental Roentgenology

\* \*2 DEH 266 National Boards Review

## MINI-CERTIFICATE PROGRAM

### Local Anesthesia and Nitrous Oxide/Oxygen Sedation

TOTAL CREDITS 3

#### 3 Certificate Requirements

- 2 DEH 133 Local Anesthesia
- 1 DEH 138 Nitrous Oxide/Oxygen Sedation

\*\*Optional recommended courses

# Diesel/Heavy Equipment Technology

Shannon South, Dean, SCCC West  
Certificate

## Program Description

The Commercial Driver's License program consists of the formal training that is industry recognized as the most reliable way to learn the many special skills required for entry-level tractor-trailer driving. The program emphasizes hands-on training with support classes directly related to training. A combination of classroom instruction, simulator practice, range work and on-highway experience help the student prepare for entry into the trucking industry.

The Heavy Duty Chassis & Brakes certificate is designed to prepare the student to gain employment in a fleet or job shop specializing in brakes and suspension system on heavy duty equipment and trucks.

The Heavy Duty Drive Train certificate gives the student the skills needed to gain employment in a drive train specialty shop. The certificate prepares the student for the ASE examination in Manual Drive Train Systems.

The Heavy Duty Engines certificate is designed to prepare the student for entry-level jobs requiring knowledge of diesel engines. The program emphasizes skills needed for employment in the areas of diesel engines for over-the-road equipment.

The Heavy Duty Electrical and Computers certificate gives the student current training in the skills demanded by any shop employment technicians to work on any wheeled machines. Technicians with proven electrical skills are the most needed and are in the highest demand today.

The Heavy Equipment Operator program consists of the formal training that is industry recognized as the most reliable and safest way to learn the many skills required for entry-level heavy equipment operation. The program offers classroom and field training in OSHA and industry safety standards including operation of agricultural, construction, and dirt moving equipment. Skills for both CDL and HE Operator are competency based, meaning a skill must be mastered before advancing to the next skill.

## Commercial Driver Training

TOTAL CREDIT HOURS 17

### 17 Core Requirements

- 2 DRV 130 Preparing for CDL
- 2 DRV 132 Orientation to Trucks and Trailing
- 4 DRV 134 Trucking Laws and Regulations
- 3 DRV 136 Vehicle Inspection and Maintenance
- 6 DRV 138 Driver Training

## Heavy Equipment Operator

TOTAL CREDIT HOURS 16

### 16 Core Requirements

- 2 HEQ 150 Basic Principles of Engine Operation and Drive Train
- 2 HEQ 220 Motor Grader I
- 2 HEQ 221 Motor Grader II
- 2 HEQ 225 Backhoe I
- 2 HEQ 226 Backhoe II
- 2 HEQ 230 Hydraulic Excavator
- 2 HEQ 240 Basic Bulldozer I
- 2 HEQ 246 Front End Loader II

# Digital Media

Jennifer Sherman, Department Chair

Associate of Applied Science (AAS) Degree  
Mini-Certificates

## Career Opportunities

The Digital Media program prepares you for a career in the ever changing world of technology and multimedia. You will graduate prepared for a career in web design and development or multimedia applications.

## Program Description

This program teaches you business processes, database development, e-commerce foundations, basic networking, and many aspects of web design and interfacing. Mini-certificates also add video editing, animation, and game design options to the core degree. The integrated curriculum includes courses in business, communication, design, project management, computer technology, and various software applications.

Note: You can earn E-business certificates while working on your Digital Media degree. You may also work on an E-business certificate after graduation, or separately from a degree. Please refer to the e-Business section of this catalog for full descriptions and requirements.

## ASSOCIATE (AAS) DEGREE

### Digital Media

TOTAL CREDITS 61-62

<b>15-16</b>	<b>General Education Requirements</b>	
3	ECO 202	Principles of Microeconomics
3	ENG 121	English Composition I
3	MAT 112	Financial Mathematics
	OR	
4	MAT 121	College Algebra
3	COM 115	Public Speaking
3		Natural Science Elective
<b>13</b>	<b>Business, Communications, and Technology Core</b>	
3	BUS 115	Introduction to Business
4	BUS 287	Cooperative Education
1	CWB 175	Special Topics: Digital Literacy IC3-Computing Fundamentals
1	CWB 175	Special Topics: Digital Literacy IC3-Key Applications
1	CWB 175	Special Topics: Digital Literacy IC3-Living Online
3	MAN 128	Human Relations in Organizations
<b>33</b>	<b>Digital Media Requirements</b>	
3	BUS 204	Introduction to E-Business
3	BUS 260	Business Process Foundations for E-Commerce
3	CNG 101	Intro to Networking
3	CWB 130	Complete Web Editing Tools
3	CWB 165	Complete Web Authoring
3	CWB 221	Technology Foundations for e-Commerce
3	CWB 206	Web Data Base
3	MAN 241	Project Management in Organizations
3	MGD 102	Introduction to Multimedia
3	MGD 143	Web Motion Graphic Design I
3	ART 143	Digital Photography I

## MINI-CERTIFICATES

### Digital Media

TOTAL CREDITS 6-9

#### 9 Animation Certificate

- 3 CWB 130 Complete Web Editing Tools
- 3 MGD 167 Game Design I
- 3 MGD 257 Animation Production

#### 9 Digital Video Certificate

- 3 MGD 164 Digital Video Editing I
- 3 RTV 102 Beginning Television
- 3 RTV 175 Special Topics: Basic Video Production

#### 9 Graphic Design Certificate

- 3 CIS 167 Desktop Publishing
- 3 MGD 102 Introduction to Multimedia
- 3 MGD 133 Graphic Design I

#### 6 Web Technologies Certificate

- 3 BUS 204 Introduction to E-Business
- 3 CWB 221 Technology Foundations for e-Commerce

#### 9 Web Design Certificate

- 3 CWB 130 Complete Web Editing Tools
- 3 MGD 143 Web Motion Graphic Design I
- 3 ART 143 Digital Photography I

Please see related e-Business program

## Early Childhood Education

Rosemary Breckenfelder, Department Chair

### Associate of Applied Science (AAS) Degree Certificates

#### 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 a 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. Also, you must 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 of this catalog.

## ASSOCIATE (AAS) DEGREE

### Early Childhood Education

TOTAL CREDITS 61

#### 15 General Education Requirements

- 3 ENG 121 English Elective
- OR
- 3 ENG 131 English Elective
- 3 HUM/ART Humanities or Arts Elective
- 3 MAT 107 Math or higher
- 3 COM 115 Public Speaking
- OR
- 3 COM 125 Interpersonal Communication
- 3 Social or Behavioral Course

#### 40 Core Curriculum Requirements

- 3 ECE 101 Introduction to Early Childhood Education
- 3 ECE 102 Introduction to Early Childhood Lab
- 3 ECE 103 Guidance Strategies for Children
- 3 ECE 111 Infant and Toddler Theory and Practice
- 3 ECE 205 Nutrition, Health and Safety
- 3 ECE 220 Curriculum Development: Methods and Techniques
- 3 ECE 225 Language and Cognition for the Young Child
- 3 ECE 226 Creativity and the Young Child
- 4 ECE 238 Child Growth and Development
- 3 ECE 240 Administration of Early Childhood Care and Education Programs

- 3 ECE 241 Administration: Human Relations for Early Childhood Professions
- 3 ECE 260 Exceptional Child
- 3 ECE 288 Practicum: Early Childhood Education

**6 Electives**

**Select two courses:**

- 3 ECE 112 Intro to Infant/Toddler Lab Techniques
- 3 ECE 125 Science/Math and the Young Child
- 3 ECE 178 High/Scope
- 3 ECE 256 Working with Parents, Families, and Community Systems
- 3 LIT 255 Children's Literature

**CERTIFICATE PROGRAMS**

**Early Childhood Education**

TOTAL CREDITS 16-31

**31 Director Certificate**

- 3 ECE 101 Introduction to Early Childhood Education
- 3 ECE 102 Introduction to Early Childhood Lab Techniques
- 3 ECE 103 Guidance Strategies for Children
- 3 ECE 111 Infant and Toddler Theory and Practice
- 3 ECE 205 Nutrition, Health and Safety
- 3 ECE 220 Curriculum Development: Methods and Techniques
- 4 ECE 238 Child Growth and Development
- 3 ECE 240 Administration of Early Childhood Care and Education Programs
- 3 ECE 241 Administration: Human Relations for Early Childhood Education
- 3 ECE 260 Exceptional Child

**16 Early Childhood Teacher Certificate**

- 3 ECE 101 Introduction to Early Childhood Education
- 3 ECE 102 Introduction to Early Childhood Lab Techniques
- 3 ECE 103 Guidance Strategies for Children
- 3 ECE 220 Curriculum Development: Methods and Techniques
- 4 ECE 238 Child Growth and Development

**10 Infant Toddler Supervisor Certificate**

- 3 ECE 111 Infant and Toddler Theory and Practice
- 3 ECE 112 Intro to Infant/Toddler Lab Techniques
- 4 ECE 238 Child Growth and Development

# Emergency Medical Services

Dawnelle S. Mathis, Department Chair

Associate of Applied Science (AAS) Degree  
Certificates and Mini-Certificate\*

**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 Description**

This program teaches you skills in scene control and safety, direct emergency patient care, and patient transport. These skills include patient assessment, management of life threats, recording of patient history, medication administration, and critical care 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-Basic, 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 EMT-Intermediate or Paramedic programs, you must have a current Colorado EMT-Basic certification, an EMT IV endorsement, successfully complete all pre-screening 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.

**ASSOCIATE (AAS) DEGREE**

**Emergency Medical Services**

TOTAL CREDITS 69

69 Degree Requirements

**Semester One**

- 4 BIO 106 Basic Anatomy and Physiology
- 4 BIO 201 Human Anatomy and Physiology I

**Semester Two:**

- 4 BIO 202 Human Anatomy and Physiology II
  - 3 ENG 121 English Composition I
  - 3 MAT 107 Career Math
  - 3 COM 115 Public Speaking
- OR**
- COM 125 Interpersonal Communication

- Semester Three**
- 3 EMS 225 Fundamentals of Paramedic Practice
  - 2 EMS 226 Fundamentals of Paramedic Practice - Lab
  - 3 EMS 229 Paramedic Pharmacology
  - 2 EMS 230 Paramedic Pharmacology Lab
  
  - 4 EMS 233 Paramedic Medical Emergencies
  - 1 EMS 234 Paramedic Medical Emergencies Lab

- Semester Four**
- 3 EMS 227 Paramedic Special Considerations
  - 2 EMS 228 Paramedic Special Considerations Lab
  - 5 EMS 231 Paramedic Cardiology
  - 1 EMS 232 Paramedic Cardiology Lab
  - 4 EMS 235 Paramedic Trauma Emergencies
  - 1 EMS 236 Paramedic Trauma Emergencies Lab
  - 2 EMS 237 Paramedic Internship Preparatory

- Semester Five**
- 6 EMS 280 Paramedic Internship I
  - 3 PSY 235 Human Growth and Development

- Semester Six**
- 6 EMS 281 Paramedic Internship II

**CERTIFICATE PROGRAMS**  
**Emergency Medical Services**  
TOTAL CREDITS 20 - 55

**18 EMT Intermediate Option Requirements**

- 6 EMS 203 EMT Intermediate I
- 6 EMS 205 EMT Intermediate II
- 3 EMS 270 Clinical: EMS Intermediate
- 3 EMS 282 EMT – Intermediate Internship

**53 EMT Paramedic Option**

- 8 General Education Requirements**
- 4 BIO 106 Basic Anatomy and Physiology
  - 4 BIO 201 Human Anatomy and Physiology I

**45 Core Curriculum Requirements**

- 3 EMS 225 Fundamentals of Paramedic Practice
- 2 EMS 226 Fundamentals of Paramedic Practice - Lab
- 3 EMS 227 Paramedic Special Considerations
- 2 EMS 228 Paramedic Special Considerations Lab
- 3 EMS 229 Paramedic Pharmacology
- 2 EMS 230 Paramedic Pharmacology Lab
- 5 EMS 231 Paramedic Cardiology
- 1 EMS 232 Paramedic Cardiology Lab
- 4 EMS 233 Paramedic Medical Emergencies
- 1 EMS 234 Paramedic Medical Emergencies Lab
- 4 EMS 235 Paramedic Trauma Emergencies
- 1 EMS 236 Paramedic Trauma Emergencies Lab
- 2 EMS 237 Paramedic Internship Preparatory
- 6 EMS 280 Paramedic Internship I
- 6 EMS 281 Paramedic Internship II

**MINI-CERTIFICATE PROGRAM\***  
**Emergency Medical Services**  
TOTAL CREDITS 10.5-28.5

**10.5 EMT Basic Option Requirements**

- 9 EMS 125 EMT Basic
- 1 EMS 170 EMT Basic Clinical
- .5 HPR 102 CPR for Professionals: Professional Rescuer

# Energy Maintenance Technology

Roger Weitzel, Department Chair

## Associate of Applied Science (AAS) Degree Certificate

### Career Opportunities

The Energy Maintenance Technology program prepares you for a career in electrical, mechanical, and alternative energy maintenance and installation. You will learn to work in and around power plants, perform energy audits, and install and maintain solar panel systems. You will acquire the basic knowledge to manage the energy resources of industrial and commercial operations.

### Program Description

This program gives you the opportunity to specialize in Energy Mechanical Systems, Energy Electrical Systems, or Energy Solar Systems. The core courses for this program include print reading, basic electronics, and an introduction to energy plant operations. You will be expected to specialize in one of three career areas: Mechanical, Electrical, or Solar.

### Program Requirements

*Entrance requirements:*

You must meet all basic skills requirements (through ACCUPLACER testing and/or completing the necessary basic skills courses) prior to entering the program.

*Graduation requirements:*

You will be eligible for graduation after completing the course requirements as outlined in the Curriculum Sheet.

## ASSOCIATE (AAS) DEGREE\*

### Energy Maintenance Technology

TOTAL CREDITS 61-62.5

**61 Solar Energy**

**17 General Education Requirements**

- 3 ENG 131 Technical Writing I
- 3 COM 125 Interpersonal Communication
- 4 MAT 108 Technical Mathematics
- 4 PHY 105 Conceptual Physics
- 3 Social Science or Humanities

**12 Common Technical Core**

- 3 ENY 101 Introduction to Energy Technologies
- 3 ENY 103 Renewable Energy worker Safety
- 3 ELT 101 Survey of Electronics
- 3 ELT 106 Fundamentals of DC/AC

**29 Required Technical Courses**

- 3 ENY 102 Building Energy Audit Tech
- 3 ENY 121 Solar Photovoltaic Components
- 3 ENY 127 Solar PV System Install
- 1 ENY 132 NABCEP Entry Level Prep Class
- 3 ENY 225 Solar Domestic Hot Water Systems
- 2 ENY 230 PV Maintenance & Troubleshooting
- 4 ENY 231 Solar Contracting
- 4 ENY 240 Estimating for Energy
- 3 ENY 275 Special Topics
- 3 ENY 280 Internship



- 3 **Elective Courses (Choose one)**
- 3 BUS 102 Entrepreneurial Operations
- 3 CAD 101 Computer Aided Drafting I
- 3 CIS 118 Intro to PC Applications

### 62.5 Wind Turbine

#### 17 General Education Requirements

- 3 ENG 131 Technical Writing I
- 3 COM 125 Interpersonal Communication
- 4 MAT 108 Technical Mathematics
- 4 PHY 105 Conceptual Physics
- 3 Social Science or Humanities

#### 45.5 Required Technical Courses

- 3 CNG 124 Networking I: Network +
- 1.5 EIC 222 Instrument. & Process Control
- 3 ENT 238 Industrial Fluid Power and Controls
- 3 ENY 101 Introduction to Energy Technologies
- 3 ENY 103 Renewable Energy worker Safety
- 3 ELT 101 Survey of Electronics
- 3 ELT 106 Fundamentals of DC/AC
- 2 ELT 138 Power Control Devices
- 3 ELT 252 Motors and Controls
- 3 ELT 257 Sensors and Transducers
- 3 ELT 258 Programmable Logic Controllers
- 3 MAC 256 Industrial Components
- 3 MAC 265 Mechanical Components II
- 3 WTG 100 Introduction to Wind Industry
- 3 WTG 110 WTG Power & Control Systems
- 3 WTG 280 Wind Technician Internship

### CERTIFICATE PROGRAM\*

#### Energy Maintenance Technology

TOTAL CREDITS 12-30

#### Quick Start

##### 12 Core Curriculum Requirements

- 3 ELT 101 Survey of Electronics
- 3 ELT 106 Fundamentals of DC/AC
- 3 ENT 238 Industrial Fluid Power and Controls
- 3 MAC 256 Industrial Components

#### Solar Energy

##### 25 Required Technical Courses

- 3 ELT 101 Survey of Electronics
- 3 ELT 106 Fundamentals of DC/AC
- 3 ENY 103 Renewable Energy Worker Safety
- 3 ENY 121 Solar Photovoltaic Components
- 3 ENY 127 Solar PV System Install
- 1 ENY 132 NABCEP Entry Level Prep Class
- 2 ENY 230 PV Maintenance & Troubleshooting
- 4 ENY 231 Solar Contracting
- 3 ENY 280 Internship

#### Wind Turbine Technology

##### 30 Required Technical Courses

- 3 ELT 101 Survey of Electronics
- 3 ELT 106 Fundamentals of DC/AC
- 3 ELT 252 Motors and Controls
- 3 ELT 257 Sensors and Transducers
- 3 ELT 258 Programmable Logic Controllers
- 3 ENT 238 Industrial Fluid Power and Controls
- 3 ENY 103 Renewable Energy Worker Safety
- 3 MAC 256 Industrial Components
- 3 WTG 100 Introduction to Wind Industry
- 3 WTG 280 Wind Technician Internship

# Engineering Technology

Roger Weitzel, Department Chair

## Associate of Applied Science (AAS) Degree Certificates and Mini-Certificates

### Career Opportunities

The Associate of Applied Science Degree in Engineering Technology offers two areas of specialization: Manufacturing Engineering Technology and Civil Engineering Technology. Manufacturing Engineering Technicians work closely with mechanical and manufacturing engineers to design mechanical components and assemblies, tooling, manufacturing processes, and machine systems for industry. They also help solve problems on the production line and work to ensure product accuracy and quality.

Civil Engineering Technicians work in the surveying, construction, or architectural fields. Job opportunities exist for CAD operators, map drafters, surveyor's assistants, architectural drafters, soils testers, or construction supervisors/assistants.

These degree options also transfer well to certain universities.

The Certificate Program in Engineering Technology offers three options: Rapid Product Development, Architectural Design, and Surveying. In all three areas, you will receive specific skills training to prepare you for entry level positions in business and industry. Though employers desire the AAS degree for entry level employment, many students take the AAS in one area and a certificate in another option to improve their employability. You may also pursue a job upgrade with your present employer by earning a certificate.

### Degree Program Description

The Manufacturing Engineering Technology degree option prepares you for industrial careers requiring skills in drafting, CAD, mechanical design, 3D solid modeling, rapid product development, manufacturing processes, machining, fluid power, and CNC Programming.

The Civil Engineering Technology degree option prepares you for the surveying, construction, or architectural fields by giving you skills in math, physics, surveying, and civil and architectural design.

We focus on the skills and knowledge required in today's changing job market. You will receive intensive training on state-of-the-art Computer Aided Design workstations and other modern, up-to-date equipment. The program is housed in the Gorsich Advanced Technology Center at PCC. It is the only program in Colorado to have Rapid Prototyping equipment including 3D Systems Stereolithography, Fused Deposition Modeling, and Powder Based machines.

If you plan to pursue a bachelor's degree in the fields of mechanical/manufacturing engineering technology, civil engineering technology, or architecture, please consult with a PCC transfer advisor to determine the transferability of courses.

### Certificate Program Description

The Rapid Production Development Certificate option trains you in 3D solid modeling software such as Pro Engineer, and in state-of-the-art rapid prototyping machines. This certificate prepares you to work as a mechanical design and prototyping technician at service bureaus and manufacturing facilities.

The Surveying Certificate option allows you to use surveying instruments to solve problems in the field and to bring solutions back to the classroom to produce survey maps and related architectural plans. This certificate prepares you to work as a surveyor's assistant or survey drafter.

The Architectural Design Certificate option prepares you for the architectural detailing field. Detailers work closely with architects to create computer-generated drawings of architectural designs.

### Mini-Certificate Program Description

We offer three Mini-Certificates in Engineering Technology. Two are CAD based and include Mechanical CAD and Civil CAD. The Construction Basics certificate offers you the opportunity to obtain skills in print reading, planning and estimating, and materials and methods associated with the construction industry.

## ASSOCIATE (AAS) DEGREE

### Civil Engineering Technology

TOTAL CREDITS 75

#### 21-24 General Education Requirements

- 1 CIS 110 Introduction to the PC (required for Option B only)
- 3 ENG 121 English Composition I
- 3 ENG 122 English Composition II (required for Option B only)
- 4 MAT 121 College Algebra
- 3 MAT 122 College Trigonometry
- 4 PHY 105 Conceptual Physics (required for Option B only)
- OR
- 5 PHY 111 Physics: Algebra-Based I with Lab: GT-SCI (required for Option A only)
- 3 Humanities Elective
- 3 Social Science Elective

#### 19 Common Core Courses

- 3 CAD 101 Computer Aided Drafting I
- 3 CAD 255 Solidworks/Mechanical
- 4 ENT 131 Mechanical Drawing I
- 3 ENT 137 Introduction to Engineering Technology
- 3 ENT 237 Statics
- 3 ENT 247 Strength of Materials

#### 35 Civil Engineering Technology

- 3 CAD 202 Computer Aided Drafting/3D
- 4 ENT 141 Surveying I
- 4 ENT 142 Surveying II
- 3 ENT 143 Survey Drafting
- 3 ENT 145 Structural Detailing
- 3 ENT 146 Construction Materials and Methods
- 3 ENT 241 Residential Architecture
- 3 ENT 243 Advanced Survey Drafting
- 3 ENT 244 Surveying III
- 3 ENT 245 Concrete and Asphalt Technology
- 3 ENT 270 Technical Experience

## ASSOCIATE (AAS) DEGREE

### Manufacturing Engineering Technology

TOTAL CREDITS 75

#### 21-24 General Education Requirements

- 1 CIS 110 Introduction to the PC (required for Option B only)
- 3 ENG 121 English Composition I
- 3 ENG 122 English Composition II (required for Option B only)
- 4 MAT 121 College Algebra
- 3 MAT 122 College Trigonometry
- 4 PHY 105 Conceptual Physics (required for Option B only)
- OR
- 5 PHY 111 Physics: Algebra-Based I with Lab: GT-SCI (required for Option A only)

- 3 Humanities Elective
- 3 Social Science Elective

#### 19 Common Core Courses

- 3 CAD 101 Computer Aided Drafting I
- 3 CAD 255 Solidworks/Mechanical
- 4 ENT 131 Mechanical Drawing I
- 3 ENT 137 Introduction to Engineering Technology
- 3 ENT 237 Statics
- 3 ENT 247 Strength of Materials

#### 35 Manufacturing Engineering Technology

- 1 ENT 105 Safety for Manufacturing Environments
- 3 ENT 106 Print Reading for Manufacturing
- 3 ENT 133 Introduction to Mechanical Design
- 2 ENT 134 Geometric Dimensioning & Tolerancing
- 3 ENT 233 Mechanical Design I
- 3 ENT 234 Mechanical Design II
- 3 ENT 238 Industrial Fluid Power and Controls
- 4 ENT 256 Rapid Product Development
- 4 MAC 105 Introduction to Machining Technology
- 3 MAC 205 Introduction to CNC Milling Operations
- 3 MAC 240 CAD/CAM 2D
- 3 MAC 245 CAD/CAM 3D

## CERTIFICATE PROGRAMS

### Engineering Technology

TOTAL CREDITS 33-34

#### 7 General Education Requirements

- 3 ENG 121 English Composition I
- 4 MAT 121 College Algebra

Choose one option:

#### 27 Rapid Production Development Option

- 3 CAD 101 Computer Aided Drafting I
- 1 ENT 105 Safety for Manufacturing Environments
- 4 ENT 131 Mechanical Drawing I
- 3 ENT 133 Introduction to Mechanical Design
- 3 ENT 137 Introduction to Engineering Technology
- 3 ENT 155 Manufacturing Technology I
- 3 ENT 233 Mechanical Design I
- 4 ENT 256 Rapid Product Development

#### Electives (Choose one)

- 3 CAD 255 SolidWorks/Mechanical
- 3 ENT 234 Mechanical Design II
- 3 MAC 240 CAD/CAM 2D

#### 27 Surveying Option

- 3 CAD 101 Computer Aided Drafting I
- 4 ENT 131 Mechanical Drawing I
- 3 ENT 137 Introduction to Engineering Technology
- 4 ENT 141 Surveying I
- 4 ENT 142 Surveying II
- 3 ENT 143 Survey Drafting
- 3 ENT 243 Advanced Survey Drafting
- 3 ENT 244 Surveying III

#### 26 Architectural Design Option

- 3 CAD 101 Computer Aided Drafting I
- 4 ENT 131 Mechanical Drawing I
- 3 ENT 137 Introduction to Engineering Technology
- 4 ENT 141 Surveying I
- 3 ENT 145 Structural Detailing
- 3 ENT 146 Construction Materials and Methods
- 3 ENT 241 Residential Architecture
- 3 ENT 242 Commercial Architecture

## MINI-CERTIFICATE PROGRAMS

### Engineering Technology

TOTAL CREDITS 8-9

#### 9 Mechanical CAD Certificate

- 3 CAD 101 Computer Aided Drafting I
- 3 ENT 133 Introduction to Mechanical Design

#### Elective (choose one)

- 3 CAD 255 SolidWorks/Mechanical
- 3 ENT 233 Mechanical Design I

#### 9 Civil CAD Certificate

- 3 CAD 101 Computer Aided Drafting I

#### Electives (choose two)

- 3 ENT 143 Survey Drafting
- 3 ENT 145 Structural Detailing
- 3 ENT 241 Residential Architecture

#### 8 Construction Basics Certificate

- 3 ARC 107 Blueprint Reading (Residential/Commercial)
- 2 ENT 135 Construction Planning and Estimating
- 3 ENT 146 Construction Materials and Methods

## Fire Science Technology

Alan Ziff, Department Chair

### Associate of Applied Science (AAS) Degree Certificates

#### Career Opportunities

The Fire Science Technology program prepares students for entry level positions in the fire service industry.

#### Degree 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, independent study, and hands on training in conjunction with local fire departments.

#### 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 fire fighting 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 fire fighting can be applied to the Fire Science Associate of Applied Science Degree offered by Pueblo Community College.

#### Program Requirements

##### Entrance Requirements:

Accuplacer Test Scores:

- REA 40 or higher
- SS 50 or higher
- MAT 25 or higher

##### Graduation Requirements:

The Fire Science Technology AAS degree requires a minimum of 69 credits for completion. Fifteen credits are in general education, 15 credits are in technical electives, and 39 credits are in required technical courses.

The Fire Science Technology Certificate Program requires 21 credits for completion.

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

## ASSOCIATE (AAS) DEGREE

### Fire Science Technology

TOTAL CREDITS 69-70

#### 1 Basic Skills Courses

- 1 CIS 110 Introduction to the PC or a score of 30 on the Accuplacer Test

#### 15 General Education Requirements

- 3 ENG 121 English Composition I: GT-CO1
- 3 ENG 131 Technical Writing I

OR

- 3 ENG 122 English Composition II: GT-CO1
- 3 COM 115 Public Speaking
- 3 MAT 107 Career Math

OR

- 3 MAT 121 College Algebra: GT-MA1
- 3 POS 111 American Government: GT-SS1

OR

- 3 POS 125 American State and Local Government

**40 Technical Courses**

3	FST 102	Intro to Fire Science & Suppr
3	FST 103	Firefighter Occupational Health and Safety
3	FST 104	Fire Protection Systems
3	FST 105	Building Plans and Construction
3	FST 106	Fire Inspection Practices
3	FST 107	Hazardous Materials Operations (Level I)
3	FST 201	Instructional Methodology
3	FST 202	Firefighting Strategy and Tactics
4	FST 203	Fire Science Hydraulics
3	FST 204	Fire Codes and Ordinances
3	FST 205	Fire Cause Determination
3	FST 206	Fire Co Superv and Leadership
3	FST 250	Chemistry for Fire Protection

**15 Technical Elective Courses –**

Select 15 hours from the following courses:

9	EMS 125	EMT Basic
9	FST 100	Firefighter I
3	FST 101	Firefighter II
3	FST 110	Job Placement and Assessment
3	FST 150	Introduction to Fire Prevention Education
4	FST 151	Driver-Operator
3	FST 160	Candidate Physical Abilities Test Prep Course
3	FST 207	Strategy and Tactics II
3	FST 252	Fire Arson Investigation
3	FST 253	Fire Ground Organization and Command
3	FST 254	Hazardous Materials Technician Level
3	FST 255	Fire Service Management
3	FST 256	Fire Service EMS Management
3	FST 257	Fire Department Administration

**12 Fire Officer I**

3	FST 201	Instruction Methodology
3	FST 206	Fire company Supervision and Leadership
3	FST 253	NIMS
3	FST 255	Fire Service Management

**14 Fire Prevention & Public Education**

3	FST 104	Fire Protection Systems
3	FST 106	Fire Prevention
3	FST 150	Introduction to Fire Prevention Education
3	FST 204	Principles of Code Enforcement
2	FST 208	Fire Plans Review and Acceptance Testing

**14 Fire Service Special Operations**

4	FST 121	Technical Rope Rescue
2	FST 132	Structural Collapse
2	FST 133	Trench Rescue
2	FST 134	Confined Space Rescue
2	FST 135	Ice Water Rescue
2	FST 136	Swift Water Rescue

**6 Vehicle Extrication**

1	FST 126	Vehicle Extrication Awareness Level
2	FST 127	Vehicle Extrication Operations Level
3	FST 128	Vehicle Extrication Technician Level

**ALSO SEE WILDLAND FIREFIGHTER.****CERTIFICATE PROGRAMS****Fire Science Technology**

TOTAL CREDITS 6-25

**9 Basic Fire Science**

3	FST 102	Principles/Emergency Services
3	FST 103	Occ Safety & Health for Fire
3	FST 202	Strategy and Tactics

**7 Driver Operator**

3	FST 151	Driver Operator
4	FST 203	Fire Hydraulics & Water Supply

**12 Fire Investigator I**

3	FST 205	Fire Investigation I
3	FST 250	Chemistry for Fire Protections
3	FST 251	Legal Aspects of Fire Service
3	FST 252	Investigation II

**12 Firefighter I**

9	FST 100	Firefighter I
3	FST 107	Hazardous Material Operations (Level I)

**8 Firefighter II**

3	FST 101	Firefighter II
3	FST 137	Vehicle Extrication
2	FST 254	Hazardous Materials Technician Level

**25 Firefighter Academy Structural**

3	AAA 101	College 101: The Student Experience
9	EMS 125	EMT Basic
9	FST 100	Firefighter I
3	FST 107	Hazardous Material Operations (Level I)
1	FST 160	Candidate Physical Abilities Test Prep

# Hospitality Studies

Carol Himes, Department Chair

Associate of Applied Science (AAS) degree  
Certificates in Culinary Arts and Tourism

## Career Opportunities

The Hospitality Studies program prepares you for a variety of careers relating to culinary arts, food service management, travel, tourism, convention centers, and event planning. The two Culinary Arts tracks prepare you for skilled or supervisory jobs in cooking, baking, dining room management, bar and lounge management, restaurant management, and institutional food service supervision. The Tourism, Conventions, and Events track prepares you for employment in travel, tour management and event planning, as well as supervisory positions in the lodging and resort business.

## Program Description

The Hospitality Studies program teaches you to perform many skills relating to the specific track you choose. Skills covered in the Culinary Arts tracks include sanitation and safety, hot and cold food production, baking, dining room management, bartending (including responsible alcohol service), garde manger, nutrition, supervision, and basic cost controls. The Culinary Arts tracks are accredited by the American Culinary Federation and include a number of courses endorsed by the National Restaurant Association. Skills taught in the Tourism, Conventions, and Events track include event planning, tour management, convention planning, business planning and development, basic cost controls, marketing, and travel planning. To complete a degree, you must finish an on-the-job internship experience. Often this leads directly to employment in the field.

## Program Requirements

### Entrance requirements:

There are no entrance requirements for this program. However, by the time you have completed 30 credits, you must meet all college requirements for basic skill proficiency in Reading, Math, English, and Computer usage.

### Graduation requirements:

In addition to program requirements, you must complete English 121, a college math course, 3 credits of humanities, 3 credits of social science, and 3 credits of computer instruction.

## ASSOCIATE (AAS) DEGREE

### Culinary Arts Production

TOTAL CREDITS 69.5

#### 12 General Education Requirements

3	ENG 121	English Composition I
3	COM 115	Public Speaking
3		Social Science Elective
3		Math Elective

#### 6 Related Requirements

3	CIS 118	Intro PC Applications
3		Humanities Elective

#### 14.5 Core Program Requirements

3	CUA 156	Nutrition for the Hospitality Professional
3	CUA 157	Menu Planning
3	CUA 255	Supervision in the Hospitality Industry
2	CUA 181	Work Exploration
3	HOS 105	Intro to Management in the Hospitality Industry
.5	HPR 102	CPR for Professionals: Professional Rescuer

#### 37 Culinary Arts Production

2	CUA 101	Food Safety and Sanitation
1	CUA 121	Introduction to Food Production Principles and Practices
1	CUA 122	Introduction to Stocks, Soups, and Sauces
1	CUA 123	Introduction to Garde Manger
1	CUA 124	Vegetable Preparation and Breakfast Cookery
1	CUA 131	Starches, Pastas, Casseroles and Grain Products
1	CUA 132	Center of the Plate; Meat
1	CUA 133	Center of the Plate; Poultry, Fish and Seafood
1	CUA 134	Application of Food Production Principles
1	CUA 141	Baking: Principles and Ingredients
1	CUA 142	Basic Yeast-Raised Products and Quick Breads
1	CUA 143	Baking: Cakes, Pies, Pastries and Cookies
1	CUA 144	Baking Applications
4	CUA 190	Dining Room Management
4	CUA 210	Advanced Cuisine and Garde Manger
4	CUA 233	Advanced Line Prep and Cookery
2	CUA 234	Advanced Line Planning
2	CUA 236	Advanced Baking
3	CUA 261	Cost Controls
4	CUA 281	Internship

## ASSOCIATE (AAS) DEGREE

### Culinary Arts Management

TOTAL CREDITS 69.5

#### 12 General Education Requirements

3	ENG 121	English Composition I
3	COM 115	Public Speaking
3		Social Science Elective
3		Math Elective

#### 6 Related Requirements

3	CIS 118	Intro PC Applications
3		Humanities Elective

#### 14.5 Core Program Requirements

3	CUA 156	Nutrition for the Hospitality Professional
3	CUA 157	Menu Planning
3	CUA 255	Supervision in the Hospitality Industry
2	CUA 181	Work Exploration
3	HOS 105	Intro to Management in the Hospitality Industry
.5	HPR 102	CPR for Professionals: Professional Rescuer

#### 37 Culinary Arts Management

2	CUA 101	Food Safety and Sanitation
1	CUA 121	Introduction to Food Production Principles and Practices
1	CUA 122	Introduction to Stocks, Soups, and Sauces
1	CUA 123	Introduction to Garde Manger
1	CUA 124	Vegetable Preparation and Breakfast Cookery
1	CUA 131	Starches, Pastas, Casseroles and Grain Products
1	CUA 132	Center of the Plate: Meat
1	CUA 133	Center of the Plate: Poultry, Fish and Seafood
1	CUA 134	Application of Food Production Principles
2	CUA 136	Bartending
4	CUA 190	Dining Room Management
1	CUA 191	Front of the House Planning
4	CUA 233	Advanced Line Preparation and Cookery
3	CUA 256	Marketing in the Hospitality Industry
3	CUA 261	Cost Controls
3	CUA 262	Purchasing for the Hospitality Industry
3	CUA 263	Legal Aspects of Hospitality Management
4	CUA 281	Internship

**ASSOCIATE (AAS) DEGREE**  
**Tourism, Conventions and Events**  
TOTAL CREDITS 69.5

**12 General Education Requirements**

- 3 ENG 121 English Composition I
- 3 COM 115 Public Speaking
- 3 Social Science Elective
- 3 Math Elective

**6 Related Requirements**

- 3 CIS 118 Intro PC Applications
- 3 Humanities Elective

**14.5 Core Program Requirements**

- 3 CUA 156 Nutrition for the Hospitality Professional
- 3 CUA 157 Menu Planning
- 3 CUA 255 Supervision in the Hospitality Industry
- 2 CUA 181 Work Exploration
- 3 HOS 105 Intro to Management in the Hospitality Industry
- .5 HPR 102 CPR for Professionals: Professional Rescuer

**37 Tourism, Conventions and Events**

- 3 CUA 256 Marketing in the Hospitality Industry
- 3 CUA 263 Legal Aspects of Hospitality Management
- 4 CUA 281 Internship
- 3 HOS 122 Tourism Geography I
- 3 HOS 123 Tourism Geography II
- 3 HOS 131 Planning for Special Events
- 3 HOS 141 Convention Management
- 3 HOS 207 Tour Management
- 3 MAN 216 Small Business Management
- 3 MAN 225 Managerial Finance
- 6 Electives

**CERTIFICATE PROGRAMS**

**Culinary Arts**

TOTAL CREDITS 16

**16 Dining Service Certificate**

- 2 CUA 101 Food Safety and Sanitation
- 2 CUA 136 Bartending
- 4 CUA 190 Dining Room Management
- 3 HOS 105 Intro to Management in the Hospitality Industry
- 5 Electives

**16 Beginning Production and Baking Certificate**

- 2 CUA 101 Food Safety and Sanitation
- 1 CUA 121 Introduction to Food Production Principles and Practices
- 1 CUA 122 Introduction to Stocks, Soups, and Sauces
- 1 CUA 123 Introduction to Garde Manger
- 1 CUA 124 Vegetable Preparation and Breakfast Cookery
- 1 CUA 141 Baking: Principles and Ingredients
- 1 CUA 142 Basic Yeast-Raised Products and Quick Breads
- 1 CUA 143 Baking: Cakes, Pies, Pastries, and Cookies
- 1 CUA 144 Baking Applications
- 3 HOS 105 Intro to Management in the Hospitality Industry
- 3 Electives

**16 Intermediate Production Certificate**

- 1 CUA 131 Starches, Pastas, Casseroles and Grain Products
- 1 CUA 132 Center of the Plate: Meat
- 1 CUA 133 Center of the Plate: Poultry, Fish and Seafood
- 1 CUA 134 Application of Food Production Principles
- 3 CUA 156 Nutrition for the Hospitality Professional
- 4 CUA 190 Dining Room Management
- 2 CUA 236 Advanced Baking
- 3 Electives

**16 Beginning Tours and Events Certificate**

- 3 HOS 105 Intro to Management in the Hospitality Industry
- 3 HOS 122 Tourism Geography I
- 3 HOS 131 Planning for Special Events
- 3 HOS 207 Tour Management
- 4 Electives

**16 Intermediate Tours and Events Certificate**

- 3 CUA 256 Marketing in the Hospitality Industry
- 3 CUA 263 Legal Aspects of Hospitality Management
- 3 HOS 106 Case Studies in the Hospitality Industry
- 3 HOS 123 Tourism Geography II
- 3 HOS 141 Convention Management
- 1 Electives

# Industrial Electronics Technology

Roger Weitzel, Department Chair

Associate of Applied Science (AAS) Degree  
Certificates and Mini-Certificates

## Career Opportunities

The AAS degree in Industrial Electronics Technology prepares you for a career as an electronics technician, an electro-mechanical technician, a semiconductor manufacturing technician, or an electro-mechanical field service technician.

## Program Description

This program develops essential skills for maintaining the complex electro-mechanical 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 General Electronics option provides advanced skills in analog and digital electronics. The Electro-Mechanical 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.

## ASSOCIATE (AAS) DEGREE

### General Electronics Technology

TOTAL CREDITS 61

#### 16 General Education Requirements

1	CIS 110	Introduction to the PC
3	ENG 131	Technical Writing
1	ENT 105	Safety for Manufacturing Environments
4	MAT 108	Technical Mathematics
4	PHY 105	Conceptual Physics
3		Social Science or Humanities Elective

#### 39 Common Core Requirements

3	ELT 101	Survey of Electronics
3	ELT 106	Fundamentals of DC/AC
3	ELT 112	Advanced DC-AC
3	ELT 134	Solid State Devices I
3	ELT 135	Solid State Devices II
3	ELT 147	Digital Devices I
3	ELT 148	Digital Devices II
3	ELT 175	Special Topics: Capstone I
3	ELT 258	Programmable Logic Controllers
3	ELT 261	Microprocessors
3	ELT 268	Robotics Technologies
3	ELT 275	Special Topics: Capstone II
3	ENT 236	Electronics Drafting

#### 6 Electives (Select two classes)

3	CAD 101	Computer Aided Drafting I
3	ELT 202	Introduction to PC Servicing
3	ELT 203	Advanced PC Servicing and A+ Prep
3	ELT 237	Vacuum and Power RF Systems
3	ELT 252	Motors and Controls
3	ELT 257	Sensors and Transducers
3	ELT 259	Advanced Programmable Logic Controllers
3	CNG 101	Intro to Networking

## Electromechanical Technology

TOTAL CREDITS 61

#### 16 General Education Requirements

1	CIS 110	Introduction to the PC
3	ENG 131	Technical Writing
1	ENT 105	Safety for Manufacturing Environments
4	MAT 108	Technical Mathematics
4	PHY 105	Conceptual Physics
3		Social Science or Humanities Elective

#### 42 Common Core Requirements

3	ELT 101	Survey of Electronics
3	ELT 106	Fundamentals of DC/AC
3	ELT 134	Solid State Devices I
3	ELT 147	Digital Devices I
3	ELT 175	Special Topics: Capstone I
3	ELT 252	Motors and Controls
3	ELT 254	Industrial Wiring
3	ELT 257	Sensors and Transducers
3	ELT 258	Programmable Logic Controllers
3	ELT 275	Special Topics: Capstone II
3	ENT 106	Print Reading for Manufacturing
3	ENT 236	Electronics Drafting
3	ENT 238	Industrial Fluid Power and Controls
3	MAC 256	Industrial Components

#### 3 Electives (Select one class)

3	CAD 101	Computer Aided Drafting I
3	ELT 202	Introduction to PC Servicing
3	ELT 259	Advanced Programmable Logic Controllers
3	ELT 268	Robotics Technologies
4	MAC 105	Introduction to Machining Technology
4	WEL 102	Oxyacetylene Joining Process

## CERTIFICATE PROGRAMS

### Industrial Electronics Technology

TOTAL CREDITS 16-29

#### 28 Electromechanical Technology

3	ELT 101	Survey of Electronics
3	ELT 106	Fundamentals of DC/AC
3	ELT 252	Motors and Controls
3	ELT 258	Programmable Logic Controllers
3	ENT 106	Print Reading for Manufacturing
3	ENT 238	Industrial Fluid Power and Controls
3	MAC 256	Industrial Components
3	MAC 265	Mechanical Components II
4	WEL 102	Oxyacetylene Joining Process

**29 Industrial Controls Technology**

1	CIS 110	Introduction to the PC
3	ELT 101	Survey of Electronics
3	ELT 106	Fundamentals of DC/AC
3	ELT 134	Solid State Devices I
3	ELT 147	Digital Devices I
3	ELT 252	Motors and Controls
3	ELT 257	Sensors and Transducers
3	ELT 258	Programmable Logic Controllers
3	ELT 268	Robotics Technologies
1	ENT 105	Safety for Manufacturing Environments
3	ENT 238	Industrial Fluid Power Controls

**SHORT CERTIFICATE PROGRAM**

TOTAL CREDITS 16

**16 Electromechanical Technology Fast Track**

3	ELT 101	Survey of Electronics
3	ELT 106	Fundamentals of DC/AC
3	ELT 252	Motors & Controls
3	ELT 258	Programmable Logic Controllers
4	WEL 102	Oxyacetylene Joining Process

# Interior Design

Jamie Gage, Department Chair

## Associate of Applied Science (AAS) Degree

**Career Opportunities**

The Interior Design program prepares students for careers in interior design, in which creative and technical solutions are applied within a structure to achieve a built interior environment. Professions and industries that hire graduates include interior design, kitchen and bath design, hospitality, architecture, facilities management, wholesale and retail sales, healthcare, lighting, home furnishings, home building, and real estate.

**Program Description**

The Interior Design program teaches students the interior design process, a systematic and coordinated methodology, including research, analysis and integration of knowledge into the creative process. Through this process the needs and resources of the client are satisfied to produce an interior space that fulfills the project goals. Students are introduced to the practice of interior design, as well as the structure and history of the profession. They learn drafting and graphics for interior designers, the principles of space planning, and both residential and commercial design principles. Students become proficient in kitchen, bath, and lighting design, interior textiles and finishes, interior construction and environmental technologies. Throughout the curriculum, a strong emphasis is placed on sustainable design and energy efficiency. The curriculum includes the Energy, Resource Conservation and Indoor Air Quality components of the Green Advantage Certification program, and prepares students for these components of the Green Advantage Certification Exam.

**Program Requirements***Entrance requirements:*

Accuplacer test scores of 62 in Reading; 70 on English Composition; and 57 in Math.

*Graduation requirements:*

The Associate of Applied Science program requires completion of 75 total credit hours, including a 60 hour core curriculum. An internship is required, along with completion of a seminar, workshop and capstone course.

**ASSOCIATE (AAS) DEGREE****Interior Design**

TOTAL CREDITS 75

**15 General Education Requirements**

3	COM 115	Public Speaking
3	ENG 131	Technical Writing
3	MAT 107	Career Math (or higher)
3	BIO 143	Ecology of Colorado

## Elective

3	Choose one of the following: ART 110, ART 132, PSY 101, SOC 101
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**60 Core Program Requirements**

3	CAD 101	Computer Aided Drafting I
4	IND 100	Interior Design Fundamentals
3	IND 107	History of Interior Design
1	IND 108	Profession Survey
4	IND 111	Drafting for Interiors
4	IND 112	Graphic Communication
3	IND 114	Space Planning
2	IND 117	Interior Textiles
2	IND 118	Interior Finishes



4	IND	151	Residential Design
2	IND	152	Commercial Design I
2	IND	178	Seminar: Environmental Attitudes & Sustainability
4	IND	200	Kitchen and Bath Design
4	IND	201	Commercial Design II
2	IND	205	Professional Practice for Interior Designer
4	IND	211	Interior Construction
3	IND	225	Lighting Design
3	IND	278	Workshop: Environmental Technologies for Interiors
3	IND	280	Internship
3	IND	289	Capstone

## Law Enforcement Academy

Mary Kubeck, Department Chair  
Certificate

### Career Opportunities

The Pueblo Law Enforcement Academy (PLEA) certificate program prepares you for a career in policing, parole, or investigations. This certification allows you to become state certified as a level one police officer and work anywhere in the state of Colorado.

### Program Description

This program offers instruction in many areas of law including Colorado Revised Statutes, Constitutional law, and Case law pertaining to the 4th and 14th Amendments of the United States Constitution.

This program is a 37-semester-hour program certified by the Colorado Peace Officers Standards and Training (POST) Board. When you complete the program, you will meet the requirements of the Police Science Option of the AAS Degree in Criminal Justice, and you will also qualify to take the Colorado POST test for certification as a Colorado peace officer.

### Program Requirements

#### *Entrance requirements:*

You must be admitted to PCC, 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.

### CERTIFICATE PROGRAM

#### Law Enforcement Academy

TOTAL CREDITS 37

#### **37 Police Science Certificate**

6	LEA 101	Basic Police Academy I
12	LEA 102	Basic Police Academy II
2	LEA 103	Basic Law Enforcement Academy III
8	LEA 105	Basic Law
3	LEA 106	Arrest Control Techniques
3	LEA 107	Law Enforcement Driving
3	LEA 108	Firearms

# Library Technician

Jeanne Gardner, Program Coordinator

## Associate of Applied Science (AAS) Degree Certificate

### 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 web page, 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 non-technical skills you need to be a successful library technician: customer service; listening, speaking, and 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. You will be better prepared to succeed in the courses if you have completed the following:

- BTE 100, BTE 102, BTE 103, or equivalent; and
- CIS 110 Intro to the PC or equivalent

#### Graduation requirements:

Certificate and degree-seeking students must complete a minimum of 15 graded credits in the LTN core at PCC.

If you plan to transfer to a bachelor's level program, consult with your advisor to determine the transferability of courses.

## ASSOCIATE (AAS) DEGREE

### Library Technician

TOTAL CREDITS 61

#### 30 General Education\*

- 3 Mathematics (Select one):  
MAT 107, MAT 108, MAT 120, MAT 121, MAT 125, MAT 135, MAT 201
- 3 English/Speech (Select one):  
ENG 121, ENG 122, COM 115
- 12 Social & Behavioral Sciences
- 12 Humanities

\*General Education must total 30 credits.

#### 13 Core Curriculum Requirements

- 1 CIS 130 Introduction to Internet
- 3 LTN 101 Introduction to Library Services
- 3 LTN 205 Introduction to Cataloging and Classification
- 3 LTN 210 Reference Materials
- 3 LTN 220 Library/Media Center Management & Public Relations

#### 3 Select from one of the following:

- 3 HUM 164 American Cinema
- 3 LTN 110 Selection and Acquisitions - Online
- 3 LTN 115 Library Circulation

#### 6 Electives (Select two from the following)

- 3 EDU 261 Teaching, Learning and Technology
- 3 ELT 202 Introduction to PC Servicing
- 3 LIT 255 Children's Literature
- 3 LIT 275 Special Topics: Young Adult Literature
- 3 LTN 115 Library Circulation
- 2 LTN 118 Audio Visual Management

#### 9 Electives Approved by Advisor

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.

## CERTIFICATE PROGRAM

### Library Technician

TOTAL CREDITS 30

#### 14 General Education Requirements

- 3 Communications (select one):  
ENG 121 or COM 115
- 3 Mathematics (select one):  
MAT 107, BTE 156
- 4 Humanities
- 4 Social and Behavioral Sciences

#### 10 Core Curriculum Requirements

- 1 CIS 130 Introduction to Internet
- 3 LTN 101 Introduction to Library Services
- 3 LTN 205 Introduction to Cataloging and Classification
- 3 LTN 220 Library/Media Center Management & Public Relations

#### 3 Select from one of the following:

- 3 HUM 164 American Cinema
- 3 LTN 110 Selection and Acquisitions – Online
- 3 LTN 115 Library Circulation (online)

#### 3 Electives (Select one or two from the following)

- 3 CIS 118 Intro PC Applications
- 3 CIS 128 Windows Complete
- 1 CIS 131 Word Processing I
- 3 ELT 202 Introduction to PC Servicing
- 3 LIT 205 Ethnic Literature
- 3 LIT 255 Children's Literature
- 3 LIT 275 Special Topics: Young Adult Literature
- 3 LTN 115 Library Circulation
- 2 LTN 118 Audio Visual Management
- 3 LTN 210 Reference Materials

# Machining Technology

Roger Weitzel, Department Chair

Associate of Applied Science (AAS) Degree

Certificates

## Career Opportunities

The AAS Degree and certificate programs in Machining Technology prepare you to enter the manufacturing world using the latest technology and metal working skills.

## Program Description

In the first two semesters, you will use manual machines (operated by hand) to develop "hands on" fundamental skills such as drilling, reaming, turning, milling, threading, and tool bit grinding. You will also develop applied math skills to calculate tapers, complete set ups, and figure tool offset compensation. These "old school" practices will be supplemented with an introduction to Mastercam, enabling you to create two dimensional drawings and gain experience with computer aided manufacturing software.

The AAS degree provides training in advanced metal working using computer controlled machines. You will use Mastercam to create three dimensional drawings, solids, and surfaces, and you will learn to create tool paths to machine to those features. You will learn to inspect, set up, and operate machines. If you are completing the AAS degree or currently working in the field, we provide Mastercam testing and certification.

You may convert work experience into college credit through credit-by-portfolio or credit-by-challenge. If you are in the degree program, we will arrange an internship for you.

## ASSOCIATE (AAS) DEGREE

### Machining Technology

TOTAL CREDITS 73

#### 19 General Education Requirements

- 3 ENG 131 Technical Writing I
- 3 Humanities
- 4 Natural Science
- 3 Social Science
- 3 CAD 255 Solid Works Mechanical
- OR
- ENT 133 Introduction to Mechanical Design
- 3 ENT 233 Mechanical Design I
- OR
- CAD 101 Computer Aided Drafting I
- OR
- WEL 103 Basic Shielded Metal Arc I

#### 54 Core Curriculum Requirements

##### Semester 1 – Fall

- 3 ENT 106 Print Reading for Manufacturing
- 4 MAC 105 Introduction to Machining Technology
- 4 WEL 102 Oxyacetylene Joining Processes
- 4 MAT 108 Technical Mathematics

##### Semester 2 – Spring

- 4 MAC 130 Conventional Lathe Operations
- 2 ENT 134 Geometric Dimensioning & Tolerancing
- 3 MAC 205 Introduction to CNC Milling Operations
- 3 MAC 240 CAD/CAM 2D

##### Semester 3 – Fall

- 4 MAC 131 Milling Machines and Operations
- 3 MAC 206 CNC Milling Operations II
- 3 MAC 241 CAD CAM 2D Lab
- 3 MAC 250 Advanced Inspection Techniques

##### Semester 4 – Spring

- 4 MAC 141 Advanced Machining Operations
- 3 MAC 201 Introduction to CNC Turning Operations
- 3 MAC 245 CAD/CAM 3D
- 4 WEL 263 Applied Metal Properties

## CERTIFICATE PROGRAMS

### General Machining Technology

TOTAL CREDITS 16-38

#### 38 Machining Certificate Requirements

##### Fall Semester

- 3 ENT 106 Print Reading for Manufacturing
- 4 MAC 105 Introduction to Machining Technology
- 4 MAC 130 Conventional Lathe Operations
- 3 MAT 107 Career Math
- 4 WEL 263 Applied Metal Properties

##### Spring Semester

- 2 ENT 134 Geometric Dimensioning & Tolerancing
- 4 MAC 131 Milling Machines and Operations
- 4 MAC 141 Advanced Machining Operations
- 3 MAC 205 Introduction to CNC Milling Operations

#### 7 Electives

Choose from: CAD 101, CAD 255, ENT 131, ENT 133, ENT 137, ENT 155, WEL 102, WEL 103, WEL 104, WEL 250

#### 16 Manual Machining Certificate Requirements

- 4 MAC 105 Introduction to Machining Technology
- 4 MAC 130 Conventional Lathe Operations
- 4 MAC 131 Milling Machines and Operations
- 4 MAC 141 Advanced Machining Operations

## MINI-CERTIFICATES

### Machining Technology

TOTAL CREDITS 9

#### 9 CNC Certificate Requirements

- 3 MAC 201 Introduction to CNC Turning Operations
- 3 MAC 205 Introduction to CNC Milling Operations
- 3 MAC 206 CNC Milling Operations II

#### 9 CAD/CAM Certificate Requirements

- 3 MAC 240 CAD/CAM 2D
- 3 MAC 241 CAD CAM 2D Lab
- 3 MAC 245 CAD/CAM 3D

# Manufacturing Technology

Roger Weitzel, Department Chair

Associate of Applied Science (AAS) Degree

## Career Opportunities

The completion of this two year AAS degree in Manufacturing Technology will prepare the student for positions as Quality Assurance Technicians, Group Leaders, Production Supervisors, Materials and Inventory Specialist, Production Planners, Project Coordinators and other related positions.

## Program Description

The Manufacturing Technology program has been developed in response to the ever changing needs and challenges that the manufacturing industry faces as a whole. The Manufacturing Technology program focuses on the global manufacturing environment and advances in technology by preparing the student with technical skills as well as business efficiency and innovation skills. This program takes a broad based approach in the curriculum that exposes the student to the major facets of manufacturing operations. This program includes many technical aspects of manufacturing but also prepares the student with organizational change and complex problem solving skills that involve team and personal interactions. Manufacturing in the U.S. has faced global completion over the past two decades driving the need to add tools and methodologies to be able to improve productivity. The tools such as Lean Manufacturing and Process Control methods are basic skills that are essential to the student's success.

## Program Requirements

There are no entrance requirements for this program. However, by the time you have completed 30 credits, you must meet all college requirements for basic skills. You may convert work experience into college credit through credit-by-portfolio or credit-by-challenge. If you are in the degree program, we will help arrange an internship for you.

## ASSOCIATE (AAS) DEGREE

### Manufacturing Technology

TOTAL CREDITS 64

#### 21 General Education Requirements

3	ENG 131	Technical Writing I
4	MAT 121	College Algebra
3	MAT 122	College Trigonometry
5	PHY 105	Conceptual Physics
3		Humanities Elective
3		Social Science Elective

#### 43 Core Curriculum Requirements

3	CAD 255	Solidworks/Mechanical
1	CIS 131	Word Processing I
1	CIS 151	PC Spreadsheets I: Excel
3	EKG 101	Engineering Graphics
1	ENT 105	Safety for Manufacturing Environments
3	ENT 106	Print Reading for Manufacturing
4	MAC 105	Introduction to Machining Technology
3	MAC 205	Introduction to CNC Milling Operation
3	MAN 105	Logistics Management
3	MAN 168	Basic Process Controls
3	MAN 241	Project management in Organizations
3	MTE 101	Introduction to Manufacturing Technology
3	MTE 120	Manufacturing Processes
3	MTE 220	Manufacturing Business and Economics
3	MTE 244	Lean Manufacturing Prac/Proc
3	MTE 289	Manufacturing Capstone

# Massage Therapy

Jeanette McWilliams, Coordinator

Certificate

## Career Opportunities

The Massage Therapy program prepares students for careers in spas, nursing homes, hospitals and private practice clinics. Students will be eligible for registration as a massage therapist in the State of Colorado and eligible to sit for national certification exams.

## Program Description

The Massage Therapy program teaches students to perform basic and advanced specialized massage techniques, such as aromatherapy, reflexology, acupressure, myofascial release, deep tissue, lymphatic drainage, and the foundation knowledge needed to support the skilled application of these methods. Students also receive instruction on how to set up their own clinic in the community. Skills and knowledge are taught through a combination of lecture, hands on practice with professional massage instructors, interactive teaching in a simulated clinic setting and in the community. Through this program the student completes 850 contact hours of massage and bodywork education which exceeds the 500 hour requirement for registration as a massage therapist in the State of Colorado.

## Program Requirements

### Entrance requirements:

Students must have completed coursework or ACT scores or basic skills assessment scores equivalent to ENG 090, REA 090 and MAT 060. In addition, HHP 224, HWE 275, HPR 178 and BIO 106 or equivalent must be completed with a grade of "C" or higher, prior to entrance in the program. Students must fill out an application and return it prior to the deadline for priority consideration. An informal meeting with the program chair is also required for acceptance into the program. When notified of conditional acceptance, students must complete a background check for admission.

### Graduation requirements:

While in the program students must meet clinical requirements of current immunizations, drug screening, possess a professional CPR card and purchase low-cost liability insurance. All courses must be completed with a C or better to continue and graduate from the Massage Therapy Program.

## CERTIFICATE

### Massage Therapy

TOTAL CREDITS 42

#### 42 Massage Therapy Certificate Requirements

4	BIO 106	Basic Anatomy and Physiology
1	HPR 178	Medical Terminology
1	HWE 275	Ethics of Touch*
1	HHP 224	Introduction to Massage Therapy

#### Semester 1

2	HHP 270	Clinical
3	HPR 117	Anatomical Kinesiology
2	MST 105	Lifestyle Wellness
4	MST 111	Basic Massage Therapy
2	MST 204	MST Business Practices

**Semester 2**

- 1 HHP 145 Digestive Wellness\*
- 2 HHP 208 Advanced Musculoskeletal Anatomy
- 2 HHP 271 Clinical
- 3 MST 113 Professional Massage
- 3 MST 216 Pathology for Massage Therapy
- 2 MST 289 Capstone

**Semester 3**

- 3 MST 178 Seminar
- 3 MST 184 Clinical Massage
- 3 MST 284 Clinical Massage

\*Online courses .

HHP 145 can be taken any semester

## Medical Assistant

Sue Kochevar, Dean of Health Professions  
Certificate

**Program Description**

Front Office Medical Assistant certificate will prepare the student for an entry-level position for administrative duties in a medical office.

The Medical Assistant Certificate will prepare the student to work in the front office of a medical practice, as well as perform clinical duties such as drawing blood, giving injections and performing lab tests. Students serve an internship and prepare for national certification.

**Front Office Medical Assistant**

TOTAL CREDIT HOURS 15

**15 Core Requirements**

- 6 HIT 101 Health Information Management Services
- 2 HPR 178 Medical Terminology
- 3 MOT 130 Insurance Billing & Coding
- 4 MOT 225 Medical Practice Management Issues

**Medical Assistant**

TOTAL CREDIT HOURS 41

**41 Core Requirements**

- 6 HIT101 Health Information Management Services
- 2 HPR 106 Law & Ethics for Health Professions
- 1 HPR 108 Dietary Nutrition
- 2 HPR 178 Medical Terminology
- 3 MOT 125 Basic Medical Sciences I
- 3 MOT 130 Insurance Billing & Coding
- 3 MOT 133 Basic Medical Sciences II
- 4 MOT 138 Medical Assisting Laboratory Skills
- 4 MOT 140 Clinical Studies
- 5 MOT 183 Medical Assistant Internship
- 1 MOT 189 Medical Assistant Certification Exam Review
- 4 MOT 225 Medical Practice Management
- 3 PSY 235 Human Growth & Development

## Med Prep

Sue Kochevar, Dean of Health Professions  
Certificate

### 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 that are currently working in the field to offer insight in the medical career 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 this semester, students will receive a certificate for Clinical Medical Assistant/Pharmacy Aid

### Med Prep for Nursing Assistant

TOTAL CREDIT HOURS 15

#### 15 Core Requirements

- 3 HPR 100 Introduction to Health
- 2 HPR 178 Medical Terminology
- 3 MAR 106 Marketing Your Image
- 4 NUA 101 Nurse Aide Health Care Skills
- 1 NUA 170 Nurse Aide Clinical Experience

### Nursing Aide

TOTAL CREDIT HOURS 5

#### 5 Core Requirements

- 4 NUA 101 Nurse Aide Health Care Skills
- 1 NUA 170 Nurse Aide Clinical Experience

## Medical Sonography

Larry E. Bontrager, Department Chair

Associate of Applied Science (AAS) Degree  
Certificate

### Career Opportunities

This program prepares you for a career in Medical Sonography (Ultrasound). After graduating from the program, you may take the American Registry for Diagnostic Medical Sonography (ARDMS) national certification examination 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, two track program.

Track One is a four semester certificate program for students who currently hold a Bachelor's Degree.

Track Two includes general education requirements to obtain an AAS Degree in Medical Sonography. This track is for students who currently hold a two year degree/certificate in a patient care related field.

Both programs teach 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 sonography.

### Program Requirements

#### Entrance requirements:

Basic Skills: REA 090, ENG 090, MAT 060, CIS 110, BIO 105 or BIO 106

Prerequisite Requirements: ENG 121, BIO 201, MAT 107, BIO 202, BIO 216, RTE 255

#### Graduation requirements:

PSY 235 and Humanities. In addition, students must complete all required Clinical Competencies.

## ASSOCIATE (AAS) DEGREE

### Medical Sonography

TOTAL CREDITS 76.5

#### 13 General Education Requirements

- 3 MAT 107 Career Mathematics
- 3 ENG 121 English Composition I
- 4 BIO 202 Human Anatomy and Physiology I
- 3 PSY 235 Human Growth and Development

#### 6 Prerequisite Requirements

- 4 BIO 216 Pathophysiology
- 2 RTE 255 Multiplanar Sectional Imaging

#### 57.5 Core Curriculum Requirements

##### 14.5 Semester 1 – Fall

- 2 DMS 221 OB/GYN Ultrasound I
- 2 DMS 231 Abdominal Ultrasound I
- 2 DMS 241 Ultrasound Physics I
- 6 DMS 244 Ultrasound Scanning Lab
- 2.5 DMS 280 Clinical Observation

##### 16 Semester 2 – Spring

- 2 DMS 222 OB/GYN Ultrasound II
- 2 DMS 232 Abdominal Ultrasound II
- 2 DMS 242 Ultrasound Physics II
- 10 DMS 281 Clinical Internship I

##### 14 Semester 3 – Summer

- 2 DMS 205 Small Parts Ultrasound
- 2 DMS 206 Vascular Ultrasound
- 10 DMS 282 Clinical Internship II

##### 13 Semester 4 – Fall

- 3 DMS 289 Ultrasound Capstone
- 10 DMS 283 Clinical Internship III

## CERTIFICATE PROGRAM

### Medical Sonography

TOTAL CREDITS 63.5

#### 6 Prerequisite Requirements

- 4 BIO 216 Pathophysiology
- 2 RTE 255 Multiplanar Sectional Imaging

#### 57.5 Core Curriculum Requirements

##### 14.5 Semester 1 – Fall

- 2 DMS 221 OB/GYN Ultrasound I
- 2 DMS 231 Abdominal Ultrasound I
- 2 DMS 241 Ultrasound Physics I
- 6 DMS 244 Ultrasound Scanning Lab
- 2.5 DMS 280 Clinical Observation I

##### 16 Semester 2 – Spring

- 2 DMS 222 OB/GYN Ultrasound II
- 2 DMS 232 Abdominal Ultrasound II
- 2 DMS 242 Ultrasound Physics II
- 10 DMS 281 Clinical Internship I

##### 14 Semester 3 – Summer

- 2 DMS 205 Small Parts Ultrasound
- 2 DMS 206 Vascular Ultrasound
- 10 DMS 282 Clinical Internship II

##### 13 Semester 4 – Fall

- 3 DMS 289 Ultrasound Capstone
- 10 DMS 283 Clinical Internship III

## Nursing – Associate Degree Nursing

Eva Tapia, Nursing Program Director  
Cathy Coram, Fremont Campus Coordinator  
Carolle Anne Banville, SCCC East Campus Coordinator  
Associate of Applied Science (AAS) Degree

### Career Opportunities

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.

### Program Description

The 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. Entry level courses in leadership teach you to direct and supervise ancillary personnel. The program allows a practical nursing exit point (certificate). After successfully completing the first two semesters of the program, students are eligible to write the Practical Nursing National Council Licensure Examination (NCLEX-PN). At this point, students could exit and seek employment as LPNs or continue on in the remaining two semesters and prepare to write the National Council Licensure Examination for Registered Nurses (NCLEX-RN). After completing all requirements, you will receive the AAS degree. Successful performance on the (NCLEX-RN) awards state licensure and qualifies you for the title of Registered Nurse (RN).

### Program Requirements

#### Entrance requirements:

BIO 201, BIO 202, BIO 204, ENG 121, PSY 235, and passing score on the TEAS (Test of Essential Academic Skills) or documented remediation.

This is a limited-entry admission 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 Nursing program. Students who complete the departmental application process will have their qualifications reviewed by the program's admission committee. The committee will consider the following criteria in the selection process: prerequisite GPA, completion of all general education courses, and health related work experience. Applicants not accepted for a given year who wish to be considered for a subsequent term must reapply.

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.

## ASSOCIATE (AAS) DEGREE

### PN Certificate Optional

### Nursing

TOTAL CREDITS 80

#### 18 General Education Requirements

- 4 BIO 201 Human Anatomy and Physiology I
- 4 BIO 202 Human Anatomy and Physiology II
- 4 BIO 204 Microbiology
- 3 ENG 121 English Composition I
- 3 PSY 235 Human Growth and Development

**Related Suggested Courses**

- BIO 216 Pathophysiology
- MAT 103 Math for Clinical Calculations
- \*Humanities or Social/Behavior Science elective

\*Elective must be selected from the CCCS Guaranteed Transfer (GT) – Pathways Course list

Related Suggested Courses may be completed prior to admission into the Nursing program or may be taken concurrently to the program.

**34 Core Curriculum Requirements – 1<sup>st</sup> year****Semester 1 – Fall**

- 8 NUR 109 Fundamentals of Nursing
- 2 NUR 112 Basic Concepts of Pharmacology
- 1 HPR 108 Dietary Nutrition
- 3 MAT 103 Math for Clinical Calculations

**Semester 2 – Spring**

- 9 NUR 106 Medical and Surgical Nursing Concepts
- 7 NUR 150 Obstetric & Pediatric Nursing
- 4 BIO 216 Pathophysiology

**For LPN exit-out only – Summer**

- 5 NUR 169 Transition into Practical Nursing

**28 Core Curriculum Requirements – 2<sup>nd</sup> year****Semester 3 – Fall**

- 8 NUR 206 Advanced Concepts of Medical-Surgical Nursing I
- 4 NUR 211 Nursing Psychiatric Clients
- 2 NUR 212 Pharmacology II

**Semester 4 – Spring**

- 6 NUR 216 Advanced Concepts of Medical Surgical Nursing II
- 5 NUR 230 Leadership Management Trends
- 3 \*Humanities or Social/Behavior Science elective

**ASSOCIATE (AAS) DEGREE – LPN TO ADN****Nursing**

TOTAL CREDITS 77

**20\* Credits Received for Practical Nursing Courses**

Colorado Articulation for PN graduates\*

**25 General Education Requirements**

- 4 BIO 201 Human Anatomy and Physiology I
- 4 BIO 202 Human Anatomy and Physiology II
- 4 BIO 204 Microbiology
- 4 BIO 216 Pathophysiology
- 3 MAT 103 Math for Clinical Calculations
- 3 ENG 121 English Composition I
- 3 PSY 235 Human Growth and Development

**32 Core Curriculum Requirements****Summer Semester**

- 4 NUR 189 Transition from LPN to ADN

**Fall Semester**

- 8 NUR 206 Advanced Concepts of Medical-Surgical Nursing I
- 4 NUR 211 Nursing Psychiatric Clients
- 2 NUR 212 Pharmacology II

**Spring Semester**

- 6 NUR 216 Advanced Concepts of Medical Surgical Nursing II
- 5 NUR 230 Leadership Management Trends
- 3 Humanities or Social/Behavior Science elective\*

\*Elective must be selected from the CCCS Guaranteed Transfer (GT) – Pathways Course list



# Nursing Aide

Karen Kissell, Department Chair  
Mini-Certificate\*

## Career Opportunities

The Nurse Aide program prepares you to work as an entry-level bedside caregiver in health care facilities or home health care services. You can work in a variety of positions: nursing assistant, nurse aide, orderly, or attendant.

## Program Description

This program teaches you the basic skills and procedures needed to assist hospital clients, long-term care residents, and home health care clients with their daily living activities.

## Program Requirements

*Entrance requirements: High school diploma or GED, ENG 030, REA 030, MAT 030, or equivalent assessment test scores.*

To succeed in this program, you must have a sincere concern for people, good physical and emotional health, an excellent attendance record, an ability to communicate effectively with other health care personnel, patients, and their families, and a neat, well-groomed appearance.

Note: Clinical agencies used during the program require that you successfully complete a background check, drug screening, immunization series, and CPR training; you must also carry malpractice insurance.

### Graduation requirements:

Successful completion of NUA 101, NUA 170, NUA 171, and NUA 175.

## MINI-CERTIFICATE

### Nursing Aide

TOTAL CREDITS 6.5

#### 6 Certificate Requirements

4	NUA 101	Certified Nurse Aide Health Care Skills
1	NUA 170	Nurse Aid Clinical Experience
1	NUA 171	Advanced Nurse Aid Clinical
0.5	NUA 175	Special topics: Nurse Aide Certificate Exam Perp

# Occupational Therapy Assistant

Tricia Vigil, Department Chair  
Associate of Applied Science (AAS) Degree

## Career Opportunities

The OTA program prepares you for a career 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 disabilities and become independent in their activities of daily living. You can work in hospitals, schools, mental health centers, nursing homes, and in the community. PCC graduates hold positions throughout Colorado and in many different states. The U.S. 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 clinical preparation for graduation. When you graduate from the program, you are eligible to take the national certification examination administered by the National Board for Certification of Occupational Therapy (NBCOT) to become certified and to practice in Colorado. Most states require licensure; however, state licenses are usually based on the results of the NBCOT exam.

## Program Requirements

### Entrance requirements:

The OTA program has a selective admissions policy due to a limited number of clinical sites. You must submit a completed application packet available through the Health Division office. 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 evaluation and treatment meeting medical standards required by facilities.

Note: You must undergo a background check 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](http://www.nbcot.org) for an Early Determination Review.

## ASSOCIATE (AAS) DEGREE

### Occupational Therapy Assistant

TOTAL CREDITS 69

Note: All courses other than OTA may be taken prior to admission to the program.

#### Semester 1 — Fall:

3	OTA 100	Introduction to Occupational Therapy
1	HPR 178	Seminar: Medical Terminology
4	BIO 106	Basic Anatomy and Physiology
3	PSY 101	General Psychology I
3	OTA 105	Introduction to Disease and Activity Analysis
2	OTA 106	Basic Occupational Therapy Frames of Reference & Documentation

- Semester 2 — Spring:**
- 3 MAT 107 Career Math
  - 4 OTA 121 Assessment of Component Skills in Occupations
  - 2 OTA 122 Origins of Occupational and Component Skills
  - 4 OTA 125 Basic Occupational Therapy Application to Psychiatry
  - 3 OTA 131 Geriatric Issues, Diseases, and Treatment Techniques
- Semester 3 — Summer:**
- 3 ENG 121 English Composition I
  - 1 OTA 181 Geriatric Level I Fieldwork Experience
  - 2 OTA 217 Occupational Therapy Rehabilitation Techniques
- Semester 4 — Fall:**
- 3 Humanities
  - 1 OTA 182 Physical Disabilities Level I Fieldwork Experience
  - 1 OTA 183 Pediatric Level I Fieldwork Experience
  - 3 OTA 216 Physical Disabilities Neuro-Retraining
  - 3 OTA 218 Occupational Therapy Application to Adult Physical Disabilities
  - 3 OTA 221 Pediatric Diseases, Disabilities, and Treatment
  - 2 OTA 235 Professional and Activities Management
- Semester 5 — Spring:**
- 1 OTA 278 O.T. Seminar
  - 7 OTA 280 Internship in Occupational Therapy I\*
  - 7 OTA 281 Internship in Occupational Therapy II\*

\*OTA 280 AND OTA 281 must be completed within 18 months of the didactic coursework.

## Office Administration

Jenny Sherman, Department Chair

### Associate of Applied Science (AAS) Degree Certificate

#### Career Opportunities

Many fields and industries offer employment opportunities for office professionals, including healthcare, service, law, technology, manufacturing, and government. Businesses use many job titles to describe office professionals; some of those listed with the professional associations include Administrative Assistant, Executive Assistant, Office Manager, Human Resources Assistant, Front Desk Coordinator, Medical Office Assistant, Records Management Assistant, Medical Transcriptionist, and Medical Coding and Billing Assistant, to name just a few.

#### Program Description

The Office Administration program prepares you for a career as an office professional in a variety of fields and industries. You will master state-of-the-art technology, learn top-notch interpersonal and communication skills, develop strong project management, tracking, and organizing skills, and learn to solve problems creatively.

This program has five degree options, five certificates, and three mini-certificates. The degree options include Office Professional, Desktop Application Specialist, Legal Office Specialist, Medical Transcription Specialist, and Medical Records, Insurance, Coding and Billing Specialist.

### ASSOCIATE (AAS) DEGREE

#### Office Management

TOTAL CREDITS 60

#### 15-17 General Education Requirements

- 4 MAT 121 College Algebra
- 3 ENG 121 English Composition I
- 3 ECO 202 Principles of Microeconomics
- 4 BIO 106 Basic Anatomy and Physiology
- 3 COM 115 Public Speaking

#### 28 Core Curriculum Requirements

- 3 BUS 115 Introduction to Business
- 3 BTE 225 Office Management
- 1 BTE 116 File Management
- 3 MAN 128 Human Relations in Organizations
- 3 BTE 166 Business Editing Skills
- 3 BTE 120 Electronic Office Procedures
- 3 CIS 118 Intro to PC Applications
- 3 CIS 218 Advanced PC Applications
- 3 MAR 106 Marketing Your Image
- 3 BTE 287 Cooperative Education/Internship

#### Elective: Select one of the following certificates:

- Office Professional
- Desktop Application Specialist
- Legal Office Specialist
- Medical Transcription Specialist
- Medical Records, Insurance, Coding & Billing Specialist

## CERTIFICATE PROGRAMS

TOTAL CREDITS 19-28

### 23 Office Professional

3	MAN 116	Principles of Supervision
3	ACC 101	Fundamentals of Accounting
1	ACC 103	Fundamentals of Accounting Lab
3	ACC 115	Payroll Accounting
3	MAN 128	Human Relations in Organizations
3	BUS 204	Introduction to E-Business
3	BUS 217	Business Communication and Report Writing
3	BTE 225	Office Management
1	BTE 116	File Management

### 22 Desktop Applications Specialist

3	CIS 135	Complete PC Word Processing
3	CIS 118	Intro to PC Applications
1	CIS 140	Microsoft Outlook
3	CIS 218	Advanced PC Applications
3	CIS 167	Desktop Publishing
3	BTE 120	Electronic Office Procedures
3	BUS 204	Introduction to E-Business
3	ELT 202	Introduction to PC Servicing

### 16 Legal Office Specialist

1	BTE 128	Legal Terminology
3	BTE 213	Introduction to Legal Office Procedures
3	BTE 211	Legal Formatting
3	BUS 216	Legal Environment of Business
3	CRJ 110	Intro to Criminal Justice
3	BTE 229	Legal Transcription

### 24 Medical Transcription Specialist

4	MOT 110	Medical Office Administration
3	CIS 118	Intro to PC Applications
3	BTE 166	Business Editing Skills
4	MOT 132	Medical Transcription
4	MOT 142	Medical Transcription II
3	HPR 178	Seminar: Medical Terminology
3	HPR 208	Advanced Medical Terminology

### 27 Medical Records, Insurance, Coding & Billing Specialist

4	BIO 106	Basic Anatomy and Physiology
4	MOT 110	Medical Office Administration
3	HPR 178	Seminar: Medical Terminology
3	HPR 208	Advanced Medical Terminology
2	MOT 208	Introduction to CPT-4 Coding
2	MOT 209	Introduction to ICD-9 Coding
3	MOT 210	Intermediate Coding
3	MAN 128	Human Relations in Organizations
3	CIS 118	Intro to PC Applications

## MINI-CERTIFICATES (not elective option for degree)

### Office Administration

TOTAL CREDITS 6-9

#### 9 Customer Service Academy

1	MAN 102	Business Ethics and Values
1	MAN 103	Managing Business Change
1	MAN 104	Managing Workplace Stress
1	MAN 125	Team Building
1	COM 268	Problem Solving & Decision Making
1	MAN 117	Time Management
1	MAR 158	Customer Service
1	COM 263	Conflict Resolution
1	COM 262	Communicating with Impossible People

#### 9 Personal Computer Specialist

3	CIS 118	Intro to PC Applications
3	CIS 218	Advanced PC Applications
3	CIS 167	Desktop Publishing

## CERTIFICATE PROGRAM (not elective option for degree)

### Medical Coding and Billing

TOTAL CREDITS 40

4	BIO 106	Basic Anatomy and Physiology
3	CIS 118	Intro to PC Applications
3	HIT 105	Principles of Healthcare Reimbursement
3	HIT 111	Health Data Management and Information Systems
3	HIT 150	Healthcare Delivery Systems
2	HIT 188	Health Information Practicum I
3	HIT 220	ICD Coding I
2	HIT 241	CPT Coding Basic Principles
3	HIT 252	Coding II for Certificate
3	HIT 261	Healthcare Software
1	HIT 275	Special Topics
2	HIT 288	Health Info Practicum II
3	HPR 178	Medical Terminology
5	HPR 232	Disease Process and Treatment

# Pharmacy Technician

Dave Reiter, Coordinator

## Mini-Certificate

### 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. Nationally, the median salary is \$11.50/hour for certified pharmacy technicians, and \$10.50/hour for non-certified pharmacy technicians. Certified pharmacy technicians can earn from \$7.00 per hour to \$20.00+ per hour, depending upon location and practice setting. The U.S. Department of Labor has forecast over 36% job growth for pharmacy technicians by 2010.

### Program Description

This certificate program is offered in one-semester (four courses). It provides instruction in basic pharmacy theories and is an important step toward national certification as a pharmacy technician. 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

Students are admitted into the program on a first come, first served basis. Students must have assessment scores of 62 in reading, 95 in English, and 45 EA in math, OR have successfully completed REA 060, ENG 090 and MAT 060. Students must also apply for admission to the program (through the Program Coordinator or the Administrative Assistant for the Health Professions Division) and pass a background check. Additional requirements must be met prior to placement in a clinical setting. Applications are available in March for fall semester and September for spring semester.

## MINI-CERTIFICATE

### Pharmacy Technician

TOTAL CREDITS 12

#### 12 Certificate Requirements

- 4 PHT 105 Orientation to Pharmacy
- 1 PHT 120 Medical Insurance Procedures
- 3 PHT 207 Drug Classification
- 4 PHT 235 Pharmaceutical Calculations and Compounding Techniques

# Phlebotomy Technician

Dave Reiter, Coordinator

## Mini-Certificate

### Career Opportunities

Phlebotomy technicians collect and process a patient's blood for future use or analysis. This program trains you to work as part of a laboratory team, to draw blood samples for medical tests and blood donations, and to keep careful records of blood tests. It prepares you to perform all duties associated with the practice of phlebotomy so you can work in hospitals, physician offices, group practices, independent laboratories, health maintenance organizations, and public facilities. The U.S. Bureau of Labor Statistics estimates that phlebotomists earn from \$18,720 to \$25,168, with a median salary of \$21,944. You do not need certification to become employed as a phlebotomy technician; however, certification can increase your earnings.

### Program Description

This is a one-semester (two 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.

### Program Requirements

#### Entrance requirements:

Students are admitted into the program on a first come, first served basis. Students must have assessment scores of 62 in reading, 95 in English, and 45 EA in math, OR have successfully completed REA 060, ENG 090 and MAT 060. Students must also apply for admission to the program (through the Program Coordinator or the Administrative Assistant for the Health Professions Division) and pass a background check. Additional requirements must be met prior to placement in a clinical setting. Applications are available in March for fall semester and September for spring semester.

## MINI-CERTIFICATE

### Phlebotomy Technician

TOTAL CREDITS 8

#### 8 Certificate Requirements

- 4 HPR 112 Phlebotomy
- 4 HPR 113 Advanced Phlebotomy

# Physical Therapist Assistant

Mary Chavez, Department Chair

## Associate of Applied Science (AAS) Degree

### 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 others. You will work in a broad range of settings including hospitals, outpatient clinics, rehabilitation facilities, skilled nursing, extended care, or subacute 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 - 2 ½ 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 PTA program is accredited by CAPTE of the American Physical Therapy Association.

In addition to tuition and fees, additional PTA program costs include a lab coat, name tag (\$4.00), liability insurance (\$15.00/year), drug screening (\$25.00), and background check (\$59.00). You are responsible for all expenses associated with internships and must provide your 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 they become available.

### Program Requirements

The PTA Program has a selective admissions policy due to a limited number of clinical sites. You must submit a PTA application that is available through the Health Division Office or the PTA website. You must have completed all basic skills requirements to perform at a college level in Reading, Math, English, along with BIO 201 (4c), Anatomy & Physiology I with a lab and PHY 105 (4c) conceptual Physics with a lab. Part of the application includes interviewing three different physical therapy clinicians; one PT, one PTA and the third can be a PT or a PTA. It is preferable and highly recommended to interview clinicians in three different types of physical therapy settings, such as hospitals, nursing homes, and outpatient. Questions to be asked during the interview session are listed in the application packet. All general education courses must be completed with a "C" or above and have a minimum GPA of 2.25. 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.

Employment as a PTA in Colorado does not require licensure. However, we encourage you to take the National PTA exam after graduation. Additional program information including graduation, licensure pass rate, and employment be found at <http://www.pueblocc.edu/Academics/AreasStudy/HealthProfessions/PhysicalTherapistsAssist/> OR [http://www.apta.org/AM/Template.cfm?section=PT\\_Programs&template=/aptaapps/accreditedschools/acc\\_schools\\_map.cfm&process=2&ProgramID=342](http://www.apta.org/AM/Template.cfm?section=PT_Programs&template=/aptaapps/accreditedschools/acc_schools_map.cfm&process=2&ProgramID=342).

## ASSOCIATE (AAS) DEGREE Physical Therapist Assistant TOTAL CREDITS 75

### 18 General Education Requirements

*4	BIO 201	Human Anatomy and Physiology I
3	ENG 121	English Composition I
1	HPR 178	Seminar: Medical Terminology
*4	PHY 105	Conceptual Physics
3	PSY 101	General Psychology I
3	COM 115	Public Speaking

### 57 Core Curriculum Requirements

#### Semester 1 — Fall

3	HPR 117	Anatomical Kinesiology
5	PTA 110	Basic Patient Care in Physical Therapy
2	PTA 115	Principles and Practices of Physical Therapy
1	PTA 131	Professional Communications I

#### Semester 2 — Spring

5	PTA 120	Modalities in Physical Therapy
2	PTA 135	Principles of Electrical Stimulation
5	PTA 140	Clinical Kinesiology
1	PTA 141	Professional Communications II
2	PTA 124	Rehab Principles of Medical I

#### Semester 3 — Summer:

2	PTA 134	Rehab Principles of Medical II
4	PTA 280	PTA Internship I

#### Semester 4 — Fall:

2	PTA 205	Psychosocial Issues in Health Care
5	PTA 230	Orthopedic Assessment & Management Techniques
5	PTA 240	Neurologic Assessment & Management Techniques
1	PTA 251	Professional Communications III

#### Semester 5 — Spring:

2	PTA 278	PTA Seminar
5	PTA 281	PTA Internship II
5	PTA 282	PTA Internship III

\*Prior to program admission.

# Polysomnography Technology

Patricia McCandless, Coordinator

## Certificate

### Career Opportunities

Polysomnographic (PSG) Technologist (Sleep Technologists) operate a variety of sophisticated monitoring devices, which record brain activity (EEG), muscle and eye movements, respiration, blood oxygen levels, and other physiologic events. Technologists are also involved in the evaluation of various treatment methods. PSG Technologists are typically employed in sleep laboratories located in medical centers, clinical/office settings, or free standing sleep labs. Some technologist transition into management and marketing of sleep centers, product sales and support, and public and patient education regarding sleep disorders.

### Program Description

The certificate program prepares the student with didactic lectures and sleep lab clinical internships to gain entry into the workforce as a polysomnographer. The field of polysomnography (PSG) involves the complex evaluation of many physiological parameters during sleep to produce a quantitative "sleep study". PSG evaluations are necessary to document sleep disorders and to assist physicians in identifying sleep issues and the appropriate treatments. The disruption of proper sleep can complicate or cause many chronic disorders and conditions. Upon graduation the graduate will be immediately eligible for the BRPT (Board of Registered Polysomnography Technologist) exam. The Polysomnography Technologist qualities include being a caring person, people-oriented, knowledgeable in biological sciences, an ethical, crucial-thinker and strong problem solver.

### Program Requirements

To enter the program, you must meet all basic skills requirements including computer literacy; complete Bio 201 and Math 107 (with a "C" or higher). Entrance into the program involves a screening and selection process, including a background check and drug screen. You can obtain application information by calling the Polysomnography Technology department at 719-549-3477.

## CERTIFICATE PROGRAM

### Polysomnography Technology

Total Credits 38

#### 11 General Education Requirements

- 4 BIO 201 Human Anatomy & Physiology I
- 3 ENG 121 English Composition I
- 1 HPR 178 Medical Terminology
- 3 MAT 107 Career Mathematics

#### 27 Core Curriculum Requirements

- 1 PSG 100 Introduction to Polysomnography
- 3 PSG 110 Fundamentals of Sleep
- 3 PSG 120 Sleep Instrumentation
- 3 PSG 140 Therapeutic Intervention
- 3 PSG 150 Sleep Scoring and Analysis
- 2 PSG 165 Sleep Registry Review
- 2 PSG 180 Clinical Internship I
- 4 PSG 280 Clinical Internship II
- 3 RCA 131 Basic Techniques in Respiratory Care
- 3 RCA 151 Cardiopulmonary Anatomy and Physiology

# Psychiatric Technician

Eva Tapia, Nursing Program Director

## Certificate

### Career Opportunities

The Psychiatric Technician Certificate Program provides you with knowledge and skills for employment as a psychiatric caregiver in health care settings.

### Program Description

This program teaches you to use basic nursing skills 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. When you successfully complete all program requirements, you are awarded a certificate and are eligible to take the standardized examination leading to state licensure. The program is approved by the Colorado State Board of Nursing.

### Program Requirements

#### Entrance requirements:

Before admission into the program, you must complete any developmental courses indicated by results of the PCC Basic Skills Assessment Test. You must also complete BIO 106 and MAT 103.

Enrollment in the program is limited. You must complete the application process by the stated deadline. Your application will be reviewed by the program's admissions committee, and you will receive written notification of the committee's decision. If you are not accepted for a given year and wish to be considered for a subsequent term, you must re-apply. Check with a program advisor for specific changes in admission requirements.

Note: Clinical agencies used during the program require that you successfully complete a background check, drug screening, immunization series, and CPR training.

## CERTIFICATE PROGRAM

### Psychiatric Technician

Total Credits 32

#### 7 Program Prerequisites

- 4 BIO 106 Basic Anatomy and Physiology
- 3 MAT 103 Math for Clinical Calculations

#### 13 Core Curriculum Requirements (Fall Semester)

- 8 NUR 109 Fundamentals of Nursing
- 2 NUR 112 Basic Concepts of Pharmacology
- 3 PTE 110 Introduction to Psychiatric Care

#### 12 Core Curriculum Requirements (Spring Semester)

- 2 PTE 116 Theoretical Concepts of Psychiatric Care I
- 2 PTE 117 Theoretical Concepts of Psychiatric Care II
- 1 PTE 118 Psychiatric Management Principles
- 3 PTE 170 Clinical Concepts of Psychiatric Care I
- 3 PTE 171 Clinical Concepts of Psychiatric Care II
- 1 PTE 172 Psychiatric Management Clinical

# Radiologic Technology

Larry E. Bontrager, Department Chair

## Associate of Applied Science (AAS) Degree

### 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 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:

Basic Skills: REA 090, ENG 090, MAT 060, CIS 110

Prerequisite Requirements: ENG 121, BIO 201, MAT 107, RTE 101, HPR 178

#### Graduation requirements:

PSY 235, Arts/Humanities. In addition, students must complete all required Clinical Competencies.

## ASSOCIATE (AAS) DEGREE

### Radiologic Technology

TOTAL CREDITS 77

#### 16 General Education Requirements

- 4 BIO 201\* Human Anatomy and Physiology I
- 3 ENG 121\* English Composition I
- 3 MAT 107\* Career Math
- 3 PSY 235 Human Growth and Development
- 3 Arts/Humanities

#### 3 Related Requirements

- 2 RTE 101\* Introduction to Radiography
- 1 HPR 178 \* Seminar: Medical Terminology

#### 58 Core Curriculum Requirements

##### Semester 1 – Fall

- 2 RTE 111 Radiographic Patient Care II
- 3 RTE 121 Radiologic Procedures I
- 1.5 RTE 131 Radiographic Pathology and Image Evaluation I
- 3 RTE 141 Radiographic Equipment/Imaging I
- 5 RTE 181 Radiographic Internship I

##### Semester 2 – Spring

- 3 RTE 122 Radiologic Procedures II
- 1.5 RTE 132 Radiographic Pathology and Image Evaluation II
- 3 RTE 142 Radiographic Equipment/Imaging II
- 5 RTE 182 Radiographic Internship II

##### Semester 3 – Summer

- 7 RTE 183 Radiographic Internship III

##### Semester 4 – Fall

- 3 RTE 221 Advanced Medical Imaging
- 2 RTE 231 Radiation Biology/Protection
- 8 RTE 281 Radiographic Internship IV

##### Semester 5 – Spring

- 8 RTE 282 Radiographic Internship V
- 3 RTE 289 Capstone

\*Indicates prerequisite courses for program entry.

# Respiratory Care Practitioner

Delia Lechtenberg, Department Chair

Associate of Applied Science (AAS) Degree

## Career Opportunities

The RCA program prepares you for a career in respiratory therapy. Respiratory therapists work in a variety of settings: hospital, homecare, neonatal nursery, diagnostic testing, and flight for life. Respiratory care is one of fastest growing health professions in the U.S. We provide our graduates with a listing of national placement opportunities.

## Program Description

This program prepares you to work in a unique area of health care: the diagnosis, therapy, management, and prevention of diseases associated with cardiopulmonary illness. Due to the demanding training requirements and the critical life support responsibilities of the respiratory therapist, you must have a high degree of personal maturity, strong motivation, a solid science and general studies background, and excellent reasoning skills.

## Program Requirements

### Entrance requirements:

To enter the program, you must meet all basic skills requirements including computer literacy, complete at least four of the seven required General Education courses one which must be BIO 201 (with a "C" or higher), and undergo a screening and selection process including a background check and drug screen. You must also obtain CPR certification within the first semester of program. You can obtain application information from the Respiratory Care department, by calling 719.549.33477.

### Graduation requirements:

The program consists of five semesters of theory, laboratory, and clinical internships in the techniques of respiratory care. You must take the Respiratory Care courses in sequence and complete them with a "C" grade or higher. Graduates of the program become eligible for registry by the National Board for Respiratory Care.

## ASSOCIATE (AAS) DEGREE

### Respiratory Care Practitioner

TOTAL CREDITS 66-77.5

#### 77.5 General Education Requirements

13

- 4 BIO 201 Human Anatomy & Physiology I
- 3 ENG 121 English Composition I
- 3 PSY 101 General Psychology I
- OR
- 3 PSY 235 Human Growth and Development
- 3 MAT 107 Career Math

#### 11 Related Requirements

- 4 BIO 204 Microbiology
- 5 CHE 105 Chemistry in Context
- OR
- 5 CHE 101 Introduction to Chemistry I with Lab
- 1 HPR 178 Medical Terminology
- 1 RCA 105 Introduction to Respiratory Care (course can be taken during Semester 1)

#### 53.5 Core Curriculum Requirements

##### Semester 1 – Fall

- 3 RCA 155 Logic of Respiratory Science
- 3 RCA 151 Cardiopulmonary Anatomy and Physiology
- 3 RCA 131 Basic Techniques in Respiratory Care I

##### Semester 2 – Spring

- 3 RCA 153 Cardiopulmonary Disease
- 3 RCA 165 Pharmacology of Cardiopulmonary Care
- 5 RCA 132 Basic Techniques in Respiratory Care II
- 3 RCA 164 Advanced Cardiac Care

##### Semester 3 – Summer

- 2 RCA 230 Critical Care I
- 4.5 RCA 280 Internship I

##### Semester 4 – Fall

- 3 RCA 256 Pediatric and Neonatal Care
- 1 RCA 254 Pulmonary Function Testing
- 3 RCA 251 Critical Care II
- 7.5 RCA 281 Internship II

##### Semester 5 – Spring

- 2 RCA 265 Professional Development
- 7.5 RCA 283 Internship III



# Small Business Management

Joe Easton, Department Chair  
Certificate

## Program Description

The Small Business Management program includes five separate certificates which can be earned in two semesters each to teach the many skills necessary for starting a small business or improving an existing one. It includes evening classes and one-on-one help from the instructor. Students will be prepared to manage or start a small business or agricultural operation.

The Financial Analysis and Planning for the Small Business certificate program covers how actual enterprise cost analysis is calculated for facilitating the development of whole business projected cash flow statements. This includes the review and revision of business planning goals and objectives. It 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.

The Marketing and Risk Management for the Small Business certificate program emphasizes the identification of the strengths and weaknesses of the business and applying them in the development of plans for the business. It includes the development of marketing goals and objectives. It 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. The business operator will develop appropriate business, marketing, and risk management goals and objectives and be ready to initiate their implementation.

The Marketing and Risk Management and E-Commerce for the Small Business certificate program introduces the development of web pages using structured design to document layout. This course provides the student with hands-on, practical application in creating and maintaining a web page for small business owners. It will study e-commerce and marketing for small business owners.

The Records and Computerization for the Small Business certificate program will guide the student in the collection of necessary information to implement a computerized record keeping system for the small business owner/operator. Discussion will include computer terminology, application software, balance sheet concepts, accounting principles, computerized accounting reports and business plan components.

The Small Business Planning certificate program provides business owners systematic instruction to give them the tools to make sound business decisions. This will guide 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.

## Financial Analysis and Planning for the Small Business

TOTAL CREDIT HOURS 18

### 18 Core Requirements

- 9 SBM 141 Financial Analysis and Planning I
- 9 SBM 142 Financial Analysis and Planning II

## Marketing and Risk Management for the Small Business

TOTAL CREDIT HOURS 18

### 18 Core Requirements

- 9 SBM 151 Marketing and Risk Management I
- 9 SBM 152 Marketing and Risk Management II

## Marketing and Risk Management and E-Commerce for the Small Business

TOTAL CREDIT HOURS 18

### 18 Core Requirements

- 9 SBM 153 Marketing & Risk Management and E-Commerce I
- 9 SBM 154 Marketing & Risk Management and E-Commerce II

## Records and Computerization for the Small Business

TOTAL CREDIT HOURS 18

### 18 Core Requirements

- 9 SBM 131 Records and Computerization I
- 9 SBM 132 Records and Computerization II

## Small Business Planning

TOTAL CREDIT HOURS 18

### 18 Core Requirements

- 9 SBM 121 Small Business Planning I
- 9 SBM 122 Small Business Planning II

# Visual Communications

Jennifer Sherman, Department Chair

Associate of Applied Science (AAS) Degree  
Certificate

## Career Opportunities

The VCC program prepares you for an entry level career in graphic design and computer graphics. The coursework prepares you to become a digital artist, design specialist, or entrepreneur in the field of visual communications and design. Career options range from working for a corporation as a designer or digital artist to owning your own small business.

## Program Description

This program teaches you to use computers and state-of-the-art software to design and develop graphic elements and produce print or electronic communication. The integrated curriculum includes in art and design, graphic arts, computer technology, and small business planning. These courses, taught on both PCs and Macs, provide you with an excellent foundation and many employment options in the visual communications field.

## ASSOCIATE (AAS) DEGREE

### Visual Communications

TOTAL CREDITS 62-70

#### 15 General Education Requirements

- 3 ENG 131 Technical Writing I
- 3 HUM 110 Introduction to the Fine Arts
- 3 MAT 112 Financial Mathematics
- 3 COM 115 Public Speaking
- 3 Natural Science Elective

#### 47 Visual Communications Core Curriculum Requirements

- 3 MAR 220 Principles of Advertising
- 3 MGD 102 Introduction to Multimedia
- 3 MGD 105 Typography & Layout
- 3 ART 131 2-D Design
- 3 MGD 111 Adobe Photoshop I
- 3 MGD 133 Graphic Design I
- 3 MGD 141 Web Design I
- 3 MGD 202 Point of Purchase Packaging Design
- 3 MGD 207 Illustration I
- 3 MGD 233 Graphic Design II
- 3 MGD 241 Web Design II
- 3 MGD 256 Graphic Design Production
- 2 MGD 268 Commercial Art Business
- 3 MGD 280 Internship
- 3 MGD 289 Capstone
- 3 ART 143 Digital Photography I

## CERTIFICATE PROGRAM

### Visual Communications

TOTAL CREDITS 37-43

#### 25 Program Requirements for All Options

- 3 ART 121 Drawing I
- 3 ART 131 2-D Design
- 3 ENG 131 Technical Writing I
- 3 MAN 216 Small Business Management
- 4 MAT 108 Technical Mathematics
- 3 MGD 102 Introduction to Multimedia
- 3 MGD 280 Internship
- 3 ART 138 Photography I

#### Select one of the following options:

- 12 Option A: Graphic Design**
  - 3 CIS 167 Desktop Publishing
  - 3 MGD 133 Graphic Design I
  - 3 MGD 221 Computer Graphics I
  - 3 MGD 233 Graphic Design II
- 12 Option B: 3-D Rendering & Illustration**
  - 3 CAD 101 Computer Aided Drafting I
  - 3 CAD 202 Computer Aided Drafting/3D
  - 3 CAD 219 3D Studio Max
  - 3 CAD 220 3D Studio Max/Advanced
- 18 Option C: Digital Multimedia**
  - 3 CWB 130 Complete Web Editing Tools
  - 3 MGD 143 Web Motion Graphic Design I
  - 3 MGD 164 Digital Video Editing I
  - 3 MGD 167 Game Design I
  - 3 MGD 257 Animation Production
  - 3 ART 143 Digital Photography I

# Welding

Roger Wolfe, Department Chair

## Associate of Applied Science (AAS) Degree

### Certificates

#### 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.

## ASSOCIATE (AAS) DEGREE

### Welding

TOTAL CREDITS 73

#### 16 General Education Requirements

- 3 ENG 131 Technical Writing I
- 4 MAT 108 Technical Mathematics
- 3 Humanities
- 3 Natural Science
- 3 Social Science

#### 49 Core Curriculum Requirements

- 1 WEL 100 Safety for Welders
- 4 WEL 102 Oxyacetylene Joining Process
- 4 WEL 103 Basic Shielded Metal Arc I
- 4 WEL 104 Basic Shielded Metal Arc II
- 4 WEL 106 Blueprint Reading for Welders and Fitters
- 4 WEL 125 Introduction to Gas Metal Arc Welding
- 4 WEL 124 Introduction to Gas Tungsten Arc Welding
- 4 WEL 224 Advanced Gas Tungsten Arc Welding
- 4 WEL 225 Advanced Gas Metal Arc Welding
- 4 WEL 230 Pipe Welding I
- 4 WEL 250 Layout and Fabrication
- 4 WEL 251 Design, Layout and Fabrication
- 4 WEL 263 Applied Metal Properties

#### 8 Related Requirements

- 4 ENT 131 Mechanical Drawing I
- 4 MAC 105 Introduction to Machining Technology

## CERTIFICATE PROGRAM

### Welding

TOTAL CREDITS 41

#### 41 Welding Certificate Requirements

- 4 ENT 131 Mechanical Drawing I
- 4 MAC 105 Introduction to Machining Technology
- 4 MAT 108 Technical Mathematics
- 1 WEL 100 Safety for Welders
- 4 WEL 102 Oxyacetylene Joining Process
- 4 WEL 103 Basic Shielded Metal Arc I
- 4 WEL 104 Basic Shielded Metal Arc II
- 4 WEL 106 Blueprint Reading for Welders and Fitters
- 4 WEL 124 Introduction to Gas Tungsten Arc Welding
- 4 WEL 250 Layout and Fabrication
- 4 WEL 263 Applied Metal Properties

## MINI-CERTIFICATES

### Welding

TOTAL CREDITS 12

#### 12 Structural Welding Intermediate

- 4 WEL 106 Blueprint Reading for Welders and Fitters
- 4 WEL 124 Introduction to Gas Tungsten Arc Welding
- 4 WEL 250 Layout and Fabrication

#### 12 Structural Welding Introduction

- 4 WEL 102 Oxyacetylene Joining Process
- 4 WEL 103 Basic Shielded Metal Arc I
- 4 WEL 104 Basic Shielded Metal Arc II

# Welding Technologies

Roger Wolfe, Department Chair  
Certificates

## 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.

## Structural Welder

TOTAL CREDIT HOURS 21

### 21 Core Requirements

- 1 WEL 100 Safety for Welders
- 4 WEL 101 Allied Cutting Processes
- 4 WEL 102 Oxyacetylene Joining Processes
- 4 WEL 103 Basics Shielded Metal Arc I
- 4 WEL 104 Basics Shielded Metal Arc II
- 4 WEL 106 Blueprint Reading for Welders and Fitters

## Fitter or Combination Welder

TOTAL CREDIT HOURS 20

### 20 Core Requirements

- 4 WEL 124 Introduction to Gas Tungsten Arc Welding
- 4 WEL 125 Introduction to Gas Metal Arc Welding
- 4 WEL 224 Advanced Gas Tungsten Arc Welding
- 4 WEL 225 Advanced Gas Metal Arc Welding
- 4 WEL 250 Layout and Fabrication

## Low Pressure Pipe Welder

TOTAL CREDIT HOURS 16

### 16 Core Requirements

- 4 WEL 233 2G-Horizontal Pipe A.P.I.
- 4 WEL 234 5G-Vertical Down A.P.I.
- 4 WEL 235 6G-45° Down A.P.I.
- 4 WEL 248 Pipe Layout

## High Pressure Pipe Welder

TOTAL CREDIT HOURS 16

### 16 Core Requirements

- 4 WEL 239 2G-Horizontal Pipe A.S.M.E.
- 4 WEL 241 5G-Vertical Up A.S.M.E.
- 4 WEL 242 6G-45° All Size Pipe
- 4 WEL 243 Testing All Sizes Pipe

# Wildland Firefighter

Alan Ziff, Department Chair  
Certificate

## Career Opportunities

The Wildland Firefighter Certificate will prepare students for a career with local and state fire departments and federal land management agencies (U.S. 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:*

ACCUPLACER TEST SCORES:

*REA 62 or higher*

*SS 70 or higher*

*MAT 34 or higher*

*Graduation requirements:*

Successful completion of all coursework with a grade of C or better.

## CERTIFICATE PROGRAM

### Wildland Firefighter

TOTAL CREDITS 16.75

- 1 AAA 101 College 101: The Student Experience
- 3 FST 160 Candidate Physical Abilities Test Prep Course
- 1 FSW 100 S-190 Introduction to Wildland Fire Behavior
- 2 FSW 101 S-130 Firefighting Training
- .5 FSW 102 S-131 Firefighter Type I
- 1 FSW 103 D-110 Dispatch Recorder with Intro to Ross
- .25 FSW 104 I-100 Introduction to ICS
- 1 FSW 140 S-200 Initial Attack Incident Commander
- 2 FSW 141 S-203 Introduction to Incident Information
- 1.5 FSW 142 S-211 Portable Pumps and Water Use
- 2 FSW 143 S-212 Wildfire Chain Saws
- 1.5 FSW 155 I-200, IS-200, Q-436 Basic ICS: ICS for Single Resources and Initial Action Incidents

# Course Descriptions

## 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.

Common abbreviations used in the course descriptions are:

CLI	Voc/Tech Clinic	LBV	Vocational Lab
COP	Cooperative Education	OE	Occupational Experience
CORQ	Co requisite	PED	Physical Education and Recreation
CR	Credit	PRC	Practicum
FIT	Field Instruction	PRI	Private Instruction
LBA	Academic Lab	PRQ	Prerequisite
ILB	Instructional Lab	SEM	Seminar
IND	Independent Study	STA	Art Studio
INT	Internship	STM	Music Studio
L	Lecture	VAR	Variable Credits

The numbers that appear within the parenthesis next to the credit hours represent the total number of contact hours per week, by activity, that the student attends the class assuming a 15-week semester. For instance, a 4 credit hour course that is listed as 2L/3LBV means there are two hours of lecture per week plus three hours vocational lab per week for a total of (5) hours contact time per week for 15 weeks. In this example, the student attends a total of 75 contact hours. The 75 hours can be adjusted to any length term.

Most courses in the following sections have pre-requisites. Pre-requisites are requirements that you must complete before enrolling in the course. You can satisfy pre-requisites in one of two ways: 1) by completing pre-requisite courses, or 2) by attaining assessment scores that place you ABOVE the listed pre-requisite course's skill level. (Pueblo Community College only accepts Accuplacer or ACT or SAT assessment scores.)

### **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 pages 82-149 is not impacted by restricted courses as the requirements do not include such courses.

# Accounting

ACC 101

## **FUNDAMENTALS OF ACCOUNTING**

3 CR. (3L)

PRQ: CIS 110, MAT 030, or equivalent assessment test scores or department chair/advisor approval. CORQ: ACC 103, MAT 090, BTE 156 highly recommended. Presents the basic elements and concepts of accounting, with emphasis on the procedures used for maintaining journals, ledgers, and other related records, and for the completion of end-of-period reports for small service and merchandising businesses.

ACC 103

## **FUNDAMENTALS OF ACCOUNTING LAB**

1 CR. (1.5 LBV)

PRQ: CIS 110, MAT 060, or equivalent assessment test scores, or Department Chair approval. CORQ: ACC 101. 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 101.

ACC 115

## **PAYROLL ACCOUNTING**

3 CR. (3L)

PRQ: ACC 101, CIS 110, MAT 060, or equivalent assessment test scores or Department Chair approval. Studies 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. Students are exposed to computerized payroll procedures.

ACC 121

## **ACCOUNTING PRINCIPLES I**

4 CR. (4L)

PRQ: CIS 110, ENG 030, REA 030, MAT 060, or equivalent assessment test score or permission of Department Advisor or Chair. Introduces the study of accounting principles for understanding of the theory and logic that underlie procedures and practices. Major topics include the accounting cycle for service and merchandising companies, special journals and subsidiary ledgers, internal control principles and practices, notes and interest, inventory systems and costing, plant assets and intangible asset accounting, and depreciation methods and practices.

ACC 122

## **ACCOUNTING PRINCIPLES II**

4 CR. (4L)

PRQ: ACC 121, CIS 110, MAT 060, or equivalent assessment test scores or permission of Department Advisor or Chair. Continues the study of accounting principles as they apply to partnerships and corporations. Major topics include stocks and bonds, investments, cash flow statements, financial analysis, budgeting, and cost and managerial accounting.

ACC 125

## **COMPUTERIZED ACCOUNTING**

3 CR. (4.5 LBV)

Introduces the capabilities of computer applications in accounting. Includes solving accounting problems of a financial nature and hardware and software controls.

ACC 133

## **TAX HELP COLORADO PRACTICUM**

1 CR. (1L)

PRQ: ACC 132 @ Volunteer IRS Tax Preparer Certificate at Intermediate Level. This course allows students to prepare actual federal and state income tax returns for individuals in a real time environment.

ACC 225

## **COMPUTERIZED ACCOUNTING II**

3 CR. (4.5 LBV)

Continues Computerized Accounting I (ACC 125) with emphasis on the practical application of integrated accounting processes through the use of commercially available software. Includes software evaluation and selection, automated accounting systems controls, and system documentation.

ACC 131

## **INCOME TAX**

3 CR. (3L)

PRQ: ACC 121, ENG 131, CIS 110, REA 090, MAT 090, or equivalent assessment test scores or permission of Department Advisor or Chair. This course is the study of basic concepts of federal income taxation, including gross income, deductions, accounting periods and methods, and property transactions, with emphasis on taxation of individuals and sole proprietorships.

ACC 132

## **TAX HELP COLORADO**

2 CR. (2L)

This course prepares the students for preparation of federal and state income tax returns for individuals. Emphasis is placed on form preparation with the use of tax software.

ACC 175-177

## **SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

ACC 211

## **INTERMEDIATE ACCOUNTING I**

4 CR. (4L)

PRQ: MAT 121 or MAT 112, ENG 131, ACC 122, CIS 110, REA 090, or equivalent assessment test scores or permission of Department Advisor or Chair. Focuses on comprehensive analysis of generally accepted accounting principles (GAAP), accounting theory, concepts and financial reporting principles for public corporations. It is the first of a two-course sequence in financial accounting and is designed primarily for accounting and finance majors. Focuses on the preparation and analysis of business information relevant and useful to external users of financial reports. Explores the theories, principles and practices surveyed in Accounting Principles and critically examines 'real-world' financial analysis and reporting issues.

ACC 212

## **INTERMEDIATE ACCOUNTING II**

4 CR. (4L)

PRQ: ACC 211, CIS 110, REA 090, or equivalent assessment test scores or permission of Department Advisor or Chair. 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 215  
**ACCOUNTING INFORMATION SYSTEMS AND E-BUSINESS**

3 CR. (3L)

PRQ: ACC 122, CIS 110, ENG 090, REA 090, MAT 090, or equivalent assessment test scores or permission of Department Advisor or Chair. Studies the principles, concepts and tools used in the analysis, design, implementation and integration of accounting systems, internal controls systems and accounting procedures. Key elements of system analysis, business systems design, accounting software selection, and the acquisition and implementation of systems are studied. Techniques and systems for electronic control systems, electronic data interchange, electronic funds transfer and web commerce are explored.

ACC 216  
**GOVERNMENTAL AND NOT-FOR- PROFIT ACCOUNTING**

3 CR. (3L)

PRQ: ENG 131, ACC 122, CIS 110, REA 090, MAT 090, or equivalent assessment test scores or permission of Department Advisor or Chair. Addresses concepts of budgetary control as a matter of law and public administration theory. Accounting principles and procedures necessary to implement budgetary controls for governmental units and other not-for-profit institutions and organizations are presented.

ACC 226  
**COST ACCOUNTING**

3 CR. (3L)

PRQ: ACC 122, CIS 110, ENG 030, REA 060, MAT 060, or equivalent assessment test scores or permission of Department Advisor or Chair. Studies cost accumulation methods and reports. Focuses on the concepts and procedures of job order, process, standard, and direct cost systems, budgeting, planning, and control of costs.

ACC 235  
**COMPUTERIZED ACCOUNTING FOR SMALL BUSINESSES**

3 CR. (3L)

PRQ: ACC 101 or ACC 121, CIS 110, ENG 030, REA 060, MAT 060, or equivalent assessment test scores or permission of Department Advisor or Chair. Introduces a microcomputer package, such as Quickbooks, One-write Plus or similar accounting application, for use in a small business. Focuses on installation, starting the application and converting a manual accounting system to an electronic system. Includes an easy to use bookkeeping system that incorporates all daily transactions and summarizes records in reports for a complete financial picture.

ACC 245  
**COMPUTERIZED ACCOUNTING WITH A PROFESSIONAL PACKAGE**

3 CR. (3L)

PRQ: CIS 110, ENG 030, REA 060, MAT 060, or equivalent assessment test score, and ACC 101 or ACC 121 or permission of Department Advisor or Chair. Integrates accounting principles and practices with a computerized accounting package such as Peachtree, DacEasy, or other professional package. Emphasizes computerized functions of the general ledger and integrated accounts payable, accounts receivable, invoicing and payroll systems.

ACC 275-277  
**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

ACC 287  
**COOPERATIVE EDUCATION**

3 CR. (9 INT)

PRQ: Permission of Department Advisor or Chair. Provides an opportunity to gain practical experience in applying occupational skills and/or to develop specific skills in a practical work setting. The instructor works with the student to select an appropriate work site, establish learning objectives, and coordinate learning activities with the employer or work site supervisor. For Accounting majors only.

## Advancing Academic Achievement

AAA 050  
**SEMESTER SURVIVAL**

2 CR. (2L)

PRQ: Instructor/advisor permission: CORQ: REA 030 or REA 060. Emphasizes basic study skills in order to bolster their chances of completing the current semester successfully.

AAA 075 - 077  
**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

AAA 090  
**ACADEMIC ACHIEVEMENT STRATEGIES**

3 CR. (3L)

PRQ: REA 060 or equivalent assessment test score. 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 098  
**S.T.E.P.S FOR COLLEGE SUCCESS**

2 CR. (1L/1.5 LBV)

Introduces real world technology applications for students to incorporate throughout their college experience, including campus resources and academic curricula. Wise choices, personal responsibility, critical thinking, planning, and oral/written presentation skills will be emphasized in the context of using 21st century computer applications and tools.

AAA 101  
**COLLEGE 101: THE STUDENT EXPERIENCE**

1 CR. (1L)

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 109  
**ADVANCED ACADEMIC ACHIEVEMENT**

3 CR. (3L)

PRQ: Instructor/advisor permission. Examines theories and practices associated with successful learning to enhance college success. Areas of study include 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. Recommended for new and returning students.

AAA 175-177  
**SPECIAL TOPICS**  
0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

AAA 275-277  
**SPECIAL TOPICS**  
0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

## American Sign Language

ASL 101  
**BASIC SIGN LANGUAGE I**  
3 CR. (3L)

Provides students with the basic knowledge of communicating with the deaf community or the vocally impaired. Students will be instructed in the basic techniques of this non-traditional form of communication.

ASL 102  
**BASIC SIGN LANGUAGE II**  
3 CR. (3L)

PRQ: ASL 101 or instructor permission. Provides students with expanded knowledge of communicating with the deaf community or the vocally impaired. Students will be instructed in the techniques of this non-traditional form of communication with emphasis on practical applications in social settings and in the workplace.

ASL 125  
**FINGERSPELLING**  
3 CR. (3L)

PRQ: ASL 101 or instructor permission. Provides the student an opportunity to develop expressive and receptive fingerspelling through various class activities.

ASL 135  
**CONVERSATIONAL ASL**  
2 CR. (2L)

PRQ: ASL 102 or instructor permission. Provides the student an extended opportunity to develop a strong grasp of American Sign language (ASL) as well as the cultural features of the language. It helps the student maintain sign language skill. This course is designed for students who have not met the minimum requirements to continue on with ASL 221.

ASL 275-277  
**SPECIAL TOPICS**  
0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

## Anthropology

ANT 101  
**CULTURAL ANTHROPOLOGY: GT-SS3**  
3 CR. (3L)

PRQ: REA 090 or equivalent assessment test score. Studies human cultural patterns and learned behavior. Includes linguistics, social and political organization, religion, culture and personality, culture change, and applied anthropology. This course is one of the Statewide Guaranteed Transfer Courses, GT-SS3.

ANT 107  
**INTRODUCTION TO ARCHAEOLOGY: GT-SS3**  
3 CR. (3L)

PRQ: REA 090 or equivalent assessment test score. Introduces the science of recovering the human prehistoric and historic past through excavation, analysis, and interpretation of material remains. Includes a survey of the archaeology of different areas of the Old and New Worlds. Also includes the works of selected archaeologists and discussions of major archaeological theories. This course is one of the Statewide Guaranteed Transfer Courses, GT-SS3.

ANT 111  
**PHYSICAL ANTHROPOLOGY: GT-SS3**  
3 CR. (3L)

PRQ: REA 090 or equivalent assessment test score. Studies human biology and its effects on behavior. Includes principles of genetics and evolution, vertebrates and primates, human origins, human variation, and ecology. This course is one of the Statewide Guaranteed Transfer Courses, GT-SS3.

ANT 121  
**CULTURES OF THE SOUTHWEST**  
3 CR. (3L)

PRQ: REA 090 or equivalent assessment score. 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 215  
**INDIANS OF NORTH AMERICA: GT-SS3**  
3 CR. (3L)

PRQ: ANT 101. Studies the Indians of North America from 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 course is one Statewide Guaranteed Transfer Course, GT-SS3.

ANT 221  
**EXPLORING OTHER CULTURES I**  
3 CR. (3L)

PRQ: REA 090. Provides an anthropological understanding of a selected culture. Areas of study include the culture's language, processes of enculturation, subsistence patterns and economics, kinship and descent, political organization, religion, art, history, and its reactions to the forces of globalization.

ANT 275  
**SPECIAL TOPICS**  
0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.



# Arabic

ARA 111  
**ARABIC LANGUAGE I**  
5 CR. (5L)

Begins a sequence dealing with the development of functional proficiency in listening, speaking, reading and writing the Arabic language.

ARA 275  
**SPECIAL TOPICS**  
0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

# Architectural Technology

\*\*ARC 102  
**RESIDENTIAL ARCHITECTURE**  
5 CR. (3L/3 LBV)

Covers residential planning, wood frame construction, elements of working drawings, free hand sketching, building code requirements, detailing, and structural framing.

ARC 107  
**BLUEPRINT READING (RESIDENTIAL/COMMERCIAL)**  
3 CR. (3L)

PRQ: REA 060, MAT 060, or equivalent assessment score or Department Chair approval. Covers the interpretation and reading of blueprints and related documents as used in the building trades industry and architect's office.

ARC 175-177  
**SPECIAL TOPICS**  
0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

ARC 275-277  
**SPECIAL TOPICS**  
0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

# Art

ART 107  
**ART EDUCATION METHODS**  
3 CR. (3L)

Focuses on a multimedia approach to teaching art. Emphasizes strong creative presence, philosophy and techniques in drawing, painting, printmaking, and other media.

ART 110  
**ART APPRECIATION: GT-AH1**  
3 CR. (3L)

PRQ: REA 090 or equivalent assessment test score. Introduces the cultural significance of the visual arts, including media, processes, techniques, traditions, and terminology. This course is one of the Statewide Guaranteed Transfer Courses, GT-AH1.

ART 111  
**ART HIST ANCIENT TO MEDIEV: GT-AH1**  
3 CR. (3L)

PRQ: REA 090 or equivalent assessment test scores. Provides the knowledge base to understand the visual arts, especially as related to Western culture. Surveys the visual arts from the Ancient through the Medieval periods. This course is one of the Statewide Guaranteed Transfer Courses, GT-AH1.

ART 112  
**ART HISTORY RENAISSANCE TO MODERN: GT-AH1**  
3 CR. (3L)

PRQ: REA 090 or equivalent assessment test scores. Provides the knowledge base to understand the visual arts, especially as related to Western culture. Surveys the visual arts from the Renaissance to 1900. This course is one of the Statewide Guaranteed Transfer courses. GT-AH1

ART 114  
**ART SAMPLER**  
1 CR. (2 STA)

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 121  
**DRAWING I**  
3 CR. (6 STA)

Investigates the various approaches and media that students need to develop drawing skills and visual perception.

ART 124  
**WATERCOLOR I**  
3 CR. (6 STA)

Provides an introduction to the basic techniques and unique aspects of materials involved in the use of either transparent or opaque water media or both. Color theory is included.

ART 128  
**FIGURE DRAWING I**  
3 CR. (6 STA)

PRQ: ART 121 or permission of the instructor. Introduces the basic techniques of drawing the human figure.

ART 129  
**PRINTMAKING I**  
3 CR. (6 STA)

Introduces the basic techniques and skills of printmaking as a fine art media. Instruction includes an understanding of visual concepts as they relate to prints. May include introduction to relief, intaglio, lithography and screen printing techniques.

ART 131  
**VISUAL CONCEPTS 2-D DESIGN**  
3 CR. (6 STA)

Examines the basic elements of design, visual perception, and artistic form and composition as they relate to two-dimensional media.

ART 132  
**VISUAL CONCEPTS 3-D DESIGN**  
3 CR. (6 STA)

Focuses on learning to apply the elements and principles of design to three dimensional problems.

ART 133  
**JEWELRY AND METAL WORK I**  
3 CR. (6 STA)  
Introduces the construction of jewelry designs in metals and small casting techniques.

ART 138  
**FILM PHOTOGRAPHY I**  
3 CR. (6 STA)  
Introduces black and white photography as a fine art medium and develops skills necessary for basic camera and lab operations.

ART 139  
**DIGITAL PHOTOGRAPHY I**  
3 CR. (6 STA)  
Introduces the basic concepts of digital imaging as applied to photography. Using applicable technology and hands on experience, modern developments are presented leading to the present applications of digital imaging which combine traditional photographic ideas with electronic media. Enables the student to learn how to operate image manipulation software using a variety of scanning equipment, software tools and output devices by executing new assignments and applying these technologies to their photographic process.

ART 140  
**COLOR PHOTOGRAPHY I**  
3 CR. (6 STA)  
Covers the fundamentals of color photography such as color theory and light, production, processing and printing color negatives.

ART 141  
**STUDIO PHOTOGRAPHY**  
3 CR. (6 STA)  
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 142  
**LANDSCAPE PHOTOGRAPHY**  
2 CR. (4 STA)  
Focuses on traditional and contemporary approaches to landscape photography. Examines technical and aesthetic aspects of landscape photography through group discussions, a field study, lectures, and print and slide critiques.

\*\*ART 145  
**DIGITAL DARKROOM**  
3 CR. (4.5 LBV)  
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 151  
**PAINTING I**  
3 CR. (6 STA)  
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 161  
**CERAMICS I**  
3 CR. (6 STA)  
Introduces traditional and contemporary ceramic forms and processes including handbuilding and throwing on the potter's wheel.

ART 162  
**HANDBUILT CLAY I**  
3 CR. (6 STA)  
Provides instruction in several methods of handbuilding and the study of functional and decorative design elements.

ART 165  
**SCULPTURE I**  
3 CR. (6 STA)  
Introduces the fundamentals of sculpture such as modeling, casting, carving, and the processes of assemblage.

ART 175-177  
**SPECIAL TOPICS**  
0-12 CR.  
Provides students with a vehicle to pursue in depth exploration of special topics of interest.

ART 207  
**ART HISTORY – 1900 TO PRESENT: GT-AH1**  
3 CR. (3L)  
PRQ: REA 090 or equivalent assessment test scores. Provides students with the knowledge base to understand the visual arts as related to Modern and Contemporary visual art. Surveys world art of the twentieth century, including Modernism to Post-Modernism. This course is one of the Statewide Guaranteed Transfer Courses, GT-AH1.

ART 208  
**CULTURE STUDIES**  
3 CR (3L)  
PRQ: REA 090 or equivalent assessment test scores. Studies the arts and history of a particular culture at the location of that culture. Students view the arts and architecture of the culture in the historical and spatial contexts for which they were designed and in galleries and museums.

ART 209  
**STUDIO ART**  
3 CR. (6 STA)  
Designed for advanced students interested in further exploring an art discipline to develop a more comprehensive portfolio.

ART 210  
**MARKETING FOR THE VISUAL ARTISTS**  
3 CR. (3L)  
PRQ: 12 credits of any combination of ART courses. Provides students with the framework, tools, and professional materials necessary for the practicing visual artist. Guidelines for writing proposals, artist's statements, and resumes are discussed and practiced. Explores theoretical and practical considerations related to portfolio presentation and exhibiting artwork through hands-on activities, readings, and discussion.

ART 211  
**THE BUSINESS OF VISUAL ART**  
3 CR. (3L)  
Introduces students to the principles and practices involved in creating and operating arts organizations in the profit and not-for-profit art world.

ART 221

**DRAWING II**

3 CR. (6 STA)

Explores expressive drawing techniques with an emphasis on formal composition, color media and content or thematic development.

ART 222

**DRAWING III**

3 CR. (6 STA)

Offers a continued study of expressive drawing techniques and development of individual style, with an emphasis on composition and technique variation.

ART 224

**WATERCOLOR II**

3 CR. (6 STA)

PRQ: ART 123 or equivalent. Continues the study of watercolor techniques, emphasizing original compositions and experimentation with materials. Color theory is included.

ART 230

**COLOR THEORY**

3 CR. (6 STA)

Explores the properties and concepts of color for application in fine art, commercial art and/or applied arts using various traditional fine art techniques and materials.

ART 233

**JEWELRY AND METAL WORK II**

3 CR. (6 STA)

Emphasizes conceptual design development, using casting and specialized techniques.

ART 234

**JEWELRY AND METAL WORK III**

3 CR. (6 STA)

Focuses upon advanced work and emphasizes experimentation with materials and techniques, individual designs, and superior craftsmanship.

ART 235

**JEWELRY AND METAL WORK IV**

3 CR. (6 STA)

Provides continued study of the properties of metal and stone in creating decorative work. Students employ advanced design and techniques to explore original, personal expression. A variety of materials and approaches are used in discovering new and independently creative finished pieces.

ART 238

**PHOTOGRAPHY II**

3 CR. (6 STA)

This course is a further exploration in camera and lab operations with an emphasis on individual creativity. It includes the development of a comprehensive portfolio.

ART 239

**DIGITAL PHOTOGRAPHY II**

3 CR. (6 STA)

PRQ: ART 143 or permission of the instructor. 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 240

**COLOR PHOTOGRAPHY II**

3 CR. (6 STA)

Designed for students who are approaching a personal style and aesthetic in the medium of color photography. It is an extension of Color Photography I. Personal expression is stressed through individual critiques.

ART 241

**LARGE FORMAT PHOTOGRAPHY**

3 CR. (6 STA)

Introduces the visual aesthetics and techniques of view camera photography. Students receive hands-on photographic experience with the 4x5 view camera, process film, and produce prints.

ART 244

**DIGITAL PHOTO STUDIO**

3 CR (6 STA)

Introduces digital photography as a fine art medium, and develops skills necessary for basic operation of a digital camera and production of digital imagery.

ART 251

**PAINTING II**

3 CR. (6 STA)

This course further explores techniques, materials, and concepts used in opaque painting processes in oil or acrylic painting, with emphasis on composition and content development.

ART 252

**PAINTING III**

3 CR. (6 STA)

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 261

**CERAMICS II**

3 CR. (6 STA)

A continuation of ART 161, this course emphasizes skill, technique and form.

ART 262

**CERAMICS III**

3 CR. (6 STA)

Encourages students to develop an individual style of wheel thrown and handbuilt ceramic forms with continuing involvement in surface treatment.

ART 264

**CERAMIC SCULPTURE**

3 CR. (6 STA)

Explores a variety of processes to create three-dimensional images in clay. Focuses on hand-built sculptures, without using a potter's wheel and relying on very basic tools. Encourages creative experimentation and engaging in the process.

ART 265

**SCULPTURE II**

3 CR (6 STA)

Develops an understanding and focus on manipulation of three dimensional form, with greater concentration on individual creativity and style.

ART 275-277

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

# Astronomy

AST 101

## **ASTRONOMY I: GT-SC1**

4 CR. (3L/2 LBA)

PRQ: REA 090, MAT 090, ENG 060, or equivalent test scores. Focuses on the history of astronomy, the tools of the astronomer and the contents of the solar system including the planets, moons, asteroids, comets, and meteoroids. Incorporates laboratory experience. This course is one of the Statewide Guaranteed Transfer Courses, GT-SC1.

AST 102

## **ASTRONOMY II: GT-SC1**

4 CR. (3L/2 LBA)

PRQ: REA 090, MAT 060, ENG 060, or equivalent assessment test scores. Emphasizes the structure and life cycle of the stars, the sun, galaxies, and the universe as a whole, including cosmology and relativity. Incorporates laboratory experience. This course is one of the Statewide Guaranteed Transfer Courses, GT-SC1.

AST 175-177

## **SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

AST 275-277

## **SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

# Automotive Service Technology

ASE 101

## **AUTO SHOP ORIENTATION**

2 CR. (1L/1.5 LBV)

Provides students with safety instruction in the shop and on the automobile. Emphasis is placed 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 102

## **INTRODUCTION TO THE AUTOMOTIVE SHOP**

2 CR (2L)

Prepares the incoming automotive student to work in the shop safely and gain familiarity with the shop and common equipment.

ASE 110

## **BRAKES I**

3 CR. (2L/1.5 LBV)

Covers basic operation of automotive braking systems. Includes operation, diagnosis, and basic repair of disc brakes, drum brakes, and basic hydraulic systems.

ASE 120

## **BASIC AUTOMOTIVE ELECTRICITY**

2 CR. (1.5L/.75 LBV)

Introduces automotive electricity and includes basic electrical theory, circuit designs, and wiring methods. Focuses on multi-meter usage and wiring diagrams.

ASE 123

## **AUTOMOTIVE BATTERY, STARTING, AND CHARGING SYSTEMS**

2 CR. (1.5L/.75 LBV)

Covers the operation, testing, and servicing of automotive battery, starting, and charging systems. Includes voltage and amperage testing of starter and generator, load testing and maintenance of a battery, and starter and generator overhaul.

ASE 124

## **ADVANCED IGNITION SYSTEM DIAGNOSIS AND REPAIR**

2 CR. (1L/1.5 LBV)

Focuses on lecture and related laboratory experiences in the diagnosis, service, adjustments and repair of various ignitions systems on customer vehicles.

ASE 130

## **GENERAL ENGINE DIAGNOSIS**

2 CR. (1L/1.5 LBV)

Focuses on lecture and related laboratory experiences in the diagnosis and necessary corrective actions of automotive engine performance factors.

ASE 132

## **IGNITION SYSTEM DIAGNOSIS AND REPAIR**

2 CR. (1.5L/.75 LBV)

Focuses on lecture and related laboratory experiences in the diagnosis, service, adjustments and repair of various automotive ignition systems.

ASE 134

## **AUTOMOTIVE EMISSIONS**

2 CR. (1.5L/.75 LBV)

Focuses on lecture and laboratory experiences in the diagnosis and repair of automotive emission control systems.

ASE 140

## **SUSPENSION AND STEERING I**

3 CR. (2L/1.5 LBV)

Focuses on lecture and related experiences in the diagnosis and service of suspensions and steering systems and their components.

ASE 151

## **AUTOMOTIVE MANUAL TRANSMISSION/TRANSAXLES AND CLUTCHES**

2 CR. (1L/1.5 LBV)

Focuses on lecture and related laboratory experiences in the diagnosis and repair of automotive manual transmissions, transaxles and clutches and related components.

ASE 152

## **DIFFERENTIALS AND 4WD/AWD SERVICE**

2 CR. (1.5/.75 LBV)

Focuses on lecture and related laboratory experiences in the diagnosis and repair of automotive differentials, four wheel and all wheel drive units.

ASE 160

## **AUTOMOTIVE ENGINE REMOVAL AND INSTALLATION**

1 CR. (.5L/.75 LBV)

Focuses on lecture and laboratory experiences in the removal and installation procedures of the automotive engine from and into front wheel and rear wheel drive vehicles.

ASE 161  
**ENGINE, DISASSEMBLY DIAGNOSIS AND ASSEMBLY**  
3 CR. (1L/6 LBV)  
Focuses on lecture and laboratory experiences in the disassembly, diagnosis and reassembly of the automotive engine. Topics include the diagnostic and repair procedures for the engine block and head assemblies.

ASE 163  
**AUTOMOTIVE COMPONENT REMOVAL AND REPLACEMENT**  
3 CR. (1L/3 LBV)  
Practical methods of removal and installation of engines, transmissions, transfer cases, clutch assemblies, bolt, and thread repair.

ASE 165  
**AUTOMOTIVE MACHINING**  
2 CR. (1L/1.5 LBV)  
Offers instruction in machining processes on the automotive engine using up-to-date machines to recondition connecting rods, bore engine blocks, machine heads for replaceable guides and seats. Brake drum and disc machining is also discussed.

ASE 170  
**LABORATORY EXPERIENCE I**  
1-6 CR. (1.5-9 LBV)  
Continues to build upon the principles that are expected to be understood by students.

ASE 171  
**LABORATORY EXPERIENCE II**  
1-6 CR (1.5-9 LBV)  
Continues to build upon the principles that are expected to be understood by students.

ASE 172  
**LABORATORY EXPERIENCE III**  
1-6 CR. (1.5-9 LBV)  
Continues to build upon the principles that are expected to be understood by students.

ASE 175-177  
**SPECIAL TOPICS**  
0-12 CR.  
Provides students with a vehicle to pursue in depth exploration of special topics of interest.

ASE 210  
**BRAKES II**  
3 CR. (1L/3 LBV)  
Covers the operation and theory of the modern automotive braking systems. Includes operation, diagnosis, service, and repair of the anti-lock braking systems, power assist units and machine operations of today's automobile.

ASE 220  
**SPECIALIZED ELECTRONICS TRAINING**  
2 CR. (1.5L/.75 LBV)  
Provides a systematic approach to automotive electrical systems. Builds from the basic electrical principles and concepts through semiconductors and microprocessors. Features on-bench exercises. Students practice diagnostic procedures that have applications to present and future automotive electronics and electrical systems.

ASE 221  
**AUTOMOTIVE BODY ELECTRICAL**  
4 (1L/4.5 LBV)  
Provides a comprehensive study of the theory, operation, diagnosis, and repair of vehicle accessories.

ASE 231  
**AUTOMOTIVE COMPUTERS**  
2 CR. (1L/1.5 LBV)  
Focuses on lecture and laboratory experiences in the inspection and testing of typical computerized engine control systems.

ASE 233  
**FUEL INJECTION AND EXHAUST SYSTEMS**  
4 CR. (3L/1.5 LBV)  
Focuses on lecture and related laboratory experiences in the diagnosis and repair of electronic fuel injection systems and modern exhaust systems.

ASE 234  
**ADVANCED AUTOMOTIVE EMISSIONS**  
2 CR. (1.5L/.75 LBV)  
Provides laboratory experiences with a variety of customer work in the areas that the student received training during previous automotive classes.

ASE 235  
**DRIVABILITY DIAGNOSIS**  
1 CR. (.5L/.75 LBV)  
Emphasizes lecture and related laboratory experience in diagnostic techniques and the use of diagnostic scan tools, oscilloscopes, lab scopes, multi-meters and gas analyzers. Students diagnose live vehicle drivability problems.

ASE 236  
**ADVANCED DRIVABILITY DIAGNOSIS/REPAIR**  
4 CR. (2L/6 LBV)  
Focuses on lecture and laboratory experiences in the inspection, testing and repair of typical computerized engine control systems on customer vehicles.

ASE 240  
**SUSPENSION AND STEERING II**  
3 CR. (1.5L/2.25 LBV)  
Emphasizes lecture and related experiences in the diagnosis and service of electronic suspensions and steering systems and their components.

ASE 250  
**AUTOMATIC TRANSMISSION/TRANSAXLE SERVICE**  
1 CR. (1L)  
Focuses on practical methods of maintaining, servicing, and performing minor adjustments on an automatic transmission and transaxle.

ASE 251  
**AUTOMATIC TRANSMISSION/TRANSAXLE DIAGNOSIS AND ASSEMBLIES**  
5 CR. (3L/3 LBV)  
Covers diagnosis, principles of hydraulics, principles of electronic components, power flow, theory of operation, removal of transmission/transaxle, tear down, replacement of components, measurement and subsequent adjustment of components and replacement of transmission/transaxle.

ASE 252

**ADVANCED AUTOMATIC TRANSMISSIONS/TRANSAXLES**

2 CR. (1L/1.5 LBV)

Provides laboratory experiences with a variety of customer work in the areas that the student received training during previous automotive transmission classes.

ASE 253

**ADVANCED MANUAL TRANSMISSION/TRANSAXLES**

2 CR. (1L/1.5 LBV)

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 260

**ADVANCED ENGINE DIAGNOSIS**

2 CR. (1L/2.0 LBV)

Focuses on lecture and related laboratory experiences in the diagnosis and necessary corrective actions of automotive engine performance factors related to customer vehicles.

ASE 265

**AUTOMOTIVE HEATING AND AIR CONDITIONING**

5 CR. (4L/1.5 LBV)

Emphasizes lecture and related laboratory experiences in the diagnosis and service of automotive heating and air conditioning systems and their components.

ASE 275-277

**SPECIAL TOPICS**

0-12 CR.

Provides the student with a vehicle to pursue in depth exploration of special topics of interest.

ASE 280

**INTERNSHIP: BASIC ELECTRICAL AND ENGINE PERFORMANCE**

1 CR. (3 INT)

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 ("F.A.S.T.") Fundamental Automotive Systems Training (Chrysler) or others as required by the program track.

ASE 281

**INTERNSHIP: BASIC HEAVY DUTY AND POWER TRAIN PERFORMANCE**

1 CR. (3 INT)

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 ("F.A.S.T.") Fundamental Automotive Systems Training (Chrysler) or others as required by the program track.

ASE 282

**INTERNSHIP: GENERAL**

1 CR. (3 INT)

Emphasizes practical on-the-job, work-related experience that corresponds to the area of study. In this semester, the student takes all related sponsor requirements in (STS) Service Training Standards (General Motors) or ("F.A.S.T.") Fundamental Automotive Systems Training (Chrysler) or others as required by the program track.

ASE 283

**INTERNSHIP: ADVANCED ELECTRICAL AND ENGINE PERFORMANCE**

1 CR. (3 INT)

Emphasizes practical on-the-job, work-related experience that corresponds to the area of study. In this semester, the student takes all related sponsor requirements in (STS) Service Training Standards (General Motors) or ("F.A.S.T.") Fundamental Automotive Systems Training (Chrysler) or others as required by the program track. The student registers for and takes the (ASE) Automotive Service Excellence based tests for engine performance and electrical systems.

ASE 284

**INTERNSHIP: ADVANCED HEAVY DUTY AND POWER TRAIN PERFORMANCE**

1 CR. (3 INT)

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 ("F.A.S.T.") 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.

ASE 285

**INDEPENDENT STUDY**

1-6 (1.5-9 LBV)

Provides laboratory experiences with a variety of work in the areas that the student received training during previous automotive classes.

ASE 287

**COOPERATIVE EDUCATION**

1-9 CR. (3-27 INT)

Develops practical objectives assigned by an automotive employer providing an on-the-job learning experience at an approved automotive repair facility.

## Automotive Collision Technology

\*\*ACT 101

**INTRODUCTION TO AUTOMOTIVE COLLISION TECHNOLOGY**

4 CR. (2L/3 LBV)

Designed as an orientation to the automotive collision repair industry. Students receive an overview of job possibilities as well as learn various types of automobile construction. Names, uses and maintenance procedures for a variety of tools and equipment are covered. Focuses on general collision repair and refinishing shop safety procedures with an emphasis on personal and environmental safety issues. Students also learn the proper handling and disposal of hazardous materials.

ACT 110

**SAFETY IN COLLISION REPAIR**

2 CR. (1L/1.5 LBV)

Introduces the student to safety techniques and operation as it relates to shop safety and industry standards. The student is exposed to regulations and collision shop operations. In addition, the student becomes involved with VICA, developing writing and speaking skills.

ACT 111

**METAL WELDING AND CUTTING I**

3 CR. (1L/3 LBV)

Covers sheet metal oxygen-acetylene welding and MIG welding techniques including safety, materials, equipment and setups. Personal and vehicle protective measures prior to welding procedures is presented.

ACT 121

**NON-STRUCTURAL REPAIR PREPARATION**

3 CR. (1L/3 LBV)

Covers the basic characteristics of preparation for automotive repair. Students familiarize themselves with damage analysis, extent of damage and the sequence of repair. Focuses on removal of vehicle components and protection of panels along with storage and labeling of parts. Safety procedures and equipment use are included.

ACT 122

**PANEL REPAIR AND REPLACEMENTS**

3 CR. (1L/3 LBV)

Covers straightening techniques including tension pulls/stress relief, metal finishing, metal shrinking and use of fillers. Emphasizes the identification, handling and replacement of parts such as adjustment and alignment of bolt-on parts, fixed parts and accessories. Training covers the use of adhesives, sound deadeners and welding methods performed during repairs.

ACT 123

**METAL FINISHING AND BODY FILLING**

3 CR. (1L/3 LBV)

Covers metal finishing, metal shrinking and the use of cosmetic fillers. Emphasis is placed on the use of proper tools required to perform these tasks, including use, selection and safety procedures for tools and equipment selected.

ACT 131

**STRUCTURAL DAMAGE DIAGNOSIS**

3 CR. (1L/3 LBV)

Focuses on methods of frame measurement using dimension charts and service manuals. Includes the use of self-centering gauges and mechanical and electronic measuring. Appropriate terms and definitions of vehicle structures and vehicle diagnosis is covered including identification and analysis of damage. Includes the techniques for basic hook ups and safety procedures used in making corrective pulls.

ACT 132

**STRUCTURAL DAMAGE REPAIR**

3 CR. (1L/3 LBV)

Continues the study and application of frame measurement and repair. The student applies methods found in dimension charts and service manuals for vehicle diagnosis and straightening. Training includes the replacement of a structural panel with the identification of damaged suspension components replaced according to manufacturer's recommendations.

ACT 141

**REFINISHING SAFETY**

1 CR. (1L)

Covers correct use of safety procedures used in refinishing. Proper fit and use of various types of protective equipment is emphasized. The identification of tools and equipment, with use and maintenance is covered including national guidelines for proper disposal and handling of hazardous materials.

ACT 142

**SURFACE PREPARATION I**

2 CR. (1L/1.5 LBV)

Covers surface preparation for refinishing including cleaning, sanding, feather edging, chemical treatment of bare materials and priming. The application of primers, including rationale and use is covered. In addition the student learns skills for proper removal and storage of exterior trim and protection of adjacent panels.

ACT 143

**SPRAY EQUIPMENT OPERATION**

2 CR. (1L/1.5 LBV)

Covers the inspection, cleaning and determination of the condition of spray guns and related equipment. Students learn skills for adjusting spray guns by setting-up and testing spray gun operations.

ACT 144

**REFINISHING I**

2 CR. (1L/1.5LBV)

Provides the knowledge needed for application and use of automotive paint systems. Course includes locating color codes, mixing formulas, matching and selections of materials. Proper paint gun use and adjustments is taught for the product being applied. In addition, the student practices correct masking and detailing techniques.

ACT 151

**PLASTICS AND ADHESIVES I**

1 CR. (.5L/.75 LBV)

Designed to teach the state-of-the-art repair for both rigid and flexible plastic components and choosing adhesives using the latest manufacturer's repair techniques.

ACT 160

**CUSTOM PAINTING**

3 CR. (1L/3 LBV)

This course provides instruction in basic custom paint application such as pearl paints, candy colors, metal flakes, etc.

ACT 161

**AUTOMOTIVE GRAPHICS AND DESIGNS**

3 CR. (1L/3 LBV)

This course provides instruction in the application of graphics and designs to an automotive finish. These designs include striping, flames, paint fades, and graphics, etc.

ACT 162

**AUTOMOTIVE AIR BRUSHING AND MURALS**

3 CR. (1L/3 LBV)

This course provides instruction in the use of airbrush equipment to produce murals. Instruction in mural layout background, foreground, and fine detail will be provided.

ACT 163

**AUTOMOTIVE SPECIAL EFFECTS AND REFINISHING**

3 CR. (1L/3 LBV)

This course provides instruction in the different types of design effects that can be achieved through special techniques.

ACT 165

**AUTOMOTIVE BODY CUSTOMIZING I**

3 CR. (1L/3 LBV)

Recommended CORQ: ACT 166 AND ACT 167. Covers tool identification welding (mig and resistance), plasma cutting, metal finishing, metal shrinking and the use of cosmetic fillers. Emphasis is placed on the use of proper tools required to perform body customizing tasks, including use, selection and safety procedures for tools and equipment selected.

ACT 166

**AUTOMOTIVE BODY CUSTOMIZING II**

3 CR. (1L/3 LBV)

Recommended PRQ: ACT 165. Covers modification of vehicle and vehicle parts such as Chopping, measuring, realigning, fabricating, recessing, shaping etc.

ACT 167

**AUTOMOTIVE BODY CUSTOMIZING III**

3 CR. (1L/3 LBV)

Recommended PRQ: ACT 165 and ACT 166. Covers the completion of modifications that were started in Automotive Body Customizing II along with the addition of body molding kits.

ACT 170

**AUTOMOTIVE COLLISION TECHNOLOGY LAB EXPERIENCES I**

7 CR. (10 LBV)

Designed to prepare the student to perform basic tasks for a specialized area in a controlled instructional lab.

ACT 171

**AUTOMOTIVE COLLISION TECHNOLOGY LAB EXPERIENCE II**

1-9 CR. (1.5-13.5 LBV)

Course is a continuation of Lab experience. Designed to prepare the individual to perform basic tasks for a specialized area in a controlled instructional lab.

ACT 172

**AUTOMOTIVE COLLISION TECHNOLOGY LAB EXPERIENCES III**

1-9 CR. (1.5-13.5 LBV)

Course is a continuation of Lab experience. Designed to prepare the individual to perform basic tasks for a specialized area in a controlled instructional lab.

ACT 175-177

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

ACT 180

**AUTOMOTIVE COLLISION REPAIR INTERNSHIP LEVEL I**

1-9 CR (3-27 INT)

Designed to meet the needs of the student in selected specialized area in a work-based environment. Individualized instruction at the job site is coordinated based on student's interest and instructor approval.

ACT 181

**AUTOMOTIVE COLLISION REPAIR LEVEL II INTERNSHIP**

1-9 CR. (3-27 INT)

Course is a continuation of Level I Internship. Student uses the knowledge and skills acquired throughout the ACT program in a job site placement.

ACT 205

**ESTIMATING AND SHOP MANAGEMENT**

3 CR. (2L/1.5 LBV)

Initiates written estimates on damaged vehicles. Students learn shop management including work orders, ordering supplies, operating costs, time cards, shop liabilities, employee's safety and insurance management issues.

ACT 211

**METAL WELDING AND CUTTING II**

2 CR. (3 LBV)

Covers mig welding procedures of seam weld, stitch welds and destructive testing. Resistance spot welding, which includes two-sided spot weld, plasma cutting, safety, materials, and equipment and operating procedures, with emphasis on shop safety are also presented.

ACT 220

**STRUCTURAL REPAIR II**

4 CR (2L/3 LBV)

Designed as a continuation of ACT 132 Students continue practice in structural damage analysis and measuring procedures on both, unitized and body-over-frame type vehicles. Proper methods for straightening, as well as replacing structural, mechanical, and electronic components are covered.

ACT 221

**MOVABLE GLASS AND HARDWARE**

2 CR (1L/1.5 LBV)

Covers door glass, vent windows and glass mechanisms (both electric and mechanical) with emphasis on removal and replacement. In addition, interior trim panels, seats and headliners are removed and replaced. Student learns proper care and treatment of vehicle seat protectors plus the proper use of tools required to perform these tasks.

ACT 226

**PRODUCTION**

4 CR (6 LBV)

PRQ: ACT 121, 151, 251. Simulates the actual working procedures of an auto collision repair technician. The student performs a variety of structural and non-structural repairs, as well as refinishing operations in accordance with industry procedures, and in compliance with estimates and flat-rate times from collision estimating guides. Students also develop leadership abilities and time management skills.

ACT 231

**ADVANCED STRUCTURAL DAMAGE DIAGNOSIS AND REPAIR**

3 CR. (1L/3 LBV)

Covers major automotive body repair in vehicles with major damage on conventional structures and unibody structures. Student learns the operation of equipment and techniques used to straighten and align damaged frames. Identification and analysis of frames, hot and cold stress relieving, servicing and sectioning of structural frames is also included. Liability issues and the importance of making these corrections according to the manufacturer's recommendations and industry standards are emphasized.

ACT 232

**FIXED GLASS REPAIR**

2 CR. (3 LBV)

Covers the removal and replacement of fixed glass using manufacturer's specifications, proper tools and recommended materials. Application of skills are demonstrated and utilized for the removal and replacement of modular glass using manufacturer's specifications and procedures.



ACT 241

**PAINT DEFECTS**

3 CR. (1L/3 LBV)

Covers paint defects. Emphasizes the causes of paint defects with methods to cure problems during and after refinishing procedures. Students learn to identify the proper surface preparations to apply prior to refinishing. Training includes using paint equipment and determining paint film thickness with proper temperatures for refinishing.

ACT 242

**SURFACE PREPARATION II**

2 CR. (1L/1.5 LBV)

Emphasizes surface preparation for refinishing including cleaning, sanding, feather edging, chemical treatment of bare metals and priming. The application of primers, including why and where to use them is covered.

ACT 243

**REFINISHING II**

2 CR. (1L/1.5LBV)

In this advanced course students learn the necessary skills used to tint and blend panels working with the latest finishes and paints. Special coatings and procedures are covered in this course.

ACT 244

**FINAL DETAIL**

2 CR. (1L/1.5 LBV)

Focuses on the detailing procedures in paint refinishing of vehicles. Methods and techniques are specialized to enhance painting skills. Transfers and tapes methods with decals etc. are demonstrated.

ACT 251

**PLASTICS AND ADHESIVES II**

1 CR. (.75L/.38 LBV)

Emphasizes advanced plastic and adhesives. The current state-of-the-art repair for both rigid and flexible plastic components using the latest manufacturer's repair techniques are presented. Sheet Moulded Compound procedures and the use of proper adhesives is covered.

ACT 266

**RESTRAINT SYSTEMS**

1 CR. (.5L/.75 LBV)

Students learn to inspect, remove and replace active restraint systems, passive restraint systems and supplemental restraint systems. Procedures are demonstrated for disarming and diagnosing restraint systems using electronic equipment and trouble codes. Instruction for passive restraint replacement is also covered in this course.

ACT 275-277

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

ACT 280

**AUTOMOTIVE COLLISION REPAIR LEVEL III INTERNSHIP**

1-9 CR. (3-27 INT)

Individualized instruction at job site continues in this final internship. The student is encouraged to develop skills needed to enter employment in the automotive collision repair field.

ACT 284

**AUTOMOTIVE COLLISION REPAIR INTERNSHIP LEVEL IV**

1-9 CR. (3-27 INT)

Individualized instruction at job site continues in this final internship. The student is encouraged to develop skills needed to enter employment in the automotive collision repair field.

## \*\*Barber

\*\*BAR 103

**INTRODUCTION TO HAIR & SCALP**

1 CR. (.5L/.75 LBV)

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 107

**INTRODUCTION TO SHAVING, HONING & STROPPING**

1 CR. (.5L/.75 LBV)

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 108

**INTERMEDIATE SHAVING, HONING & STROPPING**

1 CR. (.5L/.75 LBV)

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 110

**INTRODUCTION TO HAIR COLORING**

3 CR. (1.5L/2.25 LBV)

Introduces theory pertaining to law of color, theory of color, chemistry of color, product knowledge, and analysis of hair and scalp. Focuses on basic techniques and procedures for the application of hair coloring.

\*\*BAR 111

**INTERMEDIATE HAIR CUTTING**

2 CR. (.5L/2.25 LBV)

Emphasizes theory and practical application of color products, formulations of color, and level and shades of color.

\*\*BAR 120

**INTRODUCTION TO HAIR CUTTING**

3 CR. (2L/1.5 LBV)

Introduces theory relevant to patron protection angles and degree and analysis of hair textures related to hair cutting. Covers proper use and care of hair cutting implements. Introduces basic hair cutting techniques using scissors, razor, clippers, and thinning shears. Training is provided in a classroom or lab setting with students training on mannequins or models.

\*\*BAR 121

**INTERMEDIATE HAIR CUTTING**

3 CR. (1L/3 LBV)

Focuses on theory related to facial shapes and head and body forms to determine the appropriate haircut. Practical application of hair cutting techniques are explored in specialized classes or in a supervised salon setting.

**\*\*BAR 130**

**INTRODUCTION TO HAIR STYLING**

3 CR. (1L/3 LBV)

Combines theory with the practical application of airforming curling iron, finger waving, soft pressing and hard pressing.

**\*\*BAR 131**

**INTERMEDIATE HAIR STYLING**

3 CR. (2L/1.5 LBV)

Focuses on the accepted methods of styling hair, air forming, finger waves, and hair pressing.

**\*\*BAR 140**

**INTRODUCTION TO PERMANENT WAVES & CHEMICAL RELAXERS**

3 CR. (1L/3 LBV)

Focuses on the analysis of hair and scalp, proper equipment and product knowledge. Covers basic techniques in permanent waving and chemical relaxing. Incorporates training in a classroom or lab setting on mannequins or models.

**\*\*BAR 141**

**INTERMEDIATE PERMANENT WAVES & CHEMICAL RELAXERS**

3 CR. (1L/3 LBV)

Focuses on theory and practical application of permanent waves and chemical relaxers in specialized classes or supervised salon setting. Students practice different wrapping techniques that are required by trend styles.

**\*\*BAR 166**

**INTRODUCTION TO FACIAL MASSAGES & SKIN CARE**

1 CR. (.5 L/.75 LBV)

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 167**

**INTERMEDIATE FACIAL MASSAGE & SKIN CARE**

1 CR. (.5 L/.75 LBV)

Focuses on practical application dealing with anatomy, skin disorders, skin types and facial shapes. Students help patrons select proper skin care treatments.

**\*\*BAR 203**

**ADVANCED HAIR AND SCALP**

1 CR. (.5L/.75 LBV)

Focuses on advanced theory and practical training of hair, scalp treatments and shampooing in a supervised salon setting. Advanced techniques prepare the student for employment. Covers student preparation for the State Board Licensing Examination on theory and practical procedures.

**\*\*BAR 207**

**ADVANCED SHAVING, HONING & STROPPING**

1 CR. (.5 L/.75 LBV)

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 211**

**ADVANCED HAIR COLORING**

3 CR. (1L/3 LBV)

Provides continued instruction in advanced practical techniques for hair coloring with emphasis on recognition of color problems and color correction procedures. Covers advanced techniques and product knowledge to prepare the student for employment. Provides instruction for the State Board Licensing Examination pertaining to hair coloring.

**\*\*BAR 220**

**ADVANCED HAIR CUTTING**

3 CR. (1L/3 LBV)

Provides theory and advanced techniques in all phases of hair cutting to ready the student for employment. Covers student preparation for State Board licensing examination on theory and practical procedures. Training is a combination of supervised work and specialized classes.

**\*\*BAR 231**

**ADVANCED HAIR STYLING**

3 CR. (1L/3 LBV)

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.

**\*\*BAR 241**

**ADVANCED PERMANENT WAVES & CHEMICAL RELAXERS**

2 CR. (1L/1.5 LBV)

Focuses on advanced techniques to prepare the student for employment and examines changes in current industry standards. Provides instruction in specialized classes or a supervised salon setting. Covers student preparation for the State Board Licensing Examination pertaining to permanent waves and relaxers.

**\*\*BAR 266**

**ADVANCED FACIAL MASSAGE & SKIN CARE**

1 CR. (.5L/.75 LBV)

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 105**

**SCIENCE OF BIOLOGY: GT-SC1**

4 CR. (3L/2 LBA)

PRQ: REA 090, MAT 060, ENG 090, or equivalent assessment scores. 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. This course is one of the Statewide Guaranteed Transfer Courses, GT-SC1.

BIO 106

**BASIC ANATOMY AND PHYSIOLOGY**

4 CR. (3L/2 LBA)

PRQ: REA 090, MAT 060, ENG 090. 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 111

**GENERAL COLLEGE BIOLOGY I WITH LAB: GT-SC1**

5 CR. (4L/2 LBA)

PRQ: BIO 105 or the equivalent, REA 090, MAT 060, ENG 090, or equivalent assessment test scores. 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. This course is one of the Statewide Guaranteed Transfer Courses, GT-SC1.

BIO 112

**GENERAL COLLEGE BIOLOGY II WITH LAB: GT-SC1**

5 CR. (4L/2 LBA)

PRQ: BIO 105 or the equivalent, MAT 060, ENG 121, or equivalent assessment test scores. A continuation of Biology I. Includes ecology, evolution, classification, structure, and function in plants and animals. This course includes laboratory experience. This course is one of the Statewide Guaranteed Transfer Courses, GT-SC1.

BIO 143

**ECOLOGY OF COLORADO**

3 CR. (3L)

PRQ: REA 060, MAT 090 or MAT 107, ENG 060, or equivalent assessment test scores. Studies the natural environments in Colorado. Explores the vast natural environments of Colorado and the plants and animals that inhabit the life zones of our majestic plains, mountains, and valleys. Discovers the interrelationships of man and his Colorado environment - past, present, and future. Through an inquiry approach, the student examines the changing needs and roles of our environments. Field trips include Roxborough State Park, Garden of the Gods, Mt. Evans, Pikes Peak, Deer Creek Canyon, Daniels Park, Barr Lake or others.

BIO 175-177

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

BIO 201

**HUMAN ANATOMY AND PHYSIOLOGY I: GT-SC1**

4 CR. (3L/2 LBA)

PRQ: BIO 090, BIO 105 or BIO 106, REA 090, ENG 090, MAT 060, or equivalent assessment test scores. 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. This course is one of the Statewide Guaranteed Transfer Courses, GT-SC1.

BIO 202

**HUMAN ANATOMY AND PHYSIOLOGY II: GT-SC1**

4 CR. (3L/2 LBA)

PRQ: BIO 201, MAT 060, and ENG 121, or equivalent assessment test scores. Recommend PRQ: CHE 101. 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. This course is one of the Statewide Guaranteed Transfer Courses, GT-SC1.

BIO 204

**MICROBIOLOGY: GT- SC1**

4 CR. (3L/2 LBA)

PRQ: BIO 090, BIO 105 or BIO 106, REA 090, ENG 121, MAT 060, or equivalent assessment test scores. 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. This course is one of the Statewide Guaranteed Transfer Courses, GT-SC1.

BIO 216

**HUMAN PATHOPHYSIOLOGY**

4 CR. (4L)

PRQ: BIOL 201, BIO 202, ENG 121, REA 090, MAT 060, CIS 110, or equivalent assessment test scores. Focuses on the alterations in physiological, cellular, and biochemical processes, the associated homeostatic responses, and the manifestations of disease. Prior knowledge of cellular biology, anatomy, and physiology is essential for the study of pathophysiology.

BIO 269

**NUCLEIC ACID TECHNIQUES/MOLEC CLONE**

4 CR. (3L/2 LBA)

PRQ: BIO 111, CHE 111, MAT 121, ENG 121. 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.

BIO 275-277

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

# Business

BUS 102

## **ENTREPRENEURIAL OPERATIONS**

3 CR. (3L)

Covers the major aspects of small business management to enable the entrepreneur to successfully begin his own business. This course provides the basic concepts of marketing, principles of management and finance needed to manage a small business. Further it develops the business plan and suggests methods of obtaining the financing required to launch the business.

BUS 115

## **INTRODUCTION TO BUSINESS**

3 CR. (3L)

PRQ: CIS 110, ENG 060, REA 060, or equivalent assessment test score or permission of Department Advisor or Chair. Focuses on the operation of the American business system. Covers fundamentals of the economy, careers and opportunities, marketing, management, production, governmental regulations, tools of business and social responsibilities.

\*\*BUS 116

## **PERSONAL FINANCE**

3 CR. (3L)

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.

BUS 175-177

## **SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

BUS 181

## **INTERNSHIP**

0-6 CR. (0-18 INT)

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 204

## **INTRODUCTION TO E-BUSINESS**

3 CR. (3L)

PRQ: CIS 110, ENG 060, REA 060, or equivalent assessment test score or permission of Department Advisor or Chair. Introduces the use of technology in all aspects of a business. Explores the use of technology for customer relations management, accounting and financial applications, purchasing and production tools, sales and marketing functions, and human resources management. Examines use of the Internet, world-wide-web and sophisticated multi-function software tools. Students gain a heightened awareness of emerging technologies and trends in e-business.

BUS 216

## **LEGAL ENVIRONMENT OF BUSINESS**

3 CR. (3L)

PRQ: CIS 110, ENG 060, REA 060, or equivalent assessment test score or permission of Department Advisor or Chair. Emphasizes public law, regulation of business, ethical considerations, and various relationships existing within society, government, and business. Specific attention is devoted to economic regulation, social regulation, regulation and laws impacting labor-management issues, and environmental concerns. Students develop an understanding of the role of law in social, political, and economic change.

BUS 217

## **BUSINESS COMMUNICATION AND REPORT WRITING**

3 CR (3L)

PRQ: CIS 110, ENG 121, or equivalent assessment test score or permission of Department Advisor or Chair. 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 226

## **BUSINESS STATISTICS**

3 CR. (3L)

PRQ: ENG 090, REA 090, MAT 090 or MAT 112, or equivalent assessment test score or permission of Department Advisor or Chair. Focuses on statistical study, descriptive statistics, probability, and the binomial distribution, index numbers, time series, decision theory, confidence intervals, linear regression, and correlation. Intended for the business major.

BUS 260

## **BUSINESS PROCESS FOUNDATIONS FOR E-COMMERCE**

3 CR. (3L)

PRQ: CIS 110 or equivalent assessment test score, CWB 221, BUS 204, or permission of Department Advisor or Chair. Focuses on business process foundations and a preliminary look at the opportunities and challenges that implementers of e-commerce tools encounter.

BUS 261

## **E-COMMERCE BUSINESS VALUE**

3 CR. (3L)

PRQ: CIS 110 or equivalent assessment test score, BUS 260, or permission of Department Advisor or Chair. Focuses on how implementation of e-commerce solutions drive changes to the business process.

BUS 275-277

## **SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

BUS 287

## **COOPERATIVE EDUCATION**

0.5-6 CR. (1.5-18 INT)

PRQ: Permission of Department Advisor or Chair. 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 100

## **COMPUTER KEYBOARDING**

1 CR. (.5L/.75 LBV)

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. S/U

BTE 102

## **KEYBOARDING APPLICATIONS I**

2 CR. (1L/1.5 LBV)

PRQ: BTE 100 or instructor's permission, or Department Chair approval. Designed for students with minimal keyboarding skills. Introduces letters, tables, memos, and manuscripts. Emphasizes speed and accuracy.

BTE 103

## **KEYBOARDING APPLICATIONS II**

3 CR. (2L/1.5 LBV)

PRQ/CORQ: BTE 102, CIS 135, CIS 110 or equivalent assessment test score, or Department Chair approval. Reinforces basic keyboarding formats and procedures. Productivity and decision-making skills are exercised. Emphasizes speed and accuracy.

BTE 108

## **TEN-KEY BY TOUCH**

1 CR. (1L)

PRQ: CIS 110 or equivalent assessment test score, or Department Chair approval. Introduces touch control of the ten-key pad. Emphasizes the development of speed and accuracy using proper technique.

BTE 111

## **KEYBOARDING SPEEDBUILDING I**

1 CR. (1.5 LBV)

PRQ: BTE 100 or instructor permission, CIS 110 or equivalent assessment test score, or Department Chair approval. Designed to increase speed and improve accuracy in keyboarding on the PC through the use of correct techniques and concentrated effort.

BTE 112

## **KEYBOARDING SPEEDBUILDING II**

2 CR. (3 LBV)

PRQ: BTE 111. Continues the skill building sets from BTE 111. 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 116

## **FILE MANAGEMENT**

1 CR. (1L)

PRQ: REA 060 and ENG 060, or equivalent assessment test scores, or Department Chair approval. Provides instruction principles, organization, and procedures for alphabetic, numeric, subject, chronological and geographic systems of filing.

BTE 120

## **ELECTRONIC OFFICE PROCEDURES**

3 CR. (3L)

PRQ: REA 060 and ENG 060, or equivalent assessment test scores, or Department Chair approval. Provides instruction in the latest electronic office procedures using business technologies which include: e-mail, FAX, Windows, presentation graphics, telephone techniques, internet, electronic calendaring and appointment scheduling.

BTE 125

## **RECORDS MANAGEMENT**

3 CR. (4.5 LBV)

PRQ: CIS 110, ENG 060, REA 060, MAT 060, or equivalent assessment test score, or Department Chair, Advisor, or Instructor permission. 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 128

## **LEGAL TERMINOLOGY**

1 CR. (1L)

PRQ: CIS 110, MAT 060, or equivalent assessment test score, or Department Chair approval. Allows students to develop a basic legal terminology background. Students learn the state, federal, and local court structures.

\*\*BTE 155

## **WORD PROCESSING TECHNIQUES I**

3 CR.(3L)

Provides instruction in the preparation of business documents for the modern office using current software and learning software commands and functions. Includes creating, processing, and editing documents.

BTE 156

## **BUSINESS MATHEMATICS WITH CALCULATORS**

4 CR. (3L/1.5 LBV)

PRQ: CIS 110, MAT 060, or equivalent assessment test score, or Department Chair approval. Covers basic business mathematics using the touch system on electronic calculators to solve business problems.

BTE 157

## **BUSINESS LEADERSHIP ACTIVITIES**

1 CR. (1L)

PRQ: Enrollment in a business program, CIS 110, ENG 060, REA 060, MAT 060, or equivalent assessment test score, or Department Chair approval. Prepares students to understand and utilize the free enterprise system, parliamentary procedures, and business reporting in relation to a student organization, Phi Beta Lambda, while developing leadership skills. S/U

BTE 166

## **BUSINESS EDITING SKILLS**

3 CR. (3L)

PRQ: CIS 110 or equivalent assessment test score, ENG 113, or Department Chair approval. Provides proofreading techniques and reviews spelling, punctuation, grammar, and word processing formats on various types of business documents and worksheets.

BTE 175-177

## **SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

BTE 201

## **BANK TRAINING I**

3 CR. (3L)

PRQ: By permission. Develops knowledge of bank operations and provides a solid foundation of banking principles, integrity, and ethics.

\*\*BTE 202

**OFFICE SIMULATION I**

3 CR. (3L)

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.

BTE 204

**KEYBOARDING APPLICATIONS III**

3 CR. (2L/1.5 LBV)

PRQ: BTE 103, CIS 135, BTE 166 and 45 wpm, CIS 110 or equivalent assessment test score, or Department Chair approval. Produces mailable computer printouts from straight-copy, rough-draft, and simulated office projects and develops the ability to make decisions without direct supervision.

BTE 211

**LEGAL FORMATTING**

3 CR. (3L)

PRQ: REA 060 and ENG 060, or equivalent assessment test scores, or Department Chair approval. Introduces keyboarding and formatting legal correspondence, legal instruments, and court documents and provides an introduction to legal procedures.

BTE 213

**INTRODUCTION TO LEGAL OFFICE PROCEDURES**

3 CR. (3L)

PRQ: REA 060 and ENG 060, or equivalent assessment test scores; or Department Chair approval. 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 225

**OFFICE MANAGEMENT**

3 CR. (3L)

PRQ: REA 060 and ENG 060, or equivalent assessment test scores, or Department Chair approval. 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 226

**MACHINE TRANSCRIPTION**

3 CR. (3L)

Designed to help students become more proficient in transcribing memos, letters and other documents from machine transcription. Includes exercises to improve language arts skills. Introduces proper dictation techniques.

BTE 229

**LEGAL TRANSCRIPTION**

3 CR. (1L/3 LBV)

PRQ: BTE 128, CIS 135, BTE 103, CIS 110, ENG 090, MAT 090 or MAT 107, or equivalent assessment test scores, or Department Chair approval. Prepares students to work as legal transcriptionists. Students transcribe a variety of legal documents and develop a legal vocabulary.

BTE 238

**LEGAL OFFICE PROCEDURES**

3 CR. (2L/1.5 LBV)

PRQ: 40 wpm, BTE 128, CIS 135. 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 239

3 CR (3L)

**BILLING SYSTEMS: PC LAW**

Introduces the fundamental applications of PC Law software as used for time, billing, and accounting.

\*\*BTE 255

**WORD PROCESSING TECHNIQUES II**

3 CR. (3L)

Introduces basic applications for advanced word processing for Windows. It reviews and expands the students' knowledge of MS Word functions including merging, sorting, tables, charts, desktop publishing newsletters, document enhancements, styles, macros, templates and wizards to increase proficiency.

BTE 275-277

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

BTE 287

**COOPERATIVE EDUCATION/INTERNSHIP**

0.5-6 CR. (.75-9 COP)

PRQ: CIS 110 or equivalent assessment test score, or Department Chair approval. 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 101

**BASIC SAFETY**

1 CR. (1L)

An overview of safety concerns and procedures in the construction field.

\*\*CAR 102

**HAND AND POWER TOOLS**

1 CR. (.25L/1.12 LBV)

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 105

**JOB SITE LAYOUT AND BLUEPRINT READING**

1 CR. (.5L/.75 LBV)

Introduces blue-print reading and how they apply to the construction site. Includes in-depth introduction to site layout (materials and methods).

\*\*CAR 115

**FORM & FOUNDATION SYSTEMS**

1 CR. (.5L/.75 LBV)

Covers materials and methods for concrete forms and foundations. Includes various reinforcement methods such as re-bar and welded-wire fabric.

\*\*CAR 120

**GENERAL CONSTRUCTION FRAMING**

1 CR. (.25L/1.12 LBV)

Instructs students in basic framing methods and materials utilizing a hands-on framing lab. Covers floor, wall, and roof framing.

\*\*CAR 121

**FLOOR FRAMING**

1 CR. (.25L/1.12 LBV)

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.

\*\*CAR 122

**WALL FRAMING**

1 CR. (.25L/1.12 LBV)

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.

\*\*CAR 123

**ROOF FRAMING**

1 CR. (.25L/1.12 LBV)

Describes the various kinds of roofs and contains instructions for laying out rafters for gable roofs, hip roofs and valley intersections. Coverage includes both stick-built and truss-built roofs.

\*\*CAR 133

**CONSTRUCTION FRAMING & SAFETY**

4 CR. (1L/4.5 LBV)

Utilizes hands-on techniques to illustrate basic framing methods and materials. Floor/Wall/and Roof framing will be discussed/demonstrated and taught. There will be extensive utilization of modern and western residential framing methods. The course will also include 10 hours of OSHA approved safety instruction, which will qualify the student for their 10 hour safety card.

\*\*CAR 140

**STAIR CONSTRUCTION/LAYOUT**

1 CR. (.5L/.75 LBV)

Covers the various types of wooden stairs used in residential and commercial construction, along with procedures for laying out stairs, cutting out stringers and installing and finishing stairs.

\*\*CAR 156

**SHOP TOOLS: STATIONARY, HAND, AND PORTABLE**

4 CR. (1L/4.5 LBV)

Covers the safe use and care of stationary, hand, and portable tools. Develops skills through tool utilization to pass competency and safety tests for each tool.

\*\*CAR 165

**SHOP CARPENTRY**

4 CR. (2L/3 LBV)

Focuses on the non-site, shop carpenter and includes jig and pattern making, stationary power tool maintenance and adjustment, machining of woods, and techniques unique to shops, cabinetmakers and millworkers.

\*\*CAR 166

**STAIR DESIGN & CONSTRUCTION**

4 CR. (1L/4.5 LBV)

Focuses on both site and off-site stair lay-out and construction. Students have a chance to explore various techniques for building the stairs and millwork involved in the construction and installation of handrail assemblies.

CAR 170

**CLINICAL: CONSTRUCTION LAB I**

1 CR. (2 CLI)

Continues to build upon the principles that are expected to be understood by students in the construction discipline.

CAR 171

**CLINICAL: CONSTRUCTION LAB I**

1 CR. (2 CLI)

Continues to build upon the principles that are expected to be understood by students in the construction discipline.

CAR 172

**CLINICAL: CONSTRUCTION LAB I**

1 CR. (2 CLI)

Continues to build upon the principles that are expected to be understood by students in the construction discipline.

CAR 175

**SPECIAL TOPIC**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

CAR 180

**INTERNSHIP**

5 CR. (15 INT)

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 181

**INTERNSHIP**

6 CR. (18 INT)

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 205

**ADVANCED SITE LAYOUT**

2 CR. (1L/1.5 LBV)

Expands upon CAR105 and gives students a chance to explore more complex plot plans and multi-unit site layouts. Includes a more in-depth look at the blueprints and how they apply to the job-site.

\*\*CAR 215

**FORM AND FOUNDATION SYSTEMS II**

1 CR. (1.5 LBV)

Builds on course CAR 115 and expands on theories and concepts from the first year class. Offers opportunities to explore more complex systems and form requirements.

\*\*CAR 220

**ADVANCED FRAMING - GENERAL**

1 CR. (1.5 LBV)

Expands upon abilities learned in CAR 120. Utilizes a hands-on approach to allow students to study floor, wall, and roof framing.

\*\*CAR 221

**ADVANCED FLOOR SYSTEMS**

2 CR. (3 LBV)

Expands upon skills and knowledge learned in CAR 121 and focuses on an in-depth look at floor framing. Allows students to hone skills previously learned.

\*\*CAR 222

**ADVANCED WALL SYSTEMS**

2 CR. (1L/1.5 LBV)

Expands upon those skills and knowledge learned in CAR 122. Covers complex wall framing issues and leadership/foreman responsibilities.

\*\*CAR 240

**ADVANCED STAIR LAYOUT**

2 CR. (1L/1.5 LBV)

Expands upon the first year course emphasizing construction of residential and commercial stairs. Covers complex stairs, including curved and multi-level stair construction. Includes alternatives to stringers, and finish. Emphasizes methods and materials for balusters and rails.

CAR 270

**CLINICAL: CONSTRUCTION LAB I**

1 CR. (2 CLI)

Continues to build upon the principles that are expected to be understood by students in the construction discipline.

CAR 271

**CLINICAL: CONSTRUCTION LAB I**

1 CR. (2 CLI)

Continues to build upon the principles that are expected to be understood by students in the construction discipline.

CAR 272

**CLINICAL: CONSTRUCTION LAB I**

1 CR. (2 CLI)

Continues to build upon the principles that are expected to be understood by students in the construction discipline.

CAR 275-277

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

CAR 280

**INTERNSHIP**

5 CR. (15 INT)

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 281

**INTERNSHIP**

6 CR. (18 INT)

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 101

**INTRODUCTION TO CHEMISTRY I WITH LAB: GT-SC1**

5 CR. (4L/2 LBA)

PRQ: MAT 090, REA 090, ENG 060, or equivalent assessment test score. 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. This course is one of the Statewide Guaranteed Transfer Courses, GT-SC1.

CHE 102

**INTRODUCTION TO CHEMISTRY II: GT-SC1**

5 CR. (4L/2 LBA)

PRQ: CHE 101, MAT 090, REA 090, ENG 060, or equivalent assessment test scores. 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. This course is one of the Statewide Guaranteed Transfer Courses, GT-SC1.

CHE 104

**CONCEPTS OF CHEMISTRY I**

4 CR. (3L/2 LBA)

PRQ: MAT 090, REA 090, ENG 060, or equivalent assessment test scores. 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 101 lecture.

CHE 105

**CHEMISTRY IN CONTEXT: GT-SC1**

5 CR. (4L/2 LBA)

PRQ: CHE 101, MAT 090, REA 090, ENG 060, or equivalent assessment test scores. 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. This course is one of the Statewide Guaranteed Transfer Courses, GT-SC1.

CHE 109

**GENERAL, ORGANIC, AND BIOCHEMISTRY**

4 CR. (4L)

PRQ: CHE 101, MAT 090, REA 090, ENG 060, or equivalent assessment test scores. 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 111  
**GENERAL COLLEGE CHEMISTRY I: GT-SC1**  
5 CR. (4L/2 LBA)  
PRQ: CHE 101, MAT 099, REA 090, ENG 090, or equivalent assessment test scores. Focuses on basic chemistry and measurement, matter, chemical formulas, reactions and equations, stoichiometry and thermochemistry. This course covers the development of atomic theory culminating in the use of quantum numbers to determine electron configurations of atoms, and the relationship of electron configuration to chemical bond theory and molecular orbital theory. The course includes gases, liquids, and solids and problem-solving skills are emphasized through laboratory experiments. This course is one of the Statewide Guaranteed Transfer Courses, GT-SC1.

CHE 112  
**GENERAL COLLEGE CHEMISTRY II: GT-SC1**  
5 CR. (4L/2 LBA)  
PRQ: CHE 111, MAT 121, ENG 121, or equivalent assessment test scores. Presents concepts in the areas of solution properties, chemical kinetics, chemical equilibrium, acid-base and ionic equilibrium, thermodynamics, electrochemistry, nuclear chemistry, and organic chemistry. This course emphasizes problem solving skills and descriptive contents for these topics. Laboratory experiments demonstrate qualitative and quantitative analytical techniques. This course is one of the Statewide Guaranteed Transfer Courses, GT-SC1.

CHE 175-177  
**SPECIAL TOPICS**  
0-12 CR.  
Provides students with a vehicle to pursue in depth exploration of special topics of interest.

CHE 211  
**ORGANIC CHEMISTRY I**  
5 CR. (4L/2 LBA)  
PRQ: CHE 102, CHE 111, MAT 121, ENG 121. 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 275-277  
**SPECIAL TOPICS**  
0-12 CR.  
Provides students with a vehicle to pursue in depth exploration of special topics of interest.

## Communications

\*\*COM 105  
**CAREER COMMUNICATIONS**  
3 CR. (3L)  
Develops skills needed in obtaining and keeping a job. Includes job searching, applications, resumes, interviews, and the dynamics of customer, peer, and managerial relationships. Emphasizes speaking, writing, listening, critical reading skills, and vocabulary development essential to the employment world.

COM 115  
**PUBLIC SPEAKING**  
3 CR. (3L)  
PRQ: ENG 060 or equivalent assessment test score. Combines the basic theory of speech communication with public speech performance skills. Emphasis is on speech delivery, preparation, organization, support, and audience analysis.

COM 125  
**INTERPERSONAL COMMUNICATION**  
3 CR. (3L)  
PRQ: ENG 060 or equivalent assessment test score. Examines the communication involved in interpersonal relationships occurring in family, social and career situations. Relevant concepts include self-concept, perception, listening, nonverbal communication, and conflict.

COM 175-177  
**SPECIAL TOPICS**  
0-12 CR.  
Provides students with a vehicle to pursue in depth exploration of special topics of interest.

COM 216  
**PRINCIPLES OF SPEECH COMMUNICATION II**  
3 CR. (3L)  
PRQ: ENG 060 or equivalent assessment test score. Emphasizes the intensification of ideas and styles with a focus on persuasive speaking. The course includes additional studies in rhetorical analysis and oral delivery methods.

COM 226  
**ORAL INTERPRETATION**  
3 CR. (3L)  
Excites and exposes the student to the potential offered in the reading and performing of great literature such as is found in prose, poetry, and drama.

COM 262  
**COMMUNICATING WITH IMPOSSIBLE PEOPLE**  
1 CR. (1L)  
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 263  
**CONFLICT RESOLUTION**  
1 CR. (1L)  
Focuses on handling conflict productively. Enables the student to understand the roots of conflict and how to mediate interpersonal conflict in a variety of settings. Emphasizes conflict prevention techniques.

COM 268  
**PROBLEM SOLVING**  
1 CR. (1L)  
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 275-277  
**SPECIAL TOPICS**  
0-12 CR.  
Provides students with a vehicle to pursue in depth exploration of special topics of interest.

# Computer Aided Drafting

CAD 101

## **COMPUTER AIDED DRAFTING I**

3 CR. (1L/3 LBV)

PRQ: ENT 131 or Department Chair approval. Focuses on basic computer aided drafting skills using the latest release of CAD software. Includes file management, Cartesian coordinate system, drawing set-ups, drawing aids, layer usage, drawing geometric shapes, editing objects, array, text applications, basic dimensioning, and Help access.

\*\*CAD 102

## **COMPUTER AIDED DRAFTING II**

3 CR. (4.5 LBV)

Focuses on advanced computer aided drafting skills using the latest release of CAD software. Includes blocks and wblocks, polylines, multilines, polyline editing, advanced editing, editing with grips, hatching, isometric drawings, dimensions and dimension variables, paper space and viewports, templates, external references, and printing/plotting.

CAD 153

## **INTRODUCTION TO PRO ENGINEER/BASICS**

3 CR. (1L/3 LBV)

PRQ: CAD operation experience. Introduces basic Pro/Engineer software operation including part creation, drawing creation, and assembly creation. Pro/Engineer is a 3D solid modeling software from parametric technologies. See also ENT-133.

CAD 155

## **PRO ENGINEER/ADVANCED**

3 CR. (1L/3 LBV)

PRQ: CAD 153. Emphasizes advanced part creation, drawing manipulation, and assembly techniques using Pro/Engineer by parametric technologies. See also ENT-133.

CAD 175-177

## **SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

CAD 202

## **COMPUTER AIDED DRAFTING/3D**

3 CR. (1L/3 LBV)

PRQ: CAD 101 or instructor approval. Focuses on construction of three-dimensional objects using the latest release of CAD software. Includes wireframe construction, surface modeling, solid modeling, extrusions, Boolean operations, 3D editing, 3D views, rendering, and 3D to 2D construction.

CAD 219

## **3D STUDIO MAX**

3 CR. (1L/3 LBV)

PRQ: CAD 101 or instructor permission. Introduces 3D rendering and animation using AUTODESK 3D Studio software. Emphasizes 3D geometry, texture mapping, lighting, camera placement, shading, photo-realistic rendering, animation techniques, and walk through animations.

CAD 220

## **3D STUDIO MAX/ADVANCED**

3 CR. (1L/3 LBV)

PRQ: CAD 219. Focuses on advanced rendering and animation techniques using AUTODESK 3D studio software. Emphasizes 3D-geometry manipulation, external processing, and video postproduction of 3D studio animations.

CAD 231

## **LAND DESKTOP/AUTO DESK**

3 CR. (1L/3 LBV)

PRQ: CAD 101, ENT 143. Focuses on the basic command structure and applications of civil mapping concepts utilizing a civil software, to include data collection files, symbols libraries, setting attributes, COGO, layer control, surface modules, road calculations, and site design. All course work is completed on a CAD system.

CAD 255

## **SOLIDWORKS/MECHANICAL**

3 CR. (1L/3 LBV)

PRQ: Instructor permission. Introduces basic non-parametric 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 275-277

## **SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

# Computer Information Systems

CIS 101

## **ALTERNATIVE INPUT/OUTPUT FOR COMPUTERS**

1 CR. (1.5 LBV)

Focuses on teaching alternative methods for inputting data into a computer. Individualized for each student, the course covers such programs as Dragon NaturallySpeaking, Dragon Dictate, or Job Access with Speech (JAWS). It is designed for students who have little or no previous computer experience.

CIS 102

## **COMPUTER ASSISTIVE TECHNOLOGY**

3 CR. (4.5 LBV)

Introduces assistive technology and alternative methods for utilization of computer systems. Depending upon student need or interest, the student selects the AT or method. Options include voice recognition, screen readers, screen enlargement, keyboard modification, word predication, reading enhancement programs and alternative data entry methods.

CIS 104

## **WORD PROCESSING WITH ASSISTIVE TECHNOLOGY**

3 CR. (4.5 LBV)

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 107

## **VOICE RECOGNITION: DRAGON**

1 CR. (1.5 LBV)

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 110

**INTRODUCTION TO THE PC**

1 CR. (1.5 LBV)

Provides the beginning computer user with hands-on experience in the elementary use of the personal computer. This course introduces the basic feature of and the terminology associated with personal computers, including topics such as database, spreadsheet, and word processing. S/U

CIS 112

**MOBILE COMPUTING WITH LAPTOPS**

1 CR. (1.5 LBV)

Introduces the student to laptop computers. The course includes the special features of laptop computers that differentiate them from desktop computers. The course allows the student to make use of the ability of a laptop computer to be used at many locations with wireless connections. Students are taught the uses of the special hardware available for laptop computers, and are taught how to install and use various software on them.

CIS 114

**COMPUTING FOR HEALTH IT**

3 CR. (3 L)

PRQ: Department Chair Approval. This is an introductory course in Computer Information Systems for Healthcare professionals. The focus of the class will be on computers as applied to Healthcare needs. The class will cover data representation, data communication, data storage, networking architecture and security. Network security will be covered as it relates to Electronic Health Records and Healthcare Privacy issues. The class will provide an introduction to computer programming and database management.

CIS 115

**INTRODUCTION TO COMPUTER INFORMATION SYSTEMS**

3 CR. (3L)

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 118

**INTRO TO PC APPLICATIONS**

3 CR. (2L/1.5 LBV)

PRQ: CIS 110 or equivalent assessment test score. Introduces computer concepts and components, as well as application-suite software and the Internet. Includes descriptions of and hands-on experiences with word processing, spreadsheets, databases, operating environments and other common PC application packages.

CIS 124

**INTRO TO OPERATING SYSTEMS**

3 CR. (2L/1.5 LBV)

CORQ: CIS 110 or equivalent assessment test score. Introduces concepts, terminology and hands-on skills in the use of DOS and Windows. Emphasizes navigation, file manipulation, file creation and troubleshooting.

CIS 128

**WINDOWS COMPLETE**

3 CR. (2L/1.5 LBV)

PRQ: CIS 110 or equivalent assessment test score. Introduces the functions and capabilities of Microsoft Windows. Includes configuring and modifying the operating system environment.

CIS 129

**ADVANCED WINDOWS**

3 CR. (2L/1.5 LBV)

Introduces the more advanced concepts of the Windows operating system. Topics include resource management, interactive booting, opening DOS sessions, customizing desktop properties, navigating folders, installing and uninstalling software, multitasking, task switching, disk optimization, troubleshooting tools, evaluating system performance, software installation, and use of the Windows Registry.

CIS 130

**INTRODUCTION TO INTERNET**

1 CR. (1.5LBV)

Enhances the student's knowledge of the Internet and its resources. Individuals learn terminology in dealing with the Internet. Includes privacy and copyright issues with information retrieved from the Internet. Students experience the use of e-commerce, multimedia and e-mail. Explores searching the Internet and credibility of information obtained with searches. S/U

CIS 131

**WORD PROCESSING I**

1 CR. (1L)

Gives the student an introductory working knowledge of word processing. The student will create, edit, format, save, and print documents. The student will use spell check, grammar check, and thesaurus features. The student will format text, paragraphs, and pages, change margins and use the find and replace feature as well as create envelopes and labels.

CIS 135

**COMPLETE PC WORD PROCESSING**

3 CR. (2L/1.5 LBV)

PRQ: CIS 110 or equivalent assessment test score, 30 wpm. BTE 102 highly recommended. Explores a complete array of word processing skills. The skills needed to create, edit, format, and printing documents are covered. Other topics include character, spelling checkers and thesaurus, hyphenation, tables, mail merge, document design, and graphics.

CIS 140

**MICROSOFT OUTLOOK**

1 CR. (.5L/.75 LBV)

PRQ: CIS 110 or equivalent assessment test score, BTE 102, CIS 128. Introduces the functions used in Microsoft Outlook including e-mail messages, calendar, contacts, tasks, journals, and notes. S/U

CIS 141

**PC DATABASE: EXCEL**

1 CR. (1.5 LBV)

Introduces the student to the functions of a database using selected software. It includes skills such as file creation, searches, sorts, simple editing and indexes.

CIS 145

**COMPLETE PC DATABASE**

3 CR. (2L/1.5 LBV)

Explores a complete array of database skills. Includes table, query, form, and report creation and modification. Other topics include application integration and automation of database tasks within the database.

CIS 146

**DATABASE APPLICATION DEVELOPMENT: ACCESS**

3 CR. (2L/1.5 LBV)

PRQ: CIS 145. Covers the PC database concepts necessary to create database applications. Includes programming, shared files, resource locking, and database recovery.

CIS 149

**MICROSOFT OFFICE SPECIALIST CERTIFICATION PREP: ACCESS**

1 CR. (1.5 LBV)

Prepares students for the Microsoft Office Specialist certification examination for Access. Students use software to determine strengths and weaknesses and elect to review and prepare for the Core level Certification exam.

CIS 151

**PC SPREADSHEETS I: EXCEL**

1 CR. (1.5 LBV)

Introduces the student to concepts and applications of an electronic spreadsheet. Topics include creating a worksheet, developing a professional looking worksheet and creating charts.

CIS 155

**PC SPREADSHEET CONCEPTS: EXCEL**

3 CR. (2L/1.5 LBV)

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 156

**PC SPREADSHEETS APPLICATION DEVELOPMENT: EXCEL**

3 CR. (2L/1.5 LBV)

PRQ: CIS 155. Builds on skills learned in CIS 155 and teaches advanced techniques for spreadsheet design and use. Topics include inserting objects from the form toolbar, recording macros and assigning macros to objects, and using visual basic commands to automate repetitive tasks.

CIS 159

**MICROSOFT OFFICE SPECIALIST CERTIFICATION PREP: EXCEL**

1 CR. (1.5 LBV)

Prepares students for the Microsoft Office Specialist certification examination for Excel. Students use software to determine strengths and weaknesses and elect to review and prepare for either the Core or Expert level Certification exam. The MOS test is not included in this course.

CIS 161

**PRESENTATION GRAPHICS I**

1 CR. (.5L/.75 LBV)

PRQ: CIS 110 or equivalent assessment test score, CIS 128, BTE 102. Introduces the development of presentation graphics materials including graphs, charts, illustrations, and diagrams. Emphasizes effective communication.

\*\*CIS 162

**ADVANCED PRESENTATION GRAPHICS**

1 CR. (1.5 LBV)

Focuses on delivery and integration of presentation software. Students will learn to rehearse, modify and deliver their presentations. This course will emphasize the integration features of the software as students learn how to share presentations, work together on development of presentations and to integrate their presentations with other programs.

\*\*CIS 165

**COMPLETE PRESENTATION GRAPHICS**

3 CR. (3L)

Focuses on the development of presentation graphics materials including graphs, charts, illustrations, and diagrams. Emphasizes effective communication through computerized presentations. Covers features of the software and effective presentation techniques.

CIS 167

**DESKTOP PUBLISHING**

3 CR. (2L/1.5 LBV)

Introduces the concepts and applications for desktop publishing using word processing software. Emphasizes page layout and design with techniques for incorporating text and graphics and final production of printed documents.

CIS 175-177

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

CIS 178

**SEMINAR/WORKSHOP**

1-6 CR. (1-6 SEM)

Provides students with an experiential learning experience.

CIS 218

**ADVANCED PC APPLICATIONS**

3 CR. (2L/1.5 LBV)

PRQ: CIS 118 or permission of instructor. 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 220

**FUNDAMENTALS OF UNIX**

3 CR. (2L/1.5 LBV)

Covers the structure and fundamentals of the UNIX operating system. Includes the files system and file processing, various utility programs, and shell, multi-user operation, text processing and communications.

CIS 222

**UNIX SYSTEM ADMINISTRATION**

3 CR. (2L/1.5 LBV)

Introduces the UNIX/Linux operating system and covers the skills required to install, configure and operate a UNIX/Linux system.

CIS 230

**SOLARIS FUNDAMENTALS**

3 CR. (2L/1.5 LBV)

Teaches students to use UNIX Operating Environment commands. Focuses on fundamental command-line features of the Solaris environment including file system navigation, file permissions, the vi text editor, command shells, and basic network use.

CIS 240

**DATABASE DESIGN AND DEVELOPMENT**

3 CR. (3L)

Introduces the basic concepts of relational databases, data storage, and retrieval. Covers database design, data modeling, transaction processing, and introduces the Structured Query Language for databases.

CIS 241  
**ADVANCED DATABASE DESIGN AND DEVELOPMENT**  
3 CR. (3L)  
PRQ: CIS 240. Continues work started in CIS 240 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 268  
**SYSTEMS ANALYSIS AND DESIGN I**  
3 CR. (3L)  
PRQ: CIS 115 and one programming language course. 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 275-277  
**SPECIAL TOPICS**  
0-12 CR.  
Provides students with a vehicle to pursue in depth exploration of special topics of interest.

CIS 287  
**COOPERATIVE EDUCATION**  
1-6 CR. (1-6 INT)  
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 289  
**CAPSTONE**  
1-6 CR. (3-18 INT)  
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

CNG 101  
**INTRO TO NETWORKING**  
3 CR. (3L)  
Focuses on underlying concepts of data communications, telecommunications and networking. Emphasizes the terminology and technologies in current networking environments and provides a general overview of the field of networking as a basis for continued study in the field.

CNG 102  
**LOCAL AREA NETWORKS**  
3 CR. (3L)  
Introduces Local Area Networking. Focuses on discussions and demonstrations of planning, installing, and supporting networks.

CNG 103  
**WIDE AREA NETWORKS**  
3 CR. (3L)  
Provides the student with conceptual and working knowledge of how Local Area Networks communicate over a wide area. Introduces telephony - the technology of switched voice communications. Provides students with an understanding of how communication channels of the public switched telephone networks are used for data communications and how voice data communications have become integrated.

CNG 104  
**INTRO TO TCP/IP**  
3 CR. (3L)  
Outlines four important networking architectures in corporate environments today - TCP/IP, SNA, AppleTalk, and DNA. Focuses on the major components and functions of each of these architectures as well as methods used to connect different architectures. Provides students with concepts that are important to the field of systems integration, as well as a conceptual basis for understanding network architectures.

CNG 105  
**INTERNET TECHNOLOGIES**  
3 CR. (3L)  
Outlines the important Internet Technologies in use today. Focuses on the major components and functions of each of these technologies as well as methods used to connect different technologies. Provides the students with concepts that are important to the field of systems integration with the Internet as well as a conceptual basis for understanding Internet Technologies.

CNG 108  
**NETWORK ANALYSIS AND DESIGN**  
3 CR. (3L)  
Provides advanced instruction for networking professionals and students who grasp the basic concepts of networking but would like to understand methods used to analyze, design and manage LAN's point-to-point networks. Exercises are geared toward learning techniques used to design and analyze networks.

CNG 123  
**NETWORK SERVER BASICS: SERVER+**  
3 CR. (2L/1.5 LBV)  
Provides students who are preparing for roles as network support technicians with skills training in the support of multi-processor computers and high capacity data storage systems typical of servers used in medium to large-scale networks.

CNG 124  
**NETWORKING I: NETWORK +**  
3 CR. (2L/1.5 LBV)  
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 125  
**NETWORKING II: NETWORK +**  
3 CR. (2L/1.5 LBV)  
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 127

**IT ESSENTIALS I: PC HARDWARE & SOFTWARE**

5 CR. (5L)

Introduces students to information technology and data communications. Enables the student to develop the necessary skills to enter this field by building a computer, installing the operating system, adding peripherals, connecting the computer to a local area network and the Internet. It is a hands-on, lab-based course stressing safety and working effectively in a group environment. This course prepares students for CompTIA's A+ certification.

CNG 128

**IT ESSENTIALS II: NETWORK OPERATING SYSTEMS**

5 CR. (5L)

PRQ: CNG 101. Introduces multi-user, multi-tasking networking operating systems. Focuses on characteristics of the Linux, Unix, Windows 2000, NT, and XP networking operating systems. Explores a variety of topics including installation procedures, security issues, back up procedures and remote access. The course prepares the student for both the CompTIA Server + certification and the Linux + certification

CNG 131

**NETWORK SECURITY FUNDAMENTALS**

3 CR. (2L/1.5 LBV)

Delivers a comprehensive overview of network security, including general security concepts. Communication Security is studied, including remote access, e-mail, the Web, directory and file transfer, and wireless data. Common network attacks are introduced. Cryptography basics are incorporated, and operational/organizational security is discussed as it relates to physical security, disaster recovery, and business continuity. Computer forensics is introduced.

CNG 132

**PRINCIPLES OF INFORMATION SECURITY**

3 CR. (2L/1.5 LBV)

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 133

**NETWORK SECURITY: FIRE WALLS, INTRUSION DETECTION AND NETWORK SECURITY**

3 CR. (2L/1.5 LBV)

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 136

**GUIDE TO DISASTER RECOVERY**

3 CR. (3L)

PRQ: REA 090, CIS 115, or department chair approval. 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 160

**TELECOMMUNICATIONS I**

3 CR. (3L)

PRQ: CIS 115 or CIS 124 or CIS 128. Introduces the background needed to understand telephony products and services in the telecommunications industry. Includes hardware and devices, transmission characteristics and codes, network configurations, software and protocols.

CNG 175-177

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

CNG 212

**IMPLEMENTING WINDOWS 2000 PROFESSIONAL AND SERVER**

4 CR. (3L/1.5 LBV)

Provides students with the knowledge and skills necessary to install and configure Microsoft Windows 2000 Professional on stand-alone and client computers that are part of a workgroup or domain. Focuses on the skills and knowledge necessary to install and configure Windows 2000 Server to create file, print, Web, and Terminal servers. Provides students with the prerequisite knowledge and skills required for course CNG 213 Implementing a Windows 2000 Network Infrastructure.

CNG 224

**MICROSOFT WINDOWS WIRELESS NETWORK**

3 CR. (2L/1.5 LBV)

PRQ: CNG 104 or instructor permission. 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 251

**ANTIVIRUS CONCEPTS**

3 CR. (3L)

PRQ: REA 090 or department chair approval. 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 254

**DATA ENCRYPTION**

3 CR. (3L)

PRQ: REA 090 or department chair approval. 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 257

**NETWORK DEFENSE AND COUNTER MEASURE**

3 CR. (2L/1.5 LBV)

PRQ: CNG 104 or instructor permission. 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 258

**COMPUTER FORENSICS**

4 CR. (1L/4.5 LBV)

PRQ: CNG 124; PRQ: CIS 220. Exposes the student to the field of Computer Forensics and investigation. Provides the student with methods to properly conduct a computer forensics investigation beginning with a discussion of ethics. Topics covered include fundamental concepts, history of computer forensics, file structures, data recovery techniques, computer forensic tools and analysis. The curriculum and objectives map to the International Association of Computer Investigative Specialists (IACIS) certification.

CNG 260

**CISCO NETWORK ASSOCIATE I**

5 CR. (5L)

Introduces network fundamentals, the OSI model and industry standards, IP addressing (subnet masks) and basic network design.

CNG 261

**CISCO NETWORK ASSOCIATE II**

5 CR. (5L)

PRQ: CNG 260. Focuses on router theory and technologies, including router configurations, protocols, network management and introductory LAN switching.

CNG 262

**CISCO NETWORK ASSOCIATE III**

5 CR. (5 L)

PRQ: CNG 261. Focuses on advanced routing and switching configurations, LAN switching, network management and advanced network design.

CNG 263

**CISCO NETWORK ASSOCIATE IV**

5 CR. (5 L)

PRQ: CNG 262. Focuses on project-based learning, including advanced network design projects and advanced management projects. This course and CNG 260, 261 and 262 prepare students for the CISCO Certified Network Associate (CCNA) certification exam.

CNG 275-277

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

## Computer Science

CSC 116

**LOGIC AND PROGRAM DESIGN**

3 CR. (3L)

Introduces computer program design using concepts of structured programming and logic. Includes pseudocode, flowcharts, and structure charts. Covers variables, data types, control structures, looping, program breaks, and arrays.

CSC 150

**VISUAL BASIC PROGRAMMING**

3 CR. (2L/1.5 LBV)

PRQ: CSC 116 or permission of instructor. Introduces programming and applications development for the Microsoft Windows Programming environment using Visual Basic for Windows.

CSC 151

**ADVANCED VISUAL BASIC PROGRAMMING**

3 CR. (2L/1.5 LBV)

PRQ: CSC 150 or permission of instructor. Builds on the skills learned in CSC 150. Focuses on more involved applications, work with advanced controls, and deal with additional advanced topics.

CSC 160

**COMPUTER SCIENCE I: (JAVA)**

4 CR. (3L/1.5 LBV)

PRQ: CSC 116 or permission of instructor. 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 161

**COMPUTER SCIENCE II: (JAVA)**

4 CR. (3L/1.5 LBV)

PRQ: CSC 160 or permission of instructor. Continues the structured algorithm development and problem solving techniques begun in Computer Science I. Enables students to gain experience in the use of data structures and design of larger software projects. Requires intensive computer laboratory experience.

CSC 230

**C PROGRAMMING**

3 CR. (3L/1.5 LBV)

PRQ: CSC 116. Introduces C programming language - a 'mid level' language whose economy of expression and data manipulation features allow a programmer to deal with the computer at a 'low level.'

CSC 231

**ADVANCED C PROGRAMMING**

3 CR. (3L/1.5 LBV)

PRQ: CSC 230. Continues the study of C begun in CSC 230. Includes pointers, arrays, linked lists, stacks and queues, trees and advanced user interfaces such as menus, windows and cursor control.

CSC 233

**OBJECT ORIENTED PROGRAMMING IN C++**

3 CR. (2L/1.5 LBV)

Covers all syntactical components of the C++ language including arrays, structures, pointers, functions and classes. Emphasizes inheritance, overloading, and polymorphism. Focuses on writing clear, properly structured, and well documented programs using the C++ Language and Object-Oriented methodology. It is the advanced course in C++ Programming.

CSC 240

**JAVA PROGRAMMING**

3 CR (2L/1.5 LBV)

PRQ: CSC 116 or permission of instructor. 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 241

**ADVANCED JAVA PROGRAMMING**

3 CR. (2L/1.5 LBV)

PRQ: CSC 240 or permission of instructor. Continues the study of the Java programming language. Covers advanced programming topics including multi-threading, network/Internet programming, database programming, and JavaBeans. Enables the student to write advanced, large, and complex programs.

CSC 269  
**PROGRAMMING IN PERL**  
2 CR. (2L)

Introduces the knowledge and skills necessary to be able to write programs in the Perl programming language. This course will offer a brief introduction of writing CGI programs using Perl.

CSC 275-277  
**SPECIAL TOPICS**  
0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

## Computer Web-Base

CWB 110  
**COMPLETE WEB AUTHORIZING**  
3 CR. (2L/1.5 LBV)

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 130  
**COMPLETE WEB EDITING TOOLS**  
3 CR. (2L/1.5 LBV)

Provides tools used for designing and building Web pages that are easy to use and have a pleasing look. The student will develop Web pages using a web page development program. Use of images, forms, frames, tables, templates and layers will be covered.

CWB 164  
**XML**  
3 CR. (2L/1.5 LBV)

Provides students with an introduction to the XML language's structure and syntax. Examines supporting tools such as XSL and CSS. This course is not designed to focus on a particular implementation of XML, but examine the possibilities of using XML with popular technologies such as Java SAX, SOAP, RDF, and the DOM.

CWB 175-177  
**SPECIAL TOPICS**  
0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

CWB 185  
**INDEPENDENT STUDY**  
1-6 CR. (2-12 IND)

Meets the individual needs of students. Students engage in intensive study or research under the direction of a qualified instructor. S/U

CWB 205  
**COMPLETE WEB SCRIPTING**  
3 CR. (2L/1.5 LBV)

PRQ: CWB 110. Explores the complete set of web scripting skills needed to develop Web Applications. Includes variables, data types, arithmetic operations, logical operations, looping, creating and reading cookies, creating an array, displaying data based on a cookie value, setting flags, working with frames, creating objects in a hidden frame, using the History Object, writing HTML to another window, determining browser and detecting keystrokes.

CWB 206  
**WEB DATA BASE**  
3 CR. (2L/1.5 LBV)

Emphasizes scripting languages used to create and manage Web databases. Targets to multimedia authors who wish to add database management and search functionality to their web sites. Enables students to build an inexpensive, portable database solution.

CWB 221  
**TECHNOLOGY FOUNDATIONS FOR e-COMMERCE**  
3 CR. (2L/1.5 LBV)

PRQ: BUS 204. Provides the student with thorough knowledge of e-commerce architecture, relational database management systems, and HTML and Network fundamentals.

CWB 265  
**MACROMEDIA DREAMWEAVER ULTRADEV**  
3 CR. (2L/1.5 LBV)

Focuses on the basics of UltraDev, client/server concepts and objects. Enables the student to amend and search a database, work with user logins and registrations, as well as creating and adding functionality to a shopping cart. Covers server behaviors and stored procedures.

CWB 275-277  
**SPECIAL TOPICS**  
0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

CWB 287  
**COOPERATIVE EDUCATION**  
1-6 CR. (3-18 INT)

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 105  
**CONSTRUCTION TECHNOLOGY**  
4 CR. (3L/1.5 LBV)

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 110  
**INTRODUCTION TO CONSTRUCTION, PART I**  
4 CR. (3L/1.5 LBV)

Explores the expanding array of careers within the construction industry. Students will be exposed to the construction industry through 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 111  
**INTRODUCTION TO CONSTRUCTION, PART II**  
4 CR. (3L/1.5 LBV)

Explores additional careers within the construction industry. Students will be exposed to the construction industry through 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 112

**BASIC REPAIRS FOR HOME OR APARTMENT**

4 CR. (2L/3 LBV)

Focuses on repair and maintenance of buildings. Covers preventative maintenance methods and skills.

CON 120

**BUILDING MATERIALS AND ENVIRONMENTAL IMPACT**

3 CR. (2L/1.5 LBV)

Examines the qualities, uses and characteristics of wood, building materials, lumber, grading and defects of hard and soft woods, estimating, ordering, pricing, fasteners, adhesives, manufactured wood products, steels, vinyl and aluminum and their applications in construction process. Explores Built-Green products and their characteristics.

\*\*CON 130

**BLUEPRINT READING**

2 CR. (3 LBV)

Focuses on the techniques for reading and using blueprints and specifications with an emphasis placed on those drawing and types of information that are relevant to the carpentry craft.

CON 140

**INTRODUCTION TO BUILDING CODES AND ENFORCEMENT**

3 CR. (3L)

Introduces the basic concepts of code enforcement.

CON 175-177

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

CON 245

**PROJECT MANAGEMENT**

4 CR. (4L)

Covers the principles of project planning, scheduling, estimating and management. Emphasizes the basic skills required to supervise personnel. Includes case studies.

CON 275-277

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

## Cosmetology

COS 103

**SHAMPOO/RINSES/CONDITIONERS I**

1 CR. (.33L/1LBV)

PRQ: REA 060, MAT 060, ENG 060. 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 110

**INTRODUCTION TO HAIR COLORING**

2 CR. (1L/1.5 LBV)

PRQ: REA 060, MAT 060, ENG 060. 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 111

**INTERMEDIATE: HAIR COLORING**

2 CR. (1L/2 CLI)

PRQ: COS 110. 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 120

**INTRODUCTION TO HAIR CUTTING**

2 CR. (1L/1.5 LBV)

PRQ: REA 060, MAT 060, ENG 060. 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, sanitation procedures as they relate to haircutting.

COS 121

**INTERMEDIATE I: HAIRCUTTING**

2 CR. (4 CLI)

PRQ: COS 120. Focuses on theory related 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 130

**INTRODUCTION TO HAIR STYLING**

2 CR. (1L/1.5 LBV)

PRQ: REA 060, MAT 060, ENG 060. Combines theory with the practical application of roller placement, shaping, pin curls, finger waves, air forming iron curling, soft pressing and hard pressing.

COS 131

**INTERMEDIATE I: HAIR STYLING**

2 CR. (1L/1.5 LBV)

PRQ: COS 130. Focuses on the accepted methods of styling hair, air forming roller sets, finger waves pin curls braiding and hair pressing.

COS 140

**INTRODUCTION TO CHEMICAL TEXTURE**

1 CR. (1L)

PRQ: REA 060, MAT 060, ENG 060. 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 141

**INTERMEDIATE I: CHEMICAL TEXTURE**

1 CR. (1L)

PRQ: COS 140. 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 150

**LAWS, RULES AND REGULATIONS**

1 CR. (1L)

PRQ: REA 060, MAT 060, ENG 060. Provides instruction on the laws, rules and regulations and how they govern the cosmetology and barber industry. The affects these on the student, licensed individual, salons and school owners.

COS 160  
**INTRODUCTION TO DISINFECTION, SANITATION AND SAFETY**  
2 CR. (1L/1.5 LBV)  
PRQ: REA 060, MAT 060, ENG 060. 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 161  
**INTERMEDIATE I: DISINFECTION, SANITATION & SAFETY**  
1 CR. (2 CLI)  
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 203  
**SHAMPOO/RINSES/CONDITIONERS II**  
1 CR. (2 CLI)  
PRQ: COS 103. 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 210  
**INTERMEDIATE II: HAIR COLORING**  
2 CR. (1.5 LBV/2 CLI)  
PRQ: COS 110. 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 211  
**ADVANCED HAIR COLORING**  
2 CR. (.5L/.75 LBV/2 CLI)  
PRQ: COS 111. 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 220  
**INTERMEDIATE II: HAIRCUTTING**  
2 CR. (1L/1.5LBV)  
PRQ: COS 120. 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 221  
**ADVANCED HAIR CUTTING**  
2 CR. (.5L/0.75 LBV/2 CLI)  
PRQ: COS 121. Focuses on advanced cutting techniques using all the cutting tools. Emphasizes current fashion trends. Includes student preparation for the State Licensure examination.

COS 230  
**INTERMEDIATE II: HAIR STYLING**  
2 CR. (1L/1.5 LBV)  
PRQ: COS 130. 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 231  
**ADVANCED HAIR STYLING**  
1 CR. (2 CLI)  
PRQ: COS 131. 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 240  
**INTERMEDIATE II: CHEMICAL TEXTURE**  
1 CR. (2 CLI)  
PRQ: COS 140. 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 241  
**ADVANCED CHEMICAL TEXTURE**  
1 CR. (2 CLI)  
PRQ: COS 141. 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 250  
**MANAGEMENT, ETHICS, INTERPERSONAL SKILLS & SALESMANSHIP**  
1 CR. (1L)  
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 260  
**INTERMEDIATE II: DISINFECTION, SANITATION & SAFETY**  
2 CR. (1L/1.5 LBV)  
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 261  
**ADVANCED DISINFECTION, SANITATION & SAFETY**  
1 CR. (2 CLI)  
PRQ: COS 161. 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 262

**ADVANCED II: DISINFECTION, SANITATION & SAFETY**

3 CR. (1L/1.5 LBV/2 CLI)

PRQ: COS 260. 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 275-277

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

EST 110

**INTRODUCTION TO FACIALS AND SKIN CARE**

3 CR. (1L/1.5 LBV/2 CLI)

PRQ: REA 060, MAT 060, ENG 060. Provides a basic understanding of massage manipulations when providing facials and the study of skin in both theory and practical applications. Benefits derived from proper facial and good skin care routines. Training is conducted in a classroom or lab setting using mannequins or models.

EST 111

**INTERMEDIATE FACIALS & SKIN CARE**

2 CR. (1L/1.5 LBV)

PRQ: EST 110

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 210

**ADVANCED MASSAGE & SKIN CARE**

2 CR. (1.5 LBV/2 CLI)

PRQ: EST 111. 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 211

**FACIAL MAKE-UP**

1 CR. (.33L/1 LBV)

PRQ: EST 110. 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 212

**HAIR REMOVAL**

3 CR. (1L/1.5 LBV/2 CLI)

PRQ: EST 110. 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 110

**INTRODUCTION TO MANICURES & PEDICURES**

3 CR. (1L/3 LBV)

PRQ: REA 060, MAT 060, ENG 060. 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 111

**INTERMEDIATE MANICURES & PEDICURES**

2 CR. (1L/2 CLI)

PRQ: REA 060, MAT 060, ENG 060. 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 210

**ADVANCED MANICURES & PEDICURES**

2 CR. (1.5 LBV/2 CLI)

PRQ: NAT 211. 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 211

**APPLICATION OF ARTIFICIAL NAILS**

5 CR. (2 L/3 LBV/2 CLI)

PRQ: NAT 111. 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.

## Counselor

Upon completion of the required 7 credit hours of coursework and 1,000 hours of internship experience in a state approved treatment center, students will fulfill requirements established by the Colorado Department of Health's Alcohol and Drug Abuse Division (ADAD), and are eligible to apply to the state for certification as a Counselor I.

CSL 175-177

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

CSL 245  
**PROFESSIONAL ETHICS**

1 CR. (1L)

PRQ: REA 090 or permission of instructor. Focuses on ethical practice in counseling through an overview of Colorado Mental Health Statute as well as the structure, function, and administration of the licensing and grievance boards in Colorado. This course meets the professional ethics mandatory training requirement for the Counselor I level of the Colorado Alcohol and Drug Abuse Program.

CSL 249  
**DIFFERENTIAL ASSESSMENT OF PROBLEMS RELATED TO PSYCHOACTIVE DRUG USE**

1 CR. (1L)

PRQ: CSL 245, CSL 255, CSL 260, CSL 265, CSL 268, CSL 269. Focuses on comparing diagnostic and assessment models available to drug and alcohol addictions counselors. This course meets the differential assessment mandatory training requirements for the Counselor II level of the Colorado Drug and Alcohol Abuse Program.

CSL 250  
**MOTIVATIONAL INTERVIEWING**

1 CR. (1L)

PRQ: CSL 245, CSL 255, CSL 260, CSL 265, CSL 268, CSL 269. 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. Opportunity for skills practice during class that includes skill sets specific to each stage of client readiness. Presentation of assessment instruments to evaluate client readiness for change. Minimum of 14 contact hours.

CSL 251  
**PHARMACOLOGY I FOR COUNSELORS**

1 CR. (1L)

PRQ: CSL 245, CSL 255, CSL 260, CSL 265, CSL 268, CSL 269. Focuses on providing the student with an introduction to pharmacological concepts that will be useful to counselors in the field of alcohol and substance abuse. When combined with CSL 252, this course meets the pharmacology training requirement for the Counselor II level of the Colorado Alcohol and Drug Abuse Program.

CSL 252  
**PHARMACOLOGY II FOR COUNSELORS**

1 CR. (1L)

PRQ: CSL 245, CSL 251, CSL 255, CSL 260, CSL 265, CSL 268, CSL 269. 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 255  
**INFECTIOUS DISEASES IN ALCOHOL/DRUG TREATMENT SETTING**

1 CR. (1L)

PRQ: REA 090 or permission of instructor. Focuses on risk factors for transmission of HIV/AIDS and the application of counseling methods to individuals infected with HIV/AIDS. This course meets the infectious diseases in treatment settings requirement for the Counselor I level of the Colorado Alcohol and Drug Abuse Program.

CSL 260  
**CLIENT RECORDS MANAGEMENT**

1 CR. (1L)

PRQ: REA 090 or permission of instructor. Focuses on Colorado State Laws surrounding the methods of client records documentation. This course meets the records management training requirement for the Counselor I level of the Colorado Alcohol and Drug Abuse Program.

CSL 265  
**COUNSELING DIVERSE TREATMENT POPULATIONS**

1 CR. (1L)

PRQ: REA 090 or permission of instructor. Focuses on therapeutic methods for treatment of substance abuse disorders as applied particularly to the needs of minorities and special populations. This class meets the diverse treatment populations mandatory training requirements for the Counselor I level of the Colorado Drug and Alcohol Abuse Program.

CSL 268  
**ADDICTIONS COUNSELING SKILLS**

1 CR. (1L)

PRQ: REA 090 or permission of instructor. Focuses on clinical skills practice, crisis intervention techniques, and an overview of substance abuse. This course meets the addictions counseling skills training requirement for the Counselor I level of the Colorado Alcohol and Drug Abuse Program.

CSL 269  
**PRINCIPLES OF ADDICTIONS TREATMENT**

1.5 CR. (1.5L)

PRQ: REA 090 or permission of instructor. 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 110  
**INTRO TO CRIMINAL JUSTICE**

3 CR. (3L)

CORQ: REA 060, ENG 060 or equivalent assessment scores. Introduces a study of the agencies and processes involved in the criminal justice system: the legislature, the police, the prosecutor, the public defender, the courts, and corrections. Includes an analysis of the roles and problems of the criminal justice system in a democratic society, with an emphasis upon inter-component relations and checks and balances.

CRJ 111  
**SUBSTANTIVE CRIMINAL LAW**

3 CR. (3L)

PRQ: CRJ 110; CORQ: REA 090, ENG 090 or equivalent scores. Teaches legal definitions of crime, purposes and functions of the law, historical foundations, and the limits of the criminal law.

CRJ 112  
**PROCEDURAL CRIMINAL LAW**

3 CR. (3L)

PRQ: CRJ 110; CORQ: REA 090, ENG 090 or equivalent assessment scores. Covers constitutional and procedural considerations affecting arrest, search and seizure, post-conviction treatment, origin, development, philosophy, and constitutional basis of evidence. Focuses on degrees of evidence and rules governing admissibility, judicial decisions interpreting individual rights, and an analysis of case studies from arrest through final appeal.

CRJ 125  
**LAW ENFORCEMENT OPERATIONS**

3 CR. (3L)

Examines the complexity and multi-dimensional aspects of the law enforcement role and career; law enforcement discretion; law enforcement values and culture in modern America. Covers the role and functions of law enforcement in occupational, social, political and organizational context.

CRJ 135  
**JUDICIAL FUNCTION**

3 CR. (3L)

PRQ: CRJ 110; CORQ: REA 090, ENG 090 or equivalent assessment scores. Examines the criminal process with an analysis of the major judicial decision-makers, i.e., prosecutors, defense attorneys, judges, and the discretionary aspects of adjudication.

CRJ 145  
**CORRECTIONAL PROCESS**

3 CR. (3L)

PRQ: CRJ 110; CORQ: REA 090, ENG 090 or equivalent assessment scores. Focuses on the post-conviction corrections process, the development of a correctional philosophy, theory, and practice, a description of institutional operation, programming and management, and community-based corrections, probation, and parole.

CRJ 146  
**COMMUNITY-BASED CORRECTIONS**

3 CR. (3L)

Introduces an analysis of community based correctional programs and procedures. Emphasizes the environment and the relationship to public safety, reintegration and punishment.

CRJ 150  
**VICTIMS OF CRIME AND TRAUMA**

3 CR. (3L)

PRQ: CRJ 110 or Department Chair approval. CORQ: REA 090; ENG 122 and COM 115 or equivalent assessment scores. Introduces the student to the role the crime victim plays in the Criminal Justice System. The traditional response that a crime victim receives from the system will be studied and the psychological, emotional and financial impact these responses have on victimization will be analyzed.

CRJ 175-177  
**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

CRJ 178  
**SEMINAR**

1-6 CR. (1-6 SEM)

Provides students with an experiential learning opportunity.

CRJ 205  
**PRINCIPLES OF CRIMINAL LAW**

3 CR. (3L)

PRQ: CRJ 110, CRJ 125, CRJ 135, and CRJ 145 or Department Chair approval. CORQ: REA 090, ENG 122, COM 115 or equivalent assessment scores. 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 210  
**CONSTITUTIONAL LAW**

3 CR. (3L)

PRQ: CRJ 110 and CRJ 135; CORQ: COM 115, ENG 121. Focuses on the powers of government as they are allocated and defined by the United States Constitution. Includes intensive analysis of United States Supreme Court decisions.

CRJ 215  
**CONSTITUTIONAL RIGHTS OF INMATES**

3 CR. (3L)

Covers an overview of the criminal justice system as it pertains to the constitutional rights of inmates including civil and criminal liabilities, legal services and disciplinary proceedings.

CRJ 216  
**JUVENILE LAW AND PROCEDURES**

3 CR. (3L)

Focuses on an in-depth analysis of the socio-legal operation of the Juvenile Justice System emphasizing the substantive and due process rights of minors. Includes analysis of legal reasoning underlying the juvenile law as it operates all levels of government.

CRJ 220  
**HUMAN RELATIONS AND SOCIAL CONFLICT**

3 CR. (3L)

PRQ: REA 090, equivalent assessment test score, or Department Chair approval. Highlights the environmental, organizational and socio-psychological dimensions of social control. Includes the study of individual attitudes, beliefs and behavior involved in role conflicts, community relations and conflict management in the social structure.

CRJ 225  
**CRISIS INTERVENTION**

3 CR. (3L)

Provides information and application of crisis theories in working with diverse populations. Examines the interventionist role.

CRJ 230  
**CRIMINOLOGY**

3 CR. (3L)

PRQ: CRJ 110 and CRJ 145; CORQ: COM 115, ENG 121. Examines the question of crime causation from legal, social, political, psychological and theoretical perspectives. Covers the history and development of criminology.

CRJ 236

**CRJ RESEARCH METHODS**

3 CR. (3L)

PRQ: All lower division CRJ courses or Department Chair approval.  
CORQ: REA 090, ENG 122, COM 155 or equivalent assessment scores. Introduces and applies methods for criminal justice and criminology with an emphasis on the scientific method and the role of empirical inquiry into criminal justice and criminology. This course will include the study of methodologies of data collection and analysis, the logic of research, the role of theory, measurement, sampling and research designs. Field research and the professional norms and ethics of criminal justice and criminology research will also be covered.

CRJ 240

**CRIMINAL INVESTIGATIONS**

3 CR. (3L)

Introduces investigation methods and procedures from preliminary through the follow-up stages.

CRJ 249

**PENOLOGY**

3 CR. (3L)

PRQ: REA 090, equivalent assessment test score, or Department Chair approval. Focuses on an historical and theoretical study of incarceration as punishment, deterrence, and incapacitation.

CRJ 250

**COMPUTER CRIME INVESTIGATION**

3 CR. (3L)

Provides a basic foundation of the skills and knowledge necessary to understand and investigate the computer criminal. Investigative procedures, interviewing skills and the necessity of search warrants will be covered. Legal issues regarding personal liability, privacy and wiretapping will also be discussed.

CRJ 275-277

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

CRJ 287

**COOPERATIVE EDUCATION/INTERNSHIP**

3 CR. (9 INT)

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 101

**FOOD SAFETY AND SANITATION**

2 CR. (2L)

Covers the basic rules of sanitation, food-borne illnesses, safe food temperatures, safe food handling techniques, the HACCP Program, pest control procedures, and local/state health rules and regulations for food service operations. At the completion of the course students take a nationally recognized test from the Education Foundation of the National Restaurant Association. If passed with a score of 75% or more, students receive a Certificate of Completion from the Education Foundation.

CUA 103

**SANITATION & PRODUCTION SERVSAFE**

3 CR. (1.5 LBV)

This course parallels CUA 101 and CUA 121. 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 121

**INTRODUCTION TO FOOD PRODUCTION PRINCIPLES AND PRACTICES**

1 CR. (1.5 LBV)

CORQ: CUA 101 or Department Chair approval. 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 122

**INTRODUCTION TO STOCKS, SOUPS, AND SAUCES**

1 CR. (1.5 LBV)

PRQ/CORQ: CUA 101, CUA 121 or Department Chair approval. 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 123

**INTRODUCTION TO GARDE MANGER**

1 CR. (1.5 LBV)

CORQ: CUA 101, CUA 121, or Department Chair approval. Provides fundamental principles of cold food and non-alcoholic 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 124

**VEGETABLE PREPARATION AND BREAKFAST COOKERY**

1 CR. (1.5 LBV)

CORQ: CUA 101, CUA 123, or Department Chair approval. Enables students to describe the characteristics of a variety of vegetable items including preparation procedures. 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 131

**STARCHES, PASTAS, CASSEROLES AND GRAIN PRODUCTS**

1 CR. (1.5 LBV)

PRQ: CUA 101, CUA 121, CUA 124, MAT 030 or equivalent assessment test score, or Department Chair approval. 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 132

**CENTER OF THE PLATE: MEAT**

1 CR. (1.5 LBV)

PRQ: CUA 101, CUA 121, CUA 124, MAT 030 or equivalent assessment test score, or Department Chair approval. 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 133

**CENTER OF THE PLATE POULTRY, FISH, AND SEAFOOD**

1 CR. (1.5 LBV)

PRQ: CUA 101, CUA 121, CUA 124, MAT 030 or equivalent assessment test score, or Department Chair approval. 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 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 134

**APPLICATION OF FOOD PRODUCTION PRINCIPLES**

1 CR. (1.5 LBV)

PRQ: CUA 122, CUA 123, CUA 124, CUA 131, CUA 132, CUA 133, or Department Chair approval. Serves as the practice vehicle for the student to apply food production principles for foods covered in CUA 121, CUA 122, CUA 123, CUA 124, CUA 131, CUA 132, and CUA 133. 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 136

**BARTENDING**

2 CR. (3 LBV)

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 141

**BAKING: PRINCIPLES AND INGREDIENTS**

1 CR. (1.5 LBV)

PRQ/CORQ: CUA 101 or Department Chair approval. 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 142

**BASIC YEAST-RAISED PRODUCTS AND QUICK BREADS**

1 CR. (1.5 LBV)

PRQ/CORQ: CUA 141 or Department Chair approval. 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 quickbreads in a commercial kitchen. Meets for a minimum of 22.5 hours.

CUA 143

**BAKING: CAKES, PIES, PASTRIES, AND COOKIES**

1 CR. (1.5 LBV)

PRQ/CORQ: CUA 141 or Department Chair Approval. 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 144

**BAKING APPLICATIONS**

1 CR. (1.5 LBV)

PRQ/CORQ: CUA 141, CUA 142, CUA 143 or Department Chair approval. 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 156

**NUTRITION FOR THE HOSPITALITY PROFESSIONAL**

3 CR. (3L)

PRQ: REA 030, equivalent assessment test score, or Department Chair approval. Provides students with the fundamentals of human nutrition. Focuses on the nutritional needs of humans throughout their life cycle as well as those with special dietary needs. Students may take a nationally recognized test from the Educational Foundation of the National Restaurant Association.

CUA 157

**MENU PLANNING**

3 CR. (3L)

Introduces the culinary arts 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 175-177

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

CUA 181

**WORK EXPLORATION**

2 CR. (2L)

PRQ: 10 hours of completed course work in CUA and/or HOS classes; REA 060. Introduces students to the range of employment opportunities in the Hospitality and Culinary Arts industry. By participating in regularly scheduled class sessions which feature guest lecturers from a variety of business operations students will learn about the careers available to them. Students will 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 190

**DINING ROOM MANAGEMENT**

4 CR. (6 LBV)

PRQ/CORQ: CUA 101 or Department Chair approval. 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 191

**FRONT OF THE HOUSE PLANNING**

1 CR. (1.5 LBV)

PRQ: CUA 101, CUA 190. CORQ: CUA 157, CUA 233, CUA 261. 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 210

**ADVANCED CUISINE AND GARDE MANGER**

4 CR. (6 LBV)

PRQ: CUA 134, REA 030 or equivalent assessment test score, or Department Chair approval. Focuses on the preparation of food display items for buffets and banquets such as fancy garnishes, fruit and vegetable carvings, canapés, party trays, etc. Includes pates, galantines, terrines, and choud froid items. Incorporates creation of food artistry show pieces meeting competition guidelines developed by the American Culinary Federation. Covers the preparation of a regional, ethnic or cultural culinary presentation based upon personal research.

CUA 233

**ADVANCED LINE PREP AND COOKERY**

4 CR. (6 LBV)

PRQ: CUA 134 or Department Chair approval. Focuses on preparation of complete meals to order. Emphasizes cooking center of the plate items such as meat, fish, seafood, and poultry as well as accompaniment foods such as starches and vegetables. Enables the student to prepare sauces, entrée salads, edible garnishes, and meals determined by the menu prepared for a dining room setting. Emphasizes line supervisor, sauté cook, pantry cook, cooks helper and runner responsibilities.

CUA 234

**ADVANCED LINE PLANNING**

2 CR. (3 LBV)

PRQ: CUA 233 or Department Chair approval. Teaches students to plan a variety of menus to be prepared in CUA 233, 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 236

**ADVANCED BAKING**

2 CR. (3 LBV)

PRQ: CUA 144. 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 242

**INTERMEDIATE GARDE MANGER**

1 CR. (1.5 LBV)

Teaches students the basic skills necessary for preparing a variety of popular charcuterie items. This advanced course begins with an introduction to ingredients and their application as students learn to prepare a variety of forcemeats. Students go on to learn the preparation of pates, galantines, terrines, and sausages.

Preparation and the use of aspic and chaud-froid as covered.

CUA 255

**SUPERVISION IN THE HOSPITALITY INDUSTRY**

3 CR. (3L)

PRQ: CUA 101, REA 060. CORQ: ENG 090 Provides the current/future foodservice operator, manager, or supervisor with a solid foundation for developing communication skills, planning and decision-making skills, and skills for creating a goal-oriented environment utilizing management principles in the selection, training, evaluating, delegating, motivating, rewarding, and disciplining employees. Stresses skills for success through people development.

CUA 256

**MARKETING IN THE HOSPITALITY INDUSTRY**

3 CR. (3L)

PRQ: ENG 060, REA 060, or equivalent assessment test scores or Department Chair approval. Involves the student in a study of foodservice marketing including marketing planning, use of marketing information in the foodservice operation, marketing research, understanding foodservice customers, advertising and promotion, hospitality group sales, and menu design and pricing strategies. At the conclusion of this course, the student will take a nationally recognized test and receive a certificate from the Education Foundation of the National Restaurant Association.



CUA 261

**COST CONTROLS**

3 CR. (3L)

PRQ: CIS 110, ENG 060, REA 060. CORQ: MAT 107. 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 262

**PURCHASING FOR THE HOSPITALITY INDUSTRY**

3 CR. (3L)

PRQ: REA 060, equivalent assessment test score, or Department Chair approval. 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 263

**LEGAL ASPECTS OF HOSPITALITY MANAGEMENT**

3 CR. (3L)

PRQ: REA 060, equivalent assessment test score, or Department Chair approval. 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 275-277

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

CUA 281

**INTERNSHIP**

2-6 CR. (6-18 INT)

PRQ: CIS 110, ENG 090, and MAT 090 or MAT 107, or equivalent assessment test scores; CUA 157, CUA 190, CUA 233, CUA 261 or, HOS 123, HOS 207, and CIS 118; or Department Chair approval. Places students in an actual work situation where they participate in the operation of a foodservice establishment. Hours of work are arranged by the site supervisor and the intern. The number of hours required are determined by the number of credits the course carries.

## Dance

DAN 121

**JAZZ I**

1 CR. (2 STA)

Introduces the basic techniques and vocabulary of jazz dance and the basic elements of dance. Focuses on movement oriented dance, comprised of warm-up exercises, center combinations, traveling combinations and cool down. May be repeated for a maximum of three credits.

DAN 129

**INTRODUCTION TO DANCE**

1 CR. (2 STA)

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 131

**BALLET I**

1 CR. (2 STA)

Introduces the basic techniques of ballet, which are built upon knowledge of ballet terminology, fundamental exercises, and the basic elements of dance. Focuses on movement-oriented dance, comprised of stretching, barre warm-up exercises, simple terre à terre and jumping steps, and basic extended positions. May be repeated for a maximum of three credits.

DAN 132

**BALLET II**

1 CR. (2 STA)

Continues Ballet I and emphasizes ballet terminology, fundamental exercises and the basic elements of dance. Focuses on an intermediate level within the basic structure of the ballet class. May be repeated for a maximum of three credits.

DAN 175-177

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

DAN 275-277

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

## Dental Assisting

DEA 102

**PRINCIPLES OF CLINICAL PRACTICE**

3 CR. (1L/3 LBV)

PRQ: Admission to the DEA program. Includes techniques used in four handed dentistry, instrument identification, and armamentarium for tray set-ups. Covers sterilization and aseptic procedures.

DEA 104

**SPECIALTIES IN DENTISTRY**

2 CR. (1L/2 CLI)

PRQ: Admission to the DEA program. Focuses on armamentarium of specific tray set-ups for periodontics, endodontics, and fixed and removable prosthodontics. Examines pediatric dentistry, oral surgery, and implants. Includes diagnosis, treatment, and the dental assistant's role in each specialty.

DEA 111

**DENTAL OFFICE MANAGEMENT**

2 CR. (1L/2 CLI)

PRQ: Admission to the DEA program. Includes office management and clerical practices, scheduling appointments, completing daily records, insurance and tax forms, bookkeeping and recall systems, and ordering supplies.

DEA 120

**INTRODUCTION TO DENTAL PRACTICES**

1 CR. (1L)

PRQ: Admission to the DEA program. Includes roles and responsibilities of the dental health team; educational background for the various specialties including general practitioner, hygienist, dental assistant; history, legal implications, ethical responsibilities and the role of professional organizations.

DEA 121

**DENTAL SCIENCE I**

3 CR. (3L)

PRQ: Admission to the DEA program. Includes fundamentals of the oral structures as they apply oral histology, embryology, morphology, pathology, dental anatomy, and dental charting.

DEA 122

**DENTAL SCIENCE II**

3 CR. (3L)

PRQ: Admission to the DEA program. Includes survey of human anatomy and physiology, the structure of the head and neck as applied to dental assisting, the function of the maxilla and mandible, processes, foramen, sutures, and major nerve and blood supply.

DEA 123

**DENTAL MATERIALS I**

3 CR. (4.5 LBV)

PRQ: Admission to the DEA program. Includes fundamentals of dental materials as they apply to clinical and laboratory applications.

DEA 124

**DENTAL MATERIALS II**

3 CR. (1L/4 CLI)

PRQ: Admission to the DEA program. Includes type, compositions, and uses of elastomeric impression materials and the fabrication of custom impression trays and temporary crowns.

DEA 125

**DENTAL RADIOGRAPHY**

3 CR. (2L/2 CLI)

PRQ: Admission to the DEA program. Focuses on the science of radiography, the application of radiographic techniques, and aseptic techniques.

DEA 126

**INFECTION CONTROL**

3 CR. (2L/2 CLI)

PRQ: Admission to the DEA program. Includes basic information concerning infection and disease transmission in the dental office. Emphasizes knowledge of microorganisms, with an emphasis on aseptic techniques, sterilization, and hazardous communication management.

DEA 127

**DENTAL SCIENCE III**

3 CR. (2L/1.5 LBV)

PRQ: Admission to the DEA program. Includes in depth study of oral defects, microorganisms and their effects on the human body with recognition and identification of pathological condition that most frequently occur orally. Emphasizes pharmacology and the drugs used in the prevention and treatment of pain and conditions of the oral cavity. Focuses on laboratory experiences and the procedures involved with local anesthesia with emphasis on the knowledge and application of nitrous oxide administration in the dental office. Upon completion, the student is eligible to administer Nitrous Oxide and Oxygen having met the requirements of the Colorado State Practice Act Rule XVII. Certificate in Nitrous Oxide Administration is given.

DEA 131

**ADVANCED DENTAL RADIOGRAPHY**

3 CR. (1L/3 LBV)

PRQ: Admission to the DEA program. Includes theory and techniques of exposing intra-oral and extra-oral radiographs on adults, children, edentulous, and special needs patients. Covers dental anatomy radiographic interpretation and aseptic techniques. Enables the student to expose radiographs on the x-ray mannequin and patients. Students must be a minimum of eighteen years of age.

DEA 132

**MEDICAL EMERGENCIES**

2 CR. (1L/2 CLI)

PRQ: Admission to the DEA program. Includes techniques for taking and reading vital signs. Emphasizes recognition, prevention, and management of medical emergency situations in the dental office. Covers completing and updating patient health history. Addresses pharmacology.

DEA 134

**PREVENTION AND NUTRITION IN DENTISTRY**

2 CR. (1L/2 CLI)

PRQ: Admission to the DEA program. Includes techniques in preventive dentistry with an emphasis on fluoride application and oral home care instruction. Includes nutrition as it applies to dental health and diet counseling. Covers techniques for coronal polishing.

DEA 140

**DENTAL ASSISTING NATIONAL BOARD REVIEW (ELECTIVE)**

1 CR. (1L)

PRQ: Admission to the DEA program or two years experience and consent of program coordinator. Focuses on a review for the Dental Assisting National Board (DANB) Examination.

DEA 175-177

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

DEA 181

**CLINICAL INTERNSHIP I**

1 CR. (3 INT)

PRQ: Admission to the DEA program. Includes the opportunity for clinical application of dental assisting techniques in a dental office or clinical setting as part of the American Dental Association's requirement of 300 clinical internship hours.

DEA 182

**CLINICAL INTERNSHIP II AND SEMINAR**

1-6 CR. (3-18 INT)

PRQ: Admission to the DEA program. Focuses on clinical practice in private or public dental offices or clinics with clinical work experience in both general dentistry and specialty fields on a rotating basis.

DEA 200

**INTRODUCTION TO EXPANDED FUNCTIONS**

4 CR. (2L/3 LBV)

PRQ: Graduate of an ADA accredited program, certified dental assistant, or 2 years of full time documented chairside experience (3,500 hours). Emphasizes techniques and concepts of expanded functions in dental assisting, including team management, placement and finishing of dental restorative materials, and adjunct procedures necessary to restorative dentistry.

DEA 205

**EXPANDED FUNCTIONS FOR THE DENTAL AUXILIARY**

4 CR. (2L/4 CLI)

PRQ: DEA 200. Focuses on clinical application of expanded functions in dental assisting.

DEA 275-277

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

## Dental Hygiene

DEH 101

**PRECLINICAL DENTAL HYGIENE LECTURE**

2 CR. (3 LBV)

PRQ: ENG 121; basic skills courses, if applicable; ACT 20 or higher in Reading; admission to Dental Hygiene program. Explores basic dental hygiene theory and development of basic skills. Focuses on the application of diagnostic, preventative and therapeutic procedures and includes an introduction to dentistry and dental hygiene, dental and medical terminology, infection control, the removal of tooth deposits, patient medical and dental histories, preventive instruction and treatment planning.

DEH 102

**PRECLINICAL DENTAL HYGIENE CARE**

3 CR. (6 CLI)

PRQ: ENG 121; basic skills courses, if applicable; ACT 20 or higher in Reading; admission to the Dental Hygiene program. Focuses on clinical experiences in basic dental hygiene procedures and techniques including basic instrumentation, infection control, and patient assessment skills. Students participate in a variety of clinical learning experiences.

DEH 103

**DENTAL ANATOMY AND HISTOLOGY**

3 CR. (2L/2 CLI)

PRQ: ENG 121; basic skills courses, if applicable; ACT 20 or higher in Reading; admission to the Dental Hygiene program. Focuses on a study of the anatomical and histological features of the teeth and other oral structures of the oral cavity. Includes terminology, anatomical landmarks, and tooth identification. Introduces histology, the embryology of the face and oral and nasal cavities, development of the teeth, and the histological features of the various components of the teeth and surrounding structures.

DEH 104

**DENTAL RADIOLOGY**

3 CR. (2L/2 CLI)

PRQ: ENG 121; basic skills courses, if applicable; ACT 20 or higher in Reading; admission to Dental Hygiene program. Introduces principles of x-radiation production and safety factors; application and theory of properly exposing, processing, mounting and evaluating radiographs; identification of normal anatomic landmarks and pathologic conditions. Focuses on utilization of the laboratory in performing procedures necessary to produce quality radiographs.

DEH 111

**DENTAL AND MEDICAL EMERGENCIES**

2 CR. (2L)

PRQ: Current enrollment in Dental Hygiene program. Introduces the management of emergency situations in the dental office setting. Emphasizes reduction of risk for emergencies, identification and management of anxiety, and stress recognition protocol. Provides practical skills applicable to dental hygienists and the scope of responsibility for medical emergency management as dictated by state dental practice law. Covers the basic categories of emergencies, causes and management. Includes content and use of emergency kits and oxygen support systems.

DEH 122

**PERIODONTICS I**

2 CR. (2L)

PRQ: Current enrollment in Dental Hygiene program. 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 123

**HEAD AND NECK ANATOMY**

1 CR. (1.5 LBV)

PRQ: BIO 201, BIO 202, current enrollment in Dental Hygiene program. Focuses on the study of head and neck anatomy with emphasis on the muscles of mastication, the lymphatics, the TMJ, the nerve and vascular supply, and the oral cavity.

DEH 126

**DENTAL MATERIALS**

3 CR. (2L/2 CLI)

PRQ: Current enrollment in Dental Hygiene program. Provides the dental hygiene student with a sound knowledge of the science of dental materials. Covers didactic and laboratory experiences and the physical properties, basic chemistry, and the clinical applications of the materials used in the practice of dentistry.

DEH 132

**APPLIED PHARMACOLOGY**

2 CR. (2L)

PRQ: Current enrollment in Dental Hygiene program. Covers general pharmacology and reviews drugs that may influence the management of dental hygiene patients. Enables the student to develop sufficient knowledge of pharmacology to permit safe and effective medical evaluation of patients for dental hygiene treatment.

DEH 133

**LOCAL ANESTHESIA**

2 CR. (1 L/2 CLI)

PRQ: DEH 111, DEH 123, current enrollment in Dental Hygiene program. 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 134

**ADVANCED CLINICAL SKILLS**

1 CR. (.7 L/.6 CLI)

PRQ: Current enrollment in Dental Hygiene program. 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 136

**CLINICAL DENTAL ROENTGENOLOGY**

.5 CR. (1 CLI)

PRQ: Current enrollment in Dental Hygiene program. Enhances clinical competence of basic radiographic principles including intra-oral, positioning techniques, exposure factors, bisecting technique, vertical bitewing survey, and management of anatomical deviations. S/U

DEH 138

**NITROUS OXIDE/OXYGEN SEDATION**

1 CR. (.8 L/.4 CLI)

PRQ: BIO 201, BIO 202, current enrollment in Dental Hygiene program. Provides a working knowledge of the latest equipment and methods of nitrous oxide/oxygen sedation administration in the dental office.

DEH 153

**CLINICAL THEORY OF DENTAL HYGIENE I**

2 CR. (2L)

PRQ: Current enrollment in Dental Hygiene program. Builds on the broad theoretical basis provided in DEH 101 and DEH 102. Focuses on enhancing patient assessment skills, instrumentation and additional information on preventative and prophylactic clinical procedures.

DEH 170

**CLINICAL PRACTICE OF DENTAL HYGIENE I**

4.5 CR. (9 CLI)

PRQ: Current enrollment in Dental Hygiene Program. Provides clinical experience in patient skills assessment, instrumentation and additional preventative and prophylactic clinical procedures.

DEH 171

**CLINICAL PRACTICE OF DENTAL HYGIENE I-A**

2 CR. (4 CLI)

PRQ: Current enrollment in Dental Hygiene program. 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 175-177

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

DEH 202

**APPLIED NUTRITION IN DENTISTRY**

2 CR. (2L)

PRQ: ENG 121; basic skills courses, if applicable; ACT 20 or higher in Reading; CHE 102 or CHE 109. 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 204

**COMMUNITY DENTAL HEALTH I**

2 CR. (2L)

PRQ: Current enrollment in Dental Hygiene program. 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 213

**GENERAL AND ORAL PATHOLOGY**

3 CR. (3L)

PRQ: Current enrollment in Dental Hygiene program. Focuses on the fundamentals of general pathology and the disease process. Covers oral pathology with emphasis on recognition and identification of pathologic conditions that most frequently occur around the oral cavity. Helps students identify appropriate referral mechanisms to render a definitive diagnosis.

DEH 221

**ETHICS AND PRACTICE MANAGEMENT**

2 CR. (2L)

PRQ: Current enrollment in Dental Hygiene program. Focuses on the transition from an educational environment to a working dental business. Enables the student to learn management skills of operating a dental office. Emphasizes opportunities for self-exploration in development of personal and professional goals. Examines professional ethics, legal issues, and the relationship to the licensed practice of dental hygiene.

DEH 225

**COMMUNITY DENTAL HEALTH II: FIELD EXPERIENCE**

1 CR. (2 CLI)

PRQ: DEH 204. 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 242

**PERIODONTICS II**

2 CR. (2L)

PRQ: DEH 122. Continues to explore theoretical/clinical preparations with emphasis on dental hygiene process of care, treatment planning, non-surgical treatment, evaluation of treatment, and maintenance needs of the periodontal patient. Develops research and decision making skills with use of library and Internet resources relating to risk factors, etiologic agents, and treatment modalities. Includes comprehensive periodontal assessment, supplemental diagnostics, periodontal pharmacology, and evidence based treatment planning.

DEH 259

**ADVANCED DENTAL HYGIENE THEORY**

2 CR. (2L)

PRQ: Current enrollment in Dental Hygiene program. 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 266  
**NATIONAL BOARDS REVIEW**  
2 CR. (2L)

PRQ: Current enrollment in Dental Hygiene program. Provides formal review sessions for second year dental hygiene students preparing to sit for the National Board Examination. S/U

DEH 268  
**CLINICAL THEORY OF DENTAL HYGIENE II**  
2 CR. (3 LBV)

PRQ: Current enrollment in Dental Hygiene program. Provides the didactic theory for clinical practice of dental hygiene skills at the beginning of the second year of dental hygiene curriculum. Builds on clinic theory from first year curriculum to provide the knowledge base needed for treatment of patients with more advanced periodontal disease and medical/health factors. Focuses on: periodontal charting and documentation, interpretation of periodontal factors on radiographs, use of treatment planning in the dental hygiene process of care, legal parameters of record keeping and informed consent, use of oral photography, application of sealants, treatment of dental hypersensitivity, application of chemotherapeutics and professional oral irrigation, application of ergonomics in dentistry, clinical dental hygiene treatment considerations for patients with history of cardiac complications and diabetes.

DEH 270  
**CLINICAL PRACTICE OF DENTAL HYGIENE II**  
6 CR. (12 CLI)

PRQ: Current enrollment in Dental Hygiene program. Covers patient care sessions for the performance of traditional dental hygiene treatment. Continues and expands periodontal patient care and special patient care sessions. Focuses on clinical competence in margination and polishing of restorations, nutrition counseling, oral irrigation, chemotherapeutics and OSHA compliance.

DEH 271  
**CLINICAL PRACTICE OF DENTAL HYGIENE III**  
6 CR. (12 CLI)

PRQ: Current enrollment in Dental Hygiene program. Continues patient care session with emphasis on attaining a level of competency and efficiency for successful performance in clinical board exams and private practice. Focuses on clinical skill development in tobacco cessation, product selection, patient communications, curettage and special topics developed patient treatments. Provides elective extra-mural clinical sites for additional practice.

DEH 275-277  
**SPECIAL TOPICS**  
0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

DEH 282  
**PERIODONTICS III**  
1 CR. (1.5 LBV)

PRQ: DEH 122. 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 285  
**CLINICAL THEORY OF DENTAL HYGIENE III**  
2 CR. (3 LBV)

PRQ: Current enrollment in Dental Hygiene program. Serves as the capstone course of the final semester of a two-year curriculum. Prepares the student for two major goals: basic competence for transition to provision of dental hygiene services in private practice; and the ability to successfully pass both written National Boards examinations and regional dental hygiene clinical examinations. Emphasizes the application of case based learning. Major topics include: cosmetic bleaching, air powered polishing devices, application of the re-evaluation process in treatment planning for periodontally involved cases, preparation for the CRDTS regional clinical exam process, application of an effective tobacco cessation process, technique and process for gingival curettage, technique and process for amalgam polishing and margination, care of cosmetic dental restorations, and maintenance of implants.

## Diagnostic Medical Sonography

DMS 205  
**SMALL PARTS ULTRASOUND**  
2 CR. (1L/2 CLI)

PRQ: DMS 221, DMS 231, DMS 241, DMS 281. CORQ: DMS 206, DMS 282. 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 206  
**VASCULAR ULTRASOUND**  
2 CR. (1L/2 CLI)

PRQ: DMS 221, DMS 231, DMS 241, DMS 281. CORQ: DMS 205, DMS 282. 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 221  
**OB/GYN ULTRASOUND I**  
2 CR. (1L/2 CLI)

PRQ: BIO 202, BIO 216, RTE 255. CORQ: DMS 231, DMS 241, DMS 281. 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 222  
**OB/GYN ULTRASOUND II**  
2 CR. (1L/2 CLI)

PRQ: DMS 221, DMS 231, DMS 241, DMS 281. CORQ: DMS 232, DMS 242, DMS 283. 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 231  
**ABDOMINAL ULTRASOUND I**  
2 CR. (1L/2CLI)

PRQ: BIO 202, BIO 216, RTE 255. CORQ: DMS 221, DMS 241, DMS 281. 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 232

**ABDOMINAL ULTRASOUND II**

2 CR. (1L/2 CLI)

PRQ: DMS 221, DMS 232, DMS 241, DMS 281. CORQ: DMS 222, DMS 242, DMS 283. 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 241

**ULTRASOUND PHYSICS I**

2 CR. (1L/2 CLI)

PRQ: BIO 202, BIO 216, RTE 255. CORQ: DMS 221, DSM 231, DMS 281. 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 242

**ULTRASOUND PHYSICS II**

2 CR. (1L/2 CLI)

PRQ: DMS 221, DMS 231, DMS 241, DMS 282. CORQ: DMS 222, DMS 232, DMS 283. 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 bioeffects are covered. Note: The comprehensive final is in a registry review format.

DMS 244

**ULTRASOUND SCANNING LAB**

6 CR. (9 LBV)

PRQ: BIO 202, BIO 216, RTE 255; CORQ: DMS 221, DMS 231, DMS 241, DMS 280. Prepares the sonography student for ultrasound internship with an emphasis on applied instrumentation, ergonomics, and image optimization.

DMS 280

**CLINICAL OBSERVATION**

2.5 CR. (7.5 INT)

PRQ: BIO 202, BIO 216, RTE 255;

CORQ: BIO 102, BIO 216, RTE 255, DMS 221, DMS 231, DMS 241, DMS 244. 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 281

**CLINICAL INTERNSHIP I**

10 CR. (30 INT)

PRQ: BIO 202, BIO 216, RTE 255. CORQ: DMS 221, DMS 231, DMS 241. 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 282

**CLINICAL INTERNSHIP II**

10 CR. (30 INT)

PRQ: DMS 281. CORQ: DMS 205, DMS 206. 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 283

**CLINICAL INTERNSHIP III**

10 CR. (30 INT)

PRQ: DMS 282. CORQ: DMS 222, DMS 232, DMS 242. 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 289

**ULTRASOUND CAPSTONE**

3 CR. (3L)

PRQ: DMS 282. CORQ: DMS 283. Prepares the sonography student to effectively search for a job and sit for the American Registry of Diagnostic Medical Sonographers examination in their specialty.

## Diesel Power Mechanics

\*\*DPM 100

**INTRO TO DIESEL MECHANICS**

2 CR. (1L/1.5 LBV)

Focuses on the student identifying and describing the many different types of diesel powered vehicles. Emphasis is placed on being able to research information in maintenance manuals and parts manuals along with demonstration of their abilities in properly identifying and select mechanical fasteners for a particular application. Specific coverage of precision fasteners, fuels, fluids as they relate to the diesel industry.

\*\*DPM 101

**DIESEL SHOP ORIENTATION**

2 CR. (1L/1.5 LBV)

Focuses on maintaining a safe and clean working heavy duty diesel shop. Emphasis is placed on the proper use and care for hand, electric, air and hydraulic tools safely. Covers how to clean equipment properly, to handle and dispose of hazardous materials correctly, and to apply mandated regulations. Emphasis is also placed on proper lifting equipment.

DPM 103

**DIESEL ENGINES I**

4 CR. (1L/4.5 LBV)

Covers the theory and operation of diesel engines with emphasis on cylinder heads and valve trains diagnosis and repair. Also introduces the cooling system's importance with diagnosis and repair. Enables students to diagnose, test, and repair cylinder heads and cooling systems on diesel engines.

DPM 105

**HEAVY DUTY POWERTRAINS I**

3 CR. (1L/3 LBV)

Focuses on drive axles and universal joints of heavy duty trucks and equipment. Students will cover operations, tests, removal, inspections, and repair of heavy duty drivelines, axles, and differentials.

DPM 106

**DIESEL FUEL SYSTEMS**

3 CR. (1L/3 LBV)

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 111

**PREVENTIVE MAINTENANCE I**

3 CR. (2L/1.5 LBV)

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.

DPM 121

**HYDRAULIC SYSTEMS I**

3 CR. (1L/2 LBV)

Offers instruction on the basic fundamentals of hydraulics and their applications. Diagnosis, service, and testing along with safety are stressed within this course.

DPM 122

**HYDRAULIC SYSTEMS II**

3 CR. (1L/3 LBV)

Offers instruction on the repair, replacement, measuring, and subsequent adjustments of components. Identification and repairing pumps, control valves, and cylinders is stressed within this course.

DPM 140

**H/D STEERING & SUSPENSION I**

3 CR. (1L/3 LBV)

Emphasizes lecture and related lab in the diagnosis and service of Heavy Duty mechanical and air suspension systems, wheels/tires and pressure management systems.

DPM 170

**LAB EXPERIENCE I**

4 CR. (6 LBV)

Continues to build upon the principles that are expected to be understood by students.

DPM 171

**LAB EXPERIENCE II**

3 CR. (4.5 LBV)

Continues to build upon the principles that are expected to be understood by students.

DPM 172

**LAB EXPERIENCE III**

4 CR. (6 LBV)

Continues to build upon the principles that are expected to be understood by students.

DPM 203

**DIESEL ENGINES II**

4 CR. (1L/4.5 LBV)

Covers the theory of operation and repair of diesel engines with emphasis on the cylinder block in big bore engines. Enables students to disassemble, inspect, and reassemble engines.

DPM 205

**HEAVY DUTY POWERTRAINS II**

3 CR. (1L/3 LBV)

Teaches students to diagnosis clutch and transmission problems. Focuses on clutch, transmission, additional assembly operation, testing, and repairing. Students will learn removal, rebuilding, inspection, repairing, and replacement of all components. Covers electrical systems on transmissions and related assemblies.

DPM 206

**HEAVY DUTY BRAKES I**

3 CR. (1L/3 LBV)

Focuses on the various braking systems incorporated in heavy-duty trucks and heavy equipment. Includes a study of hydraulic brake systems and covers the diagnosis and service of the mechanical and electrical components.

DPM 207

**HEAVY DUTY BRAKES II**

3 CR. (1L/3 LBV)

Teaches instruction in general service and maintenance procedures for the heavy-duty truck air brake system and its related pneumatic components. Operational checks, performance testing, and verifying system compliance with regulations (FMVSS No. 121) will be discussed.

DPM 222

**H/D LIGHTING & INSTRUMENTATION**

4 CR. (1L/4.5 LBV)

Provides students with diagnosis and repair of lighting systems found on Medium /Heavy duty trucks and equipment. Emphasis on inspecting and testing of electrical circuits, switches and interfacing through data bus with on board computers.

DPM 240

**H/D STEERING & SUSPENSION II**

3 CR. (1L/3 LBV)

Emphasizes lecture and related lab in the diagnosis and service of Heavy Duty standard and air assisted steering along with chassis and frame alignment.

DPM 275

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

DPM 280

**INTERNSHIP**

4 CR. (12 INT)

Provides students with the opportunity to supplement coursework with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor.

## Driving

DRV 130

**PREPARING FOR CDL**

1 CR. (.5L/2.25 LBV)

Prepares students for the CDL written test with detailed study guides in conjunction with the Colorado CDL manual. Students will learn to conduct walk-around inspections and become familiar with the course layout and driving portion of the test.

DRV 132

**ORIENTATION TO TRUCKS AND TRAILERING**

2 CR. (1L/1.5 LBV)

Introduces students to the trucking industry, both over-the-road trucks and trailers and the operation of dump trucks used in construction and local commerce. Safe operations will be stressed, including securing loads on van, flat bed and drop bed trailers, watching for overhead hazards, backing safely, following standard fueling procedures, preventive maintenance and tire care.

DRV 134

**TRUCKING LAWS & REGULATIONS**

4 CR. (3L/1.5 LBV)

This class introduces students to the laws and regulations governing the operation of commercial trucks and buses, defensive driving techniques, proper operation of equipment, and safe operation of vehicles while behind the wheel.

DRV 136

**VEHICLE INSPECTION & MAINTENANCE**

3 CR. (1L/3 LBV)

Vehicle inspection and maintenance stresses the importance of pre-trip and post-trip inspections. Students will learn to identify and name the critical components on commercial vehicles, and to recognize problems with lubricants, fluids, tires and wheels, electrical systems, brakes, and the overall condition of the vehicle they intend to drive. This class will also prepare students to pass the pre-trip portion of the CDL driving test.

DRV 138

**DRIVER TRAINING**

6 CR. (9 LBV)

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 175

**SPECIAL TOPICS**

0-12

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

DRV 275

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

## Early Childhood Education

ECE 101

**INTRODUCTION TO EARLY CHILDHOOD EDUCATION**

3 CR. (3L)

PRQ: ENG 060, or equivalent assessment test score. Provides an introduction to Early Childhood Education. Includes the eight key areas of professional knowledge: Child Growth and Development; Health, Nutrition and Safety; Developmentally Appropriate Practices; Guidance; Family and Community Relationships; Diversity; Professionalism; Administration and Supervision. Focuses on ages birth through age eight.

ECE 102

**INTRODUCTION TO EARLY CHILDHOOD LAB TECHNIQUES**

3 CR. (1L/3 LBV)

PRQ: ENG 060, ECE 101. Focuses on a classroom seminar and placement in a child care setting. The supervised placement provides the student with the opportunity to observe children, to practice appropriate interactions, and to develop effective guidance and management techniques. Addresses ages birth through age 8.

ECE 103

**GUIDANCE STRATEGIES FOR CHILDREN**

3 CR. (3L)

PRQ: ENG 060, or equivalent assessment test score. Explores guidance theories, applications, goals, techniques and factors that influence expectations, classroom management issues, and prosocial skills. Addresses ages birth through age 8.

ECE 111

**INFANT AND TODDLER THEORY AND PRACTICE**

3 CR (3L)

PRQ: ENG 060 or equivalent

assessment test scores. Presents an overview of theories, applications (including observations) and issues pertinent to infant and toddler development in group and/or family settings. Includes state requirements for licensing, health, safety and nutrition issues.

ECE 112

**INTRO TO INFANT/TODDLERS LAB TECHNIQUES**

3 CR. (1L/3 LBV)

PRQ: ENG 060, ECE 111. Includes a classroom seminar and placement in an infant and/or toddler setting. The supervised placement provides the student with the opportunity to observe, to practice appropriate interactions and to develop effective guidance and nurturing techniques with infants and/or toddlers. Addresses ages prenatal through age 2.

ECE 125

**SCIENCE/MATH & THE YOUNG CHILD**

3 CR. (3L)

PRQ: ENG 060. 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 175-177

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

ECE 178

**WORKSHOP**

0.5-6 CR. (0.5-6L)

PRQ: REA 060, or equivalent assessment test score. Provides students with an experiential learning opportunity.

ECE 195

**SCHOOL AGE CHILD IN CHILD CARE**

2 CR. (2L)

Explores important issues of before and after school care (school holiday and summer day camp), emphasizing child development, health, safety, and appropriate activities for school-age children in the child care setting.



ECE 205

**NUTRITION, HEALTH AND SAFETY**

3 CR. (3L)

PRQ: ENG 060, or equivalent assessment test scores. Focuses on nutrition, health and safety as a key factor for optimal growth and development of young children. Includes nutrient knowledge, menu planning, food program participation, health practices, management and safety, appropriate activities and communication with families. Addresses ages from prenatal through age 8.

ECE 220

**CURRICULUM DEVELOPMENT: METHODS AND TECHNIQUES**

3 CR. (3L)

PRQ: ENG 060, ECE 101, ECE 102 and ECE 103, or equivalent assessment test scores. Provides an overview of early childhood curriculum development. Includes processes for planning and implementing developmentally appropriate environments, materials and experiences, and quality in early childhood programs.

ECE 225

**LANGUAGE AND COGNITION FOR THE YOUNG CHILD**

3 CR. (3L)

PRQ: ENG 060, or equivalent assessment test scores. Examines theories of cognitive and language development as a framework for conceptualizing the way children acquire thinking skills. Includes observing, planning, facilitating, creative representation, and evaluating strategies within the context of play. Focuses on language, science, math, problem solving and logical thinking. Addresses ages birth through age 8.

ECE 226

**CREATIVITY AND THE YOUNG CHILD**

3 CR. (3L)

PRQ: ENG 060, or equivalent assessment test scores. Provides an emphasis on encouraging and supporting creative self expression and problem solving skills in children. Explores creative learning theories and research. Focuses on developmentally appropriate curriculum strategies in all developmental domains. Addresses ages birth through age 8.

ECE 228

**LANGUAGE AND LITERACY**

3 CR. (3L)

Presents strategies for optimum language development, literacy, social and emotional development. Supports children's language and literacy in home, classroom, and community settings. Provides appropriate teacher/child verbal interactions, classroom environments, and activities. Addresses ages birth through age 8.

ECE 238

**CHILD GROWTH AND DEVELOPMENT**

4 CR. (4L)

PRQ: ENG 060, ECE 101, ECE 102, or equivalent assessment test scores. Covers the growth and development of the child from conception through the elementary school years. Emphasizes physical, cognitive, language, social and emotional domains and the concept of the whole child and how adults can provide a supportive environment. Ages addressed: prenatal through age 12. This course has an early childhood laboratory component.

ECE 240

**ADMINISTRATION OF EARLY CHILDHOOD CARE AND EDUCATION PROGRAMS**

3 CR. (3L)

PRQ: ENG 060, ECE 101, ECE 102, ECE 103, ECE 220, ECE 238, or equivalent assessment test score. Examines Colorado's minimal licensing requirements, as well as optimal standards pertaining to the operation of programs for young children. Focuses on the director's administrative skills and role as a community advocate for young children. Addresses ages birth through age 12.

ECE 241

**ADMINISTRATION: HUMAN RELATIONS FOR EARLY CHILDHOOD EDUCATION**

3 CR. (3L)

PRQ: ENG 060, ECE 101, ECE 102, ECE 103, ECE 220, ECE 238, or equivalent assessment test score. Focuses on the human relations component of an early childhood professional's responsibilities. Includes director-staff relationships, staff development, leadership strategies, parent-professional partnerships, and community interaction.

ECE 256

**WORKING WITH PARENTS, FAMILIES, AND COMMUNITY SYSTEMS**

3 CR. (3L)

PRQ: ENG 060, or equivalent assessment test scores. Examines attitudes and family values systems and how they affect parent-professional partnerships. Addresses communication, problem-solving and conflict resolution strategies. Plans effective activities and programs for parent involvement. Addresses ages birth through 8.

ECE 260

**EXCEPTIONAL CHILD**

3 CR. (3L)

PRQ: ENG 060, or equivalent assessment test scores. Presents an overview of typical and atypical developmental progression. Includes planning techniques, learning strategies, legal requirements and accommodations and adaptations that are necessary in order to create an integrated classroom environment for a child with a wide range of exceptionalities. Focuses on ages birth through age 8.

ECE 275-277

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

ECE 288

**PRACTICUM: EARLY CHILDHOOD EDUCATION**

3 CR. (1L/4 PRC)

PRQ: ENG 060, ECE 101, ECE 102, ECE 220, or equivalent assessment test score. Provides students with advanced field experience opportunities in early childhood education programs.

## Economics

ECO 105

**INTRODUCTION TO ECONOMICS**

3 CR. (3L)

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 175-177  
**SPECIAL TOPICS**  
0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

ECO 201  
**PRINCIPLES OF MACROECONOMICS: GT-SS1**  
3 CR. (3L)

PRQ: CIS 110, ENG 090, REA 090, MAT 060, or equivalent assessment test scores or Department Chair approval. 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. This course is one of the Statewide Guaranteed Transfer Courses, GT-SS1.

ECO 202  
**PRINCIPLES OF MICROECONOMICS: GT-SS1**  
3 CR. (3L)

PRQ: CIS 110, ENG 090, REA 090, MAT 060, or equivalent assessment test scores or Department Chair approval. 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. This course is one of the Statewide Guaranteed Transfer Courses, GT-SS1.

ECO 245  
**ENVIRONMENTAL ECONOMICS: GT-SS1**  
3 CR. (3L)

PRQ: CIS 110, ENG 090, REA 090, and MAT 090. Introduces students to contemporary environmental issues and policies meant to reduce environmental degradation. Includes market failures, analytical tools, government pollution reduction policies for air, water, and natural environments and their effectiveness. This course is one of the Statewide Guaranteed Transfer Courses, GT-SS1.

ECO 275-277  
**SPECIAL TOPICS**  
0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

## Education

EDU 110  
**OVERVIEW OF SPECIAL POPULATIONS FOR  
PARAEDUCATORS**  
3 CR (3l)

Provides students with knowledge in the areas of: laws and history of special education; roles and responsibilities of paraeducators; planning for students with disabilities; typical and non-typical developmental stages of children and youth; basic learning concepts; cognitive, communicative, physical and affective needs of students with disabilities; understanding people with disabilities; transition, job coaching; and how to teach students self-advocacy skills.

EDU 111  
**COMMUNICATION SKILLS WITH SPECIAL POPULATIONS FOR  
PARAEDUCATORS**  
3 CR. (3L)

Provides knowledge in areas of effective communication skills; problem solving techniques; and analyzing self as communicator.

EDU 112  
**HEALTH & SAFETY ISSUES IN SCHOOLS FOR  
PARAEDUCATORS**  
3 CR. (3L)

Provides students with the knowledge in the areas of health and safety issues in schools; basic first aid and CPR procedures; and the feeding and positioning of physically challenged students.

EDU 114  
**STUDENT BEHAVIOR MANAGEMENT FOR PARAEDUCATORS**  
3 CR. (3L)

Provides students knowledge in the areas of behavior modification; teaching appropriate behaviors; contingency contracts; observing and recording behavior; lunchroom supervision; and playground supervision.

EDU 131  
**INTRODUCTION TO ADULT EDUCATION**  
3 CR. (3L)

PRQ: REA 090 or instructor approval. Introduces the student to the basic concepts in the instruction of adults. Emphases will be placed on understanding the adult learner and how their individual backgrounds and experiences can affect the learning process. Additionally, the course will cover applicable federal and state legislation which affects adult learning programs and will offer information on additional resources and associations in the field of Adult Education.

EDU 132  
**PLANNING, ORGANIZING, AND DELIVERING ADULT  
EDUCATION INSTRUCTION**  
3 CR. (3L)

PRQ: EDU 131. Covers the basics of planning an adult education program, organizing instruction within the various content areas and delivering the material in a variety of ways, both in groups and individualized instruction. A wide variety of learning principles and theories will be addressed in ways that show their applicability to the adult learner and his/her education.

EDU 133  
**ADULT BASIC EDUCATION (ABE)/ADULT SECONDARY  
EDUCATION (ASE)**  
3 CR. (3L)

PRQ: EDU 131. Specifically addresses the different levels within an Adult Education program. Each level will be addressed in terms of appropriate Assessment tools and instructional techniques. Emphasis will be placed on teaching ways that the adult education instructor can encourage the development of cognitive skills at each level, as a springboard to the next higher level.

EDU 134  
**TEACHING ENGLISH AS A SECOND LANGUAGE TO ADULT  
LEARNERS**  
3 CR. (3L)

PRQ: EDU 131. Introduces the development and implementation of a program to teach English to adults whose first language is not English. Topics will range widely from assessment and placement to the theories behind language acquisition. Students will also cover a wide variety of methodologies, both group and individualized, that are aimed at teaching the non-English speaker the written and verbal skills, necessary to successfully function in the United States.

EDU 135

**FAMILY LITERACY IN ADULT EDUCATION**

3 CR. (3L)

PRQ: EDU 131. Introduces the students to the philosophy and theory behind family literacy, as well as give practical advice on the development and implementation of a family literacy program. The four-component model of adult education, early childhood education, parent and child together time (PACT), and parenting will be covered, both in theory and practical application.

EDU 141

**BASIC INSTRUCTIONAL TECHNIQUES FOR  
PARAEDUCATORS**

3 CR. (3L)

Provides students with knowledge in the areas of delivering instruction; grouping students; reading with students; modifying instructional materials; using technology; and utilizing adaptive equipment.

EDU 175-177

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

EDU 221

**INTRODUCTION TO EDUCATION**

3 CR. (3L)

PRQ: REA 090 and ENG 090 or equivalent assessment scores. 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. (This course requires 30 hours of fieldwork and successful completion of a background check.)

EDU 222

**EFFECTIVE TEACHING**

1 CR. (1L)

PRQ: ENG 121 or permission of instructor. Focuses on strategies for becoming an effective teacher. Topics included are: course goals and objectives, the first day, planning a lesson, higher levels of thought, test design and grading, assessment, and teaching and learning styles.

EDU 250

**CTE IN COLORADO**

1 CR. (1L)

Explores common elements of American community college philosophy and current practices. It details the philosophy of Career and Technical Education (CTE), the federal Carl D. Perkins legislation and related guidelines for CTE, national and state regulatory agencies, the CCCS program approval process, enrollment management and advising strategies, relevant local and national issues, and quality assurance principles.

EDU 260

**ADULT LEARNING AND TEACHING**

3 CR. (3L)

Examines the philosophy of community colleges and the roles and responsibilities of the faculty member within the college community. Introduces basic instructional theories and applications, with particular emphasis on adult learners. Includes syllabus development, learning goals and outcomes, and lesson plans. Emphasizes teaching to a diverse student body, classroom management, assessment and instructional technology.

EDU 261

**TEACHING, LEARNING AND TECHNOLOGY**

3 CR. (3L)

PRQ: REA 090 or equivalent assessment test score. Prepares students to integrate technology into their teaching curriculum. Enables the student to design educational and training materials incorporating instructional technology. Explores a variety of technologies, including the computer, Internet, multimedia, graphics, audio, and text with an emphasis on increasing learning through their use. Examines combining technology with a variety of instructional methodologies.

EDU 263

**TEACHING AND LEARNING ONLINE**

3 CR. (3L)

PRQ: EDU 221 and EDU 261 or permission of instructor. Provides faculty with the knowledge and skills necessary to design, develop, and deliver courses in a distance format. Focuses on assessment and evaluation methods and methods to incorporate interactive, collaborative and expanded learning activities.

EDU 266

**ADV. COLLEGE TEACHING METHODS**

1 CR. (1L)

PRQ: ENG 121 or permission of instructor. Explores current adult learning theory, and relates this theory to the practice of teaching. It also covers a variety of factors that influence teaching and learning, including social and individual psychological aspects of adult learning, patterns of participation and motivation, the role of instructional technology, handling challenging classroom behaviors, and assessment and evaluation strategies. The main point raised and discussed throughout the course is that effective teaching requires that instructors utilize a range of teaching and assessment approaches and methods in order to enhance learning.

EDU 275-277

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

## Electricity Ind/Commercial

\*\*EIC 105

**BASICS OF AC & DC ELECTRICITY**

4 CR. (3L/1.5 LBV)

Focuses on resistance, current, voltage and power in AC and DC circuits; measurements; computations of series and parallel circuits; circuit analysis and troubleshooting with basic test equipment.

EIC 222

**INSTRUMENT. & PROCESS CONTROL**

1.5 CR. (1L/.75 LBV)

PRQ: ELT 106. CORQ: ELT 257. Investigates theory of industrial instrumentation measurement through process control. Includes theory and measurement methods for temperature, pressure, level and flow. Incorporates hands-on training equipment to measure temperature and pressure and perform calibration of a pressure differential transmitter. Enables the student to construct a closed loop and tune the loop. Test equipment is used to simulate a two-wire transmitter and source a current signal for calibration of an I/P transducer.

# Electronics

ELT 101

## **SURVEY OF ELECTRONICS**

3 CR. (1L/3 LBV)

PRQ: MAT 060, REA 060, or equivalent assessment test scores. Introduces electronics for consumers, individuals working in related fields, and those exploring Electronics Engineering Technology as a career option. Covers fundamental concepts, circuit diagrams, construction of circuits, test instruments, basic troubleshooting, and the operation of common electronic systems and circuits.

ELT 106

## **FUNDAMENTALS OF DC/AC**

3 CR. (1L/3 LBV)

PRQ: MAT 060, REA 060 or equivalent assessment test scores; ELT 101, or Department Chair approval. Introduces the basic skills needed for many careers in electronics and related fields. Covers the operations and applications of basic DC and AC circuits consisting of resistors, capacitors, inductors, transformers and diodes. Emphasizes the use of common test instruments in troubleshooting.

\*\*ELT 107

## **FUNDAMENTALS OF INDUSTRIAL ELECTRONICS**

3 CR. (1L/3 LBV)

Provides a basic knowledge of generators, motors, and the solid state devices and digital techniques used for industrial control applications.

ELT 112

## **ADVANCED DC-AC**

3 CR. (1L/3 LBV)

PRQ: MAT 108. Continues to build on ELT 106 and covers advanced concepts of DC-AC circuits. Includes an expanded treatment of power supplies, dual-supply rectifier circuits, and Zener diode voltage regulators. Emphasizes troubleshooting.

\*\*ELT 113

## **ADVANCED CIRCUIT ANALYSIS**

4 CR. (2L/3 LBV)

Serves as an advanced course in the analysis of passive AC circuits. Emphasizes the use of complex algebra and network analyses.

ELT 134

## **SOLID STATE DEVICES I**

3 CR. (1L/3 LBV)

PRQ: MAT 090, REA 090, or equivalent assessment test scores; ELT 101; or Department Chair approval. Focuses on diode and transistor studies starting with a review of semiconductor materials. Emphasizes rectifier circuits, R-C and L-C filters, limiters and peak detectors, zener regulators, Schottky diodes, varactors/varistors, LED's bipolar transistors, transistor approximation, load-lines, biasing techniques, saturation, operating point, AC models including small-signal operation, h-parameters, and data sheet understanding and interpolation.

ELT 135

## **SOLID STATE DEVICES II**

3 CR. (1L/3 LBV)

PRQ: ELT 134, ELT 112. Continues the study of transistors with an emphasis on application of modern devices to industrial circuits. Includes power amplifiers, Cascaded and Darlington configurations, field-effect devices, JFET's and MOSFET's, depletion and enhancement mode devices, biasing techniques, thyristors, SCR's and variations of the SCR family of devices.

\*\*ELT 136

## **INTRODUCTION TO TRANSISTORS**

2 CR. (1L/1.5 LBV)

Introduces the operation and applications of bipolar transistors, JFETs and MOSFETs. Includes switching circuits, single-stage small-signal amplifiers and troubleshooting.

\*\*ELT 137

## **ADVANCED TRANSISTORS**

3 CR. (1L/3 LBV)

Continues ELT 136 with specifications and additional applications of bipolar transistors, JFETs and MOSFETs. Covers voltage regulation, common-collector, and power amplifiers. Includes analyses of single and cascaded amplifier stages. Emphasizes troubleshooting.

ELT 138

## **POWER CONTROL DEVICES**

2 CR. (1L/1.5 LBV)

PRQ: ELT 106. Covers the specifications and operation of SCRs, triacs, diacs, unijunction transistors, PUTs and solid-state relays. Enables the student to construct and test circuits with power control devices. Troubleshooting is emphasized.

\*\*ELT 139

## **OPTOELECTRONIC DEVICES**

2 CR. (1L/1.5 LBV)

Focuses on a study of the specifications and operation of the LED, IRED, photoconductive cell, photodiode, phototransistor, optocoupler and vacuum-fluorescent display. Addresses fiber optics and lasers. Enables students to construct and test circuits with optoelectronic devices. Troubleshooting is emphasized.

ELT 147

## **DIGITAL DEVICES I**

3 CR. (1L/3 LBV)

CORQ: ELT 101, CIS 110 or equivalent assessment test score. PRQ: REA 060, MAT 060, or equivalent assessment test scores. Introduces the operation and application of gates, flip-flops, counters, shift registers, encoders-decoders and LED displays. Covers binary numbers, Boolean algebra and troubleshooting.

ELT 148

## **DIGITAL DEVICES II**

3 CR. (1L/3 LBV)

PRQ: ELT 147. Continues ELT 147 with emphasis on the operation and application of programmable logic devices, synchronous counters, multiplexers, liquid crystal displays, ROM and RAM. Includes specifications of ICs, display multiplexing, and design and minimization of circuits. Troubleshooting is emphasized.

\*\*ELT 149

## **DIGITAL DEVICES TROUBLESHOOTING**

2 CR. (1L/1.5 LBV)

Focuses on troubleshooting to the component level after a detailed circuit analysis of a digital system that is not microprocessor based is performed.

\*\*ELT 161

## **ELECTROMECHANICAL TROUBLESHOOTING**

1 CR. (.5L/.75 LBV)

Focuses on troubleshooting electromechanical systems consisting of switches, relays and motors. Emphasizes teamwork.

\*\*ELT 163

**SOLDERING**

1 CR. (.5L/.75 LBV)

Covers the theory and practice of high reliability hand soldering in the electronics field. Includes soldering practice with wire and terminal soldering as well as PCB soldering of through-hole and surface-mount devices.

\*\*ELT 165

**ELECTRONIC ASSEMBLY**

3 CR. (1L/3 LBV)

Introduces electronic assembly methods with an emphasis on processes, safety, component recognition, and soldering techniques for both through hole and surface mount components.

ELT 175-177

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

ELT 202

**INTRODUCTION TO PC SERVICING**

3 CR. (2L/1.5 LBV)

PRQ: CIS 110, REA 060, or equivalent assessment scores. Introduces the physical components of microcomputers, including system components, bus architectures, ports, connectors, and cables. Examines safety issues and procedures pertinent to working with computers. Enables the student to identify proper procedures for installing and configuring system components and devices; to diagnose and troubleshoot system problems and determine whether they are hardware or software related; to identify safety procedures, preventive maintenance techniques; and to identify popular motherboards, types of memory architecture.

ELT 203

**ADVANCED PC SERVICING AND A+ PREP**

3 CR. (2L/1.5 LBV)

PRQ: ELT 202. Builds on the contents of ELT 202 and provides comprehensive knowledge and skills for maintaining, upgrading, troubleshooting, and repairing IBM Computer systems. Includes preparation for CompTIA's newly revised A+ Certification Exams.

\*\*ELT 205

**ELECTRONIC TROUBLESHOOTING I**

3 CR. (1L/3 LBV)

Introduces basic troubleshooting techniques and skills required to analyze, troubleshoot, and repair both analog and digital electronic devices.

\*\*ELT 225

**COMMUNICATION ELECTRONICS I**

3 CR. (1L/3 LBV)

Focuses on a basic analog communication course emphasizing the elements of a communication system, radio frequency analysis and characteristics, radio frequency circuits, AM and FM modulation techniques, and AM and FM transmitters and receivers.

\*\*ELT 226

**COMMUNICATION ELECTRONICS II**

3 CR. 1L/3 LBV)

Introduces basic digital communication techniques, transmission line characteristics, radio wave propagation, and antennas.

ELT 231

**ELECTRONIC INSTRUMENTS**

3 CR. (.6L/4.6 LBV)

PRQ: MAT 090 and ENG 090, or equivalent assessment test scores. Enables the student to study the system of standards used for measurement and to demonstrate the principles of electronic measurements by the selection, application, and limitations of common electronic test equipment. 68 contact hours.

\*\*ELT 241

**DC/AC TECHNIQUES**

3 CR. (4.5 LBV)

Enables the student to analyze and experimentally verify theoretical results determined using network theorems, methods of analysis, time constants, phasers and time-dependent, sinusoidal formulations. 68 contact hours.

ELT 252

**MOTORS AND CONTROLS**

3 CR. (1L/3 LBV)

PRQ: REA 090 or equivalent assessment test scores; ELT 101; or Department Chair approval. Enables the student to study, construct, test, and evaluate basic industrial control systems, including AC/DC motors, stepper motors, power sources, generators, tachometers, line diagrams and logic functions. Covers safety standards and preventive maintenance.

ELT 254

**INDUSTRIAL WIRING**

3 CR. (2L/1.5 LBV)

PRQ: REA 090 or equivalent assessment test scores; ELT 101; or Department Chair approval. 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 257

**SENSORS AND TRANSDUCERS**

3 CR. (1L/3 LBV)

PRQ: ELT 101, ELT 106. 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 258

**PROGRAMMABLE LOGIC CONTROLLERS**

3 CR (1L/3 LBV)

PRQ: ELT 101. Covers the fundamentals of programmable logic controllers (PLCs) as they are applied in robotics and automation. Includes history, terminology, typical applications, hardware, and software. Incorporates lab and project activities that address operating, monitoring, programming, troubleshooting, and repairing PLC controlled lab trainers as well as actual industrial equipment.

ELT 259

**ADVANCED PROGRAMMABLE LOGIC CONTROLLERS**

3 CR. (1L/3 LBV)

PRQ: ELT 258. Serves as the second in a two course sequence and covers advanced topics and applications for programmable logic controllers (PLCs) as they are applied in robotics and automation. Includes advanced programming, diagnostics, Human Machine Interfaces (HMIs), introduction to automation networking, and system integration. Incorporates lab and project activities that address designing, operating, monitoring, programming, analyzing, troubleshooting, and repairing PLC controlled lab trainers as well as actual industrial equipment.

ELT 261

**MICROPROCESSORS**

3 CR. (2L/1.5 LBV)

PRQ: ELT 134. Focuses on basic operation and applications of microprocessors. Enables the student to write machine and assembly language programs, interface microprocessors to various devices, and troubleshoot microprocessor-based systems.

ELT 268

**ROBOTICS TECHNOLOGY**

3 CR. (2L/1.5 LBV)

PRQ: ELT 101. Introduces industrial robotics as well as a survey of the technologies and equipment used in manufacturing automation and process control. Includes axis configurations, work envelopes, programming, troubleshooting, and maintenance. Incorporates a survey of automation topics including history, computer and hardwired controls, sensors and transducers, motors and actuators, fluid power, etc. and provides a preview of the other ELT classes that cover those subjects.

ELT 275-277

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

ELT 280

**INTERNSHIP**

1-12 CR. (3-36 INT)

Provides students with the opportunity to supplement coursework with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor.

## Emergency Medical Services

EMS 115

**FIRST RESPONDER**

3 CR. (3L)

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 116

**FIRST RESPONDER REFRESHER**

2 CR. (2L)

Provides the First Responder student with needed updates and review materials to renew and maintain the First Responder certificate.

EMS 125

**EMT BASIC**

9 CR. (6L/4.5 LBV)

PRQ: REA 090 or equivalent assessment test score. CORQ: HPR 102, EMS 170. Enables the student after successful completion of this course to take the EMT Certification Examination subject to the requirements of the Colorado Department of Health and Environment. Includes written and practical examinations. Student must be at least 18 years of age.

EMS 126

**EMT BASIC REFRESHER**

2 CR. (1L/1.5 LBV)

PRQ: Current Colorado certification as EMT-Basic or eligible for re-certification. Provides required didactic and skills review for renewing EMT students. Accommodates the needs of the re-entry EMT student.

EMS 130

**EMT INTRAVENOUS THERAPY**

2 CR. (1.25L/.375 LBV/1 CLI)

PRQ: Current Colorado Certification as EMT Basic, completion of pre course screening including drug screen and criminal background check. Focuses on cognitive and skill practice as required by Colorado Prehospital Care program for EMT Basic level IV approval. Examines criteria, procedures and techniques for ICV therapy, discusses fluid and electrolyte balance and principles and treatment for shock. S/U

EMS 170

**EMT BASIC CLINICAL**

1 CR. (1.5 LBV)

Provides the EMT student with the clinical experience required of initial and some renewal processes. S/U

EMS 175-177

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

EMS 178

**EMS SEMINAR**

1 CR. (1L)

Provides the student with the opportunity to explore local interests and needs in a less formal setting. S/U

EMS 180

**EMT CLINICAL INTERNSHIP**

2 CR. (6 INT)

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. S/U

EMS 203

**EMT INTERMEDIATE I**

6 CR. (4L/3 LBV)

PRQ: Current Colorado Certification as an EMT with IV endorsement, MAT 060. CORQ: EMS 270. Course provides preparatory information and is the first part of the EMT Intermediate program.

EMS 205

**EMT INTERMEDIATE II**

6 CR. (4L/3 LBV)

PRQ: EMS 203, EMS 270. Serves as the second course for EMT Intermediate certification.

EMS 206

**EMT INTERMEDIATE REFRESHER**

3 CR. (2L/1.5 LBV)

PRQ: EMT-I Certification or eligible for recertification. Meets or exceeds minimum requirements for renewing EMT Intermediate or EMT Intermediates in the re-entry program. S/U

EMS 213  
**PREHOSPITAL TRAUMA LIFE SUPPORT**  
1 CR. (1L)  
Provides basic and/or advanced trauma life support information and skill practice. S/U

EMS 220  
**PARAMEDIC REFRESHER**  
3 CR. (2L/1.5 LBV)  
PRQ: EMT-P certification or eligibility for recertification. 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. S/U

EMS 225  
**FUNDAMENTALS OF PARAMEDIC PRACTICE**  
3 CR. (3L)  
PRQ: BIO 201, current Colorado Certification as an EMT with IV endorsement or higher and acceptance into the Paramedic Education Program. Serves as the first course of the National Standard Paramedic Curriculum as approved by the Colorado State Department of Health and Environment.

EMS 226  
**FUNDAMENTALS OF PARAMEDIC PRACTICE - LAB**  
2 CR. (1.5 LBV/2 CLV)  
PRQ: Currently enrolled in EMS 225, or have successfully completed EMS 225. Complete all pre-course screening requirements, including drug test and criminal background check. Instructor approval. Serves as the lab experience to coincide with EMS 225 topics.

EMS 227  
**PARAMEDIC SPECIAL CONSIDERATIONS**  
3 CR. (3L)  
PRQ: BIO 201, current Colorado Certification as an EMT with IV endorsement or higher and acceptance into the Paramedic Education Program. Focuses on a comprehensive study of Advanced Life Support Practice.

EMS 228  
**PARAMEDIC SPECIAL CONSIDERATIONS LAB**  
2 CR. (1.5 LBV/2 CLV)  
PRQ: Completion of pre-course screening including drug screen and criminal background check. CORQ: EMS 227. Serves as the lab experience for those students enrolled in EMS 227.

EMS 229  
**PARAMEDIC PHARMACOLOGY**  
3 CR. (3L)  
PRQ: BIO 201, current Colorado Certification as an EMT with IV endorsement or higher and acceptance into the Paramedic Education Program. Focuses on a comprehensive study of emergency pharmacology.

EMS 230  
**PARAMEDIC PHARMACOLOGY LAB**  
2 CR. (1.5 LBV/2 CLV)  
PRQ: Currently enrolled in EMS 229, or have successfully completed EMS 229. Current certification as an EMT-B or EMT-I. Successfully complete all pre-course screening requirements, including drug test and criminal background check. Instructor approval. Serves as the required lab course in the paramedic education program.

EMS 231  
**PARAMEDIC CARDIOLOGY**  
5 CR. (5L)  
PRQ: BIO 201, current Colorado Certification as an EMT with IV endorsement or higher and acceptance into the Paramedic Education Program. Addresses cardiology topics as presented in the National Standard Curriculum for paramedics.

EMS 232  
**PARAMEDIC CARDIOLOGY LAB**  
1 CR. (.75 LBV/1 CLV)  
PRQ: Completion of pre-course screening including drug screen and criminal background check. CORQ: EMS 231. Incorporates a hands-on application of principles of cardiac care in the hospital environment.

EMS 233  
**PARAMEDIC MEDICAL EMERGENCIES**  
4 CR. (4L)  
PRQ: BIO 201, current Colorado Certification as an EMT with IV endorsement or higher and acceptance into the Paramedic Education Program. Focuses on a comprehensive study of adult medical emergencies.

EMS 234  
**PARAMEDIC MEDICAL EMERGENCIES LAB**  
1 CR. (.75 LBV/1 CLV)  
PRQ: Completion of pre-course screening including drug screen and criminal background check. CORQ: EMS 233. Focuses on a clinical study of adult and pediatric medical emergencies.

EMS 235  
**PARAMEDIC TRAUMA EMERGENCIES**  
4 CR. (4L)  
PRQ: BIO 201, current Colorado Certification as an EMT with IV endorsement or higher and acceptance into the Paramedic Education Program. Focuses on a comprehensive study of adult and pediatric trauma emergencies.

EMS 236  
**PARAMEDIC TRAUMA EMERGENCIES LAB**  
1 CR. (.75 LBV/ 1 CLV)  
PRQ: Completion of pre-course screening including drug screen and criminal background check. CORQ: EMS 235. Serves as a lab presenting various acute trauma scenarios.

EMS 237  
**PARAMEDIC INTERNSHIP PREPARATORY**  
2 CR. (2L)  
PRQ: EMS 225, EMS 227, EMS 229, EMS 231, EMS 233, EMS 235 or Department Chair permission. Reviews concepts and techniques used in the prehospital setting.

EMS 270  
**CLINICAL: EMS INTERMEDIATE**  
3 CR. (4.5 LBV)  
PRQ: Completion of pre-course screening including drug screen and criminal background check. CORQ: EMS 203. Provides the EMT-I student with the required field experiences as required by the Colorado Department of Health.

EMS 275-277  
**SPECIAL TOPICS**  
0-12 CR.  
Provides students with a vehicle to pursue in depth exploration of special topics of interest.

EMS 280

**PARAMEDIC INTERNSHIP I**

6 CR. (18 INT)

PRQ: EMS 237. Serves as the preceptor/internship program for paramedic students.

EMS 281

**PARAMEDIC INTERNSHIP II**

6 CR. (18 INT)

PRQ: 280. Serves as the continuation of EMS 240, preceptor program for paramedic students.

EMS 282

**EMT INTERMEDIATE INTERNSHIP**

.25-6 CR. (.75-18 INT)

PRQ: EMS 203, EMS 270. CORQ: EMS 205. Provides the EMT-Intermediate with a supervised clinical learning experience that meets or exceeds the requirements for the State of Colorado Department of Public Health and Environment. Enables the student to work with a preceptor for clinical and internship experience to develop an understanding of advanced life support patient care and assessment.

EMS 285

**INDEPENDENT STUDY**

1-6 (3-18 INT)

Meets the individual needs of students. Students engage in intensive study or research under the direction of a qualified instructor. S/U

## Energy Technology

ENY 101

**INTRODUCTION TO ENERGY TECHNOLOGIES**

3 CR. (3L)

PRQ: MAT 060, REA 090, ENG 090, or equivalent assessment test scores. 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.

ENY 102

**BUILDING ENERGY AUDIT TECH**

3 CR. (2L/1.5 LBV)

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.

ENY 103

**RENEWABLE ENERGY WORKER SAFETY**

3 CR. (3L)

Make the student aware of various hazards that may be encountered in the renewable energies industry. The student is further trained through successful completion and certification in basic Cardio-Pulmonary Resuscitation (CPR), First Aid, and Automatic External Defibrillators (AED) and the Occupational Safety and Health Administration's (OSHA) 10 hour General Industry training.

ENY 121

**SOLAR PHOTOVOLTAIC COMPONENTS**

3 CR. (2L/1.5 LBV)

PRQ: ELT 101, ELT 106. 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 126

**SOLAR COLLECTORS**

3 CR. (3L)

PRQ: MAT 090 and ENG 090, or equivalent assessment test scores. Introduces the principles of design and operation of solar panel arrays, material analysis and construction features of flat plate collectors, mounting techniques and construction of a basic air and liquid collector array. Covers distribution from collectors to storage and building, mechanical and plumbing codes as they apply to the solar industry.

ENY 127

**SOLAR PV SYSTEM INSTALL**

3 CR. (2L/1.5 LBV)

PRQ: ENY 121. Emphasizes safe work practices while familiarizing the student with the intricacies of installing a photovoltaic (PV) system. This course takes the student through the process from the initial site survey to system commissioning and culminates with a hands-on installation.

ENY 132

**NABCEP ENTRY LEVEL PREP CLASS**

1 CR. (1L)

PRQ: ENY 127; CORQ: ENY 231. 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 141

**PASSIVE SOLAR SYSTEM I**

3 CR. (3L)

PRQ: MAT 090 and ENG 090, or equivalent assessment test scores. Presents a state-of-the-art study on the design and installation techniques of passive/natural solar energy systems.

ENY 145

**PASSIVE SOLAR RETROFIT**

3 CR. (3L)

PRQ: MAT 090 and ENG 090, or equivalent assessment test scores. Explores the principles and primary features behind a wide range of passive solar options for existing homes. Provides instruction concerning the site survey and energy conservation measures prior to installing retrofit design and construction details on various passive retrofit projects. Analyzes performance of each type of retrofit.

ENY 175-177

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.



ENY 225

**SOLAR DOMESTIC HOT WATER SYSTEMS**

3 CR. (3L)

PRQ: MAT 060, REA 090, or equivalent assessment test scores. Provides a working knowledge of sizing, installation, maintenance of solar domestic hot water systems, residential applications, components, parts and cost efficiency analysis.

ENY 226

**SOLAR PANEL INSTALLATION**

4 CR. (1.5L/3.75 LBV)

PRQ: MAT 060, REA 090, or equivalent assessment test scores. Focuses on the installation of all types of panels on all types of roofs. Covers vertical wall mounting techniques.

ENY 230

**PV MAINTENANCE & TROUBLESHOOTING**

2 CR. (1L/1.5 LBV)

PRQ: ENY 121. Learn about the areas of a PV system that could be troublesome and how to deal effectively with problems. This course will cover regular maintenance, how to judge if a system is performing up to specifications and troubleshooting techniques. Flat plate and tracking PV systems will be covered.

ENY 231

**SOLAR CONTRACTING**

4 CR. (3L/1.5 LBV)

PRQ: ENY 121. Learn the NEC code sections essential to the Solar PV contractor. Additional areas covered include one-line drawings, permit applications, rebate forms and grounding regulations.

ENY 240

**ESTIMATING FOR ENERGY**

4 CR. (4L)

PRQ: ENY 127. CORQ: ENY 231. Learn the proper way to estimate the true cost of energy related projects, such as solar installation including contractor overhead, accurate materials lists with true costs and an evaluation of system performance with a comparison to the sales quote. This is a *Capstone* class in the students' educational experience. A portfolio will be created to include a sales package with submittals and documents that will include post installation satisfaction survey and job cost reports.

ENY 275-277

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

ENY 280

**INTERNSHIP**

3 CR. (9 INT)

PRQ: Department Chair Approval. Provides students with the opportunity to supplement coursework with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor.

# Engineering

EGG 100

**INTRODUCTION TO ENGINEERING**

1 CR. (1L)

PRQ: REA 060. Introduces the math and science required in a variety of engineering disciplines. The particular engineering disciplines examined are: Civil Engineering, Mechanical Engineering, Electrical Engineering, Industrial Engineering, and Computer Science. For each discipline the course will examine certification requirements, program of study, types of work and tasks in each discipline and compensation ranges. Tours and speakers will be arranged.

EGG 101

**ENGINEERING GRAPHICS I**

3 CR. (1L/3 LBV)

PRQ: EGG 100; CORQ: MAT 090. 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 211

**ENGINEERING MECHANICS I - STATICS**

3 CR. (3L)

PRQ: MAT 201. Focuses on the vector and calculus treatment of forces and force systems. Covers concurrent and nonconcurrent force systems. Includes calculating moments of friction, trusses, centroids and moments of inertia.

EGG 212

**ENGINEERING MECHANICS II (DYNAMICS)**

3 CR. (3L)

PRQ: MAT 201. Focuses on vector and calculus treatment of the dynamics of particles and rigid bodies using Newton's Laws. Includes work-energy impulse momentum, and free and forced oscillations.

# Engineering Technology

ENT 105

**SAFETY FOR MANUFACTURING ENVIRONMENTS**

1 CR. (1L)

PRQ: REA 060, equivalent assessment test score, or Department Chair approval. Introduces federal and state regulations, industrial practices, and accident investigation techniques. Covers hazard communication standard, lockout/tagout procedures, eye safety, lifting techniques, electrical safety, stored energy safety, personal protective equipment, safety program development and monitoring, and accident investigation techniques. Serves as the prerequisite for all Advanced Technology Center programs.

ENT 106

**PRINT READING FOR MANUFACTURING**

3 CR. (1L/3 LBV)

PRQ: REA 060, MAT 060, or equivalent assessment test scores or Department Chair approval. Focuses on blueprint reading techniques related to manufacturing operations. Covers basic drafting standards, sketching, machine shop math, symbol interpretation, tolerancing, and dimensioning standards.

ENT 131

**MECHANICAL DRAWING I**

4 CR. (2L/3 LBV)

PRQ: MAT 060, equivalent assessment test score, or Department Chair approval. Enables students to manually manipulate drafting tools, computer keyboard, and mouse. Includes basic drafting techniques, use and care of instruments, lettering, line quality, geometric construction, orthographic projection, sectioning, sketching, auxiliary views, techniques. Provides an introduction to CAD.

ENT 133

**INTRODUCTION TO MECHANICAL DESIGN**

3 CR. (1L/3 LBV)

PRQ: ENT 106 or ENT 131, or Department Chair approval. Focuses on industrial design concepts for mass production. Introduces tolerancing, industrial fasteners, economic considerations, and terminology. Incorporates small design projects.

ENT 134

**GEOMETRIC DIMENSIONING & TOLERANCING**

2 CR. (1L/1.5 LBV)

PRQ: ENT 131 or ENT 106 or Department Chair approval. Enables the student to study and apply principles involving tolerance fits between mating parts and techniques involving precision.

ENT 135

**CONSTRUCTION PLANNING AND ESTIMATING**

2 CR. (2L)

PRQ: REA 090, MAT 060, or equivalent assessment test scores or Department Chair approval. Provides students with a basic knowledge of the construction planning and estimating process. Includes estimating documentation, spreadsheets, monitoring, and control of construction costs.

ENT 137

**INTRODUCTION TO ENGINEERING TECHNOLOGY**

3 CR. (3L)

CORQ: MAT 090 or equivalent assessment test score, ENT 131 or Department Chair Approval. Prepares students for success in the Engineering Technology program. Focuses on engineering job skills and duties, academic requirements, calculator usage, engineering reference and handbooks, geometry, trigonometry, problem solving skills, and introduction to wordprocessing and spreadsheets.

\*\*ENT 140

**CONSTRUCTION SURVEYING**

5 CR. (3L/3 LBV)

Surveys procedures relating to the construction of buildings, roads, dams and pipelines.

ENT 141

**SURVEYING I**

4 CR. (2L/3 LBV)

PRQ: MAT 090, equivalent assessment test score, or Department Chair approval. Serves as a beginning course in plane surveying. It covers horizontal distance measurement by pacing and chaining, care and use of total stations, theodolites, transits and levels, differential leveling, traversing, and basic construction surveying. Various instruction is given in proper survey note taking procedures and surveying terminology. Calculation of bearings, azimuths and slope reduction is also covered in this comprehensive course.

ENT 142

**SURVEYING II**

4 CR. (2L/3 LBV)

PRQ: ENT 141. Introduces topographic and land surveying. Covers advanced construction surveying techniques including curves, grades, and slope staking. Addresses use and care of theodolites and electronic total station equipment.

ENT 143

**SURVEY DRAFTING**

3 CR. (1L/3 LBV)

CORQ: ENT 131 or permission of the instructor. Enables the student to practice the methods involved in converting surveying information into graphic drawings using inking techniques.

ENT 145

**STRUCTURAL DETAILING**

3 CR. (1L/3 LBV)

PRQ: ENT 131. Focuses on shop and detail drawings used in steel and concrete construction. Covers applications to residential, light commercial, and industrial structures.

ENT 146

**CONSTRUCTION MATERIALS AND METHODS**

3 CR. (3L)

PRQ: REA 090, equivalent assessment test score, or Department Chair approval. Focuses on basic knowledge of construction materials, how they are manufactured, and their applications in light commercial and industrial structures.

ENT 155

**MANUFACTURING TECHNOLOGY I**

3 CR. (1L/3 LBV)

Focuses on contemporary manufacturing organization, methods, and processes involved in converting raw materials into finished products.

ENT 175-177

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

\*\*ENT 210

**SOIL MECHANICS**

2 CR. (1L/1.5 LBV)

Emphasizes basic principles of soil mechanics and proper testing procedures as they relate to construction.

ENT 233

**MECHANICAL DESIGN I**

3 CR. (1L/3 LBV)

PRQ: ENT 133, CAD 101. Focuses on the industrial design process from layout to production drawings, jig and fixture design standard part selection from handbooks and catalogs, specification writing, and part ordering.

ENT 234

**MECHANICAL DESIGN II**

3 CR. (1L/3 LBV)

PRQ: ENT 233. Emphasizes the layout and design of mechanical systems, tool selection, standard parts selection, report and specification writing, and part ordering techniques.

ENT 236

**ELECTRONIC DRAFTING**

3 CR. (1L/3 LBV)

PRQ: CAD 101. Schematics, printed circuit board layouts, symbols, and wiring diagrams will be produced on CAD workstation; terminology and the manufacturing process of printed circuit boards will be covered.

ENT 237

**STATICS**

3 CR. (3L)

PRQ: ENT 137, MAT 121, or instructor permission. Focuses on the study of mechanics involving forces and the effects of forces on bodies in equilibrium. Includes force systems, coplanar force systems, structure analysis, friction spatial force systems gravity and centroids.

ENT 238

**INDUSTRIAL FLUID POWER AND CONTROLS**

3 CR. (1L/3 LBV)

PRQ: MAT 090, REA 090. 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.

ENT 241

**RESIDENTIAL ARCHITECTURE**

3 CR. (1L/3 LBV)

PRQ: ENT 131 or permission of the instructor. Enables the student to produce a set of residential construction plans based on sketches produced and provided. Emphasizes the current techniques for graphic representation of residential architecture plans.

ENT 242

**COMMERCIAL ARCHITECTURE**

3 CR. (1L/3 LBV)

PRQ: CAD 101, ENT 145, and ENT 241. Covers design and drafting for commercial structures. Emphasizes the requirements for commercial public buildings, steel and timber construction. Enables the student to complete a partial set of drawings from "architect sketches".

ENT 243

**ADVANCED SURVEY DRAFTING**

3 CR. (1L/3 LBV)

PRQ: CAD 101 and ENT 143. Focuses on traverses, legal descriptions, horizontal and vertical curves, land sections, and coordinates. Emphasizes field note interpretation. Graphics for this course are produced on CAD workstations.

ENT 244

**SURVEYING III**

3 CR. (1L/3 LBV)

PRQ: ENT 142, CAD 101. Focuses on advanced electronic surveying techniques. Introduces data collection and processing via computer software.

ENT 245

**CONCRETE AND ASPHALT TECHNOLOGY**

3 CR. (2L/1.5 LBV)

PRQ: CAD 101. Focuses on the study of Portland cement concrete and bituminous pavements. Covers manufacturing, mix design, and placement of these materials.

ENT 247

**STRENGTH OF MATERIALS**

3 CR. (3L)

PRQ: ENT 237. 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 256

**RAPID PRODUCT DEVELOPMENT**

4 CR. (2L/3 LBV)

PRQ: ENT 133. Enables the student to develop 3D solid models for prototype products using CAD technology. Covers various types of prototyping including stereolithography, selective laser sintering, laminated object manufacturing and CNC.

ENT 258

**INDUSTRIAL FLUID POWER AND CONTROLS**

3 CR. (1L/3 LBV)

PRQ: ENT 238. Focuses on the diagnosis of problems that may arise in fluid power systems used in a modern manufacturing environment. Covers the tools and techniques used in installation and component repair/replacement.

ENT 270

**TECHNICAL EXPERIENCE**

3 CR. (9 COP)

PRQ: Permission from instructor. Incorporates professional work experience directly related to the area of training. S/U

ENT 275-277

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

## English

ENG 030

**BASIC WRITING SKILLS**

2 CR. (1L/2 LBA)

PRQ: 25 or better on ACCUE language test. Focuses on sentence and basic paragraph structure and development. Enables the student to review and improve grammar, usage, and punctuation skills while employing critical thinking strategies and the writing process to respond to a wide variety of writing situations.

ENG 060

**WRITING FUNDAMENTALS**

3 CR. (3L)

PRQ: 50 or better on ACCUE or grade of "C" or better in ENG 030. Focuses on paragraph structure and development and introduces the formal essay. Enables the student to review and improve grammar, usage, and punctuation skills while employing critical thinking strategies and the writing process to respond to a wide variety of writing situations.

ENG 090

**BASIC COMPOSITION**

3 CR. (3L)

PRQ: 70 or better on the ACCUE test or grade of "C" or better in ENG 060. Emphasizes critical thinking as students explore writing for specific purposes and audiences. Enables the student to develop skills required for college-level writing while reviewing paragraph structure and focusing on essay development.

ENG 113

**BUSINESS ENGLISH**

3 CR. (3L)

PRQ: CIS 110, ENG 090, REA 060 or equivalent assessment test scores or Department Chair approval. 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 119

**WRITING RESUMES AND COVER LETTERS**

1 CR. (1L)

Provides an introduction to writing resumes and cover letters. Students will learn a variety of techniques for writing, presenting, formatting, and organizing traditional resumes, electronic resumes and cover letters.

ENG 121

**ENGLISH COMPOSITION I: GT-CO1**

3 CR. (3L)

PRQ: a grade of C or better in ENG 090 or a score of 95 or better on the ACCUE test. Emphasizes the planning, writing, and revising of compositions, including the development of critical and logical thinking skills. Includes a minimum of five compositions that stress analytical, evaluative, and persuasive/argumentative writing. This course is one of the Statewide Guaranteed Transfer Courses, GT-CO1.

ENG 122

**ENGLISH COMPOSITION II: GT-CO1**

3 CR. (3L)

PRQ: a grade of C or better in ENG 121. 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. This course is one of the Statewide Guaranteed Transfer Courses, GT-CO1.

ENG 131

**TECHNICAL WRITING I**

3 CR. (3L)

PRQ: ENG 090 or ACCUE 95. Develops skills one can apply to a variety of technical documents. Focuses on principles for organizing, writing, and revising clear, readable documents for industry, business, and government.

ENG 132

**TECHNICAL WRITING II**

3 CR. (3L)

PRQ: ENG 131. Expands and refines the objectives of ENG 131, emphasizing formal presentations, both written and oral.

ENG 175-177

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

ENG 221

**CREATIVE WRITING I**

3 CR. (3L)

PRQ: ENG 090 or permission of instructor. 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 222

**CREATIVE WRITING II**

3 CR. (3L)

PRQ: ENG 221 or permission of instructor. Provides continued development of written expression in such forms as poetry, fiction, and/or nonfiction writing.

ENG 230

**CREATIVE NONFICTION**

3 CR. (3L)

PRQ: ENG 090 or equivalent assessment test score. Teaches students to incorporate literary techniques into factual writing. Enables the student to survey a wide range of readings and analyze form and content. Includes critical review, biographical profiles, travel writing, and memoirs. Provides the opportunity for students to write and review their own nonfiction in a supportive, constructive setting.

ENG 275

**SPECIAL TOPICS**

0-6 CR. (0L-6L)

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

ENG 275-277

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

## Environmental Science

ENV 101

**INTRODUCTION TO ENVIRONMENTAL SCIENCE**

4 CR. (3L/3 LBA)

PRQ: REA 090, MAT 060, ENG 060 or equivalent assessment test scores. 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.

## Esthetician

Please refer to "Cosmetology."

## Ethnic Studies

ETH 224

**INTRODUCTION TO CHICANO STUDIES**

3 CR. (3L)

PRQ: REA 090 or equivalent assessment score. Introduces students to skills development in multicultural education. Covers Chicano history, migration and labor, education, law and Chicano culture.

ETH 275-277  
**SPECIAL TOPICS**  
0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

## \*\*Facilities Maintenance Tech

**\*\*FMT 101**  
**CUSTODIAL TECHNIQUES**  
4 CR. (4L)

Focuses on products and techniques of maintaining commercial or industrial buildings. Covers health standards and issues.

**\*\*FMT 102**  
**FACILITIES MAINTENANCE - ELECTRICITY**  
4 CR. (3L/1.5 LBV)

Focuses on electrical fundamentals as applied to residential and commercial facilities maintenance. Covers repair, service and maintenance of electrical systems and codes.

**\*\*FMT 103**  
**FACILITIES MAINTENANCE - PLUMBING**  
4 CR. (2L/3 LBV)

Addresses troubleshooting, servicing and repairing of plumbing systems found in commercial and industrial buildings. Includes codes and safety practices.

**\*\*FMT 111**  
**HOUSEKEEPING**  
1.5 CR. (1L/.75 LBV)

Introduces components and practices that provide the part-time custodian with the basic knowledge to effectively perform all job-related work assignments in general housekeeping.

**\*\*FMT 128**  
**CUSTODIAN PERSONNEL MANAGEMENT**  
1.5 CR. (1.5L)

Trains school custodians in basic personnel management and emphasizes leadership and teambuilding skills for the first-time manager.

**\*\*FMT 150**  
**JOB SURVIVAL SKILLS**  
1 CR. (1L)

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.

**\*\*FMT 250**  
**CLEANING CHEMICALS**  
1 CR. (1L)

Using chemicals safely is the focus of this course. How to select the proper cleaning chemicals, cleaning agents, and disinfectants is taught. OSHA standards are included.

## Film & Video Technology

FVM 155  
**WRITING THE SHORT SCRIPT**  
3 CR. (3L)

Students write, improve and perfect their own scripts throughout the course, building a portfolio.

FVM 160  
**VIDEO POST PRODUCTION I**  
3 CR. (1L/3 LBV)

Introduces the basics of broadcast signal, VTR operations, vector scope, waveform monitors, time code edit decision list creation and editing aesthetics. Students are expected to work on the Final Cut Pro edit system, both in and outside of class time.

FVM 164  
**INTRODUCTION TO DIGITAL EDITING**  
3 CR. (1L/3 LBV)

Covers digitizing, compression boards, inputting, outputting, and software integration as well as the principles of nonlinear editing are covered. Final projects are output to digital tape. This course is a prerequisite for FVM 215 for all students who have no digital editing experience.

FVM 185  
**DOCUMENTARY FILM & VIDEO**  
3 CR. (2L/1.5 LBV)

Presents an overview of the subject including historical and contemporary examples. Classroom visits with local documentary filmmakers, analysis of documentary techniques, finding the story and the challenges of the medium.

FVM 200  
**VIDEO PRODUCTION II**  
3 CR. (4.5 LBV)

Engages students in more advanced productions using more sophisticated techniques and equipment in competing two original video productions. Pre-production planning and budgeting, working with actors and resource management with the aim of maximizing production value are stressed.

FVM 205  
**FILM /VIDEO CAMERA**  
3 CR. (1L/3 LBV)

Examines how video and 16mm cameras work, and various techniques used in composition and the acquisition of images. Lenses, light filters formats, CCD's, cranes, dollies, and jib-arms are discussed and utilized. The narrative importance of different camera angles, movements and focal planes are analyzed. Students are required to shoot specific exercises both in and out of class.

FVM 206  
**FILM/VIDEO LIGHTING & GRIP**  
3 CR. (1L/3 LBV)

Includes lighting, stands, new flags, grids, diffusion, light meters, waveform, etc., are covered. Lighting aesthetics in interior, exterior, location and studio settings, lighting for close-up, large areas and product shoots and balancing for color temperature.

FVM 208  
**SOUND FOR FILM/VIDEO**  
3 CR (1L/3 LBV)

Covers sound acquisition (equipment and techniques) sound perspective and sync as well as covering post-production methods including an introduction to sweetening, Foley, and audio editing software.

FVM 209

**PRODUCTION MANAGEMENT TECHNIQUEST**

3 CR. (1L/3 LBV)

Breaks down a film or TV show. This course teaches students to plan, schedule and budget the shoot using production boards and Movie Magic software.

FVM 215

**VIDEO POST PRODUCTION II**

3 CR. (4.5 LBV)

PRQ: FVM 164

Covers editing Production II projects utilizing Post II DV edit lab and Final Cut Pro.

FVM 265

**DVD AUTHORIZING & DVD STUDIO PRODUCTION**

3 CR. (4.5 LBV)

Presents a hands-on course in DVD authoring. Students learn the ins and outs of DVD design and compression schemes, then learn the Apple DVD studio Pro software. A significant portion of this course is a workshop to author and burn a DVD, so students should bring a project into the course with them.

FVM 275

**SPECIAL TOPICS**

0-12 CR.

Offers a variety of courses such as: Understanding the actor's Process, Intro to Digital FX for Post, Acting Scene to Screen, etc.

## \*\*Fine Woodworking

\*\*FIW 100

**FUNDAMENTALS OF WOODWORKING**

4 CR. (3L/1.5 LBV)

Introduces the manipulation of materials, drawings, hand and power tools, sharpening, joinery, assembly, and preparation for and finishing to accomplish woodworking.

\*\*FIW 108

**TOOLMAKING AND JIGS**

4 CR. (2L/3 LBV)

Expands the capabilities, speed and accuracy of the woodworker through the use of jigs and specialty tools. Focuses on constructing several projects (box joint jig, a router table, a mock dovetail jig or spring pole lathe) of progressing difficulty.

\*\*FIW 109

**INTRODUCTION TO CABINETMAKING**

4 CR. (3L/1.5 LBV)

Introduces the student to the various components of cabinetmaking. The course will teach the student basic shop drawing, material properties, joinery, and power and stationary tools as related to basic cabinet construction. Safe and efficient use of machinery and materials are the essential goals of this course.

\*\*FIW 118

**LATHE TURNINGS**

4 CR. (3L/1.5 LBV)

Explores the capacities of a lathe through spindle and faceplate turnings. The use of bead, cove, taper, cylindrical, v-cutslk proportion and curved line relationships are examined. Lathe components, tools, and sharpening are explored.

\*\*FIW 125

**FINISHING WOOD**

4 CR. (3L/1.5 LBV)

Allows the student to research the wide variety of finishes available from the oldest formulations to the bewildering array of modern films and stains. Enables the student to experiment with a representative sampling of colorations and surface finishes on a variety of species of wood using a selection of application techniques.

\*\*FIW 128

**DOORMAKING**

4 CR. (3L/1.5 LBV)

Focuses on the planning, design, selection and purchase of materials, construction, finishing and hanging of a door that the students has constructed. Examines assorted styles of door construction, joinery, glues and fabrication techniques.

\*\*FIW 201

**JOINERY**

4 CR. (3L/1.5 LBV)

Explores different types of wood connections, using both hand and power tool techniques in frame and carcass joinery. Enables students to cut, fit, and assemble projects to demonstrate their knowledge.

\*\*FIW 205

**TABLEMAKING**

4 CR. (1L/4.5 LBV)

Focuses on the study and construction of flat surface using some of the wide variety of potential styles, sizes, materials and techniques available. Examines solid and sheet goods as well as alternative construction methods and their various qualities. Explores fastenings, edging and movement concerns.

\*\*FIW 206

**CHAIRMAKING**

4 CR. (1L/4.5 LBV)

Utilizes chair construction to examine some of the alternatives of machine and hand-tool construction as illustrated by seat shaping through router surfacing vs. inshave use. Addresses spindle turnings, spokeshave use, and compound angles. Resolves construction dilemmas such as jointing compound curves and jig making for tapered legs with fluting or reeding when constructing a chair.

\*\*FIW 209

**CABINETMAKING**

4 CR. (2L/3 LBV)

Covers cabinet types, kitchen and cabinet design, layout, construction, hardware installation, materials, power tool use, accessories and estimation.

\*\*FIW 213

**FURNITURE MAKING**

4 CR. (3L/1.5 LBV)

Teaches furniture design, construction techniques, material selection, joinery, bending, laminating, veneer work and casework details.

# Fire Science Technology

FST 100

## **FIREFIGHTER I**

9 CR. (6L/4.5 LBV)

PRQ: EMS 125. CORQ: REA 060 or equivalent assessment test score. 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 101

## **FIREFIGHTER II**

3 CR. (2L/1.5 LBV)

CORQ: REA 060 or equivalent assessment test score. Addresses the requirements necessary to perform at the second level of progression as identified in NFPA 1001, level II Fire Fighter Professional Qualifications.

FST 102

## **PRINCIPLES/EMERGENCY SERVICES**

3 CR. (3L)

CORQ: REA 060 or equivalent assessment test score. Provides an overview to fire protection; career opportunities in fire protection and related fields; philosophy and history of fire protection/service; fire loss analysis; organization and function of public and private fire protection services; fire departments as part of local government ; laws and regulations affecting the fire service; fire service nomenclature ; specific fire protection functions; basic fire chemistry and physics; introduction to fire protection systems; introduction to fire strategy and tactics.

FST 103

## **OCC SAFETY & HEALTH FOR FIRE**

3 CR. (3L)

CORQ: REA 060 or equivalent assessment test score. 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. Upon completion of this course, students should be able to establish and manage a safety program in an emergency service organization.

FST 104

## **FIRE PROTECTION SYSTEMS**

3 CR. (3L)

CORQ: REA 060 or equivalent assessment test score. 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 105

## **BUILDING CONST FOR FIRE PROF**

3 CR. (3L)

CORQ: REA 060 or equivalent assessment test score. CProvides the components of building construction that relate to fire and life safety. The focus of this course is on firefighter safety. The elements of consideration and design of structures are shown to be key factors when inspecting buildings, preplanning fire operations, and operating at emergencies.

FST 106

## **FIRE PREVENTION**

3 CR. (3L)

CORQ: REA 060 or equivalent assessment test score. Provides fundamental information regarding the history and philosophy of fire prevention, organization and operation of a fire prevention bureau, use of fire codes, identification and correction of fire hazards, and the relationships of fire prevention with built-in fire protection systems, fire investigation, and fire and life-safety education.

FST 107

## **HAZARDOUS MATERIALS OPERATIONS (LEVEL I)**

3 CR. (3L)

CORQ: REA 060 or equivalent assessment test score. 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 110

## **JOB PLACEMENT AND ASSESSMENT**

3 CR. (2L/1.5 LBV)

CORQ: REA 060 or equivalent assessment test score. 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 121

## **TECHNICAL ROPE RESCUE**

4 CR. (1L/4.5 LBV)

PRQ: Accuplacer: Reading 62+, English 70+, Arithmetic 34+. 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 126

## **VEHICLE EXTRICATION AWARENESS LEVEL**

1 CR. (1.5 LBV)

PRQ: Accuplacer: Reading 62+, English 70+, Arithmetic 34+. 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 127

## **VEHICLE EXTRICATION OPERATIONS LEVEL**

2 CR. (.5L/2.25 LBV)

PRQ: Accuplacer: Reading 62+, English 70+, Arithmetic 34+. Expands and refines the objectives of FST 126. 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 128

## **VEHICLE EXTRICATION TECHNICIAN LEVEL**

3 CR. (1L/3 LBV)

PRQ: Accuplacer: Reading 62+, English 70+, Arithmetic 34+. Expands and refines the objectives learned in FST 127. 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 132

**STRUCTURAL COLLAPSE**

2 CR. (.5L/2.25 LBV)

PRQ: Accuplacer: Reading 62+, English 70+, Arithmetic 34+. 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 133

**TRENCH RESCUE**

2 CR. (.5L/2.25 LBV)

PRQ: Accuplacer: Reading 62+, English 70+, Arithmetic 34+. 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 134

**CONFINED SPACE RESCUE**

2 CR. (.5L/2.25 LBV)

PRQ: Accuplacer: Reading 62+, English 70+, Arithmetic 34+. 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 135

**ICE WATER RESCUE**

2 CR. (.5L/2.25 LBV)

PRQ: Accuplacer: Reading 62+, English 70+, Arithmetic 34+. 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 136

**SWIFT WATER RESCUE**

2 CR. (.5L/2.25 LBV)

PRQ: Accuplacer: Reading 62+, English 70+, Arithmetic 34+. 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 137

**VEHICLE EXTRICATION**

2 CR. (.5L/2.25 LBV)

PRQ: Accuplacer: Reading 62+, English 70+, Arithmetic 34+. Covers transportation emergency assessment skills as they relate to vehicle extrication; establishing safety zones; "reading" the wreck; ICS/IMS; utilities, traffic and fuel; vehicle construction; air bags; vehicle stabilization; victim access and stabilization; dismantling the vehicle; and patient packaging.

FST 150

**INTRODUCTION TO FIRE PREVENTION EDUCATION**

3 CR. (3L)

CORQ: REA 060 or equivalent assessment test score. 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 151

**DRIVER-OPERATOR**

3 CR. (2L/1.5 LBV)

CORQ: REA 060 or equivalent assessment test score. 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 160

**CANDIDATE PHYSICAL ABILITIES TEST PREP COURSE**

3 CR. (1L/3 LBV)

CORQ: REA 060 or equivalent assessment test score. 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 175-177

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

FST 201

**INSTRUCTIONAL METHODOLOGY**

3 CR. (3L)

CORQ: REA 060 or equivalent assessment test score. Covers the role and responsibility of the fire service instructor. Includes oral communication skills, concepts of learning, planning and development of lesson plans, instructional materials and delivery methods, testing and evaluations, records and reports, and demonstration of instructional abilities. Fire Instructor I State Certificate is available.

FST 202

**STRATEGY AND TACTICS**

3 CR. (3L)

CORQ: REA 090 or equivalent assessment test score. Provides an in-depth analysis of the principles of fire control through utilization of personnel, equipment, and extinguishing agents on the fire ground.

FST 203

**FIRE HYDRAULICS & WATER SUPPLY**

3 CR. (3L)

CORQ: REA 090 or equivalent assessment test score. 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 204

**PRINCIPLES OF CODE ENFORCEMENT**

4 CR. (4L)

CORQ: REA 090 or equivalent assessment test score. To provide the students with the fundamental knowledge of the role of code enforcement in a comprehensive fire prevention program.



FST 205

**FIRE INVESTIGATION I**

3 CR. (3L)

CORQ: REA 090 or equivalent assessment test score. 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 206

**FIRE CO SUPERV AND LEADERSHIP**

3 CR. (3L)

CORQ: REA 090 or equivalent assessment test score. Covers fire department organization, management philosophies, leadership traits, time management, group dynamics, communications, motivation counseling, conflict resolution, and employee discipline. Meets components of Fire Officer I State Certificate.

FST 207

**STRATEGY AND TACTICS II**

3 CR. (3L)

PRQ: FST 202. CORQ: REA 090 or equivalent assessment test score. 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 208

**FIRE PLANS REVIEW AND ACCEPTANCE TESTING**

2 CR. (2L)

PRQ: Accuplacer: Reading 80+, English 70+, Arithmetic EA 45+. 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 250

**CHEMISTRY FOR FIRE PROTECTION**

3 CR. (3L)

CORQ: REA 090 or equivalent assessment test score. Addresses the actions and reactions of commonly encountered products and chemicals, chemical properties, and field applied chemistry.

FST 251

**LEGAL ASPECTS OF FIRE SERVICE**

3 CR. (3L)

PRQ: REA 80+, ENG 70+, MAT EA 45+. 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 252

**FIRE INVESTIGATION II**

3 CR. (3L)

CORQ: REA 090 or equivalent assessment test score. 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 253

**NIMS**

3 CR. (3L)

PRQ: FST 202. CORQ: REA 090 or equivalent assessment test score. 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 254

**HAZARDOUS MATERIALS TECHNICIAN LEVEL**

3 CR. (3L)

PRQ: FST 107. CORQ: REA 090 or equivalent assessment test score. 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 255

**FIRE SERVICE MANAGEMENT**

3 CR. (3L)

CORQ: REA 090 or equivalent assessment test score. Serves as the basic management course for present and potential members of the fire service, and for students and members of other fire science-related professions. Introduces the student to current management practices and philosophies and real-world applications from the supervisor's point of view. Covers decision making/problem solving, communication skills, conflict resolution, creativity and innovation, as well as the role of the manager in supervising personnel and programs, e.g., motivation, leadership, counseling, ethics, and handling discipline and grievances.

FST 256 (ARCHIVED)

**FIRE SERVICE EMS MANAGEMENT**

3 CR. (3L)

PRQ: EMS 125. CORQ: REA 090 or equivalent assessment test score. Addresses budgeting, staffing, training, and equipment issues; transportation, standard of care, and protocols; operations, communications, incident and disaster management, and legal issues associated with EMS operations.

FST 257

**FIRE DEPARTMENT ADMINISTRATION**

3 CR. (3L)

PRQ: FST 206. CORQ: REA 090 or equivalent assessment test score. 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 275-277

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

# Fire Science Wildland

FSW 100

## **S-190 INTRODUCTION TO WILDLAND FIRE BEHAVIOR**

1 CR. (1L)

PRQ: Accuplacer: Reading 62+, English 70+, Arithmetic 34+. Provides instruction in the primary environmental factors that affect the start and spread of wildfire and recognition of potentially hazardous situations. This course can be taught in conjunction with or prior to Firefighting Training S-130.

FSW 101

## **S-130 FIREFIGHTING TRAINING**

2 CR. (.5L/2.25 LBV)

PRQ: Accuplacer: Reading 62+, English 70+, Arithmetic 34+. Provides entry-level firefighter skills. A version of the L-180, Human Factors on the Fireline, is included as part of the course. Credit should be issued for S-130.

FSW 102

## **S-131 FIREFIGHTER TYPE I**

0.5 CR. (.5L)

PRQ: Accuplacer: Reading 62+, English 70+, Arithmetic 34+. 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 fireline reference materials, communications, and tactical decision making.

FSW 103

## **D-110 DISPATCH RECORDER WITH INTRODUCTION TO ROSS**

1 CR. (15L)

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 104

## **I-100 INTRODUCTION TO ICS**

0.25 CR. (.25L)

PRQ: Accuplacer: Reading 62+, English 70+, Arithmetic 34+. 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**

1 CR. (1L)

PRQ: Qualified as any 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 141

## **S-203 INTRODUCTION TO INCIDENT INFORMATION**

2 CR. (30L)

Provides students with the knowledge and skills they need to serve as type 3 information officers (IOF3). It touches on virtually all aspects of establishing and maintaining an incident information operation, communicating with internal and external audiences to handling special situations.

FSW 142

## **S-211 PORTABLE PUMPS AND WATER USE**

1.5 CR. (.5L/1.5 LBV)

PRQ: Accuplacer: Reading 62+, English 70+, Arithmetic 34+. Consists of three areas – supply, delivery, and application of water. Students will be required to demonstrate their knowledge of correct water use, basic hydraulics, and equipment care. The module requires set up, operation, and maintenance of pump equipment. To receive credit for this course, students must have modules observed and approved.

FSW 143

## **S-212 WILDFIRE CHAIN SAWS**

2 CR. (15L/22.5 LBV)

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 provides hands-on cutting in surroundings similar to fireline situations.

FSW 144

## **S-215 FIRE OPERATIONS IN THE WILDLAND/URBAN INTERFACE**

2 CR. (2L)

PRQ: Accuplacer: Reading 62+, English 70+, Arithmetic 34+. Designed to assist structure and wildland firefighters who will be making tactical decisions when confronting wildland fire that threatens life, property, and improvements in the wildland/urban interface. Instructional units include interface awareness, size up, initial strategy and incident action plan, structure triage, structure protection tactics, incident action plan assessment and update, follow up and public relations, and firefighter safety in the interface.

FSW 145

## **S-230 CREW BOSS**

1.5 CR. (1.5L)

PRQ: Accuplacer: Reading 62+, English 70+, Arithmetic 34+. Designed to produce student proficiency in the performance of duties associated with the single-resource boss position from initial dispatch through demobilization to the home unit. Topics include operational leadership, preparation and mobilization, assignment preparation, risk management, entrapment avoidance, safety and tactics, offline duties, demobilization and post-incident responsibilities.

FSW 146

## **S-231 ENGINE BOSS (SINGLE RESOURCE)**

1 CR. (1L)

PRQ: Accuplacer: Reading 40+, English 50+, Arithmetic 25+. Designed to produce student proficiency in the performance of the duties associated with engine boss, single resource (ENGB). Topics include engine and crew capabilities and limitations, information sources, fire size up considerations, tactics and wildland/urban interface.

FSW 147

## **S-234 IGNITION OPERATIONS**

2 CR. (2L)

PRQ: Intermediate Wildland Fire Behavior (S-290). Provides training in the functional roles and responsibilities connected with firing operations. The course covers planning, ignition procedures and techniques, and equipment applicable to wildland and prescribed fire. This course also addresses the role of the ignition specialist or firing boss as the organization manages escalation from a non-complex to a complex situation.

FSW 149

**S-260 INTERAGENCY INCIDENT BUSINESS MANAGEMENT**  
1 CR. (1L)

Designed to meet the general training needs of all positions for which an understanding of interagency incident business management is required. The Interagency Incident Business Management Handbook, PMS 902, is used as the primary job aid to supplement this course. It provides the basic policy and direction for incident business management

FSW 151

**S-270 BASIC AIR OPERATIONS**  
1 CR. (1L)

Covers aircraft types and capabilities, aviation management and safety for flying in and working with agency aircraft, tactical and logistical uses of aircraft, and requirements for helicopter take-off and landing areas.

FSW 153

**S0-290 INTERMEDIATE WILDLAND FIRE BEHAVIOR**  
2 CR. (2L)

PRQ: Accuplacer: Reading 62+, English 70+, Arithmetic 34+. Designed to prepare the prospective supervisor to undertake safe and effective fire management operations.

FSW 155

**I-200, IS-200, Q-436 BASIC ICS: ICS FOR SINGLE RESOURCES AND INITIAL ACTION INCIDENTS**  
1.5 CR. (22.5L)

Introduce students to the principles of the Incident Command System (ICS) associated with incident-related performance. Topics include leadership and management, delegation of authority and management by objectives, functional areas and positions, briefings, organizational flexibility, transitions and transfers. This course was developed in conjunction with the US Fire Administration (Q-463) and the Emergency Management Institute (IS-200). These courses are built on the same lesson objectives and content as the NWCG I-200 course and are interchangeable; they are all National Incident Management System (NIMS) compliant.

FSW 156

**L-280 FOLLOWERSHIP/LEADERSHIP**  
1 CR. (.5L/.75 LBV)

PRQ: REA 060. Combines one day of instruction followed by a second day with students working through a series of problem-solving events. This course is for individuals preparing to step into a leadership role. Topics include: leadership values and principles, transition challenges for new leaders, situational leadership, team cohesion factors, and ethical decision-making.

FSW 175-177

**SPECIAL TOPICS**  
0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

FSW 200

**S-300 EXTENDED ATTACK COMMAND**  
1 CR. (1L)

PRQ: Qualified as an incident commander type 4 (ICT4). Designed to meet the training needs of the incident commander type 3 (CT3). The six instructional units cover Information Gathering, Planning, Supporting Organization, Operations, Transitioning, and Demobilization/Administrative Requirement.

FSW 201

**S-330 TASK FORCE/STRIKE TEAM LEADER**  
1.5 CR. (1.5L)

PRQ: Accuplacer: Reading 62+, English 70+, Arithmetic 34+. Designed to meet the training requirements outlined in the Wildland Fire Qualification System Guide and the Positions Task Books (PTB) developed for the positions of Task Force Leaders and Strike Team Leader. Examples and exercises in this package are specific to wildland fire suppression.

FSW 206

**I-300 INTERMEDIATE ICS FOR SUPERVISORS AND EXPANDING INCIDENTS**  
1.5 CR. (1.5L)

PRQ: I-200 Basic: ICS for single resources and Initial Action Incidents. Provides a greater description and detail of the Incident Command System (ICS) organization and operations, including application of essential principles and description of air operations. This course comprises five of the 17 instructional modules making up the ICS curriculum. These include Organization and Staffing (Module 7), Organizing for Incidents or Events (Module 8), Incident Resources Management (Module 9), Air Operations (Module 10), and Incident and Event Planning (Module 11).

FSW 241

**I-400 ADVANCED ICS FOR COMMAND & GENERAL STAFF & COMPLEX INCIDENTS**  
1.5 CR. (1.5L)

PRQ: I-300 Intermediate ICS: ICS for Supervisors and Expanding Incidents. Directs the student towards an operational understanding of large single-agency and complex multi-agency/multi-jurisdictional incident responses. Presented in an intense participative classroom environment, this course focuses on area command and staff issues, as well as the planning, logistical and fiscal considerations associated with complex incident management and interagency coordination. This course comprises four of the 17 instructional modules making up the ICS curriculum. These include Command and General Staff (Module 12), Unified Command (Module 13), Major Incident Management (Module 14), Area Command (Module 15).

FSW 275-277

**SPECIAL TOPICS**  
0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

## Floral Design

\*\*FLD 100

**INTRODUCTORY FLORAL DESIGN**  
3 CR. 2L/1.5 LBV)

Teaches students working in the floral design industry a working knowledge of retail flower shop management & 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.

# French

## FRE 111 FRENCH LANGUAGE I

5 CR. (5L)  
PRQ: ENG 060, REA 060, or equivalent assessment test scores. Begins a sequence dealing with the development of functional proficiency in listening, speaking, reading and writing the French language.

## FRE 112 FRENCH LANGUAGE II

5 CR. (5L)  
PRQ: FRE 111 or instructor's permission; ENG 060 and REA 060, or equivalent assessment test scores. Continues French I in the development of functional proficiency in listening, speaking, reading and writing the French language.

## FRE 211 FRENCH LANGUAGE III: GT-AH4

3 CR. (3L)  
PRQ: FRE 112 or instructor's permission; ENG 090; REA 090; or equivalent assessment test scores. Continues French I and II in the development of increased functional proficiency in listening, speaking, reading and writing the French 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.

## FRE 212 FRENCH LANGUAGE IV: GT-AH4

3 CR. (3L)  
PRQ: FRE 211 or instructor's permission; ENG 090; REA 090; or equivalent assessment test scores. Continues French I, II and III in the development of increased functional proficiency in listening, speaking, reading and writing the French 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.

## FRE 275 SPECIAL TOPICS

0-12 CR.  
Provides students with a vehicle to pursue in depth exploration of special topics of interest.

# Geography

## GEO 105 WORLD REGIONAL GEOGRAPHY: GT-SS2

3 CR. (3L)  
PRQ: REA 090 or equivalent assessment test score. Facilitates an understanding of spatial relationships between and among the geographic regions of the world. Includes demographic and cultural (political, economic, and historic) forces related to the physical environments of selected regions. Focuses on analysis of interrelationships between developed and developing regions, and the interactions between human societies and natural environments. This course is one of the Statewide Guaranteed Transfer Courses, GT-SS2.

## GEO 106 HUMAN GEOGRAPHY: GT-SS2

3 CR. (3L)  
PRQ: REA: 090 or the equivalent recommended. Introduces geographic perspectives and methods with applications to the study of human activities. Emphasizes the distribution of humans, adjustments to the natural environment, and land use practices. This course is one of the Statewide Guaranteed Transfer Courses, GT-SS2.

## GEO 111 PHYSICAL GEOGRAPHY - LANDFORMS

4 CR. (4L)  
PRQ: REA: 090 or the equivalent recommended. Introduces the principles of landforms as a major aspect of mans natural environment. Incorporates an integrated process of lecture, discussion, and laboratory assignments. This course is one of the Statewide Guaranteed Transfer Courses, GT-SC1.

## GEO 175-177 SPECIAL TOPICS

0-12 CR.  
Provides students with a vehicle to pursue in depth exploration of special topics of interest.

## GEO 275-277 SPECIAL TOPICS

0-12 CR.  
Provides students with a vehicle to pursue in depth exploration of special topics of interest.

# Geographic Information Systems

## GIS 101 INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS

3 CR. (3L)  
PRQ: REA 090, CIS 110, or equivalent assessment test score or department chair approval. Surveys the development and operation of automated geographic information systems. Focuses on the fundamentals of using computers to draw maps. Incorporates study of cartographic fundamentals such as map projections, map scales, selective display of data on maps, and various computer software applications in GIS.

## GIS 105 ARCVIEW GIS

3 CR. (3L)  
PRQ: GIS 101. 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 110 INTRODUCTION TO CARTOGRAPHY

3 CR. (3L)  
PRQ: GIS 105. 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 protocol resulting in the effective communication of both qualitative and quantitative information.

GIS 131  
**GLOBAL POSITIONING SYSTEMS FOR GLOBAL INFORMATION SYSTEMS**

3 CR. (3L)

PRQ: GIS 110. 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 175-177  
**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

GIS 212  
**REMOTE SENSING AND DIGITAL IMAGE PROCESSING**

4 CR. (4L)

PRQ: GIS 131. Introduces students to basic concepts and procedures used in the processing of remotely sensed data, with an emphasis on integration of digital imagery into basic GIS applications.

GIS 275-277  
**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

## Geology

GEY 111  
**PHYSICAL GEOLOGY: GT-SC1**

4 CR. (3L/2 LBA)

PRQ: REA 090, MAT 090, ENG 090, or equivalent assessment test scores. Studies the materials of the earth, its structure, surface features and the geologic processes involved in its development. This course includes laboratory experience. This course is one of the Statewide Guaranteed Transfer Courses, GT-SC1.

GEY 121  
**HISTORICAL GEOLOGY**

4 CR. (3L/2 LBA)

PRQ: MAT 090, REA 090, ENG 090, GEY 111 or consent of instructor of Geology, or equivalent assessment test scores. Studies the physical and biological development of the earth through the vast span of geologic time. Emphasizes the investigation and interpretation of sedimentary rocks, the record of ancient environments, fossil lifeforms, and physical events, all within the framework of shifting crustal plates. Course includes laboratory experience. This course is one of the Statewide Guaranteed Transfer Courses, GT-SC1.

GEY 135  
**ENVIRONMENTAL GEOLOGY**

3 CR. (3L)

PRQ: REA 090, MAT 090, ENG 090, or equivalent assessment test scores. Introduces geology and its relationship to man's environment. Covers geologic hazards such as floods, landslides, avalanches, earthquakes and volcanoes. Focuses on surface and groundwater resources in terms of exploitation and man's responsibility to protect these resources from contamination. The geologic aspects of land use practices, as well as mineral and energy resource exploitation are reviewed and related to legislation regarding environmental law.

GEY 175-177  
**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

GEY 275-277  
**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

## German

GER 101  
**CONVERSATIONAL GERMAN I**

3 CR. (3L)

PRQ: REA 060 or equivalent assessment test score. Introduces beginning students to conversational German and focuses on understanding and speaking German. Covers basic vocabulary, grammar, and expressions that are used in daily situations and in travel.

GER 111  
**GERMAN LANGUAGE I**

5 CR. (5L)

PRQ: REA 060 and ENG 060, or equivalent assessment test scores. Begins a sequence dealing with the development of functional proficiency in listening, speaking, reading and writing the German language. Note: The order of the topics and methodology will vary according to individual texts and instructors.

GER 112  
**GERMAN LANGUAGE II**

5 CR. (5L)

PRQ: GER 111 or instructor's permission; REA 060 and ENG 060, or equivalent assessment test scores. Continues German Language I in the development of functional proficiency in listening, speaking, reading and writing the German language. Note: The order of the topics and the methodology will vary according to individual texts and instructors.

GER 211  
**GERMAN LANGUAGE III: GT-AH4**

3 CR. (3L)

PRQ: GER 112 or instructor's permission; REA 090; ENG 090; or equivalent assessment test scores. Continues German Language I and II in the development of increased functional proficiency in listening, speaking, reading and writing the German 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.

GER 212  
**GERMAN LANGUAGE IV: GT-AH4**  
3 CR. (3L)

PRQ: GER 211 or permission of instructor; ENG 090 and REA 090, or equivalent assessment test scores. Continues German Language I, II and III in the development of increased functional proficiency in listening, speaking, reading and writing the German 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.

GER 275  
**SPECIAL TOPICS**

0-12 CR.  
Provides students with a vehicle to pursue in depth exploration of special topics of interest.

## Health Information Technology

HIT 101  
**HEALTH INFORMATION MANAGEMENT SCIENCE**  
6 CR. (6L)

Introduces the student to the health record, from inception to completion. Emphasis is on form, content and regulations impacting the health record in the various health care settings. Other areas to be discussed include the computerized aspects of the health record as well as the functions and responsibilities of the health information department. This course also examines various health care delivery systems and health care practitioners. The dilemmas of health care with attention directed to current events and how these events impact our profession are discussed.

HIT 102  
**MEDICAL VOCABULARY**  
3 CR. (3L)

PRQ: REA 090, BIO 106. Introduces the student to medical terminology through the study of word structures such as common medical prefixes & suffixes and the origins of terminology currently used in medical practice. Also includes basic anatomy and physiology, appropriate medical terminology, and procedures and diagnostic testing for each body system. Exercises in reading, writing and speaking new vocabularies are required. This course also includes an introduction to the medical record. Students read and analyze patient records. In turn, students are assigned writing exercise creating medical records using learned vocabulary.

HIT 105  
**PRINCIPLES OF HEALTHCARE REIMBURSEMENT**  
3 CR. (3L)

Provides students with the knowledge needed to identify and perform necessary tasks involved in healthcare reimbursement systems. Topics will include reimbursement principles of various healthcare plans, prospective payment systems, the importance of clinical coding, compliance with regulations, and related issues of fraud and abuse.

HIT 111  
**HEALTH DATA MANAGEMENT AND INFORMATION SYSTEMS**  
3 CR. (3L)

Introduces the practice of maintenance, compilation, analysis, and presentation of healthcare statistical data. Discussion is focused on the use, collection, presentation, and verification of health care data including fundamental concepts of descriptive statistics; data validity and reliability; data presentation techniques; and vital statistics. Introduces the electronic health record (EHR), health informatics and the infrastructure required for the EHR. Data reliability and validity will be emphasized.

HIT 121  
**NETWORKING AND HEALTH INFO**  
2.5 CR. (2.5L)

PRQ: Department Chair Permission. 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 122  
**WORKFLOW FUND OF HEALTHCARE**  
2 CR. (2L)

PDQ: Department Chair Permission. This course covers the fundamentals of health workflow, process analysis, and redesign. Also includes medical practice automation, dealing with the topics of process validation, quality management, and change management.

HIT 123  
**CONFIGURING EHRs**  
2 CR. (1L/1.5LBV)

PDQ: Department Chair Permission. 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 124  
**PUBLIC HEALTH IT**  
1 CR. (1L)

PDQ: Department Chair Permission. Prepare students for working with public health agencies, an overview of specialized public health applications such as registries, epidemiological databases, biosurveillance, and situational awareness and emergency response. Includes information exchange issues specific to public health.

HIT 150  
**HEALTHCARE DELIVERY SYSTEMS**  
3 CR. (3L)

This course provides an overview of the health care delivery system at the national, state and local level including the organizations that provide health care, applicable regulations and standards, reimbursement methods used professionals that provide the services, as well as resources. Current trends in health care delivery are presented including health facilities, medical staff organization and functions, the changing roles of health care professionals, and patterns of financing health care.

HIT 153  
**HEALTHCARE REIMBURSEMENT**  
3 CR. (3L)

PRQ: HIT 201, HIT 242, HIT 243. This course provides students the opportunity to learn the history, rationale, and methodology of the systems used by third party payers to determine the reimbursement that health care providers will receive. Reimbursement concepts include fee-for-service, managed care, capitation systems, Diagnosis-Related Groups (DRGs), Resource Based Relative Value Scale (RBRVS), Ambulatory Payment Classifications (APCs), and related concepts. The use of the charge description master (chargemaster) in reimbursement will be discussed. The importance of compliance with regulations and the related issues of fraud and abuse will also be addressed.

HIT 188

**HEALTH INFORMATION PRACTICUM I**

2 CR. (6 PRC)

PRQ: By approval of department chair. Provides a directed clinical experience in a health information department in a health care facility. This experience focuses on the practice of skills related to the application of legal principles, record analysis and abstraction and record retention and retrieval.

HIT 220

**ICD CODING 1**

3 CR. (3L)

PRQ: HPR 178, BIO 106. 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 241

**CPT CODING BASIC PRINCIPLES**

2 CR. (3 LBV)

PRQ: HPR 178, BIO 106. 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 252

**CODING II FOR CERTIFICATION**

3 CR. (3L)

PRQ: HIT 102, HIT 242, HIT 243, BIO 106. This advanced course will cover medical necessity, coding issues for specific body systems, and for general conditions using ICD-9-CM and CPT coding principles. Students should already possess a fundamental understanding of the CPT, ICD-CM, and HCPCS coding principles at the start of this course. Intensive coding application will be achieved through the use of real medical records, case studies, and scenarios. DRGs, APC's, RUGs, RBRVs, and the Correct Coding Initiative (CCI) will also be covered in this class. This coding class requires hands-on coding skills, knowledge of basic use of applicable codebooks are essential

HIT 260

**HEALTH INFORMATION AND DATA**

3 CR. (3L)

This course covers maintenance, compilation, analysis, and presentation of healthcare statistics. Discussion is focused on the use, collection, presentation, and verification of health care data including fundamental concepts of descriptive statistics; data validity and reliability; data presentation techniques; and vital statistics. Students will be introduced to topics such as basic statistical principles; morbidity and mortality, commonly computed hospital rates, uniform reporting requirements, and selection and construction of data displays. This course also introduces principles of quality improvement, utilization management, and risk management in health care. Topics include the continuous quality improvement philosophy, including tools, data analysis/application, and related committee functions; utilization management and risk management; and credentialing, accreditation and regulation.

HIT 261

**HEALTHCARE SOFTWARE**

3 CR. (3L)

PRQ: CIS 118. This course covers basic computer system architecture, file structure, and design for health care 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 262

**USABILITY AND HUMAN FACTORS**

2 CR. (2L)

PRQ: Department Chair Permission. Rapid prototyping; user-centered design and evaluation, effects of new technology and workflow on downstream processes; and unit-wide focus groups and simulations.

HIT 269

**CERTIFICATION TEST PREPARATION**

1 CR. (1L)

PRQ: Approval of Department Chair. This course is designed for students who have made the decision to earn the Certified Coding Associate (CCA) credential. This credential is an entry-level certification in coding. Individuals earning the CCA credential demonstrate professional competency and express a high level of commitment to the health information management field. Certification is a process by which a non-governmental organization or association recognizes the competence of an individual who has met certain qualifications as determined by that organization or association. To achieve certification from the American Health Information Management Association (AHIMA), individuals must meet certain eligibility requirements and pass the certification examination.

HIT 275

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

HIT 288

**HEALTH INFO PRACTICUM II**

2 CR. (6 INT)

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.

# Health and Wellness

## HWE 100 HUMAN NUTRITION

3 CR. (3L)  
PRQ: REA 090, MAT 060, ENG 060, or equivalent assessment test scores. Introduces basic principles of nutrition with emphasis on personal nutrition. Satisfies nutrition requirement of students entering health care professions.

## HWE 103 COMMUNITY FIRST AID AND CPR

1 CR. (1L)  
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. S/U

## HWE 108 WEIGHT LOSS

1 CR. (1 LBV)  
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 175-177 SPECIAL TOPICS

0-12 CR.  
Provides students with a vehicle to pursue in depth exploration of special topics of interest.

## HWE 275 SPECIAL TOPICS: ETHICS OF TOUCH

1 CR. (1L)  
PRQ: ENG 060, REA 060. Provides students with a vehicle to pursue in depth exploration of special topics of interest. This course is designed to focus on ethical issues associated with the hands-on professions of Massage Therapy, Manicurist, Esthetician, hairstylist and Cosmetology. Emphasis will be placed on learning and understanding the Code of Ethics that exists for each profession, confidentiality of client information and effective and appropriate interpersonal communication with clients, peers, and associated professionals. This course will support hands-on professionals to expand their knowledge of ethics, better manage their personal and professional boundaries and establish and maintain ethical businesses.

## HWE 275-277 SPECIAL TOPICS

0-12 CR.  
Provides students with a vehicle to pursue in depth exploration of special topics of interest.

# Health Professions

## HPR 100 INTRODUCTION TO HEALTH

3 CR. (3L)  
Provides an exploratory course for students interested in a health career. Basic health skills such as vital signs and CPR will be included.

## HPR 102 CPR FOR PROFESSIONALS: PROFESSIONAL RESCUER

.5 CR. (.5L)  
Meets the requirement for American Red Cross Professional Rescuer CPR or American Heart Association Basic Life Support for those who work in Emergency Services, Health Care and other professional areas. Material presented in the course is basic patient assessment, basic airway management, rescue breathing, and CPR for infant, children and adult patients. S/U

## HPR 103 CPR FOR PROFESSIONALS RENEWAL

.5 CR. (.5L)  
Provides opportunity for currently certified CPR providers to renew certificates. S/U

## HPR 106 LAW & ETHICS FOR HEALTH PROFESSIONS

2 CR. (2L)  
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 108 DIETARY NUTRITION

1 CR. (1L)  
PRQ: REA 090 or equivalent assessment test score. Studies the basic principles in clinical practice involved in the assistance of 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 112 PHLEBOTOMY

4 CR. (2.5L/2.25 LBV)  
PRQ: Admission to the Phlebotomy program and ENG 090, MAT 060, REA 060, or equivalent assessment test scores. Teaches the duties associated with the practice of venipuncture, capillary puncture, and special collection procedures. Students will have experience with quality control, infection control and safety procedures as well as laboratory computer systems. Students successfully completing this course may apply for a National Phlebotomy Registry Examination.

## HPR 113 ADVANCED PHLEBOTOMY

4 CR. (2L/3 LBV)  
PRQ: Admission to the Phlebotomy program and ENG 090, MAT 060, REA 060 or equivalent assessment test scores. Instructs students in advanced phlebotomy techniques to include patients in trauma, neonatal, geriatric, and long term acute care areas. In addition, laboratory procedures taught include specimen processing and advanced point-of-care instrumentation. This course includes a lecture/lab combination that teaches theory and direct application of theoretic content and clinical opportunities for student to master learned skills.

## HPR 117 ANATOMICAL KINESIOLOGY

3 CR. (1L/3 LBV)  
PRQ: BIO 106. Studies the Anatomical Bases of Human Movement.



HPR 120

**ACLS**

1 CR. (1L)

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. S/U

HPR 121

**ACLS RECERTIFICATION**

.5 CR. (.5L)

Presents the required material for ACLS recertification. It will cover rhythm recognition, cardiac drugs, cardiac monitors, and case based scenarios. S/U

HPR 122

**ACLS INSTRUCTOR COURSE**

.5 CR. (.5L)

Presents information on how to obtain a complete health history, assessment skills of inspection, palpation, percussion, and auscultation are practiced in class. S/U

HPR 130

**PEDIATRIC ADVANCED LIFE SUPPORT**

1 CR. (1L)

Provides students the needed information and skills as required by health care agencies for pediatric emergencies. S/U

HPR 131

**PEDIATRIC ADVANCED LIFE SUPPORT RENEWAL**

.5 CR. (.5L)

Provides students with updates and skill practice to complete renewal requirements for PALS completion card. S/U

HPR 132

**PEDIATRIC ADVANCED LIFE SUPPORT INSTRUCTOR**

1 CR. (1L)

Provides the current PALS provider the information and practice needed to instruct PALS initial and renewal courses. S/U

HPR 175-177

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

HPR 178

**MEDICAL TERMINOLOGY**

1-4 CR. (1-4L)

Introduces the student to the structure of medical terms with emphasis on combining and using the most common prefixes, roots and suffixes. Includes terms related to clinical laboratory, diagnostic imaging, nuclear medicine and oncology, as well as major body systems. Classroom structure provides accepted pronunciation of terms and relative use in the healthcare setting. When offered through BTE for 3 credits, course prerequisites are PRQ: CIS 110, REA 060, ENG 060, or equivalent assessment test scores or Department Chair approval.

HPR 190

**BASIC EKG INTERPRETATION**

2 CR. (2L)

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. S/U

HPR 200

**12 LEAD ECG INTERPRETATIONS**

3 CR. (3L)

Focuses on each wave and interval of the complex, the axis, and the 12-lead presentation of some rhythm disturbances. S/U

HPR 208

**ADVANCED MEDICAL TERMINOLOGY**

2 CR. (2L)

PRQ: HPR 178. Continues from a beginning medical terminology course for the student with emphasis on combining complex prefixes, roots and suffixes. Includes pathophysiology for major body systems. Includes terms related to diagnostic tools per body systems, as well as commonly used medical abbreviations.

HPR 232

**DISEASE PROCESS AND TREATMENT**

5 CR. (5L)

PRQ: HPR 178. 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 275-277

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

## \* \* Heating and Air Conditioning

\*\*HVA 101

**INTRODUCTION TO AIR CONDITIONING AND REFRIGERATION**

4 CR. (2L/3 LBV)

Introduces school policies, safety procedures, and first aid. Use of trade tools and terminology is covered. Laboratory experiences include brazing, soldering, and material.

## Heavy Equipment

HEQ 150

**BASIC PRINCIPLES OF ENGINE OPERATION AND DRIVE TRAIN**

2 CR. (1L/1.5 LBV)

Covers the theory of operation and the maintenance of engines, drive trains and related power equipment used in heavy equipment operations.

HEQ 220

**MOTOR GRADER I**

2 CR. (1L/1.5 LBV)

Covers the safe operation of a motor grader and perform a variety of operations using the grader.

HEQ 221

**MOTOR GRADER II**

2 CR. (1L/1.5 LBV)

Focuses on the safe operation of a motor grader and aggregate road maintenance and building.

HEQ 225

**BACKHOE I**

2 CR. (1L/1.5 LBV)

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 226

**BACKHOE II**

2 CR. (1L/1.5 LBV)

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 hand held level, crossing trenches, setting up on open excavations, benching techniques, and OSHA and industry safety standards.

HEQ 230

**HYDRAULIC EXCAVATOR**

2 CR. (1L/1.5 LBV)

Covers the safe operation of the hydraulic excavator. Allows the student to perform a variety of operations with the excavator.

HEQ 240

**BASIC BULLDOZER I**

2 CR. (1L/1.5 LBV)

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 241

**BULLDOZER II**

2 CR. (1L/1.5 LBV)

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.

HEQ 246

**FRONT END LOADER II**

2 CR. (1L/1.5 LBV)

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 275

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

HEM 275

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

## History

HIS 101

**WESTERN CIVILIZATION: ANTIQUITY-1650: GT-HI1**

3 CR. (3L)

PRQ: REA 090 or the equivalent recommended. 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 102

**WESTERN CIV: 1650-PRESENT:GT-HI1**

3 CR. (3L)

PRQ: REA 090 or the equivalent recommended. 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 111

**THE WORLD: ANTIQUITY-1500: GT-HI1**

3 CR. (3L)

Enables the student to view history up to 1500 CE 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. This course is one of the Statewide Guaranteed Transfer Courses, GT-HI1.

HIS 112

**THE WORLD: 1500-PRESENT: GT-HI1**

3 CR. (3L)

PRQ: REA 090 or equivalent assessment test score. Enables students to view history post 1500 CE 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. This course is one of the Statewide Guaranteed Transfer Courses, GT-HI1

HIS 175-177

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

## Heavy Equipment Mechanics

HEM 211

**FINAL DRIVES AND BRAKES**

2 CR. (1L/1.5 LBV)

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.

HIS 201

**US HISTORY TO RECONSTRUCTION: GT-HI1**

3 CR. (3L)

PRQ: REA 090 or the equivalent recommended. 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 202

**US HISTORY SINCE THE CIVIL WAR: GT-HI1**

3 CR. (3L)

PRQ: REA 090 or the equivalent recommended. 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 216

**HISTORY AND HOLLYWOOD: FILM AND HISTORICAL PERSPECTIVE IN MODERN AMERICA**

3 CR. (3L)

PRQ: REA 090. Examines the role in film in informing the historical perspective of modern Americans. Focuses on the status of film as historical document, and the methods and sources employed to critique historical films effectively.

HIS 225

**COLORADO HISTORY**

3 CR. (3L)

PRQ: REA 090 or the equivalent recommended. 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.

HIS 244

**HISTORY OF LATIN AMERICA**

3 CR. (3L)

PRQ: ENG 060, REA 090, or equivalent assessment test scores. Focuses on the major political, economic, social, and cultural influences that have shaped Latin America from pre-European conquest to the present. Emphasizes the early history of Latin America but connects it to the present.

HIS 246

**HISTORY OF MEXICO**

3 CR. (3L)

PRQ: ENG 060, REA 090, or equivalent assessment test score. Focuses on the major political, economic, social, and cultural developments of Mexico from Pre-Columbian times to the present.

HIS 247

**20<sup>TH</sup> CENTURY WORLD HISTORY: GT-HI1**

3 CR. (3L)

PRQ: REA 090 or equivalent. 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 275-277

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

## Holistic Health Professional

Please refer to "Massage Therapy"

### \*\*Horticulture

\*\*HLT 105

**GREENHOUSE MANAGEMENT & CROPS**

4 CR. (2L/3 LBV)

Discusses greenhouse design, systems, management, and the major greenhouse crops and their cultural needs.

\*\*HLT 118

**ROCK AND WATER GARDENING**

2 CR. (1L/1.5 LBV)

Discusses the design and construction of rock gardens and water gardens. The course also surveys the plant materials and maintenance practices associated with these types of gardens.

\*\*HLT 120

**PRINCIPLES OF XERISCAPE**

2 CR. (1L/1.5 LBV)

Covers the principles and practices used in establishing water-conserving landscapes. Special attention is given to the proper siting, establishment and care of plant materials in water conserving landscapes, and the installation of low water use irrigation systems.

\*\*HLT 125

**LANDSCAPE DRAFTING AND DESIGN**

3 CR. (1L/3 LBV)

Allows students that wish to learn the basics of landscape design and planning so that they can produce simple gardens, or interpret plans for construction. The course discusses the principles and elements of design by looking at various landscape styles. Students learn the design process and basics of landscape graphics. They produce simple, scaled landscape drawing, and learn to interpret landscape plans for construction.

\*\*HLT 126

**PLANTING DESIGN**

2 CR. (1L/1.5 LBV)

Allows students to focus on the planting design phase of landscape design. Students learn to analyze plants for their design characters, and learn how to marry various types of plant materials into various situations. Perennial, annual, and mixed plantings (trees, shrubs and herbaceous plants) will be considered. Students will learn how to represent these combinations graphically.

\*\*HLT 130

**LANDSCAPE GRAPHICS STUDIO**

3 CR. (1L/3 LBV)

Introduces students to the basics of graphic communications used in landscape design and construction. Students learn the proper use of graphic tools and materials to manually produce site analyses, concept plan, preliminary plan, planting plan, and master plan documents in both plan and perspective views.

\*\*HLT 140

**LANDSCAPE DESIGN & PLANNING**

4 CR. (2L/3 LBV)

Explores the principles and elements of design. The student learns about form, spatial and materials composition, and environmentally and architecturally responsive design. Students complete a set of landscape design documents for an actual or fictional client.

\*\*HLT 151

**IRRIGATION AUDITING - SCHEDULING**

3 CR. (3L)

Focuses on monitoring and managing the operation of an irrigation system for maximum water saving efficiency. Students learn theory behind troubleshooting, auditing and scheduling and then perform a system tune-up, irrigation audit, and calculate watering schedules based on current climatic information.

\*\*HLT 203

**PLANT DISEASE AND PEST FIELD STUDY**

2 CR. (3 LBV)

Provides students the opportunity to conduct field studies of local weed, insect and disease problems. Students evaluate various situations and discuss actual problem diagnosis and site-specific remedies or preventatives for the problems they identify.

\*\*HLT 208

**COMMERCIAL PESTICIDE LICENSE TRAINING**

3 CR. (3L)

Studies the requirements for the qualified supervisor license as outlined in the training manuals published by the Colorado Department of Agriculture. Students may elect to take the certified operator tests if they do not meet the experience qualifications for the qualified supervisors license. Areas studied will be for the general, weeds, agricultural insect, plant disease, and industrial right-of-way tests administered by the Colorado Department of Agriculture. Students may elect to take any of the other tests available.

\*\*HLT 210

**LANDSCAPE MANAGEMENT**

3 CR. (3L)

Teaches the best management practices for landscapes. Students learn about, the maintenance needs of various landscape features, and what management options exist for each feature. This course emphasizes improving landscape quality while minimizing management costs. Other topics include landscape business practices, water management, and seasonal landscape care tasks.

\*\*HLT 221

**WOODY LANDSCAPE PLANTS I**

3 CR. (1L/3 LBV)

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).

\*\*HLT 222

**WOODY LANDSCAPE PLANTS II**

3 CR. (1L/3 LBV)

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.

\*\*HLT 223

**ANNUALS, BULBS, AND GRASSES**

2 CR. (1L/1.5 LBV)

Discusses the identification (common and botanical names), landscape usage and culture of annuals, bulbs, and perennial and annual grasses common to Colorado landscapes.

\*\*HLT 232

**INTRODUCTION TO LANDDESIGNER PRO**

2 CR. (3 LBV)

Introduces LandDesigner Pro software. Student will work through a self paced, guided landscape plan. Student will develop an independent landscape design using this software.

\*\*HLT 236

**LANDSCAPE CONSTRUCTION**

4 CR. (1L/4.5 LBV)

Introduces students to the fundamentals of landscape construction, including construction equipment, safety practices, grading, deck, retaining wall, paving, and water feature construction. During labs students construct various landscape elements.

\*\*HLT 237

**LANDSCAPE CONSTRUCTION BIDDING AND ESTIMATING**

2 CR. (1L/1.5 LBV)

Discusses the process of bidding for landscape construction. Plan reading, quantity takeoffs, bidding and estimating practices and processes are covered.

\*\*HLT 240

**INTRODUCTORY SOIL SCIENCE**

4 CR. (2L/3 LBV)

Discusses the formation, physical properties, chemical properties and management of soils emphasizing conditions that affect plant growth. The principles of soil fertility and practice of fertilizer use is also discussed.

\*\*HLT 242

**TURFGRASS MANAGEMENT**

4 CR. (2L/3 LBV)

Discusses the fundamentals of turfgrass establishment and maintenance as it is practiced at different cultural intensities. Topics include the growth and development of turfgrass plants, the turfgrass environment, turfgrass species selection and identification, turfgrass cultural practices, and turfgrass pest management.

\*\*HLT 250

**LANDSCAPE IRRIGATION DESIGN**

3 CR. (2L/1.5 LBV)

Determine irrigation design capacity and working pressure using hydraulic analysis of residential irrigation and drip systems. Irrigation system components are examined and their application explained. Students analyze site conditions and apply their knowledge of hydraulic analysis to produce sample irrigation systems.

\*\*HLT 251

**LANDSCAPE IRRIGATION FIELD PRACTICES**

3 CR. (1L/3 LBV)

Applies skills necessary to install a residential system using proper equipment and techniques. They also study the routine maintenance and repair of sprinkler systems, including head adjustment, back-flow prevention device maintenance, and electrical and hydraulic system troubleshooting.

\*\*HLT 253

**INTRODUCTION TO IRRIGATOR JET PRO**

2 CR. (3 LBV)

Introduces IrrigatorJet Pro software. The student will work through a self paced, guided irrigation design. The student will develop an independent irrigation design using this software.

## Hospitality Studies

HOS 105

**INTRODUCTION TO MANAGEMENT IN THE HOSPITALITY INDUSTRY**

3 CR. (3L)

Describes the history, development, and operation of the hospitality industry including careers in the industry, management practices, accounting procedures, destinations and lodging.

HOS 122

**TOURISM GEOGRAPHY I**

3 CR. (3L)

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 123

**TOURISM GEOGRAPHY II**

3 CR. (3L)

Continues HOS 122, Tourism Geography I, 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 131

**PLANNING FOR SPECIAL EVENTS**

3 CR. (3L)

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 141

**CONVENTION MANAGEMENT**

3 CR. (3L)

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 175-177

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

HOS 207

**TOUR MANAGEMENT**

3 CR. (3L)

Develops a basic understanding of the role and function of a tour conductor.

HOS 275-277

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

## Humanities

HUM 103

**INTRODUCTION TO FILM ART**

3 CR. (3L)

PRQ: REA 090 or equivalent assessment test score. 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 key historical and aesthetic periods as well as a variety of genres and themes. The course incorporates the vocabulary stylistic systems (for instance, cinematography, editing and art direction) and narrative systems (for instance, story structure and character motivation) as both relate to the kinds of meanings a film conveys.

HUM 110

**INTRODUCTION TO THE FINE ARTS**

3 CR. (3L)

PRQ: REA 090 or equivalent assessment test score. Introduces the basic elements and principles of the fine arts (art, music and theater).

HUM 117

**CRITICAL THINKING**

3 CR. (3L)

PRQ: REA 090 or equivalent assessment test score. Develops higher order thinking and reasoning skills. Students will apply these skills to a variety of academic disciplines, contemporary issues and their own life experiences.

HUM 121

**HUMANITIES: EARLY CIV: GT-AH2**

3 CR. (3L)

PRQ: REA 090 or equivalent assessment test scores. Introduces students to the history of ideas that have defined cultures through a study of the visual arts, literature, drama, music, and philosophy. It emphasizes connections among the arts, values, and diverse cultures, including European and non-European, from the Ancient world to 1000 C.E. This course is one of the Statewide Guaranteed Transfer Courses, GT-AH2.

HUM 122  
**HUMANITIES: MEDIEVAL - MOD: GT- AH2**  
3 CR. (3L)  
PRQ: REA 090 or equivalent assessment test scores. Examines written texts, visual arts and musical compositions to analyze and reflect the evolution and confluence of cultures in Europe, Asia and the Americas from 800 C.E. to 1750 C.E. Any two of the three Survey of Humanities courses equal a sequence. This course is one of the Statewide Guaranteed Transfer Courses, GT-AH2.

HUM 123  
**HUMANITIES: MODERN WORLD: GT- AH2**  
3 CR. (3L)  
PRQ: REA 090 or equivalent assessment test scores. 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 131  
**THE ARTS AND CULTURES OF MEXICO**  
3 CR. (3L)  
PRQ: REA 090 or equivalent assessment test score. 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 164  
**AMERICAN CINEMA**  
3 CR. (3L)  
PRQ: REA 090 or equivalent assessment test score. Introduces film studies and surveys the American film industry as an art form, as an industry, and as a system of representation and communication. This course explores how Hollywood films work technically, aesthetically, and culturally to re-enforce and challenge America's national self image.

HUM 175  
**SPECIAL TOPICS**  
0-12 CR.  
Provides students with a vehicle to pursue in depth exploration of special topics of interest.

HUM 211  
**CULTURAL DIVERSITY-HUMANITIES**  
3 CR (3L)  
PRQ: REA 090. Introduces students to the various aspects of social and cultural diversity. Promotes development of critical thought and growth of multicultural, multisocial and multilingual understanding.

HUM 236  
**NORTH AMERICAN INDIAN ARTS**  
3 CR (3L)  
PRQ: REA 090. Focuses on North American Indian music, dance, architecture, painting, sculpture, pottery and fashions through a study of the literature of Indian cultures in North America.

HUM 237  
**HISPANIC ARTS OF THE AMERICAN SOUTHWEST**  
3 CR. (3L)  
PRQ: REA 090 or equivalent assessment test score. Examines the history, visual arts and permanency of the Hispanic culture of the American Southwest. Through the study of historical sequences, major artistic expressions dating from 1598 and aspects of literature of the contemporary Hispanic society students will gain an insight into the Hispanic cultural contributions to the Southwest.

HUM 238  
**SACRED IMAGES, SACRED SPACES: SOUTHWESTERN US**  
3 CR. (3L)  
PRQ: REA 090 or equivalent assessment test score. 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 266  
**DOCUMENTARY FILM**  
3 CR. (3L)  
PRQ: REA 090. This course explores documentary film as art form, cultural artifact, and rhetorical strategy.

HUM 275-277  
**SPECIAL TOPICS**  
0-12 CR.  
Provides students with a vehicle to pursue in depth exploration of special topics of interest.

## Interior Design

IND 100  
**INTERIOR DESIGN FUNDAMENTALS**  
4 CR. (4L)  
An introduction to design elements, principles and theory. Application techniques, emphasizing design relationships and composition, will be explored. Basic skills and techniques of both visual and oral presentations will be introduced.

IND 107  
**HISTORY OF INTERIOR DESIGN**  
3 CR. (3L)  
Offers a study of interiors and furnishings from the medieval period to the Revival styles of the mid-eighteenth century to the contemporary classics used in modern interiors today. Study of interior and exterior architectural elements, furniture, design motifs and ornamentation, fine arts and construction methods as it relates to the cultural, political, social, technological and economic conditions of the times.

IND 108  
**PROFESSION SURVEY**  
1 CR. (1L)  
Guest speakers share experiences and insights concerning job types, opportunities and the educational requirements for them. They also discuss business practices, current work, professional organizations; tools, methods and educational requirements necessary for various positions; and prevailing professional attitudes.

IND 111  
**DRAFTING IN INTERIORS**  
4 CR. (1L/4.5 LBV)  
Introduces the basic drafting tools and techniques, graphic references and symbols, use of pencil and technical pen. Student learns to draft floor plans and interior elevations. Course also covers basic interior dimensioning and lettering as well as isometric drawing construction for interior components.

IND 112

**GRAPHIC COMMUNICATION**

4 CR. (1L/4.5 LBV)

PRQ: IND 111. Teaches methods of communicating interior design plans, elements and ideas in 3-D, through perspective drawing construction and quick sketch techniques, and practice rendering and illustration skills.

IND 114

**SPACE PLANNING**

3 CR. (1L/3 LBV)

PRQ: IND 111. Teaches the principles and factors of space planning and practices the space planning process through residential and light commercial applications. Students are introduced to interior architecture, human factors, code requirements and functional space. Use of bubble diagrams, two and three dimensional design fundamentals and freehand ink presentation techniques are also included to communicate design solutions.

IND 117

**INTERIOR TEXTILES**

2 CR. (2L)

PRQ: IND 111. Study and research of fabric types, fibers, weaves, finishes, construction and dyeing & printing methods for residential and commercial fabrics and carpets. Emphasis is on selection of appropriate and code compliant products for environmental, durability and life safety concerns. Evaluation, selection and specification of textile products to create aesthetic and functional designs appropriate for residential and commercial interiors.

IND 118

**INTERIOR FINISHES**

2 CR. (2L)

PRQ: IND 111. Introduction to interior finish materials used as a means of functional and aesthetic application by the interior designer. Develop skills to specify appropriate materials, estimate quantities, develop costs and understand installation and removal associated with residential and commercial finishes, with a focus on sustainability.

IND 151

**RESIDENTIAL DESIGN**

4 CR. (1L/4.5 LBV)

PRQ: IND 111. Development of a residential studio project, with an emphasis on universal design and sustainability, by implementing the design process. Requires research and application of residential design solutions through space planning, furniture & finish selections & specifications, estimating quantities & costs and understanding budget. Includes development of construction documentation and professional presentation techniques.

IND 152

**COMMERCIAL DESIGN I**

2 CR. (1L/1.5 LBV)

PRQ: IND 111. Introduces commercial design space planning and procedures for a variety of commercial project types. Emphasis will be placed on conceptual design, the programming and schematic design process, space planning and design documentation.

IND 175-177

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

IND 178

**SEMINAR: ENVIRONMENTAL ATTITUDES AND SUSTAINABILITY**

2 CR. (2 SEM)

PRQ: IND 100, 111. Introductory course investigating the relationship between human behavior and the design of human spaces, identifying those basic psychological and social concepts that influence and are influenced by the built environment. Special emphasis placed on the applications of knowledge about environment – behavior interactions to the design of interior places. At least one portfolio project is produced.

IND 200

**KITCHEN AND BATH DESIGN**

4 CR. (4L)

PRQ: REA 80, MAT 46+. Provides the specialized design process and documentation requirements of kitchen and bath design and applies NKBA guidelines. Students become familiar with trade resources supporting the design field. At least two portfolio projects are produced. Students will be encouraged to produce project documents using a variety of computer software applications.

IND 201

**COMMERCIAL DESIGN II**

4 CR. (1L/4.5 LBV)

PRQ: REA 80, MAT 46+. Development of a commercial studio project, while applying knowledge of code & ADA requirements, building systems, finish & furniture specifications and sustainability. Requires research and application of commercial design solutions through the design process. Includes development of construction documentation and professional presentation techniques.

IND 205

**PROFESSIONAL PRACTICE FOR INTERIOR DESIGNERS**

2 CR. (2L)

PRQ: REA 80, MAT 46+. Introduces processes involved in creating and running a professional interior design business including legal, ethical, practical and professional requirements. Emphasis on business structures and practices, professional documentation and contracts, marketing techniques, job cost estimating, setting up industry accounts and project management methods. Students become familiar with business practices in both commercial and residential design firms and develop business plans and resumes.

IND 211

**INTERIOR CONSTRUCTION**

4 CR. (4L)

PRQ: REA 80, MAT 46+. Introduces the student to interior building systems and assemblies, construction documents and details, and codes applicable to interior architecture. Student will apply this knowledge to various graphic projects and is encouraged to produce projects using the computer and CAD software.

IND 225

**LIGHTING DESIGN**

3 CR. (3L)

PRQ: REA 80, MAT 46+. Teaches and applies basic knowledge of interior lighting technology and design. Content includes lamp classifications, color rendition, how lighting sources affect our perception of space, how to compute and control proper lighting levels, and how to communicate design information by means of a reflected ceiling plan and luminaire schedule. Students will be encouraged to produce projects using a variety of computer software applications.

IND 231  
**SUSTAINABLE DESIGN**  
3 CR. (3L)

Creates an awareness and understanding of ecological issues while emphasizing the use of environmentally friendly materials and resources that do not compromise the effectiveness of the design. This course also investigates the practice of design to reduce the effects on the environment using renewable materials in the design and building for both residential and commercial property. Its emphases are to learn to conserve resources and to reduce the negative impact on the environment.

IND 275-277  
**SPECIAL TOPICS**  
0-12 CR.

Provides students with a vehicle to pursue in-depth exploration of special topics of interest.

IND 278  
**WORKSHOP: ENVIRONMENTAL TECHNOLOGIES FOR INTERIORS**  
3 CR. (3L)

PRQ: IND 100, IND 151, IND 152, and IND 178. This course covers traditional and advancing building technology systems linked to interior design. Students learn about functional and environmental aspects of building technology systems as they relate to people's well being, indoor environmental quality and global sustainability. Students also examine the role of interior designers in improving the quality of the global environment.

IND 280  
**INTERNSHIP**  
42CR. (6 L)

PRQ: REA 80, MAT 46+. Provides work experience in a business or industry; 45 fieldwork hours per credit hour.

IND 289  
**CAPSTONE**  
3 CR. (3L)

PRQ: REA 80, MAT 46+. This course will simulate the design practicum required by the National Council for Interior Design Qualification exam. Students will go through a simulated client interview to develop a problem statement and solution to the client's needs. The student then creates a complete set of drawings and sample boards.

## Italian

ITA 101  
**CONVERSATIONAL ITALIAN I**  
3 CR. (3L)

PRQ: REA 060 or equivalent assessment test score. Provides the first course in a sequence for beginning students who wish to understand and speak Italian. The material includes basic vocabulary, grammar, and expressions that are used in daily situations and in travel.

ITA 111  
**ITALIAN LANGUAGE I**  
5 CR. (5L)

PRQ: ENG 060 and REA 060 or equivalent assessment test score. Introduces a sequence dealing with the development of functional proficiency in listening, speaking, reading and writing the Italian language. Note: The order of the topics and methodology will vary according to individual texts and instructors.

ITA 112  
**ITALIAN LANGUAGE II**  
5 CR. (5L)

PRQ: ITA 111 or instructor's approval.

Continues Italian Language I in the development of functional proficiency in listening, speaking, reading and writing the Italian language. Note: The order of the topics and the methodology will vary according to individual texts and instructors.

ITA 211  
**ITALIAN LANGUAGE III: GT-AH4**  
3 CR. (3L)

PRQ: ITA 112 or instructor's approval. Continues Italian Language I and II in the development of increased functional proficiency in listening, speaking, reading and writing the Italian 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.

ITA 212  
**ITALIAN LANGUAGE IV: GT-AH4**  
3 CR. (3L)

PRQ: ITA 211 or instructor's approval. Continues Italian Language I, II and III in 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.

ITA 275  
**SPECIAL TOPICS**  
0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

## Jewelry Repair and Design

JRD 101  
**GEMOLOGY**  
3 CR. (3L)

Introduces the precious and semi-precious stones most commonly used in jewelry.

JRD 102  
**BEGINNING STONE SETTING I**  
3 CR. (1L/3 LBV)

Introduces basic stone setting procedures and techniques.

JRD 103  
**STONE SETTING II**  
3 CR. (1L/3 LBV)

Continues basic stone setting techniques with a greater emphasis on advanced stone setting procedures for jewelry work.

JRD 111  
**JEWELRY SHOP I**  
3 CR. (6 STA)

PRQ: ART 141, ART 142, or permission of instructor. Introduces the student to hand fabrication techniques used in a jewelry and metalsmithing shop.

JRD 112  
**JEWELRY SHOP II**  
3 CR. (6 STA)

PRQ: JRD 111. Investigates advanced approaches in jewelry techniques emphasizing the merging of hand-fabricated forms with casting in jewelry shop work.



JRD 211

**INTRODUCTION TO JEWELRY REPAIR**

3 CR. (3L)

Introduces Jewelry Repair Shop and the procedures, ethics, and practices necessary to such a business.

JRD 212

**JEWELRY REPAIR I**

3 CR. (1L/3 LBV)

Stresses the fundamentals of jewelry repair techniques and procedures as they pertain to common repair problems.

JRD 213

**JEWELRY REPAIR II**

3 CR. (1L/3 LBV)

Provides an advanced study of jewelry repair problems and the techniques and procedures needed to correct them.

JRD 215

**JEWELRY DESIGN I**

3 CR. (6 STA)

PRQ: ART 141. Introduces custom jewelry design procedures and techniques.

JRD 216

**JEWELRY DESIGN II**

3 CR. (6 STA)

PRQ: JRD 215. Emphasizes advanced jewelry design techniques and practices as they relate to artistic and custom projects.

JRD 217

**ADVANCED WAX AND MOLD MAKING**

3 CR. (6 STA)

PRQ: ART 142. Focuses on the advanced wax and mold making techniques necessary to create multiples of jewelry design work. Emphasis will be given to work designed as production jewelry.

JRD 218

**JEWELRY PRESENTATION AND PHOTOGRAPHY**

2 CR. (2L)

Focuses on basic presentation techniques, display design, and photography procedures for jewelry work.

JRD 221

**JEWELRY PORTFOLIO**

1 CR. (1L)

Emphasizes the jewelry portfolio from the design concept and layout to the finished product.

JRD 275

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

JRD 280

**INTERNSHIP**

3 CR. (9 INT)

Places the jewelry student in a repair shop for actual repair experience.

## Journalism

JOU 105

**INTRODUCTION TO MASS MEDIA**

3 CR. (3L)

PRQ: REA 060, equivalent assessment test score, or Department Chair approval. 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-SC1.

JOU 106

**FUNDAMENTALS OF REPORTING**

3 CR. (3L)

Introduces newswriting, reporting and interviewing with an emphasis on clarity, accuracy, completeness, timeliness and fairness.

JOU 175-177

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

JOU 206

**INTERMEDIATE NEWSWRITING AND EDITING**

3 CR. (4.5 LBV)

PRQ: ENG 090, equivalent assessment test score, or Department Chair approval. 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 275-277

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

## Law Enforcement

LEA 101

**BASIC POLICE ACADEMY I**

6 CR. (6L)

Conforms to POST standards and state certification requirements as well as the basic skills and knowledge necessary to perform the entry level duties of a peace officer. Emphasis will be on simulating actual situations utilizing a lecture and laboratory mode of learning.

LEA 102

**BASIC POLICE ACADEMY II**

12 CR. (12L)

Conforms to POST standards and state certification requirements as well as the basic skills and knowledge to perform the entry level duties of a peace officer. Emphasis will be on simulating actual situations utilizing a lecture and laboratory mode of learning.

LEA 103

**BASIC LAW ENFORCEMENT ACADEMY III**

2 CR. (.5 L/2.25 LBV)

Enhances the standards established by the P.O.S.T. Board and state certification requirements as well as the basic skills and knowledge necessary to perform the entry level duties of a Police Officer. Emphasis will be on expanding the P.O.S.T. curriculum to create a unique learning experience.

LEA 105

**BASIC LAW**

8 CR. (8L)

Conforms to POST standards and state certification requirements as well as the basic skills and knowledge necessary to perform the entry level duties of a peace officer. Emphasis will be on United States Constitution, arrest, search and seizure, interrogation and confessions, rules of evidence, Colorado Criminal Code, Colorado Traffic Code, Colorado Children's Code, Liquor Code and controlled substances.

LEA 106

**ARREST CONTROL TECHNIQUES**

3 CR. (1L/3 LBV)

Covers the skills, knowledge and abilities necessary to effectively maintain control of a suspect when making an arrest. Emphasizes the continuum of force and de-escalation of force.

LEA 107

**LAW ENFORCEMENT DRIVING**

3 CR. (1L/3 LBV)

Covers the skills, knowledge and abilities required for operation of a law enforcement vehicle. Emphasizes defensive driving. Enables students to demonstrate skills by driving a vehicle under simulated conditions.

LEA 108

**FIREARMS**

3 CR. (1L/3 LBV)

Discusses the skills, knowledge and abilities necessary to safely use police firearms. Students will demonstrate skills by firing weapons on a firing range. The student will demonstrate basic safety techniques and will explain the firearms role within the continuum of force.

LEA 118

**REPORT WRITING**

3 CR. (3L)

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.

## Library Technician

LTN 101

**INTRODUCTION TO LIBRARY SERVICES**

3 CR. (3L)

PRQ: Any of the following: BTE 100, BTE 102, BTE 103 or equivalent and CIS 110 or equivalent. 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 110

**SELECTION AND ACQUISITIONS - ONLINE**

3 CR. (3L)

PRQ: Any of the following: BTE 100, BTE 102, BTE 103 or equivalent and CIS 110 or equivalent. Covers tools, vendors, jobbers, approval plans for books, periodicals, and audiovisual material. Includes developing an acquisitions policy; developing a weeding plan, weeding the collection, and identifying new purchases for a library as a volunteer project; and dealing with censorship.

LTN 115

**LIBRARY CIRCULATION**

3 CR. (3L)

PRQ: Any one of the following: BTE 100, BTE 102, BTE 103, or equivalent; and CIS 110 or equivalent. 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 118

**AUDIO VISUAL MANAGEMENT**

2 CR. (2L)

PRQ: One semester of keyboarding or demonstrated ability to type 30 words per minute. Provides tools to help in selecting equipment, writing bid specifications, using standard equipment and in-house maintenance tips. Includes statistics keeping and repair records.

LTN 205

**INTRODUCTION TO CATALOGING AND CLASSIFICATION**

3 CR. (3L)

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 210

**REFERENCE MATERIALS**

3 CR. (3L)

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 220

**LIBRARY/MEDIA CENTER MANAGEMENT AND PUBLIC RELATIONS**

3 CR. (3L)

PRQ: LTN 101. Includes budget preparation, how to work with staff, the public, and administrators, and the use of statistics.

LTN 275-277

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

# Literature

LIT 115

## **INTRODUCTION TO LITERATURE I: GT-AH2**

3 CR. (3L)

PRQ: A grade of "C" or better in ENG 121 or equivalent assessment test score. 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 125

## **STUDY OF THE SHORT STORY**

3 CR. (3L)

PRQ: A grade of "C" or better in ENG 121. Focuses on careful reading and interpretation of the short story as a distinct genre. It examines formal as well as thematic elements of short fiction. Critical thinking, discussion, and writing about short stories will enhance perceptive reading skills and heighten awareness of the human condition.

LIT 126

## **STUDY OF POETRY**

3 CR. (3L)

PRQ: ENG 060 or ACCUE 60 and ACCUR 71. 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 175-177

## **SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

LIT 201

## **WORLD LITERATURE TO 1600 GT-AH2**

3 CR. (3L)

PRQ: A grade of "C" or better in ENG 121. 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 202

## **WORLD LITERATURE AFTER 1600 GT-AH2**

3 CR. (3L)

PRQ: A grade of "C" or better in ENG 121. Examines significant writings in world literature from the seventeenth 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 205

## **ETHNIC LITERATURE: GT-AH2**

3 CR. (3L)

PRQ: A grade of "C" or better in ENG 121. Focuses on significant texts by ethnic Americans including African-American, Native American, Latino/a, and Asian Americans. Emphasizes careful reading and understanding of the cultural and literary elements of the works. This course is one of the Statewide Guaranteed Transfer Courses, GT-AH2.

LIT 211

## **AMERICAN LITERATURE TO CIVIL WAR: AH2**

3 CR. (3L)

PRQ: A grade of "C" or better in ENG 121. Provides an overview of American literature from the Native American through the nineteenth 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 212

## **AMERICAN LITERATURE AFTER CIVIL WAR: AH2**

3 CR. (3L)

PRQ: A grade of "C" or better in ENG 121. Provides an overview of American literature from the mid-nineteenth 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 238

## **INTRODUCTION TO MODERN POETRY**

3 CR. (3L)

PRQ: A grade of "C" or better in ENG 121. Demonstrates how modern poetry works, what it means, and how history, imagination and language are used in the act of poetic creation.

LIT 246

## **LITERATURE OF WOMEN**

3 CR. (3L)

PRQ: A grade of "C" or better in ENG 121. Examines the techniques and themes in literature by and about women by examining women's issues from various genres.

LIT 255

## **CHILDREN'S LITERATURE**

3 CR. (3L)

PRQ: ENG 090 or equivalent assessment test score. Evaluates the criteria for selecting appropriate literature for children through exploration of genres, age levels, values taught through literature, and the literary and artistic quality of various texts.

LIT 275-277

## **SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

# Machining Technology

MAC 101

## **INTRODUCTION TO MACHINE SHOP**

3 CR. (1L/3 LBV)

Covers safety procedures, use of bench tools, layout tools, power saws, drill presses, precision measurement tools, and various hand tools related to the machine shop. Also included are sharpening drill bits and general purpose turning tools for the lathe and determining speeds and feeds for both the lathe and the milling machine.

\*\*MAC 102

## **BLUEPRINT READING**

3 CR. (4.5 LBV)

Students read blueprints and interpret symbols, notes dimensions and tolerances.

MAC 105

**INTRODUCTION TO MACHINING TECHNOLOGY**

4 CR. (1.5L/3.75 LBV)

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 110

**INTRODUCTION TO ENGINE LATHE**

3 CR. (4.5 LBV)

Introduces basic lathe applications which will consist of identifying lathe components and controls, understanding turning safety, calculating speeds and feeds, using various tools and tool holders, identifying basic tool geometry, and the use of common lathe spindle tooling. Students will perform basic lathe operations, which will consist of facing, center-drilling, chuck turning, turning between centers, boring, grooving, tapers, knurling, and single point threading. Students will be required to produce specified parts to a tolerance of +/- .004 in. and perform competencies set by manufacturing standards.

\*\*MAC 112

**ADVANCED ENGINE LATHE**

3 CR. (4.5 LBV)

Prepares students to form radius, single-point isometric threads, turn spherical radius, use a radius gauge, and work within .0005 inches tolerance externally.

\*\*MAC 113

**ENGINE LATHE SETUPS AND OPERATIONS IV**

3 CR. (4.5 LBV)

Teaches students to hold .0005 tolerance internally, use an arbor and a sine bar, and taper within one minute angular tolerance.

\*\*MAC 120

**INTRODUCTION TO MILLING MACHINE**

3 CR. (4.5 LBV)

Teaches students to identify the major parts of the vertical mill, align a vise, use an indicator, edge finder, and boring head, determine speeds and feeds perform simple indexing, mill flat, square surfaces and slots, drill, bore, and tap holes, and work within a plus or minus .002 inch tolerance.

\*\*MAC 121

**INTERMEDIATE MILLING MACHINE**

3 CR. (4.5 LBV)

Prepares students to determine hole locations by coordinates and degrees, use a rotary table, use a jig bore to drill holes by the coordinate method, and work within plus or minus .001 inch tolerance.

\*\*MAC 122

**ADVANCED MILLING MACHINE OPERATIONS**

3 CR. (4.5 LBV)

Prepares students to indicate the head of a vertical mill, bore holes, drill holes at an angle, and work with tolerances of .0008 inches location and diameter.

\*\*MAC 123

**HORIZONTAL MILL SET UP & OPERATIONS DESCRIPTION**

3 CR. (4.5 LBV)

Prepares students to identify the major parts and accessories for the horizontal mill, select cutters, mill slots, slab mill, and square a workpiece, and work within a tolerance of plus or minus .002 inches.

MAC 130

**CONVENTIONAL LATHE OPERATIONS**

4 CR. (1.5L/3.75 LBV)

Covers basic lathe applications which will consist of identifying lathe components and controls, understanding turning safety, calculating speeds and feeds, using various tools and tool holders, identifying basic tool geometry, and the use of common lathe spindle tooling. Students will perform basic lathe operations, which will consist of facing, center-drilling, chuck turning, turning between centers, boring, grooving, tapers, knurling, and single point threading. Students will be required to produce specified parts to a tolerance of +/- .004 in. and perform competencies set by manufacturing standards.

MAC 131

**MILLING MACHINES AND OPERATIONS**

4 CR. (1.5L/3.75 LBV)

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 141

**ADVANCED MACHINING OPERATIONS**

4 CR. (1.5L/3.75 LBV)

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 145

**PRODUCTION MANUFACTURING CONCEPTS**

3 CR. (3L)

Familiarizes the student to concepts related to manufacturing environments. Topics will consist of, but not be limited to Material Identification, Shop Floor Management, Just-In Time Manufacturing, Kan-Ban Systems, Statistical Quality Control, Total Quality Management. Various lectures and demonstrations of these processes will be delivered. Students may be required to re-search, explore, and report on particular manufacturing processes or topics.

MAC 146

**ABRASIVE WATERJET MACHINING**

3 CR. (1L/3 LBV)

Provides the student an introduction to manufacturing processes using an abrasive waterjet machine. The student will also become familiar with the care and maintenance of abrasive waterjet machines.

MAC 175-177  
**SPECIAL TOPICS**  
0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

MAC 201  
**INTRODUCTION TO CNC TURNING OPERATIONS**  
3 CR. (1L/3 LBV)

CORQ: MAT 090, equivalent assessment test score, or Instructor approval. Covers computer numerical control (CNC) lathe operations, control functions, the letter address system, the program format, and machine setup. G & M codes, control functions, the letter address system, and math issues related to CNC are included. This class is NOT offered on an open-entry, open-exit basis.

\*\*MAC 202  
**CNC TURNING OPERATIONS II**  
3 CR. (4.5 LBV)

Prepares students to write basic computer numerical control (CNC) lathe part programs. G and M codes, math related to CNC, setups, speeds and feeds, straight turning, spherical turning, threading, chamfering, tapering, drilling, tapping, boring, and grooving will be covered. Cutter compensations, sub-programming techniques, repetitive cycles, and both absolute and incremental will be incorporated into programs. Students will also proof and edit the programs to make them valid. This class is NOT offered on an open-entry, open-exit basis.

MAC 205  
**INTRODUCTION TO CNC MILLING OPERATIONS**  
3 CR. (1L/3 LBV)

CORQ: MAT 090, equivalent assessment test score, or Instructor approval. Provides transitional information between conventional machining applications and the typical applications found in Computer Numerical Control Machining. Topics may consist of Numerical Control Systems, The Cartesian Coordinate System, High Efficiency Tooling Applications, Objectives of Numerical Control, Calculating Speed and Feed Rates, Defining and Calculating Tool Motion, Fixturing Requirements, Basic Program Structure, Programming Codes, and Basic Conversational Programming. Operations of NC machines will be required.

MAC 206  
**CNC MILLING OPERATIONS II**  
3 CR. (1L/3 LBV)

Exposes the student to the principle operations of both vertical and horizontal CNC milling machines via lecture instruction methods, multi-media instruction methods, and manufacturing hands-on methods. The student will be exposed to the basic CNC machining center, principle operations, manual controls, programming methods, tool-offsets, G54-G59 work offsets, cutter radius compensation and tool selection methods. General operator skills and basic setup skills will be stressed.

\*\*MAC 221  
**SURFACE GRINDER SETUPS AND OPERATIONS**  
3 CR. (4.5 LVB)

Teaches students how to identify major parts and accessories of the surface grinder and grind flat, vertical, and angular surfaces to a tolerance of .0002 position and size.

MAC 240  
**CAD/CAM 2D**  
3 CR. (3L)

PRQ: CIS 110, equivalent assessment test score, or Instructor approval. Provides the student with the essential concepts and techniques that are required to successfully create part geometry, generate tool path, verify tool path models, and post process the NC codes. The student will be exposed to a 2-axis machining, 3-axis machining wire frame and surface modeling, lathe programming, and DNC systems. Programming projects and models will be demonstrated in the CNC manufacturing lab.

MAC 241  
**CAD CAM 2D LAB**  
3 CR. (1L/3 LBV)

Requires students to produce a variety of lab exercises on robotic machinery in conjunction with MAG 240. Aspects of toolpaths for contour, drill and pocket will be covered. Chaining geometry, setting parameters, and managing cutter compensations will be addressed in both multi-tool programs and remachining operations. Coursework will primarily focus on 2D geometry projects.

MAC 245  
**CADCAM 3D**  
3 CR. (1L/3 LBV)

Covers both the production and surfacing of three-dimensional geometry in a self-paced setting. Issues will be covered related to the production of wire frames, solids, surfaces, the joining of surfaces, joining of solids, managing construction planes, sweeping, rotating, and controlling parameter settings. A familiarity with Mastercam, CNC programming techniques, and CNC operations is recommended.

MAC 246  
**CADCAM 3D LAB**  
3 CR. (1L/3 LBV)

Requires students to produce a variety of three dimensional lab exercises on robotic machinery in a self-paced format in conjunction with MAG 225. Coursework will focus primarily on advanced geometry to include developing an understanding of CNC codes related to work offsets, cutter compensations, and tool management within CAD/CAM programs on the milling machine.

MAC 250  
**ADVANCED INSPECTION TECHNIQUES**  
3 CR. (1L/3 LBV)

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 252  
**PRACTICAL METALLURGY**  
3 CR. (4.5 LBV)

Offers a study of metallurgical terms and definitions in an effort to understand both the behavior of metals and their service to industry. Characteristics during heating, cooling, shaping, forming, and the stresses related to their mechanical properties are covered. The theory behind the alloys, heat treatment processes, and the impact they have on strength, toughness, hardness, elasticity, ductility, malleability, wear resistance and fatigue resistances is investigated.

MAC 254

**LIFTING DEVICES**

1 CR. (.5L/.75 LBV)

Introduces the student to safe rigging procedures as well as calculating maximum load at numerous angles.

MAC 255

**MECHANICAL COMPONENTS I**

5 CR. (2L/4.5 LBV)

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 256

**INDUSTRIAL COMPONENTS**

3 CR. (2L/1.5 LBV)

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.

MAC 265

**MECHANICAL COMPONENT II**

3 CR. (2L/1.5 LBV)

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 275-277

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

## Management

MAN 102

**BUSINESS ETHICS AND VALUES**

1 CR. (1L)

Discusses behavior and identifies what is ethical and appropriate behavior and what is not. This course will identify the role of integrity, character, honesty, self-control, self-sacrifice, and core values in developing ethical and effective behavior in the workplace.

MAN 103

**MANAGING BUSINESS CHANGE**

1 CR. (1L)

Explore 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 104

**MANAGING WORKPLACE STRESS**

1 CR. (1L)

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 105

**LOGISTICS MANAGEMENT**

3 CR. (3L)

PRQ: MTE 101, CIS 151, CIS 131 OR CIS 118. Explores the logistic system from in-bound 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 116

**PRINCIPLES OF SUPERVISION**

3 CR. (3L)

PRQ: REA 060 and ENG 060, or equivalent assessment test scores, or Department Chair approval. 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 117

**TIME MANAGEMENT**

1 CR. (1L)

Provides students with the conceptual knowledge and tools to make better use of their time in the management function.

MAN 125

**TEAM BUILDING**

1 CR. (1L)

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 128

**HUMAN RELATIONS IN ORGANIZATIONS**

3 CR. (3L)

PRQ: CIS 110, ENG 060, REA 060, or equivalent assessment test scores or Department Chair approval. Explores the importance of effective communication in our personal lives as well as in the world of business. Practical business applications such as employee motivation, handling customer complaints, and effectively resolving conflict in the workplace will be a major part of the curriculum.

MAN 168

**BASIC PROCESS CONTROLS**

3 CR. (3L)

PRQ: MTE 101, MTE 120, MAT 121, CIS 131, CIS 151 OR CIS 118. Presents the basic concepts and terminology of statistical process control. Participants learn and practice the seven quality tools to find and remove causes of process variation. Participants will identify and become familiar with the basic statistical tools, their uses, and potential application and be introduced to process capability, variation, and process control.

MAN 175-177

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

MAN 200

**HUMAN RESOURCE MANAGEMENT I**

3 CR. (3L)

PRQ: CIS 110, ENG 090, REA 090, or equivalent assessment test scores or Department Chair approval. Provides the student with a broad overview of the contemporary issues, theories and principles used to effectively manage human resources. Topics include recruiting, hiring, compensation and benefits, training and development, employee relations and legal issues.

MAN 201

**HUMAN RESOURCE MANAGEMENT II**

3 CR. (3L)

PRQ: MAN 200. Offers further discussion of concepts of Human Resources. Topics covered include techniques and procedures in resources planning, appraising performance, selection and staffing, training and development, job enrichment, and wage and salary administration.

MAN 215

**ORGANIZATIONAL BEHAVIOR**

3 CR. (3L)

PRQ: MAN 128. Examines the behaviors of groups and individual members of organizations and how that behavior can be influenced. Course emphasis is on the tools managers use to achieve organizational effectiveness.

MAN 216

**SMALL BUSINESS MANAGEMENT**

3 CR. (3L)

PRQ: CIS 110, ENG 090, REA 090 or MAT 107, or equivalent assessment test scores or Department Chair approval. 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 224

**LEADERSHIP**

3 CR. (2L/2LBA)

Focuses on the leadership skills necessary to bring about change in an organization. Students learn to develop and communicate a shared vision, to empower employees, to manage conflict, to negotiate, and to develop organizations so that all are working toward common goals.

MAN 225

**MANAGERIAL FINANCE**

3 CR. (3L)

PRQ: CIS 110, ENG 090, REA 090, MAT 090 or MAT 107, or equivalent assessment test scores or Department Chair. 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 226

**PRINCIPLES OF MANAGEMENT**

3 CR. (3L)

PRQ: CIS 110, ENG 090, REA 090, or equivalent assessment test scores or Department Chair approval. Presents a survey of the principles of management. Emphasis is on the primary functions of planning, organizing, leading and controlling with a balance between the behavioral and operational approach.

MAN 227

**OPERATIONS MANAGEMENT**

3 CR. (3L)

PRQ: CIS 110, ENG 060, REA 060, MAT 060, or equivalent assessment test scores or Department Chair approval. Covers the central role and importance of the operations function in both service and product organizations. Strategy, design, scheduling, materials handling, inventory, production, supply chain management and distribution are covered.

MAN 241

**PROJECT MANAGEMENT IN ORGANIZATIONS**

3 CR. (2L/1.5 LBV)

PRQ: CIS 110, ENG 090, REA 090, MAT 090 or MAT 107, or equivalent assessment test score or Department Chair approval. 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 275-277

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

MAN 289

**CAPSTONE: MANAGEMENT INFORMATION SYSTEMS**

3 CR. (9 INT)

PRQ: CIS 110, ENG 060, REA 060, MAT 060, or equivalent assessment test score or Department Chair approval. 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 101

**INTRODUCTION TO MANUFACTURING**

3 CR. (3L)

Gives students a broad understanding of manufacturing and the role of the manufacturing technician. Students learn how manufacturing is important to Colorado and the U.S. Topics covered include manufacturing concepts, principles, and processes, cost elements, tools and techniques, safety, current trends and manufacturing in the future.

MTE 120

**MANUFACTURING PROCESSES**

3 CR. (3L)

Provides the student an overview of the different methods, tools and machines which are used to manufacture industrial and consumer products.

MTE 220

**MANUFACTURING BUSINESS AND ECONOMICS**

3 CR. (3L)

PRQ: MTE 101, MTE 120, MAT 121, MAN 168. Covers basic macroeconomic concepts, the role of manufacturing in advanced economics, and the role of product development and manufacturing in a modern company. Students learn how to read and understand a complete set of financial statements, application of activity-based costing to determine core competencies and quotation preparation, marketing basics, e-business basics, and entrepreneurship basics. Students learn the differences between Original Equipment Manufacturers (OEM) and Contract Electronics Manufacturers (CEM's).

MTE 244

**LEAN MANUFACTURING PRAC/PROC**

3 CR. (3L)

PRQ: MAN 168. Provides a study of the Toyota Production System (TPS), also known as Lean Manufacturing, Just-in-Time (JIT), Demand Flow, or Build-to-Order. The course covers the build-to-forecast batch-process method and compares it with TPS. The students study and develop in the lab the following TPS concepts/methods: customer expectations, seven fundamental wastes, plan-do-check-act cycle, kanban system and kanban types, material flow, group technology, manufacturing cells, point-of-use storage and support, and setup/changeover time reduction. This course also covers application of the following problem solving tools: flowchart, cause-and-effect diagram, check sheet, pareto chart, root cause analysis, statistical process control. Students investigate the basics of high-mix, low-volume manufacturing.

MTE 289

**MANUFACTURING CAPSTONE**

3 CR. (3L)

PRQ: Instructor's permission only. Provides a demonstrated culmination of learning with a given program of study.

## Marketing

MAR 106

**MARKETING YOUR IMAGE**

3 CR. (3L)

Teaches students how to market themselves to prospective employers, clients, professional groups, and audiences of all types. Major emphasis will be placed on skills used to gain employment (resumes, interviewing, and professional appearance) and on skills used to achieve continued personal success (professional behavior and attitude). The course will include at least one simulated interview.

MAR 111

**PRINCIPLES OF SALES**

3 CR. (3L)

PRQ: CIS 110, ENG 060, REA 060, or equivalent assessment test scores or Department Chair approval. Enables the student to understand and develop ethical sales techniques and covers the role of selling in the marketing process. Areas of emphasis include behavioral considerations in the buying and selling process and sales techniques.

MAR 117

**PRINCIPLES OF RETAILING**

3 CR. (3L)

PRQ: CIS 110, ENG 060, REA 060, MAT 060, or equivalent assessment test scores or Department Chair approval. Emphasizes the study of the basic principles and techniques of merchandising, operations, layout, store organization, site location, and customer service with an emphasis on retailing operations.

MAR 158

**BASIC CUSTOMER SERVICE**

1 CR. (1L)

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 160

**CUSTOMER SERVICE**

3 CR. (3L)

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 175-177

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

MAR 216

**PRINCIPLES OF MARKETING**

3 CR. (3L)

PRQ: CIS 110, ENG 060, REA 060, MAT 060, or equivalent assessment test scores or Department Chair approval. Presents the analysis of theoretical marketing processes and the strategies of product development, pricing, promotion and distribution, and their applications to businesses and the individual consumer.

MAR 220

**PRINCIPLES OF ADVERTISING**

3 CR. (3L)

PRQ: CIS 110, ENG 090, REA 060, MAT 060, or equivalent assessment test scores or Department Chair approval. 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 222

**IMPLEMENTING e-COMMERCE**

3 CR. (3L)

PRQ: CIS 110, ENG 090, REA 060, MAT 060, or equivalent assessment test scores or Department Chair approval. Provides the student with practical skills and knowledge of e-commerce implementation methodology. Topics include strategic planning for e-commerce, project management, change management, role of technology, implementation planning and assessment. Students use case studies to examine standards and practices of businesses implementing e-commerce applications and solutions.



MAR 275-277  
**SPECIAL TOPICS**  
0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

## Massage Therapy

MST 105  
**LIFESTYLE WELLNESS**  
2 CR. (1L/1.5 LBV)

PRQ: REA 090 or equivalent assessment test score. Provides opportunity to learn and apply specific wellness principles to your individual lifestyle. Student completes self-analysis of health behaviors and how lifestyle affects health status.

MST 110  
**ETHICS FOR MASSAGE THERAPY**  
1CR. (1L)

PRQ: ENG 060, REA 060. Focuses on the ethical issues associated with the practice of massage therapy. Emphasis will be on the NCBTMB Code of Ethics, confidentiality of client information, and effective and appropriate interpersonal communication with clients and peers.

MST 111  
**BASIC MASSAGE THERAPY**  
4 CR. (2L/3 LBV)

PRQ: BIO 106, HPR 178 and admission to the Massage Therapy program. Introduces theory and techniques of therapeutic massage, including understanding of physiological benefits of massage as well as proper body mechanics and appropriate draping. Focuses on basic strokes of Swedish massage. Students also learn techniques of seated massage.

MST 113  
**PROFESSIONAL MASSAGE**  
3 CR. (1L/3 LBV)

PRQ: MST 111 and admission to the Massage Therapy program. Continues the study of Integrative Therapeutic Massage techniques with emphasis on assessing and meeting client's needs. Students give massage in supervised in-class clinicals, applying appropriate therapeutic intervention.

MST 178  
**SEMINAR**  
3 CR. (2L/1.5 LBV)

PRQ: MST 113, HHP 271. Provides students with an experiential learning opportunity.

MST 184  
**CLINICAL MASSAGE**  
3 CR. (6 CLI)

PRQ: MST 113, HHP 208, HHP 271. Applies skills in a clinical setting. Focuses on improvement of massage therapy skills, ethics, and communication.

MST 204  
**MST BUSINESS PRACTICES**  
2 CR. (2L)

PRQ: REA 090 or equivalent assessment test score. Assists the practitioner of massage therapy to envision, market, establish and maintain a professional massage therapy practice.

MST 216  
**PATHOLOGY FOR MASSAGE THERAPY**  
3 CR. (3L)

PRQ: HPR 117, MST 111. Focuses on basic knowledge of disease and injury to assist the massage therapist to promote healing, ease pain and discomfort, and avoid complications during therapy. With a broad perspective of pathology and specific pathophysiology of diseases contributing to the need for massage therapy, this course provides the foundational science for safe practice.

MST 275-277  
**SPECIAL TOPICS**  
0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

MST 284  
**CLINICAL MASSAGE**  
3 CR. (6 CLI)

PRQ: Completion of all MST program courses. Provides an application of massage therapy skills in a clinical setting. This course focuses on improvement of techniques, communication with clients and other health professionals as well as documentation of massage sessions.

MST 289  
**CAPSTONE**  
2 CR. (2L)

PRQ: MST 111. Demonstrates the culmination of learning within a given program of study.

HHP 130  
**REIKI LEVEL ONE**  
1 CR (1L)

PRQ: REA 090, ENG 090, MAT 060. Permission of Program Chair. Explores the traditional Usui use of Reiki. Covers the history and development of Reiki work, beginning in Japan, to Hawaii, to the U.S., and later Europe. Focuses 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 145  
**DIGESTIVE WELLNESS**  
1 CR. (1L)

PRQ: ENG 090. Provides the student with information on nutritional and herbal self-care treatments.

HHP 175-177  
**SPECIAL TOPICS**  
0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

HHP 208  
**ADVANCED MUSCULOSKELETAL ANATOMY**  
2 CR. (1L/1.5 LBV)

PRQ: BIO 106, HPR 178, HPR 117. Presents an intensive study of the musculoskeletal system. Focus will be on understanding the bony structures and the relationship of the muscular system to the skeletal system from a dynamic perspective. Classes include lecture and work with the Maniken<sup>®</sup> system – building muscles with clay on a scaled down and anatomically accurate skeleton. Clinical connections will be made to take the study of anatomy out of the purely technical arena, and into the practical. The other nine systems of the body will be touched on briefly, because to clinically understand the practical applications of anatomy, you have to be aware of the interconnectedness of all the systems of the body.

HHP 224

**INTRODUCTION TO MASSAGE THERAPY**

1CR (1L)

Teaches hands-on techniques to complete a full body massage along with integration of healing touch. Swedish massage techniques and basic foot reflexology combined with a complete energy balance are performed and experienced by each student.

HHP 246

**SECOND DEGREE REIKI**

1 CR (1L)

PRQ: HHP 130. Permission of Program Chair. 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 atunement 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 270

**CLINICAL**

2 CR. (4 CLI)

PRQ: BIO 106, HPR 178. Continues to build upon the principles that are expected to be understood by students in the holistic health discipline.

HHP 271

**CLINICAL**

2 CR. (4 CLI)

PRQ: BIO 106, HPR 178, HHP 270, MST 111. Continues to build upon the principles that are expected to be understood by students in the health discipline.

HHP 275-277

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

HPR 117

**ANATOMICAL KINESIOLOGY**

3 CR. (1L/3 LBV)

PRQ: BIO 106. Studies the Anatomical Bases of Human Movement.

## Mathematics

MAT 030

**FUNDAMENTALS OF MATHEMATICS**

2 CR. (2L)

PRQ: ACCUPLACER arithmetic score higher than 23. Includes the vocabulary, operations and applications of whole numbers, decimals and basic fractions and mixed numbers. S/U

MAT 060

**PRE-ALGEBRA**

3 CR. (3L)

PRQ: Successful completion of MAT 030 or equivalent assessment test score. Furthers the study of fractions and mixed numbers. Also included are vocabulary, operations and applications of ratio, proportion, percent, area, perimeter, US and metric measures, integers, and an introduction to algebraic expressions and the solution of basic first-degree equations. S/U

MAT 075-076

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

MAT 090

**INTRODUCTORY ALGEBRA**

4 CR. (4L)

PRQ: Successful completion of MAT 060 with a grade of C or better or equivalent assessment test score. Includes first-degree equations, inequalities, formulas, polynomials, algebraic fractions, factoring polynomials, solving quadratic equations by factoring, and applications. Coordinate geometry, graphing linear equations and inequalities, and systems of linear equations may be included. S/A - U/F

MAT 099 (FORMERLY MAT 106)

**SURVEY OF ALGEBRA**

4 CR. (4L)

PRQ: Successful completion of MAT 090 with a grade of C or better or equivalent assessment test score. Emphasizes problem solving with further study of equations, slope, inequalities, systems of equations, polynomials, quadratic equations, rational expressions, rational exponents, radical expressions, graphing and applications. A graphing calculator or equivalent software may be utilized.

MAT 103

**MATH FOR CLINICAL CALCULATIONS**

3 CR. (3L)

PRQ: MAT 090 or equivalent assessment test score. 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 107

**CAREER MATH**

3 CR. (3L)

PRQ: Successful completion of MAT 060 or equivalent assessment test score. 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 108

**TECHNICAL MATHEMATICS**

4 CR. (4L)

PRQ: Successful completion of MAT 090 with a grade of C or better or equivalent assessment test score. 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 112

**FINANCIAL MATHEMATICS**

3 CR. (3L)

PRQ: Successful completion of MAT 060 or equivalent assessment test score. Covers topics including pricing, taxes, insurance, interest, annuities, amortization, investments using financial calculators and spreadsheets.

MAT 120

**MATHEMATICS FOR THE LIBERAL ARTS: GT-MA1**

4 CR. (4L)

PRQ: Successful completion of MAT 090 with a grade of S/C or better or equivalent assessment test score. Develops mathematical and problem-solving skills. Appropriate technological skills are included. Content is selected to highlight connections between mathematics and the society in which we live. Topics include set theory and logic, mathematical modeling, probability and statistical methods, and consumer mathematics. Additional content will include one topic in geometry, numeration systems, decision theory, or management science. This course is one of the Statewide Guaranteed Transfer Courses, GT-MA1.

MAT 121

**COLLEGE ALGEBRA: GT-MA1**

4 CR. (4L)

PRQ: Successful completion of MAT 099 with a grade of C or better or equivalent assessment test score. Includes a brief review of intermediate algebra, equations, and inequalities, functions and their graphs, exponential and logarithmic functions, linear and non-linear systems, selection of topics from among graphing of the conic sections, introduction to sequences and series permutations and combinations, the binomial theorem and theory of equations. This course is one of the Statewide Guaranteed Transfer Courses, GT-MA1.

MAT 122

**COLLEGE TRIGONOMETRY: GT-MA1**

3 CR. (3L)

PRQ: Successful completion of MAT 121 with a grade of C or better or equivalent assessment test score. 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 125

**SURVEY OF CALCULUS: GT-MA1**

4 CR. (4L)

PRQ: Successful completion of MAT 121 with a grade of C or better or equivalent assessment test score. 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 135

**INTRODUCTION TO STATISTICS: GT-MA1**

3 CR. (3L)

PRQ: Successful completion of MAT 090 with a grade of S/C or better or equivalent assessment test score. Includes 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 155

**INTEGRATED MATH I: GT-MA1**

3 CR. (3L)

PRQ: Successful completion of MAT 099 with a grade of C or better or equivalent assessment test score. Engages students in the concepts of school mathematics, the course will include 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.) This course is one of the Statewide Guaranteed Transfer Courses, GT-MA1.

MAT 156

**INTEGRATED MATH II: GT-MA1**

3 CR. (3L)

PRQ: Successful completion of MAT 155 with a grade of C or better. Continues MAT 155. It includes the study of the fundamentals of probability, statistics, and informal Euclidean geometry suitable for K-8 curriculum, employing laboratory techniques where applicable. (This course is only offered in the Spring semester.) This course is one of the Statewide Guaranteed Transfer Courses, GT-MA1.

MAT 175-177

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

MAT 201

**CALCULUS I: GT-MA1**

5 CR. (5L)

PRQ: Successful completion of MAT 122 with a grade of C or better or equivalent assessment test score. Introduces single variable calculus and analytic geometry. Includes limits, continuity, derivatives, and applications of derivatives as well as indefinite and definite integrals and some applications. (This course is only offered in the Fall semester.) This course is one of the Statewide Guaranteed Transfer Courses, GT-MA1.

MAT 202

**CALCULUS II: GT-MA1**

5 CR. (5L)

PRQ: Successful completion of MAT 201 with a grade of C or better. Continuation of single variable calculus which will include techniques of integration, polar coordinates, analytic geometry, improper integrals, and infinite series. (This course is only offered in the Spring semester.) This course is one of the Statewide Guaranteed Transfer Courses, GT-MA1.

MAT 203

**CALCULUS III: GT-MA1**

4 CR. (4L)

PRQ: Successful completion of MAT 202 with a C or higher. Completes 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 275-277

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

# Medical Office Technology

MOT 110

## **MEDICAL OFFICE ADMINISTRATION**

4 CR. (4L)

PRQ: CIS 110 or equivalent assessment test score, HPR 178, MOT 208, MOT 209 and HPR 208, or Department Chair approval.

Introduces the administrative duties specifically used in medical offices.

MOT 120

## **MEDICAL OFFICE FINANCIAL MANAGEMENT**

3 CR. (3L)

PRQ: BIO 106. Covers the practical uses of accounts and records with emphasis on accounting principles and analysis for use in a medical office.

MOT 123

## **INTRODUCTION TO CLINICAL PHYSIOLOGY**

1 CR. (1L)

CORQ: BIO 106 or by approval of department chair.

Introduces the allied health professional to the human body and introduces the fields of chemistry and biology with applications to the function of the human body. It examines the states of homeostasis and disease and alterations in those states. Students will also be introduced to the study of pharmacology and applying the disciplines of chemistry and biology to body processes. This course is a pre-requisite for MOT125, MOT133, and MOT135.

MOT 125

## **BASIC MEDICAL SCIENCES I**

3 CR. (3 L)

CORQ: BIO 106; MOT 123 or by approval of department chair

Teaches the anatomy and physiology, pathophysiology and drug therapy of the immune, musculoskeletal, and digestive systems. A discussion of pediatric implications as they relate to clinical physiology will also be covered. This course is a follow-on course from MOT133. Students may take MOT125, MOT133 and MOT135 in any order after successfully completing MOT123.

MOT 130

## **INSURANCE BILLING & CODING**

3 CR. (3L)

Introduces outpatient coding with an ultimate goal to present a clear picture of medical procedures and services performed (CPT codes), correlating the diagnosis, symptom, complaint or condition (ICD-9 codes), thus establishing the medical necessity required for third-party reimbursement.

MOT 131

## **ADVANCED INSURANCE BILLING AND CODING**

3 CR. (3L)

Prepares the student to code correctly, and optimize reimbursements for a full range of medical services by expanding coverage of diagnostic and therapeutic procedures, official coding guidelines, APG's, APC's, DRGs, Medicare fraud and abuse.

MOT 132

## **MEDICAL TRANSCRIPTION I**

4 CR. (3 L/1.5 LBV)

PRQ: CIS 110 and ENG 121 or equivalent assessment test scores, ENG 113, BTE 103, BTE 166, HPR 208, and minimum of 45 wpm, or Department Chair approval. Provides basic knowledge, understanding, and skills required to transcribe medical dictation with accuracy, clarity, and timeliness, applying the principles of professional and ethical conduct.

MOT 133

## **BASIC MEDICAL SCIENCES II**

3 CR. (3 L)

CORQ: BIO 106; MOT 123 or by approval of department chair.

Teaches the anatomy and physiology, pathophysiology and drug therapy of the cardiovascular, respiratory, and dermatology systems. This course is a follow-on course from MOT123.

Students may take MOT125, MOT133, and MOT135 in any order after successfully completing MOT123.

MOT 135

## **BASIC MEDICAL SCIENCES III**

3 CR. (3 L)

CORQ: BIO 106; MOT 123 or by approval of department chair

Covers the anatomy and physiology, pathophysiology and drug therapy of the Renal, Reproductive, Neurological, and Endocrine systems. This course is a follow-on course from MOT123.

Students may take MOT125, MOT133, and MOT135 in any order after successfully completing MOT123.

MOT 136

## **INTRODUCTION TO CLINICAL SKILLS**

2 CR. (3 LBV)

CORQ: BIO 106. Provides hands on experience with the basic

clinical skills required for assisting with patient care in an ambulatory setting. Delivers the theory behind each skill presented as well as proper technique for performing each skill. Includes knowledge and/or performance of universal precautions/OSHA regulations, HIPAA, medical asepsis, procedural gowning and gloving, patient draping and positioning, and measurement of vital signs.

MOT 138

## **MEDICAL ASSISTING LABORATORY SKILLS**

4 CR. (2L/3 LBV)

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. Emphasizes hands-on experience.

MOT 140

## **MEDICAL ASSISTING CLINICAL SKILLS**

4 CR. (2L/3 LBV)

Provides hands on experience with the clinical skills required for assisting with patient care. Delivers the theory behind each skill presented as well as proper technique for performing each skill.

MOT 142

## **MEDICAL TRANSCRIPTION II**

4 CR. (3L/1.5 LBV)

PRQ: CIS 110 or equivalent assessment test score, MOT 132, BIO 106 and 50 wpm, or Department Chair approval. Uses a simulation approach to build student vocabulary and speed, while providing actual medical transcription of a variety of health care and medical reports at progressively increasing accuracy and productivity standards.

MOT 150

## **PHARMACOLOGY FOR MEDICAL ASSISTANTS**

3 CR. (3L)

PRQ: BIO 106. 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.

MOT 175-177

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

MOT 181

**ADMINISTRATIVE INTERNSHIP**

3 CR. (6 INT)

PRQ: Permission of Program Coordinator. Provides supervised placement in contracted facility for guided experience in application of knowledge and skill acquired in the classroom. Positions are non-paid due to CAAHEP requirement. Student must have permission by program coordinator to begin internship.

MOT 183

**MEDICAL ASSISTANT INTERNSHIP**

5 CR. (3 LBV/6 INT)

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 non-paid due to CAAHEP requirement. Student must have permission by program coordinator to begin internship.

MOT 189

**REVIEW FOR MEDICAL ASSISTANT NATIONAL EXAMINATION**

1 CR. (1L)

Prepares the candidate sitting for the National Registration/Certification Examination for Medical Assistant through review and practice. These examinations are given with the intent of evaluating the competency of entry-level practitioners in Medical Assisting, therefore supporting quality care in the office or clinic.

MOT 208

**INTRODUCTION TO CPT-4 CODING**

2 CR. (2L)

PRQ: CIS 110, equivalent assessment test score, or Department Chair approval. HPR 178 highly recommended. Teaches basic coding concepts using the CPT-4 coding system for insurance claims. The course will introduce student to the HCFA 1500 form, HCPCS codes, and modifiers to be used for insurance claim filing.

MOT 209

**INTRODUCTION TO ICD-9 CODING**

2 CR. (2L)

PRQ: CIS 110, equivalent assessment test score, or Department Chair approval. HPR 178 highly recommended. Covers how to use the ICD-9-CM coding system for insurance claims. The course will introduce student to using the HCFA 1500 form generated from the physician's office.

MOT 210

**INTERMEDIATE CODING**

3 CR. (3L)

PRQ: CIS 110 or equivalent assessment test score, MOT 208, MOT 209, or Department Chair approval. Covers how to abstract information from medical records and code it for insurance purposes.

MOT 225

**MEDICAL PRACTICE MANAGEMENT ISSUES**

4 CR. (4L)

Focuses on bringing acquired knowledge to issues faced specifically by medical practice managers and is the culmination of knowledge the student has learned in the program. Includes management priorities, principles of practice management – financial, clinical, personnel, and service, financial management control, information management systems, marketing, managed care contracting and negotiations, basic business policies of medical office compliance, coding and documentation.

MOT 275

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

MOT 280

**INTERNSHIP**

2 CR. (6 INT)

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.

## Meteorology

MET 150

**GENERAL METEOROLOGY: GT-SC1**

4 CR. (3L/2 LBA)

PRQ: MAT 090, REA 090, ENG 090, or equivalent assessment test scores. 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.

## Multimedia and Graphic Design

MGD 101

**INTRODUCTION TO COMPUTER GRAPHICS**

3 CR. (2 L/1.5 LBV)

Introduces the student to the computer system developed for graphics. The student will learn the hardware and software components for multimedia production. Each student will explore basic computer operations, ergonomics, file management, scanning techniques, archiving capabilities, and utilization of the multimedia department server and internet connection.

MGD 102

**INTRODUCTION TO MULTIMEDIA**

3 CR. (4.5 LBV)

PRQ: CIS 110, equivalent assessment test score, or Department Chair approval. Introduces the types of equipment and technical considerations used in multimedia productions and the multimedia professions. It focuses on current types of equipment such as scanners, printers, digital cameras and computers. Students gain hands-on experience in how the technology is utilized for input and output in production and design projects. Overview of software and basic design principles will be explored.

\*\*MGD 103

**PRODUCTION DESIGN**

3 CR. (1L/3 LBV)

Explores the use of tools, computer graphics techniques and design layout principles to produce professional graphic designs. Studies include printing basics, typography and digital color systems. Students use creative thinking to solve communication and design concepts for the output process.

MGD 104

**VIDEOGRAPHY**

3 CR. (1L/3 LBV)

Offers an introduction to the principles and techniques of videotape production, including camera operation, basic script writing, lighting, sound and basic digital editing. Detailed examination of the pre-production, production, and post-production processes, as well as aesthetics, will be included.

MGD 105

**TYPOGRAPHY & LAYOUT**

3 CR. (4.5 LBV)

PRQ: CIS 110 or equivalent assessment test score. Covers the creation and production of graphic projects, emphasizing the layout creative design process, problem solving, and research. Provides experience producing thumbnails, roughs and digital layouts emphasizing refined creative typography.

MGD 106

**CREATIVITY AND VISUAL THINKING**

3 CR. (6 STA)

Introduces the visual and oral skills necessary to analyze works art and design, articulate complex ideas, then present the solution cogently in 2-D and 3-D 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 107

**HISTORY OF DESIGN**

2 CR. (2L)

Explores the pivotal events and achievements that have led to the current state of graphic communication. Through lectures, slides, videos, class discussions and research; students discover the creative thinkers, innovations and breakthrough technologies that have shaped the evolution of visual communication, advertising and industrial design today.

\*\*MGD 108

**HISTORY OF ILLUSTRATION**

2 CR. (2L)

Presents a selected overview of the origins of illustration to the present giving equal emphasis to commercial illustration, fine art and gallery illustration. Special attention is paid to stylistic changes, work methods and social context.

\*\*MGD 109

**DESIGN & COLOR**

3 CR. (4.5 LBV)

Covers the design process and creative problem solving. Design and color theories, fundamentals, styles, stages area applied to workups, finished art, and presentations. Emphasis will be on line, form, composition, and continuity.

\*\*MGD 110

**LETTERING FOR GRAPHIC DESIGN**

2 CR. (3 LBV)

Studies lettering and letter forms; the various methods and mediums used in freehand and mechanically-rendered lettering; the design of lettering and practical applications of lettering in the field of graphic design.

MGD 111

**ADOBE PHOTOSHOP I**

3 CR. (4.5 LBV)

PRQ: CIS 110 or equivalent assessment test score. Concentrates on the high-end capabilities of a raster photo-editing software 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.

MGD 112

**ADOBE ILLUSTRATOR I**

3 CR. (4.5 LBV)

Acquaints students with the processes of a vector drawing program on the computer. Students learn how to use the tools to create digital artwork that can be used in web design, print media and digital screen design.

MGD 113

**QUARK XPRESS**

3 CR. (1L/3 LBV)

PRQ: CIS 110. 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 114

**ADOBE INDESIGN**

3 CR. (2L/1.5 LBV)

Introduces students to InDesign, a page layout program which integrates seamlessly with other Adobe design programs. InDesign delivers creative freedom and productivity to DTP. Class discussions and independent projects supplement hands-on classroom work.

\*\*MGD 116

**TYPOGRAPHY I**

3 CR. (6 STA)

Introduces the history and concepts of typography as applied to graphic communications. Explores appropriate use of typography in a variety of design applications, emphasizing the basic design principles of typographic compositions and typesetting. Covers type recognition and typographic terms.

\*\*MGD 117

**INTRODUCTION TO VISUAL COMMUNICATIONS**

3 CR. (3L)

Surveys visual communications, its history and impact on society. A foundation course for graphic design and illustration majors and a survey for non-majors who are interested in the field. Assignments require minimal artistic talent.

\*\*MGD 118

**DIGITAL COLOR THEORY**

3 CR. (3L)

Covers color theory as it relates to multimedia. The psychology of color is taught as well as how to effectively design with color. Students learn how to correct color photographs and create color separations. Color scanning technology is also covered.

\*\*MGD 128

**MULTIMEDIA HARDWARE**

3 CR. (3L)

Teaches the principles and techniques of maintaining, upgrading, and customizing personal computer systems. Emphasis will also be placed on various emerging and established technologies related to graphic computing.

MGD 133

**GRAPHIC DESIGN I**

3 CR. (4.5 LBV)

PRQ: CIS 110, equivalent assessment test score, or Department Chair approval. Focuses upon the study of design layout and conceptual elements concerning graphic design projects such as posters, advertisements, logos, and brochures.

MGD 141

**WEB DESIGN I**

3 CR. (4.5 LBV)

Introduces the fundamentals of HTML syntax using a simple text editor to create a web page. Web-safe colors and the use of graphic editors will be explored. Students study web aesthetics and intuitive interface design. The course emphasizes file organization and layout including tables and frames.

MGD 143

**WEB MOTION GRAPHIC DESIGN I**

3 CR. (1L/3 LBV)

PRQ: CIS 110, equivalent assessment test score, or Department Chair approval. Stresses creation of animation and dynamic interactive media for web and multimedia applications. Students will learn how to animate objects, create symbols, and assemble motion tweens.

MGD 145

**QUICKTIME TECHNOLOGIES**

3 CR. 2L/1.5 LBV)

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 153

**3D ANIMATION I**

3 CR. (1L/3 LBV)

Encompasses all major aspects of creating 3D characters using animation software. Using developed characters, the student will learn how to animate for personality.

MGD 163

**SOUND DESIGN I**

3 CR. (1L/3 LBV)

PRQ: CIS 110. 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 164

**DIGITAL VIDEO EDITING I**

3 CR. (1L/ 3 LBV)

PRQ: CIS 110 or equivalent assessment test score, RTV 102, or Department Chair approval. Introduces to digital non-linear video editing. Students will capture, compress, edit, and manipulate video images using a personal computer. Assembly techniques including media management, editing tools, titles, and motion control; transitions and filters, and special effects are explored.

MGD 167

**GAME DESIGN I**

3 CR. (1L/3 LBV)

PRQ: CIS 110, equivalent assessment test score, or Department Chair approval. 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 175-177

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

MGD 202

**POINT OF PURCHASE PACKAGING DESIGN**

3 CR. (4.5 LBV)

PRQ: CIS 110 or equivalent assessment test score, MGD 133, MGD 111. 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 204

**VIDEOGRAPHY II**

3 CR. (4.5 LBV)

Offers advanced study of digital video imaging concepts using digital cameras. Heavy emphasis is placed upon media aesthetics and the creative integration of sight, sound, and motion in student projects.

MGD 207

**ILLUSTRATION I**

3 CR. (4.5 LBV)

PRQ: CIS 110 or equivalent assessment test score. 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 211

**ADOBE PHOTOSHOP II**

3 CR (1L/1 LBV)

PRQ: MGD 111 or Instructor Permission. Develops and reinforces image composition techniques learned in Adobe Photoshop I, MGD 111. Fundamentals are continuously reinforced as new design techniques are introduced.

MGD 221

**COMPUTER GRAPHICS I**

3 CR. (4.5 LBV)

PRQ: CIS 110, equivalent assessment test score, or Department Chair approval. Introduces the process of generating computer design.

MGD 222

**COMPUTER GRAPHICS II**

3 CR. (6 STA)

PRQ: MGD 221 or instructor's permission. Continues MTD 221 with advanced problems in generating computer design for graphics application, emphasizing production of individual fine art pieces.

MGD 233

**GRAPHIC DESIGN II**

3 CR. (4.5 LBV)

PRQ: CIS 110 or equivalent assessment test score, MGD 133, or Department Chair approval. Continues instruction in idea development for advanced graphic design.

MGD 241

**WEB DESIGN II**

3 CR. (4.5 LBV)

PRQ: CIS 110 or equivalent assessment test score, MGD 141, or instructor approval. Expands on previously learned fundamentals of HTML introducing cascading style sheets, DHTML, JavaScripts and CGI forms. Color usage and interface design principles are emphasized in this course. In this course we'll examine Web sites that employ more complex structures, optimal site architecture and navigation necessary for larger and more complex sites.

MGD 243

**WEB MOTION GRAPHIC DESIGN II**

3 CR. (1L/3 LBV)

PRQ: MGD 143. Stresses the complex creation of 2D animated motion graphics concentrating on the prior skills learned and the use of scripting and behaviors. Students will create motion graphics using these skills and apply them to web sites. Web site justification of motion graphics will be stressed, appraised and weighed.

\*\*MGD 250

**EMERGING MULTIMEDIA TECHNOLOGIES**

3 CR. (4.5 LBV)

Provides a broad-based overview of current trends and issues in multimedia development and related industries. The class format will include lectures, readings, demos, discussion, research, projects, and a final student presentation. Course content changes each semester. May include topics such as voice/data/video integration, virtual environments, broadband, streaming media architectures, telco/CATV/satellite technologies, network-based applications, using technology for building community, wireless technology, current thinking in human factors and usability, XML and the semantic web, groupware and collaborative tools, pervasive computing, and others.

MGD 256

**GRAPHIC DESIGN PRODUCTION**

3 CR. (4.5 LBV)

PRQ: CIS 110 or equivalent assessment test score, MGD 133, MGD 102. 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 257

**ANIMATION PRODUCTION**

3 CR. (1L/3 LBV)

PRQ: CIS 110, equivalent assessment test score, or Department Chair approval. Examines development of 3D animation from a production standpoint. The process of transforming conceptual designs into actual projects is explored. Students study the management function of those tasks associated with the business end of development. The student will produce a 3D animation project.

MGD 264

**DIGITAL VIDEO EDITING II**

3 CR. (1L/3 LBV)

PRQ: MGD 164 or Instructor Permission. 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 266

**DVD AUTHORIZING**

3 CR. (4.5 LBV)

Introduces students to all aspects of DVD authoring: covering source acquisition, DVD production, interface design, organization, management and appropriate DVD output solutions.

MGD 267

**GAME DESIGN II**

3 CR. (1L/3 LBV)

PRQ: MGD 167. 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 268

**COMMERCIAL ART BUSINESS**

2 CR. (3 LBV)

PRQ: Instructor approval. Presents a guide to freelance work and a study of business practices and procedures unique to commercial art including billing rates, client management, business forms, employee management, taxes, licenses, registration, bid processes and self-promotion. Course may include visits by professionals in the field and discussion of career opportunities and professional organizations.

MGD 275-277

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

MGD 280

**INTERNSHIP**

1-6 CR. (3-18 INT)

PRQ: Approval from instructor. Provides students with the opportunity to supplement coursework with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor.

MGD 289

**CAPSTONE**

1-6 CR. (3-18 INT)

A demonstrated culmination of learning within a given program of study.



# Music

MUS 101

## **INTRODUCTION TO MUSIC THEORY**

3 CR. (3L)

Presents music fundamentals, diatonic four-part harmony, analysis, and keyboard harmony. For non-music majors.

MUS 120

## **MUSIC APPRECIATION: GT-AH1**

3 CR. (3L)

PRQ: REA 090, ENG 090, or equivalent assessment test scores. Covers the basic materials of music, musical forms, media, genres and musical periods. Emphasizes the development of tools for intelligent listening and appreciation. This course is one of the Statewide Guaranteed Transfer Courses, GT-AH1.

MUS 121

## **MUSIC HISTORY I: GT-AH1**

3 CR. (3L)

PRQ: REA 090, ENG 090, or equivalent assessment test scores. Studies the various periods of music history with regard to the composers, esthetics, forms, and genres of each period. Considers music from the Middle Ages through the Classical period. This course is one of the Statewide Guaranteed Transfer Courses, GT-AH1.

MUS 122

## **MUSIC HISTORY II: GT-AH1**

3 CR. (3L)

PRQ: REA 090, ENG 090, or equivalent assessment test scores. Studies the various periods of music history with regard to the composers, aesthetics, forms, and genres of each period. Considers music from the early Romantic period to the present. This course is one of the Statewide Guaranteed Transfer Courses, GT-AH1.

MUS 125

## **HISTORY OF JAZZ: GT-AH1**

3 CR. (3L)

PRQ: REA 090 or equivalent assessment test score. Provides a survey of the basic materials of music and the forms, media, genres, historical, and cultural style periods of jazz. It emphasizes the development of tools for intelligent listening and appreciation.

MUS 131

## **MUSIC CLASS**

2 CR. (5 STM)

Applies the fundamentals of music to the voice or specific musical instruments. This course also introduces basic techniques, repertoire, and sight-reading. First year, first term.

MUS 141

## **PRIVATE INSTRUCTION**

1-2 CR. (2.5-5 STM)

PRQ: Class instruction or permission of instructor. Additional fee required. 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. First year, first term.

MUS 142

## **PRIVATE INSTRUCTION**

1-2 CR. (.5-1 STM)

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 143

## **PRIVATE INSTRUCTION**

1-2 CR. (.5-1 STM)

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 144

## **PRIVATE INSTRUCTION**

1-2 CR. (.5-1 STM)

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, fourth term. May be repeated for credit more than once per individual institution policy.

MUS 151

## **ENSEMBLE I**

1 CR. (2.5 STM)

PRQ: Instructor's permission. First year, first term. Rehearses and performs various types of musical literature.

MUS 175-177

## **SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

MUS 241

## **PRIVATE INSTRUCTION**

2 CR. (5 STM)

PRQ: Class instruction or permission of the instructor. 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 275-277

## **SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

# Nail Technician

Please refer to "Cosmetology."

# Nursing

NUR 106

## **MEDICAL AND SURGICAL NURSING CONCEPTS**

9 CR. (3.5L/1 LBV/10 CLI)

PRQ: Admission to Nursing program and completion of preceding required program course work or program director permission. Introduces the student to the role of the nurse in assessing and meeting the medical and surgical nursing needs of adults across the life span in various health care settings. The student learns nursing concepts to assist the patient in achieving optimal functioning. Knowledge from foundational nursing, the sciences, pharmacology, and nutrition along with the continued integration of mental health and cultural concepts provides foundations for nursing care planning for medical and surgical clients.

NUR 109

## **FUNDAMENTALS OF NURSING**

8 CR. (2L/6 LBV/6 CLI)

PRQ: Admission to Nursing or Psychiatric Technician program. Introduces theories and skills basic to the role of the nurse as provider of care, manager of care and member of the nursing profession. Emphasis is placed on introduction to critical thinking and the nursing process. Students will demonstrate a beginning level of competence in providing therapeutic nursing care for clients with common health alterations across the health continuum.

NUR 112

## **BASIC CONCEPTS OF PHARMACOLOGY**

2 CR (2L)

PRQ: Admission to Nursing or Psychiatric Technician program. Utilizes nursing process to introduce the basic concepts of pharmacology related to the actions, therapeutic and adverse effects, interactions of drugs, drug classification, and the basic pharmacology of commonly used medications. Emphasis is placed on therapeutic interventions and client education. Learners will apply knowledge gained in selected clinical settings situations in caring for a diversity of clients across the lifespan health illness continuum.

NUR 150

## **OBSTETRIC & PEDIATRIC NURSING**

7 CR. (3L/2 LBV/6 CLI)

PRQ: Admission to Nursing program and completion of preceding required program course work or program director permission. Provides a family centered approach to professional nursing practice of the childbearing family and children across the health continuum. Emphasis is placed on the care of the perinatal client and children from birth through adolescence. The impact of psychosocial and cultural values and practices are explored. Legal and ethical accountability are integrated throughout the course.

NUR 169

## **TRANSITION INTO PRACTICAL NURSING**

5 CR. (2L/6 CLI)

PRQ: Admission to Nursing program and completion of preceding required program course work or program director permission. Provides the student with a transition into the practical nurse role. Emphasis is placed on professionalism in nursing, communication, entry into practice, provider and manager of care and nursing management and leadership. The student assumes the role of the practical nurse as they manage patient care.

NUR 171

## **Clinical II**

3 CR. (6 CLI)

PRQ: Admission to Nursing Program; CORQ: Completion or co-enrollment in corresponding didactic nursing course. Offers the clinical practicum to apply the related nursing theory.

NUR 175-177

## **SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

NUR 189

## **TRANSITION FROM LPN TO ADN**

4 CR. (2L/2 LBV/2CLI)

PRQ: Admission to nursing program. Current Colorado LPN license Focuses on assisting the LPN to transition into a new role as an Associate Degree Nursing Student. Emphasis will be placed on roles and responsibilities of the ADN, nursing process, critical thinking, legal and ethical issues and nursing practice issues related to specialized skills and the care of special populations. The clinical focus will be care of the pediatric and obstetric client.

NUR 201

## **IV THERAPY FOR LPN'S**

5 CR. (4L/1.5 LBV)

Provides LPNs with an opportunity to expand their nursing roles by learning appropriate procedures for intravenous therapy and venous blood withdrawal. The course includes lecture, laboratory practice and clinical experiences. The course prepares the student for IV certification under State Board of nursing Guidelines.

NUR 206

## **ADVANCED CONCEPTS OF MEDICAL-SURGICAL NURSING I**

8 CR. (3L/1 LBV/9 CLI)

PRQ: Admission to Nursing program and successful completion of preceding Nursing program course work or program director permission. Focuses on the role of the registered professional nurse as care provider, teacher, manager, professional, and advocate in meeting the nursing needs of adults across the life span. Utilizing the nursing process, the student is expected to integrate previous learning to assist the patient and family in achieving optimal functioning in various health care settings.

NUR 211

## **NURSING PSYCHIATRIC CLIENTS**

4 CR. (1L/2 LBV/4 CLI)

PRQ: Admission to Nursing program and successful completion of preceding required program course work or program director permission. 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 clinical conditions/disorders.

NUR 212

**PHARMACOLOGY II**

2 CR. (2L)

PRQ: Admission to Nursing program and successful completion of preceding required program course work or program director permission. Builds upon the concepts introduced in NUR 112 Pharmacology I regarding the safe administration of medications to clients across the health continuum. Utilizing the nursing process the student demonstrates understanding of the role of the nurse as provider of care, manager of care, and member of the profession. Emphasis is placed upon the therapeutic use of medications in the nursing care of individuals with complex health needs. The student is introduced to the calculation of complex intravenous drip rates.

NUR 216

**ADVANCED CONCEPTS OF MEDICAL SURGICAL NURSING II**

6 CR. (2L/8 CLI)

PRQ: Admission to Nursing program and successful completion of preceding program course work or program director permission. Continues to focus on the role of the registered professional nurse as care provider, teacher, manager, professional, and advocate in meeting the complex medical and surgical health care needs of adult clients. Utilizing the nursing process, the student is expected to integrate previous learning to assist the patient and family in achieving optimal functioning in various complex health care situations and settings.

NUR 230

**LEADERSHIP MANAGEMENT TRENDS**

5 CR. (1.5L/7 CLI)

PRQ: Admission to Nursing program and successful completion of preceding program course work or program director permission. Introduces students to current trends in leadership and management concepts affecting the healthcare continuum and the practice of nursing. The student assumes the role of provider, manager of care and member of the discipline at the entry level into professional nursing. There is a practicum for application which may occur across the healthcare continuum, as the student manages groups of clients and health care personnel. The course will facilitate transition from student to the role of the graduate nurse.

NUR 275-277

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

## Nursing Assistant

NUA 101

**NURSE AIDE HEALTH CARE SKILLS**

4 CR. (2L/3 LBV)

PRQ: ENG 030, REA 030, MAT 030. Or equivalent test scores. Prepares the student to perform the fundamental skills of the nurse aide. Basic nursing skills, restorative services, personal care skills, safety and emergency care issues are covered in theory and lab. The student will learn skills that address mental health needs as well as patient/resident/client rights.

NUA 170

**NURSE AID CLINICAL EXPERIENCE**

1 CR. (1.5 CLI)

PRQ: ENG 030, REA 030, MAT 030 or equivalent test scores. CORQ: NUA 101. Applies knowledge gained from NUA 101 in a clinical setting. S/U

NUA 171

**ADVANCED NURSE AIDE CLINICAL**

1 CR. (1.5 CLI)

PRQ: ENG 030, REA 030, MAT 030, or equivalent assessment test scores. CORQ: NUA 101, NUA 170. Prepare the student to move toward more independent functioning within the nurse aide scope of practice, in applying knowledge and skills gained in NUA 101 and NUA 170. The student will learn skills that enhance communication, cultural competency, end of life care, critical thinking and organizational skills. S/U

NUA 175

**SPECIAL TOPICS: NURSE AIDE CERTIFICATE EXAM PREP**

.5 CR. (.5L)

Provides students with a vehicle to pursue in depth exploration of special topics of interest. Provides student with an opportunity to prepare for the state certification exam through mock testing.

NUA 175-177

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

## Occupational Safety Technician

\*\*OSH 146

**HAZARDOUS MATERIALS**

2 CR. (2L)

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.

## Occupational Therapy Assistant

OTA 100

**INTRODUCTION TO OCCUPATIONAL THERAPY**

3 CR. (3L)

PRQ: REA 090, ENG 090, or equivalent assessment test scores. Covers through study, discussion, and observation/participation, the investigation of a career choice in Occupational Therapy; description of man's need for self-care, productivity and leisure; description of the history and philosophy of Occupational Therapy; description of the differences between health, illness, and wellness; identification of the roles, responsibilities and relationships of health care professionals; discussion of ethics and the legal implications of health care, and exploration and discussion of basic sociological issues in health care.

OTA 105

**INTRODUCTION TO DISEASE AND ACTIVITY ANALYSIS**

3 CR. (1L/3 LBV)

PRQ: Admission to the OTA program. Explores the diseases common to OT intervention and an exploration of occupation, various treatment methods and techniques, and an application of activity analysis.

OTA 106

**BASIC OCCUPATIONAL THERAPY FRAMES OF REFERENCE AND DOCUMENTATION**

2 CR. (2L)

PRQ: Admission to the OTA program. Develops the ability to identify the types of OT documentation and practice basic documentation skills. Identifies OT theories, founders, underlying assumptions, and implications to OT practice. In addition, related theories that impact OT treatment will be discussed.

OTA 121

**ASSESSMENT OF COMPONENT SKILLS IN OCCUPATIONS**

4 CR. (2L/3 LBV)

PRQ: OTA 105, BIO 106. Covers through study, discussion, and observation/participation: 1) Performance of basic manual muscle tests; 2) Performance of range of motion assessments; 3) Safe performance of simulated patient transfers; 4) Safe performance of body mechanics in all activities; and 5) Analysis of occupations in terms that facilitate understanding of assessments and communication with other health professionals, clients and significant others.

OTA 122

**ORIGINS OF OCCUPATIONAL AND COMPONENT SKILLS**

2 CR. (2L)

PRQ: OTA 100. Explores the impact of environmental, cultural and community influences on the adolescent and adult individual, focusing on an ever changing occupational status through the influences of component skills.

OTA 125

**BASIC OCCUPATIONAL THERAPY APPLICATION TO PSYCHIATRY**

4 CR. (3L/1.5 LBV)

PRQ: PSY 101, OTA 106. Identifies commonly seen psychiatric symptoms, methods for screening and assessment for the need for occupational therapy, and psychiatric occupational therapy techniques for the evaluation and treatment within a multicultural context.

OTA 131

**GERIATRIC ISSUES, DISEASE, AND TREATMENT TECHNIQUES**

3 CR. (2L/1.5 LBV)

PRQ: OTA 105, OTA 106. Explores the impact of environmental, cultural and community influences on the older individual, focusing on an ever changing occupational status through the influences of component skills. Identifies geriatric diseases common to occupational therapy and methods of treatment available to the occupational therapy practitioner within the context of health care and the community.

OTA 175-177

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

OTA 181

**GERIATRIC LEVEL I FIELDWORK EXPERIENCE**

1 CR. (1.5 LBV)

PRQ: OTA 131. Identifies and provides practical experience in commonly seen disabilities, evaluation techniques and methods of treatment for the geriatric population from diverse backgrounds in collaboration with Occupational Therapy and other professionals. Students will demonstrate universal precautions, hand washing techniques, and safety issues.

OTA 182

**PHYSICAL DISABILITIES LEVEL I FIELDWORK EXPERIENCE**

1 CR. (1.5 LBV)

CORQ: OTA 218. Identifies and provides practical experience in commonly seen disabilities, evaluation techniques, and methods of treatment for these conditions for adult patients with diverse backgrounds in collaboration with the OTR and other professionals.

OTA 183

**PEDIATRIC LEVEL I FIELDWORK EXPERIENCE**

1 CR. (1.5 LBV)

CORQ: OTA 221. Provides the student the practical experience necessary to identify commonly seen disabilities, evaluation techniques and methods of treatment for the pediatric population from diverse backgrounds in collaboration with Occupational Therapy and other professionals.

OTA 216

**PHYSICAL DISABILITIES NEURO-RETRAINING**

3 CR. (2L/1.5 LBV)

PRQ: OTA 121. Provides the student with the skill necessary to utilize the components of the OT treatment planning process, including: age appropriate evaluation, treatment and discharge for the neurodevelopmental and biomechanical frames of references in collaboration with other professionals.

OTA 217

**OCCUPATIONAL THERAPY REHABILITATION TECHNIQUES**

2 CR. (3 LBV)

PRQ: OTA 121, OTA 105. Explores the treatment methods and techniques focusing on adaptive equipment, assistive devices, activities of daily living and specialized physical disability assessments.

OTA 218

**OCCUPATIONAL THERAPY APPLICATION TO ADULT PHYSICAL DISABILITIES**

3 CR. (1L/3 LBV)

PRQ: OTA 121. Provides through study, discussion, papers, and lab experiences the student's ability to identify commonly seen medical and orthopedic diseases and disabilities and the method for treatment within the appropriate frame of reference. Explores treatment methods such as splinting, transfers, positioning and communication techniques.

OTA 221

**PEDIATRIC ISSUES, DISEASES, DISABILITIES AND TREATMENT**

3 CR. (2L/1.5 LBV)

PRQ: OTA 121, and OTA 122. Explores the impact of environmental, cultural, and community influences on the child, focusing on an ever changing occupational status through the influences of component skills. Provides the student the skills necessary to identify commonly seen diseases, disabilities and treatment techniques in pediatrics: identify occupational therapy evaluation techniques and methods of treatment within the context of health care and the community.

OTA 235

**PROFESSIONAL AND ACTIVITIES MANAGEMENT**

2 CR. (2L)

PRQ: OTA 100, admission to the OTA program. Provides the student with the basic management skills needed by the occupational therapy assistant and the activity director. Other topics covered will be job seeking skills, the role of the OTA in research, professional responsibilities, and life long learning.

OTA 275-277  
**SPECIAL TOPICS**  
0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

OTA 278  
**O.T. SEMINAR**  
1 CR. (1.5 LBV)

PRQ: OTA 280 or OTA 281. Provides for discussion of Level II fieldwork experiences and opportunity to apply logical thinking, critical analysis, problem solving, and creativity to application problems.

OTA 280  
**INTERNSHIP IN OCCUPATIONAL THERAPY I**  
7 CR. (21 INT)

PRQ: All OTA courses except OTA 278 and OTA 281. Provides an eight-week, full-time or an equal amount of time, part-time, supervised clinical internship to develop professional behaviors consistent with the profession standards and ethics, apply previously learned academic knowledge as an OT team member. The student will gain experience in application of the OT treatment process from admission to discharge for patients from a variety of socio-cultural backgrounds and ages in the practice area of physical disabilities.

OTA 281  
**INTERNSHIP IN OCCUPATIONAL THERAPY II**  
7 CR. (21 INT)

PRQ: All OTA courses except OTA 278 and OTA 280. Provides an eight-week full time or equal amount of time part-time, supervised clinical internship to develop professional behaviors consistent with the professions standards and ethics, apply previously learned academic knowledge as an OT team member. The student will gain experience in application of the OT treatment process from admission to discharging for patients from a variety of socio-cultural backgrounds and ages in the practice area of behavioral, sensorimotor, and/or developmental disabilities.

OTA 285  
**INDEPENDENT STUDY**  
1-6 CR. (2-12 IND)

Meets the individual needs of students. Students engage in intensive study or research under the direction of a qualified instructor.

## Pharmacy Technician

PHT 105  
**ORIENTATION TO PHARMACY**  
4 CR. (3L/1.5 LBV)

PRQ: Admission to the PHT program. Focuses on a general overview of pharmaceutical care in the scheme of health care and the role of the pharmacist and the pharmacy technician in its delivery. Introduces pharmacy practice, standards of practice, certification, pharmacy associations and opportunities available to the pharmacy technician. Includes surveying laws, regulations and standards at the Federal and State level as they govern the practice of pharmacy. Discussion includes legal and ethical responsibilities of the pharmacy technician. Emphasizes pharmacy terminology, symbols and abbreviations. Professionalism and communication skills stressing interactions with patients and health care professionals are discussed.

PHT 120  
**MEDICAL INSURANCE PROCEDURES**  
1 CR. (1.5 LBV)

PRQ: Admission to the PHT program.

Provides a basic introduction to pharmacy reimbursement services. Defines and presents the processes involved in reimbursement for pharmacy products and services. Examines the health care insurance industry along with an overview of the three core functions of pharmacy reimbursement services - patient admission, verification of insurance, and billing procedures. Integrates an actual pharmacy operation application and allow students hands-on technical experience.

PHT 207  
**DRUG CLASSIFICATION**  
3 CR. (3L)

PRQ: Admission to the PHT program. Emphasizes the drug classes, such as over-the-counter vs. prescription drugs, scheduled drugs, and the laws pertaining to each. Includes the drug development process, the different pregnancy classifications and the degree of potential harm for each class, and the commonly used drugs that can be addictive, abused and potentially lethal. Examines dosage forms, routes of administration, selection and recommendation of OTC drugs and natural products, and memorize trade and generic names.

PHT 235  
**PHARMACEUTICAL CALCULATIONS AND COMPOUNDING TECHNIQUES**  
4 CR. (4L)

PRQ: Admission to the PHT program. 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, autoinjectors and pumps is discussed.

PHT 275-277  
**SPECIAL TOPICS**  
0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

## Philosophy

PHI 111  
**INTRODUCTION TO PHILOSOPHY: GT-AH3**  
3 CR. (3L)

PRQ: REA 090 or equivalent assessment test scores. Introduces significant human questions and emphasizes understanding the meaning and methods of philosophy. Includes human condition, knowledge, freedom, history, ethics, the future, and religion. This course is one of the Statewide Guaranteed Transfer Courses, GT-AH3.

PHI 112

**ETHICS: GT-AH3**

3 CR. (3L)

PRQ: REA 090 or equivalent assessment test scores. 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 113

**LOGIC: GT-AH3**

3 CR. (3L)

PRQ: REA 090 or equivalent assessment test scores. 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 114

**COMPARATIVE RELIGIONS: GT-AH3**

3 CR. (3L)

PRQ: REA 090 or equivalent assessment test score. Introduces students to the similarities and differences among concepts predominant in the major world religions, comparing sociological, philosophical, and phenomenological similarities between major world faiths. It is designed to transfer to any four-year college philosophy, religious studies or humanities department. This course is one of the Statewide Guaranteed Transfer Courses, GT-AH3.

PHI 275-277

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

## Physical Education

PED 100

**BEGINNING GOLF**

1 CR. (2 LBA)

Introduces a basic course in golf designed for those who have had little or no formal instruction or for those with some experience who are interested in improving some aspect of their game. Includes driving range, putting green, and on-course play.

PED 106

**TENNIS**

1 CR. (2 LBA)

Introduces tennis and focuses on improving the skill level of the student. Emphasizes the elements of tennis including the rules of the game, groundstrokes, serving, the various shots, and singles and doubles play and strategies.

PED 110

**FITNESS CENTER ACTIVITY I**

1 CR. (2 LBA)

Focuses on improving total fitness via an aerobic circuit training program. Includes an individual fitness evaluation, computerized analysis of results, and a prescribed exercise program. Covers the basic components of fitness including flexibility, muscular strength, muscular endurance, cardiovascular fitness, and body composition. Weight machines, stationary bicycles, and computerized cardiovascular equipment are incorporated to elicit improvements in fitness.

PED 111

**FITNESS CENTER ACTIVITY II**

1 CR. (2 LBA)

PRQ: PED 110. Serves as an advanced course for individuals interested in reaching a higher level of total fitness via an aerobic circuit training program. Includes an individual fitness evaluation, computerized analysis of results, and a prescribed exercise program. Focuses on the basic components of fitness including flexibility, muscular strength, muscular endurance, cardiovascular fitness, and body composition. Weight machines, stationary bicycles, and computerized cardiovascular equipment are used to elicit improvements in fitness.

PED 112

**CONDITIONING LAB**

1 CR. (2 LBA)

Offers an independent self-paced format of conditioning exercises to meet individual needs. Emphasizes the value of lifetime fitness and its contribution to achieving personal health and wellness. Students utilize cardiorespiratory, muscular strength and endurance exercises to promote positive changes in health-related fitness components.

PED 113

**FITNESS CONCEPTS**

1 CR. (2 LBA)

Focuses on providing information and guidelines for moving toward a more healthy lifestyle. Includes classroom instruction, an individual fitness evaluation, computerized analysis of results, and a prescribed exercise program utilizing the equipment and exercise options available in the Fitness Center.

PED 114

**WALKING AND JOGGING**

1 CR. (2 LBA)

Enables the student to understand the values in walking and jogging. Safety precautions and emphasis on personal programs are emphasized.

PED 115

**BODY SCULPTING AND TONING**

1 CR. (2 LBA)

Introduces exercise techniques to improve overall physical fitness. Emphasizes the interaction between cardiovascular conditioning, muscular strength and endurance, flexibility and program design integrated into an aerobic format. Focuses on blending together different combinations and sequences of exercises while conditioning the entire body. Students exercise using various types of resistance equipment.

PED 116

**WEIGHT TRAINING**

1 CR. (2 LBA)

Offers basic instruction and practice in weight training. Students utilize weight training equipment in accordance to their abilities and goals. Emphasizes weight training equipment orientation, correct lifting techniques, and basic program design for men and women. 30 Contact Hours.

PED 117

**CROSS TRAINING**

1 CR. (2 LBA)

Introduces basic cross-training techniques designed to improve physical work capacity of an individual. Enables the student to gain an understanding of the basic principles of cross training, the effects cross training has upon the body's energy systems and muscles, program design and terminology.

PED 118

**INDOOR STATIONARY GROUP CYCLING**

1 CR. (2 LBA)

Focuses on improving cardiovascular fitness, burning calories and enhancing muscular endurance. Designed specifically to enhance aerobic work capacity and improve pedalling skills. Each exercise session is choreographed to music and includes a complete workout with a warm-up, endurance and cool-down component.

PED 119

**FITNESS CIRCUIT TRAINING**

1 CR. (2 LBA)

Examines a number of different circuit training programs. Emphasizes the development of cardiovascular endurance, muscular strength and endurance, flexibility and a healthy body composition to meet individual needs.

PED 121

**STEP AEROBICS**

1 CR. (2 LBA)

Introduces basic step aerobics and exercise techniques to improve physical fitness. Emphasizes the basic principles of step aerobics including the effects upon the cardio-respiratory system and skeletal muscles, various step patterns and choreography.

PED 124

**MOUNTAIN BIKING**

1 CR. (2 LBA)

Introduces basic mountain biking skills and techniques. The primary emphasis is to gain an understanding of the basic principles of mountain biking. Students develop skills and techniques for all riding situations, review bicycle anatomy, and basic maintenance and repairs.

PED 125

**BOWLING**

1 CR. (2 LBA)

Introduces bowling fundamentals to improve the student's skill level. The primary emphasis is on teaching the student the elements of bowling, rules and regulations, footwork, courtesies, delivery, selection of ball, scoring, and team and individual competition.

PED 143

**TAI CHI I**

1 CR. (2 LBA)

Introduces Tai Chi as an expression of understanding of self-control, exercise and self-defense. The primary emphasis is to gain an understanding of the history (origins and changes) of Tai Chi, the movements and their names, application of movements and terminology.

PED 145

**PILATES MATWORK I**

1 CR. (2 LBA)

Focuses on Pilates matwork to increase core strength, overall muscles tone and flexibility with focused and precise floor work techniques. A physical education class built upon the philosophies and exercises of Josef Pilates.

PED 147

**YOGA**

1 CR. (2 LBA)

Offers a guided instruction in yoga. Students practice yoga according to their individual fitness levels and abilities. Emphasizes enhancing general health and well-being through the performance of yoga strength, flexibility, balance and relaxation techniques and exercises.

PED 148

**YOGA II**

1 CR. (2 LBA)

PRQ: PED 147. Continues to build on the concepts of basic yoga. Increases awareness of yoga including physical and mental benefits.

PED 175-177

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

PED 210

**FITNESS CENTER ACTIVITY III**

1 CR. (2 LBA)

PRQ: PED 110, PED 111. Serves as an advanced exercise course designed for individuals interested in attaining a high level of total fitness. Includes an individual fitness evaluation, computerized analysis of results, and a prescribed exercise program. Focuses on the basic components of fitness including flexibility, muscular strength and endurance, cardiovascular fitness, and body composition. The primary mode of training is Aerobic Circuit Training. The circuit training is supplemented with additional work on specialized weight machines, dumbbells, treadmills, rowers, stair climbers, cross trainers, nordic track, versa climbers, and running track available in the Fitness Center.

PED 211

**FITNESS CENTER ACTIVITY IV**

1 CR. (2 LBA)

PRQ: PED 110, PED 111, PED 210. Focuses on advanced instruction designed for individuals interested in attaining a high level of total fitness. Includes an individual fitness evaluation, computerized analysis of results, and a prescribed exercise program. Focuses on the basic components of fitness including flexibility, muscular strength, muscular endurance, cardiovascular fitness, and body composition. The primary mode of training is Aerobic Circuit Training. The circuit training is supplemented with additional work on the specialized weight machines, dumbbells, treadmills, rowers, stair climbers, cross trainers, nordic track, versa climbers, and running track found in the Fitness Center.

PED 213

**FIRE ACADEMY FITNESS**

2.5 CR. (5 LBA)

Focuses on Basic Fire Academy students who are interested in improving total fitness. Includes an individual fitness evaluation, computerized analysis of results and a prescribed exercise program. Emphasizes improving cardiovascular fitness, muscular strength, muscular endurance and addressing any fitness deficiencies revealed in the initial testing.

PED 275-277

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

# Physical Therapist Assistant

PTA 110

## **BASIC PATIENT CARE IN PHYSICAL THERAPY**

5 CR. (2L/4.5 LBV)

PRQ: Admission to the Physical Therapist Assistant program or Department Chair permission. Examines the basic patient care skills for the healthcare practitioner. Enables the student to gain an understanding and demonstrate skills that include positioning, body mechanics, transfers, range of motion, palpation, vital signs, aseptic techniques, bandaging, intermittent venous compression, medical terminology, activities of daily living, wheelchair management, architectural barriers.

PTA 115

## **PRINCIPLES AND PRACTICES OF PHYSICAL THERAPY**

2 CR. (2L)

PRQ: REA 090 or equivalent assessment test score. Explores the history of the profession including definition, development and areas of practice. The role of the APTA, the physical therapist assistant and the relationship between the physical therapist, PTA and other health care professionals are investigated. Includes current issues and trends including professionalism, ethics, quality assurance, communications and reimbursement issues such as Medicare, Medicaid, Worker's Compensation and commercial insurance.

PTA 120

## **MODALITIES IN PHYSICAL THERAPY**

5 CR. (2L/4.5 LBV)

PRQ: PTA: 110. Examines theory and principles of physical therapy modalities. Course includes therapeutic heat and cold, traction, massage and hydrotherapy.

PTA 124

## **REHAB PRINCIPLES OF MEDICAL I**

2 CR. (2L)

PRQ: REA 090, CIS 110, or equivalent assessment test scores. Investigates the impairments, functional limitations, and disabilities resulting from a variety of neuromusculoskeletal conditions. The medical management including pharmacology, and its impact on physical therapy rehab principles are discussed. Evidence based practice for musculoskeletal and neurological system diagnosis, will be reviewed as they relate to physical therapy rehab.

PTA 131

## **PROFESSIONAL COMMUNICATIONS I**

1 CR. (1L)

Introduces students to oral and written professional communication in their field. The course develops skills in verbal and non-verbal communication, conducting self-critiques and peer reviews, research of professional literature, medical documentation, and professional presentations.

PTA 134

## **REHAB PRINCIPLES OF MEDICAL II**

2 CR. (2L)

PRQ: REA 090, CIS 110, or equivalent assessment test scores. Investigates the impairments, functional limitations, disabilities and medical management including pharmacology, of a variety of traumatic, immunological, inflammatory and degenerative processes and their impact on physical therapy rehab principles. Evidence based practice for cardiovascular, respiratory, endocrine and chronic pain diagnosis, will be reviewed as they relate to physical therapy rehab.

PTA 135

## **PRINCIPLES OF ELECTRICAL STIMULATION**

2 CR. (1L/1.5 LBV)

PRQ: Program Admission. Investigates the principles and application of electrical stimulation (ES) modalities currently used in physical therapy practice. Enables the student to understand the electrochemical and physiological effects of electrical stimulation and identify the various forms and applications of ES.

PTA 140

## **CLINICAL KINESIOLOGY**

5 CR. (5L)

PRQ: HPR 117 or Department Chair permission. Focuses on the science of human motion, theories of biomechanics and muscle/joint structure and function. Emphasizes basic principles of therapeutic exercise and their application to specific body regions. A laboratory experience that includes the application of kinesiology and exercise principles is integrated in the learning experience.

PTA 141

## **PROFESSIONAL COMMUNICATIONS II**

1 CR. (1L)

Builds on Professional Communications I and develops skills in writing professional documents to patients and other health care professionals, participating effectively in meetings, and medical documentation skills.

PTA 175-177

## **SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

PTA 205

## **PSYCHOSOCIAL ISSUES IN HEALTH CARE**

2 CR. (2L)

PRQ: REA 090 or equivalent assessment test score. Explores the psychosocial aspects of the patient/client and health care practitioner. Investigates recognition of and adjustment for psychological, sociological, educational, cultural, economic and political concerns on the delivery of health care services. Communication skills and social and advocacy responsibilities of the health care practitioner are discussed. Enables the student to develop the skills to meet expectations and needs of members of society receiving health care services.

PTA 230

## **ORTHOPEDIC ASSESSMENT AND MANAGEMENT TECHNIQUES**

5 CR. (2L/4.5 LBV)

PRQ: PTA 120, PTA 140. Examines the theory and principles and practices of orthopedic conditions. Includes an understanding of assessment and management techniques pertaining to orthopedic conditions, goniometry, manual muscle testing, gait analysis, and posture analysis

PTA 240

## **NEUROLOGIC ASSESSMENT AND MANAGEMENT TECHNIQUES**

5 CR. (2L/4.5 LBV)

PRQ: PTA 120 and PTA 140 or Department Chair permission. Examines the theory and principles of physical therapy with an introduction to assessment, management techniques and advanced physical therapy procedures as they relate to neurologic, cardiac and pulmonary conditions.



PTA 251

**PROFESSIONAL COMMUNICATIONS III**

1 CR. (1L)

Promotes the concepts from Professional Communications II and further develops written and oral communication skills in the professional arena through correct documentation of patient progress based on observations, dictating progress notes, development of resume, job interview skills, portfolios, and an awareness of the national PTA exam.

PTA 275-277

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

PTA 278

**PTA SEMINAR**

2 CR. (2L)

PRQ: PTA 230, PTA 280 (Student should be in final semester of degree). Provides a summary of all coursework, internships and prepares the student for transition into the workforce as an entry level PTA. It includes a comprehensive review and mock exam in preparation for the national PTA exam, employment benefits, licensing, state practice act review, professional development, employment opportunities and community service.

PTA 280

**PTA INTERNSHIP I**

4 CR. (12 INT)

PRQ: PTA 120. Focuses on initial clinical exposure providing hands on of various types of 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 281

**PTA INTERNSHIP II**

5 CR. (15 INT)

PRQ: Successful completion of all previous PTA curriculum or permission of program director. 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 inservice on a physical therapy related topic.

PTA 282

**PTA INTERNSHIP III**

5 CR. (15 INT)

PRQ: Successful completion of all previous PTA curriculum or permission of program director. 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 inservice on a physical therapy related topic.

# Physics

PHY 105

**CONCEPTUAL PHYSICS: GT-SC1**

4 CR. (3L/2 LBA)

PRQ: REA 060, MAT 060, ENG 060, or equivalent assessment test scores. Strongly recommend MAT 090. 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 111

**PHYSICS: ALGEBRA-BASED I WITH LAB: GT-SC1**

5 CR. (4L/2 LBA)

PRQ: REA 090, MAT 099, ENG 090, or equivalent assessment test scores. PRQ/CORQ: MAT 108 or MAT 122. Enables the student to explore the truth about physical reality 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 advance sciences should register for PHY 211. This course is one of the Statewide Guaranteed Transfer Courses, GT-SC1.

PHY 112

**PHYSICS: ALGEBRA-BASED II WITH LAB: GT-SC1**

5 CR. (4L/2 LBA)

PRQ: MAT 099, ENG 121, or equivalent assessment test scores. PRQ/CORQ: MAT 108 or MAT 122. Expands upon PHY 111 and covers sound waves, electric fields, electric circuits, magnetic fields, 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 175-177

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

PHY 211

**PHYSICS: CALCULUS BASED I WITH LAB: GT-SC1**

5 CR. (4L/2 LBA)

PRQ: ENG 121, MAT 201 or equivalent test scores. Enables the student to examine the truth about physical reality through reasoning, mathematics and experimentation. Covers kinematics, force, gravity, energy, momentum, torque, rotational dynamics, fluids and waves. 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 advance sciences. This course is one of the Statewide Guaranteed Transfer Courses, GT-SC1.

PHY 212

**PHYSICS: CALCULUS-BASED II WITH LAB: GT-SC1**

5 CR. (4L/2 LBA)

PRQ: ENG 121, MAT 201 or equivalent test scores. Expands upon PHY 211 and examines thermodynamics, 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 275-277  
**SPECIAL TOPICS**  
0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

## Political Science

POS 105  
**INTRODUCTION TO POLITICAL SCIENCE: GT-SS1**  
3 CR. (3L)

PRQ: REA 090 or the equivalent recommended. Survey of the discipline of political science, including political philosophy and ideology, democratic and non-democratic governments, and processes, and international relations. This course is one of the Statewide Guaranteed Transfer Courses, GT-SS1.

POS 111  
**AMERICAN GOVERNMENT: GT-SS1**  
3 CR. (3L)

PRQ: REA 090 or the equivalent recommended. Includes the background of the U.S. Constitution; the philosophy of American government; general principles of the Constitution; federalism; civil liberties; 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 125  
**AMERICAN STATE AND LOCAL GOVERNMENT**  
3 CR. (3L)

PRQ: REA 090 or equivalent assessment test score. 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.

POS 175-177  
**SPECIAL TOPICS**  
0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

POS 275-277  
**SPECIAL TOPICS**  
0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

## Polysomnography

PSG 100  
**INTRODUCTION TO POLYSOMNOGRAPHY**  
1 CR. (1L)

PRQ: MAT 107 or higher, BIO 201, ENG 121, HPR 178 or consent from instructor. Introduces the profession of Polysomnography, the role of the Polysomnography Technologist, the associated professional organizations, infection control, patient safety, communication and record keeping, assessment and accommodations for special need, ethical, legal implications of the and HIPAA implications of the practice. Students will have the opportunity to have direct observation in an associated sleep center or lab. \*\*Additional student costs: In addition to the course tuition, fees and textbooks this course has additional expense consideration that are estimated to be between \$50-\$150 (to join the AAST (American Association of Sleep Technologist). PRQ : Math 107 or higher, Bio 201, Eng 121, HPR 178, or consent from instructor.

PSG 110  
**FUNDATMENTALS OF SLEEP**  
3 CR. (3L)

PRQ: Admission to program. An introduction to the different stages of sleep, physiology of sleep including the neurophysiological basis of sleep and wakefulness, normal patterns, sleep disorder breathing and phenomena of sleep, sleep deprivation, sleep across life cycles, pediatric sleep and the classification of sleep disorders and their pathologies. Phamacologic effectson the polysomnogram and Acronyms' associated with sleep. PRQ : Admission to the program.

PSG 120  
**SLEEP INSTRUMENTATION**  
3 CR. (4.5LBV)

PRQ: Admission to program; PSG 110. This course will teach the function, operation and design of electroneurodiagnostic equipment, monitoring devices, electrode application, impedances, montages & patient connection and interfaces.

PSG 140  
**THERAPEUTIC INTERVENTION**  
3 CR. (4.5LBV)

PRQ: Admission to program. An in- depth study of the treatments available for insomnia, sleep apnea, including CPAP, BiPAP, oxygen therapy; patient adjunctive fitting, surgical intervention, and the role of the sleep technologist in titration. Special diagnostics will also be covered, including basic ECG interpretation and ET/CO2 monitoring. PRQ: Admission to the program.

PSG 150  
**SLEEP SCORING AND ANALYSIS**  
3 CR. (2L/1.5LBV)

PRQ: Admission to program. A study of the sleep staging and scoring of adults and pediatrics, staging and scoring respiratory events, PLMS, scoring of REM density, Scoring and recognition of a typical EEG Patterns and waveform characteristics and interpretation, filters and PSG electronics and troubleshooting. Signal pathways, reference electrodes & impedance checking and filter setting in calibration will be covered. Motor events, Nocturnal Seizures, Pharmacologic effects on the Polysomnogram and Evaluation of Hypersomnia, as well as summarization of the sleep report and competency test will also be covered.

PSG 165  
**SLEEP REGISTRY REVIEW**  
2 CR. (2L)

PRQ: Admission to program. This course focuses on preparation for the Comprehensive Registry Examination for Polysomnographic Technologists.

PSG 180  
**CLINICAL INTERNSHIP I**  
2 CR. (6 INT)

PRQ: Admission to program. A supervised clinical application of electrode placement, proper patient preparation, assortment of therapeutics, protocols and procedures, impedance checks, calibrations, troubleshooting, vital signs, assessment, proper documentation & note taking. The student will have the opportunity to observe, perform (under supervision) and evaluate sleep studies.

PSG 280  
**CLINICAL INTERNSHIP II**  
4 CR. (12 INT)

PRQ: Admission to program. Continuation of Clinical Internship I- supervised clinical application of electrode placement, proper patient preparation, assortment of therapeutics, protocols and procedures, impedance checks, calibrations, troubleshooting, vital signs, assessment, proper documentation and note taking. This course will emphasize observation, analysis, criteria, qualification and therapeutic intervention.

## \*\*Printing Technology

\*\*PRT 101  
**INTRODUCTION TO PRINTING TECHNOLOGY**  
1 CR. (1L)

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.

\*\*PRT 112  
**BEGINNING OFFSET PRESS**  
3 CR. (2L/1.5 LBV)

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.

\*\*PRT 113  
**INTERMEDIATE OFFSET PRESS**  
3 CR. (1L/3 LBV)

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.

\*\*PRT 114  
**PAPER MANAGEMENT AND ESTIMATING**  
3 CR. (3L)

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.

## Process Technology

PRO 100  
**INTRODUCTION TO PROCESS TECHNOLOGY**  
3 CR. (3L)

PRQ: REA 090 and MAT 090, or equivalent assessment test scores. 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 175-177  
**SPECIAL TOPICS**  
0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

PRO 275-277  
**SPECIAL TOPICS**  
0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

## Psychiatric Technician

PTE 110  
**INTRO TO PSYCHIATRIC CARE**  
3 CR. (3L)

PRQ: REA 090 and ENG 060, or equivalent assessment test scores. Explores basic principles of psychiatric care. Through the study of therapeutic communication, human development, behavior assessment and documentation, the student will develop and apply interpersonal and technical skills in preparation to work with clients in psychiatric care settings.

PTE 116  
**THEORETICAL CONCEPTS OF PSYCHIATRIC CARE I**  
2 CR. (2L)

PRQ: Admission into the Psychiatric Technician Program, PTE 110. CORQ: PTE 170, NUR 112. Explores basic etiology, symptoms of, and interventions for common psychiatric disorders. Builds on prior knowledge. Provides opportunities to recognize and intervene with clients experiencing typical psychiatric problems.

PTE 117  
**THEORETICAL CONCEPTS OF PSYCHIATRIC CARE II**  
2 CR. (2L)

PRQ: Admission into the Psychiatric Technician Program, PTE 116, PTE 170. CORQ: PTE 171, NUR 112. 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 118  
**PSYCHIATRIC MANAGEMENT PRINCIPLES**  
1 CR. (1L)

PRQ: Admission into the Psychiatric Technician Program, PTE 117, PTE 171. CORQ: PTE 172. Capstone: explores principles of psychiatric unit management and professional behaviors in psychiatric care. Self-care issues and job-seeking skills are also discussed.

PTE 170  
**CLINICAL CONCEPTS OF PSYCHIATRIC CARE I**  
3 CR. (4.5 LBV)  
PRQ: Admission into the Psychiatric Technician Program, PTE 110; CORQ: PTE 116. Provides clinical application of theory and principles presented in PTE 116 through supervised clinical practice in a psychiatric care setting.

PTE 171  
**CLINICAL CONCEPTS OF PSYCHIATRIC CARE II**  
3 CR. (4.5 LBV)  
PRQ: Admission into the Psychiatric Technician Program, PTE 116, PTE 170, or permission of instructor. CORQ: PTE 117. Provides clinical application of theory and principles presented in PTE 117 through supervised clinical practice in a psychiatric care setting.

PTE 172  
**PSYCHIATRIC MANAGEMENT CLINICAL**  
1 CR. (1.5 LBV)  
PRQ: Admission into the Psychiatric Technician Program, PTE 117, PTE 171. CORQ: PTE 118. Synthesizes knowledge from prerequisite courses and provides clinical application of theory presented in PTE 118.

PTE 275-277  
**SPECIAL TOPICS**  
0-12 CR.  
Provides students with a vehicle to pursue in depth exploration of special topics of interest.

## Psychology

PSY 100  
**PSYCHOLOGY OF WORKPLACE RELATIONSHIPS**  
3 CR. (3L)  
PRQ: REA 090 or equivalent. This course focuses on interactions among people – their conflicts, cooperative efforts, and group relationships. It will examine why beliefs, attitudes, and behaviors cause relationship problems in our personal lives and in work-related situations. It will emphasize the analysis of human behavior, the application of prevention strategies, and resolution of the behavior.

PSY 101  
**GENERAL PSYCHOLOGY I: GT-SS3**  
3 CR. (3L)  
PRQ: REA 090 or the equivalent. 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 102  
**GENERAL PSYCHOLOGY II: GT-SS3**  
3 CR. (3L)  
PRQ: REA 090 or equivalent. Focuses on the scientific study of behavior including cognition, language, intelligence, psychological assessment, personality, abnormal psychology, therapy, life span development, and social psychology. This course is one of the Statewide Guaranteed Transfer Courses, GT-SS3.

PSY 107  
**WORKGROUP PSYCHOLOGY**  
3 CR. (3L)  
PRQ: REA 090 or the equivalent recommended. This course is designed as an introduction to the psychology of workgroups in the modern workplace. Emphasis is placed on team dynamics, social diversity issues, team building, interpersonal communication skills, goal setting, time and resource management, and consensus decision making.

PSY 110  
**CAREER DEVELOPMENT**  
3 CR. (3L)  
PRQ: CIS 110, equivalent assessment test score, or Department Chair approval. Assists students in recognizing their career potential, and provides tools for making realistic decisions concerning educational and occupational objectives.

PSY 117  
**PARENTING**  
1 CR. (1L)  
PRQ: REA 090 or equivalent assessment test score. Focuses on effective techniques for parenting children, with emphasis on setting expectations, consideration of individual differences, satisfactory communication, and effective parent-child relationships.

PSY 175-177  
**SPECIAL TOPICS**  
0-12 CR.  
Provides students with a vehicle to pursue in depth exploration of special topics of interest.

PSY 200  
**RESEARCH METHODOLOGY**  
3 CR. (3L)  
PRQ: PSY 101 or PSY 102. A survey of 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 204  
**RELATIONSHIPS: CHALLENGES & CHOICES**  
1 CR. (1L)  
PRQ: REA 090 or equivalent. The student will learn how 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 205  
**PSYCHOLOGY OF GENDER: GT-SS3**  
3 CR. (3L)  
PRQ: REA 090 or equivalent. This course examines gender differences in work, courtship, family life, and sexual behavior throughout the life span. This course is one of Statewide Guaranteed Transfer Courses, GT-SS3.

PSY 215  
**PSYCHOLOGY OF ADJUSTMENT**  
3 CR. (3L)  
PRQ: REA 090 or equivalent assessment test score. Emphasizes personal growth and the development of interpersonal skills. Focuses on the practical application of psychological principles and theories in achieving self-understanding and personal growth.

PSY 217

**HUMAN SEXUALITY: GT-SS3**

3 CR. (3L)

PRQ: REA 090 or equivalent assessment test score. Surveys physiological, psychological, and psychosocial aspects of human sexuality. Topics include relationships, sexual identity, and sexual health. This course is one of Statewide Guaranteed Transfer Courses, GT-SS3.

PSY 226

**SOCIAL PSYCHOLOGY: GT-SS3**

3 CR. (3L)

PRQ: 3 hrs. General PSY, or 3 hrs. General SOC or instructor permission. This course covers 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 227

**PSYCHOLOGY OF DEATH AND DYING: GT-SS3**

3 CR. (3L)

PRQ: REA 090 or equivalent assessment test score. 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 235

**HUMAN GROWTH AND DEVELOPMENT: GT-SS3**

3 CR. (3L)

PRQ: REA 090 or equivalent assessment test score. 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 237

**CHILD AND ADOLESCENT PSYCHOLOGY**

3 CR. (3L)

PRQ: REA 090 or equivalent. This course is a survey of human development from conception through adolescence, emphasizing physical cognitive, emotional, and psychosocial factors.

PSY 238

**CHILD DEVELOPMENT: GT-SS3**

3 CR. (3L)

PRQ: REA 090 or equivalent assessment test score. 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 239

**ADOLESCENT AND ADULT PSYCHOLOGY**

3 CR. (3L)

PRQ: REA 090 or equivalent. This course covers growth and development of the individual from adolescence to death, emphasizing physical, cognitive, emotional and psychosocial factors.

PSY 240

**HEALTH PSYCHOLOGY**

3 CR. (3L)

PRQ: REA 090 and ENG 090. Students will learn an overview of the scientific study of attitudes, behaviors and personality variables related health, illness and bodily systems. Emphasis is on the interaction of biological, psychological and social factors that cause illness and influence its treatment and prevention. Statewide Guaranteed Transfer Courses, GT-SC1.

PSY 245

**EDUCATIONAL PSYCHOLOGY**

3 CR. (3L)

PRQ: ENG 060, REA 090, or equivalent assessment test scores. Focuses on the relationships among theory, research, and practice in the areas of learning, child development, motivation, and educational assessment.

PSY 247

**CHILD ABUSE AND NEGLECT**

3 CR. (3L)

PRQ: REA 090 or equivalent. This course examines the causes and effects of physical, sexual, and psychological abuse and neglect. Intervention and prevention strategies are emphasized.

PSY 249

**ABNORMAL PSYCHOLOGY: GT-SS3**

3 CR. (3L)

PRQ: REA 090. CORQ: PSY 101 or permission of instructor. Examines abnormal behavior and its classification, causes, treatment, and prevention. This course is one of the Statewide Guaranteed Transfer Courses, GT-SS3.

PSY 250

**DYNAMICS OF RACISM AND PREJUDICE**

3 CR. (3L)

PRQ: REA 090 or equivalent. A survey of early race relations in the USA; the development of prejudicial attitudes and the social impact; strategies for positive change.

PSY 265

**PSYCHOLOGY OF PERSONALITY**

3 CR. (3L)

PRQ: REA 090 or equivalent assessment test score. Examines the structure, function, and development of personality. Investigates the major contemporary theories of personality. Covers psychodynamic, behavioral, cognitive-social learning, humanistic, trait, and, optionally, neurobiological, existential, and/or Eastern perspectives. The underlying assumptions and research support for these theories are appraised. Enables the student to gain an appreciation of the value of alternative theoretical approaches to this study of psychology.

PSY 267

**STRESS REDUCTION WITH BIOFEEDBACK**

3 CR. (3L)

PRQ: REA 090 or equivalent assessment test score. 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 268

**ORGANIZATIONAL PSYCHOLOGY**

3 CR. (3L)

PRQ: ENG 060, REA 090, or equivalent assessment test scores. 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 275-277

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

PSY 289  
**CAPSTONE**  
3 CR. (3L)  
PRQ: ENG 060, REA 090, or equivalent assessment test scores.  
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.

## Radio and Television

RTV 100  
**INTRODUCTION TO TELECOMMUNICATIONS**  
2 CR. (2L)  
CORQ: MGD 175 Special Topics: Media Lab. Focuses on the study of the market demands involving national, local and international uses of telecommunications.

\*\*RTV 101  
**RADIO PROGRAMMING AND PRODUCTION I**  
3 CR. (4.5 LBV)  
Focuses on radio programming, formats and audience rating survey, basic and sophisticated communications systems, history of broadcasting, broadcasting and production equipment, and program broadcast systems and propaganda.

RTV 102  
**BEGINNING TELEVISION**  
3 CR. (3L)  
PRQ: REA 060, equivalent assessment test score, or Department Chair approval. 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, preproduction, and post production.

RTV 103  
**WRITING FOR TV AND RADIO**  
3 CR. (3L)  
Explores writing techniques for television and radio emphasizing professional techniques, format and style.

\*\*RTV 105  
**PRINCIPLES OF SATELLITE COMMUNICATION**  
2 CR. (2L)  
Enables the student to gain a general understanding of the basic operations relating to satellite communications, and how this technology applies to education and industry, on a global and national scale.

\*\*RTV 106  
**RADIO PROGRAMMING AND PRODUCTION LAB I**  
3 CR. (4.5LBV)  
Focuses on the use of basic radio station equipment, programming and formats. Includes simulated broadcasting using production studio facilities.

RTV 108  
**PRINCIPLES OF AUDIO**  
3 CR. (1L/3 LBV)  
PRQ: REA 060, equivalent assessment test score, or Department Chair approval. 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 109  
**RADIO BROADCAST TECHNICAL OPERATIONS**  
2 CR. (2L)  
Focuses on technical operation of radio transmitting systems and includes FCC rules and regulations.

\*\*RTV 110  
**NEWS WRITING AND REPORTING**  
3 CR. (3L)  
Emphasizes gathering, writing, and reporting radio and television news and development of communication medium style. Covers the legal system in relation to news reporting ethics. Addresses professional news-sorting and writing software for IBM compatible computers.

RTV 175-177  
**SPECIAL TOPICS**  
0-12 CR.  
Provides students with a vehicle to pursue in depth exploration of special topics of interest.

RTV 182  
**INTERNSHIP RADIO STA/AUDIO PRODUCTION**  
4 CR. (12 INT)  
Provides experience in a commercial radio station or an allied industry.

RTV 183  
**INTERNSHIP TV STUDIO/VIDEO PRODUCTION CO.**  
4 CR. (12 INT)  
Provides experience in a commercial television station or an allied industry.

\*\*RTV 211  
**RADIO PROGRAMMING AND PRODUCTION II**  
3 CR. (4.5 LBV)  
Focuses on styles of writing and reporting news, editorials, interviews, and commentaries; station logs and announcing styles and techniques; the Federal Communications Commission with emphasis on politics and serving the public interest; job finding and advancing in broadcasting; women in broadcasting; drama; and specialized production. Includes sportscasting and weathercasting.

\*\*RTV 216  
**RADIO PROGRAMMING AND PRODUCTION LAB II**  
3 CR. (4.5 LBV)  
Covers the operation of technical equipment of a radio broadcasting studio with emphasis on news, special news features, commercials, audition tapes, sports, and weather.

RTV 217  
**ADVANCED TELEVISION STUDIO PRODUCTION**  
3 CR. (4.5 LBV)  
PRQ: REA 060, equivalent assessment test score, or Department Chair approval. 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.

RTV 269  
**VIDEO FIELD PRODUCTION**  
3 CR. (4.5 LBV)  
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 275-277  
**SPECIAL TOPICS**  
0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

## Radiologic Technology

RTE 100  
**RADIATION SAFETY**  
.6 CR. (.6L)

Meets the State of Colorado requirements for ISCD certified bone densitometry operators. The requirement is for 9 hours of radiation safety training.

RTE 101  
**INTRODUCTION TO RADIOGRAPHY**  
2 CR. (2L)

Offers an introduction to radiology including equipment, exposure, positioning and the knowledge necessary for the radiography student to provide safe patient care including communication skills, body mechanics, patient transfer, and radiography as a profession.

RTE 111  
**RADIOGRAPHIC PATIENT CARE**  
2 CR. (2L)

PRQ: RTE 101. CORQ: RTE 121, RTE 131, RTE 141, RTE 181. Offers expansion of the information presented in RTE 101, including diversity, universal precautions, legal considerations and ethics. Includes lecture and laboratory experience in the patient care areas of asepsis, vital signs, venipuncture, medical emergencies, assistance with drug administration, patient with special needs, and death and dying.

RTE 121  
**RADIOLOGIC PROCEDURES I**  
3 CR. (2L/1.5 LBV)

PRQ: Program admission, RTE 101. Introduces fundamentals of radiographic positioning including use of radiographic equipment and safety, positioning, terminology, anatomy, pathology, and skills necessary to perform radiographic procedures of the chest, abdomen, upper extremity, gastrointestinal and urinary systems.

RTE 122  
**RADIOLOGIC PROCEDURES II**  
3 CR. (2L/1.5 LBV)

PRQ: RTE 121. Introduces additional material covered in RTE 121 including the knowledge of anatomy, pathology, and skills necessary to perform radiographic procedures of the lower extremity, pelvis, spine, and bony thorax.

RTE 131  
**RADIOGRAPHIC PATHOLOGY AND IMAGE EVALUATION I**  
1.5 CR. (1.5L)

PRQ: RTE 101. 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 132  
**RADIOGRAPHIC PATHOLOGY AND IMAGE EVALUATION II**  
1.5 CR. (1.5L)

PRQ: RTE 131. Provides a detailed anatomic/pathologic discussion of the spine, circulatory system, nervous system, and skull and related medical terminology.

RTE 141  
**RADIOGRAPHIC EQUIPMENT/IMAGING I**  
3 CR. (3L)

PRQ: Program admission, RTE 101. Introduces the fundamental aspects of radiographic equipment including a basic review of Physics fundamentals pertaining to x-ray production, the x-ray machine, image receptors, and control of scatter radiation.

RTE 142  
**RADIOGRAPHIC EQUIPMENT/IMAGING II**  
3 CR. (3L)

PRQ: RTE 141. Expands information covered in RTE 141 and provides in depth knowledge of radiographic exposure and the factors that effect radiographic film quality and assurance.

RTE 181  
**RADIOGRAPHIC INTERNSHIP I**  
5 CR. (15 INT)

PRQ: Program admission, RTE 101. Introduces the clinical education experience at the clinical education center. The student applies knowledge learned in the classroom to the actual practice of radiography.

RTE 182  
**RADIOGRAPHIC INTERNSHIP II**  
5 CR. (15 INT)

PRQ: RTE 181. Introduces additional concepts and more complex radiographic procedures than those learned in Clinical Internship I.

RTE 183  
**RADIOGRAPHIC INTERNSHIP III**  
7 CR. (21 INT)

PRQ: RTE 182. Reinforces the basic concepts of Clinical Internship I and II.

RTE 221  
**ADVANCED MEDICAL IMAGING**  
3 CR. (3L)

PRQ: RTE 122. 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 231  
**RADIATION BIOLOGY/PROTECTION**  
2 CR. (2L)

PRQ: RTE 142. Provides the basic knowledge and understanding of the biologic effects of ionizing radiation and radiation protection and safety.

RTE 255  
**MULTIPLANAR SECTIONAL IMAGING**  
2 CR. (2L)

PRQ: Radiologic Technology student or imaging professional or permission of instructor. Offers a course designed to increase knowledge in multi-planar/multi-modality 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 256  
**BONE DENSITOMETRY**  
2 CR. (2L)

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 275-277  
**SPECIAL TOPICS**  
0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

RTE 281  
**RADIOGRAPHIC INTERNSHIP IV**  
8 CR. (24 INT)

PRQ: RTE 183. Introduces the student to the radiographic specialty areas of Pediatrics, Geriatrics, the out-patient clinic, as well as increasing proficiency in general radiography.

RTE 282  
**RADIOGRAPHIC INTERNSHIP V**  
8 CR. (24 INT)

PRQ: RTE 281. Introduces the student to the radiographic specialty areas of portable and trauma radiography as well as increasing proficiency in general radiography.

RTE 289  
**CAPSTONE**  
3 CR. (3L)

PRQ: All core curriculum or permission of instructor. CORQ: RTE 282. Prepares the radiology technology student to effectively search for a job in radiography and sit for the American Registry of Radiologic Technology examination.

RTE 291  
**MAMMOGRAPHY INTERNSHIP**  
3 CR. (9 INT)

PRQ: Registrant must be registered or registry eligible Radiologic Technologist and approval of Department Chair. CORQ: RTE 250 or Instructor Permission. Provides clinical experience for demonstrating and documenting clinical competencies required by the American Registry of Radiologic Technologist for application for registry examination.

## Reading

REA 030  
**BASIC READING SKILLS**  
2 CR. (1L/2 LBA)

PRQ: ACCUR score of 25. Focuses on strategies for word attack, vocabulary development, stages of reading, and basic reading comprehension.

REA 060  
**FOUNDATIONS OF READING**  
3 CR (3L)

PRQ: "C" or better in REA 030 or equivalent assessment test score. PRQ/CORQ: CIS 110 or equivalent assessment test score. Focuses on strategies for vocabulary development, improved reading comprehension, and enrichment.

REA 090  
**COLLEGE PREPARATORY READING**  
3 CR. (3L)

PRQ: "C" or better in REA 060 or equivalent assessment test score. PRQ/CORQ: CIS 110 or equivalent assessment test score. Enables the student to apply strategies for improving comprehension, developing vocabulary, and increasing rate for reading college textbooks.

REA 112  
**SPEED READING**  
2 CR. (2L)

PRQ: Accuplacer Reading 80+, completion of REA 090, or instructor permission. Improves reading comprehension and speed of reading for students who want to enhance skills for success in college or career environments.

REA 130  
**APPLIED AND TECHNICAL READING**  
2 CR. (2L)

PRQ: Accuplacer Reading 80+, completion of REA 090, or instructor permission. Focuses on the appropriate reading strategies to understand technical, vocational and academic texts, manuals, professional journals and pleasure materials; to complete a task in the workplace; and to comprehend a new process.

REA 175-177  
**SPECIAL TOPICS**  
0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

REA 275-277  
**SPECIAL TOPICS**  
0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

## Real Estate

REE 175-177  
**SPECIAL TOPICS**  
0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

REE 201  
**REAL ESTATE BROKERS I**  
6 CR. (6L)

Enables the student, in conjunction with REE 202 - 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 202  
**REAL ESTATE BROKERS II**  
6 CR. (6L)

Enables the student, in conjunction with REE 201 - 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 275-277  
**SPECIAL TOPICS**  
0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.



# Respiratory Care Practitioner

RCA 105

## **INTRODUCTION TO RESPIRATORY CARE**

1 CR. (1L)

PRQ: MAT 107, BIO 201, REA 090 and ENG 121 or equivalent assessment test score, consent of instructor. Introduces the profession of respiratory care including history of the profession ; current and future role of the respiratory care professional ; role, function, and interrelationships of several professional organizations ; introduces quality and evidence-base practice ; patient safety, communication and record keeping ; the principles of infection control ; and legal and ethical implications in the practice. This is an online course.

RCA 131

## **BASIC TECHNIQUES IN RESPIRATORY CARE**

3 CR. (2L/1.5 LBV)

PRQ: Program admission. Focuses on the study of principles of operation and therapeutic application of basic respiratory care equipment and techniques.

RCA 132

## **BASIC TECHNIQUES IN RESPIRATORY CARE II**

5 CR. (3L/3 LBV)

PRQ: RCA 131, RCA 155 or consent of instructor. Continues RCA 131 and focuses on airways, aerosol therapy, chest physiotherapy, and positive pressure breathing.

RCA 151

## **CARDIOPULMONARY ANATOMY AND PHYSIOLOGY**

3 CR. (3L)

PRQ: RCA 105, BIO 201 or consent of instructor. Focuses on the structure of the pulmonary and cardiovascular systems. Addresses independent functional relationships.

RCA 153

## **CARDIOPULMONARY DISEASE**

3 CR. (4.5 LBV)

PRQ: Program admission, RCA 151, RCA 131, or consent of Department Chair. Discusses the clinical manifestations and assessment of cardiopulmonary disease in depth. The course utilizes a problem based-case management approach to the study of cardiopulmonary disease.

RCA 155

## **LOGIC OF RESPIRATORY SCIENCE**

3 CR. (3L)

PRQ: Program admission. Focuses on a study of the basic concepts used in respiratory care with a strong emphasis on their interrelationships.

RCA 164

## **ADVANCED CARDIAC CARE**

3 CR. (2L/1.5 LBV)

PRQ: RCA 151 or consent of Department Chair. Focuses on an in depth process of the electrophysiology of the heart, as well as the techniques and interpretations of electrocardiograms. The class will also include instruction and certification in ACLS.

RCA 165

## **PHARMACOLOGY OF CARDIOPULMONARY CARE**

3 CR. (2L/1.5LBV)

PRQ: Program admission, RCA 155, RCA 151, or consent of Department Chair. Focuses on a study of the principles of pharmacology and the pharmacologic properties and application of drugs commonly employed in the treatment of cardiopulmonary disease.

RCA 230

## **CRITICAL CARE I**

2 CR. (3 LBV)

PRQ: RCA 153 or consent of instructor. Focuses on the care of critically ill patients. Includes advanced pulmonary physiology and pathophysiology, assessment and monitoring of acute and chronic respiratory failure, mechanical ventilation, and emergency respiratory care. Incorporates a laboratory portion that enables the student to develop skills essential for the assessment and treatment of the critically ill.

RCA 251

## **CRITICAL CARE II**

3 CR. (4.5 LBV)

PRQ: RCA 230 or consent of instructor. Focuses on selected topic areas in critical care. Includes both technical and management concerns in the intensive care setting.

RCA 254

## **PULMONARY FUNCTION TESTING**

1 CR. (1L)

PRQ: Program admission, RCA 155, RCA 151, RCA 165, or consent of Department Chair. Explores the Indications for Pulmonary Function Testing as well as the testing procedures involved in pulmonary function testing. This will include Spirometry, Lung Volumes and Gas Distribution Tests. Reference values as well as conversion and correction factors will be introduced. This class will also explore how Pulmonary Function testing is used to diagnose disease and evaluate treatment.

RCA 256

## **PEDIATRIC AND NEONATAL CARE**

3 CR. (2L/1.5 LBV)

PRQ: Program admission, RCA 155, RCA 151, RCA 165, RCA 164, RCA 153, or consent of Department Chair. Covers aspects of fetal development, neonatology, and pediatrics. Cardiopulmonary disorders, respiratory therapeutics, special procedures, labor and delivery will be covered. Students enrolled in this class will also be certified in Pediatric Advanced Life Support.

RCA 265

## **PROFESSIONAL DEVELOPMENT**

2 CR. (2L)

CORQ: RCA 283 or consent of instructor. Focuses on preparation for national board exams and professional interaction.

RCA 275-277

## **SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

RCA 280

## **INTERNSHIP I**

4.5 CR. (13.5 INT)

PRQ: RCA 131, RCA 132, RCA 155, or instructor's permission. Focuses on the care and analysis of the noncritical patient. Procedures include those presented in RCA 131 and RCA 132.

RCA 281

## **INTERNSHIP II**

7.5 CR. (22.5 INT)

PRQ: RCA 280 or instructor's permission. Focuses on the care and analysis of the critically ill patient. Rotations into specialty areas are carried out as the schedule permits.

RCA 283

**INTERNSHIP III**

7.5 CR. (22.5 INT)

PRQ: RCA 281 or instructor's permission. 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.

## Science

SCI 155

**INTEGRATED SCIENCE I – PHYSICS AND CHEMISTRY: GT-SC1**

4 CR. (3L/2 LBA)

PRQ: REA 090, MAT 090, ENG 090, or equivalent assessment test scores. 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. This course is one of the Statewide Guaranteed Transfer Courses, GT-SC1.

SCI 156

**INTEGRATED SCIENCE II – EARTH AND LIFE SCIENCE: GT-SC1**

4 CR. (3L/2 LBA)

PRQ: REA 090, MAT 090, ENG 090 or equivalent assessment scores. Examines earth and biological systems, living and non-living environments, through the application of fundamental energy and matter concepts. These systems and concepts will be explored in hands-on laboratory experiments. This course is one of the Statewide Guaranteed Transfer Courses, GT-SC1.

SCI 275-277

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

## Small Business Management

SBM 101

**STARTING A SMALL BUSINESS**

1 CR. (1L)

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 113

**WRITING A BUSINESS PLAN**

1 CR. (1L)

This is the final course in the small business certificate program. Students will write a business plan from the material they have developed in the other courses.

SBM 121

**SMALL BUSINESS PLANNING I**

9 CR. (9L)

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 122

**SMALL BUSINESS PLANNING II**

9 CR. (9L)

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. Focuses on implementing a computerized record keeping system.

SBM 131

**RECORDS AND COMPUTERIZATION I**

9 CR. (9L)

Guides the student in the collection of necessary information to implement a computerized record keeping system for the small business owner/operator. Discussion will include computer terminology, application software, balance sheet concepts, accounting principles, computerized accounting reports and business plan components.

SBM 132

**RECORDS AND COMPUTERIZATION II**

9 CR. (9L)

Covers the implementation of a computerized record keeping 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 131.

SBM 141

**FINANCIAL ANALYSIS/PLANNING I**

9 CR. (9L)

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 142

**FINANCIAL ANALYSIS/PLANNING II**

9 CR. (9L)

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 151

**MARKETING AND RISK MANAGEMENT I**

9 CR. (9L)

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. The development of budgets, including marketing, into the total operating budget and activities of the business. Provide 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 152

**MARKETING AND RISK MANAGEMENT II**

9 CR. (9L)

Continues from SBM 151 and 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 153

**MARKETING, RISK MANAGEMENT AND E-COMMERCE I**

9 CR. (9L)

Introduces the development of web pages using structured design to document layout. This course provides the student with hands on, practical application in creating and maintaining a web page for small business owners. May include such concepts as, web page 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 web site.

SBM 154

**MARKETING, RISK MANAGEMENT AND E-COMMERCE II**

9 CR. (9L)

Introduces the development of web pages 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 web page for small business owners.

SBM 175

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

SBM 275

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

# Sociology

SOC 100

**PRINCIPLES OF PRACTICAL SOCIOLOGY**

3 CR. (3L)

PRQ: REA 090 or equivalent assessment test score. Introduces the student to the varied dynamics of human society. We will examine topics such as: The impact of social groups of which we are a part on how we act and think, the historical development of sociology, the way sociologists are taught to think, the interaction between humans and their social organizations, the ways in which we operate in and through our social structures, inequality in society, the meaning of culture, the effects of our social institutions, the ways in which social organizations influence each other, order and power in social organizations, the ever-changing dynamics of human social life, and the study of family structures in our society.

SOC 101

**INTRODUCTION TO SOCIOLOGY I: GT-SS3**

3 CR. (3L)

PRQ: REA 090 or the equivalent recommended. 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 102

**INTRODUCTION TO SOCIOLOGY II: GT-SS3**

3 CR. (3L)

PRQ: REA 090 or the equivalent recommended. 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 175-177

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

SOC 201

**INTRODUCTION TO GERONTOLOGY**

3 CR. (3L)

PRQ: REA 090 or equivalent assessment test score. Acquaints students with the major issues and concepts pertinent to the field of gerontology. The course introduces various theoretical perspectives on aging, the changing trends in life expectancy and other demographic considerations, and the interrelationship between elders and key social institutions. It provides an overview of physical, cognitive, and socioemotional factors associated with aging.

SOC 203

**URBAN SOCIO-ANTHROPOLOGY**

3 CR. (3L)

PRQ: REA 090 or equivalent assessment test score. 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 205

**SOCIOLOGY OF FAMILY DYNAMICS: GT-SS3**

3 CR. (3L)

PRQ: REA 090 or equivalent assessment test score. 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 life styles. This course is one of Statewide Guaranteed Transfer Courses, GT-SS3.

SOC 212

**RESEARCH IN SOCIAL SCIENCES**

3 CR. (3L)

PRQ: REA 090 or equivalent assessment test score. Introduces social research methods with an emphasis on the scientific method and the role of empirical inquiry into sociology. This course will include the study of methodologies of data collection and analysis, the logic of research, the role of theory, measurement, sampling and research designs. Field research and the professional norms and ethics of social research will also be covered.

SOC 215

**CONTEMPORARY SOCIAL PROBLEMS: GT-SS3**

3 CR. (3L)

PRQ: REA 090 or the equivalent recommended. 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 216

**SOCIOLOGY OF GENDER: GT-SS3**

3 CR. (3L)

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 218

**SOCIOLOGY OF DIVERSITY**

3 CR. (3L)

PRQ: REA 090 or equivalent assessment test score. 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.

SOC 223

**CHICANOS IN A CHANGING SOCIETY**

3 CR. (3L)

PRQ: REA 090 or equivalent assessment test score. Explores the lives and roles of Chicanos and Chicanas (Americans of Mexican descent). It introduces students to the Chicano community, its historical, political and social development. It explores the ways in which Chicano communities interrelate with Anglo and multicultural societies as well as its future prospects.

SOC 231

**THE SOCIOLOGY OF DEVIANT BEHAVIOR: GT-SS3**

3 CR. (3L)

PRQ: REA 090 or equivalent assessment test score. 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 237

**SOCIOLOGY OF DEATH AND DYING**

3 CR. (3L)

PRQ: REA 090 or equivalent assessment test score. 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.

SOC 265

**VIOLENCE AND CULTURE**

3 CR. (3L)

PRQ: ENG 060, REA 090, or equivalent assessment test scores. 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 275-277

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

SOC 280

**INTERNSHIP**

3 CR. (3L)

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 289

**CAPSTONE**

3 CR. (3L)

PRQ: ENG 060, REA 090, or equivalent assessment test scores. Studies and applies the theories and techniques of leadership and group processes. In addition, PSY 275 introduces leadership skills and experiences with applications in group and community settings.

## Social Work

SWK 100

**INTRODUCTION TO SOCIAL WORK**

3 CR. (3L)

Covers the human services and the challenges and problems of working with people. Intervention strategies and skills are taught and human service systems, the role of the human service worker and attitudinal and ethical issues are covered.

SWK 106

**INTRODUCTION TO ALCOHOL AND DRUGS**

3 CR. (3L)

PRQ: REA 090 or equivalent assessment test score. 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 175-177

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

SWK 201

**HUMAN BEHAVIOR IN THE SOCIAL ENVIRONMENT I**

3 CR. (3L)

PRQ: PSY 101, SOC 101. PRQ/CORQ: SWK 100. Focuses on the person in environment throughout the life span with an examination of the relationship between biological, psychological, social, spiritual and cultural systems.

SWK 202

**HUMAN BEHAVIOR IN THE SOCIAL ENVIRONMENT II**

3 CR. (3L)

PRQ: SWK 201. 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 205

**SOCIAL WELFARE IN THE UNITED STATES**

3 CR. (3L)

PRQ/CORQ: SWK 100. Introduces students to the profession of Social Work and Social Welfare. Students will be presented with an historical and conceptual overview of the social welfare system in the United States. Attention is given to the milieu within which social, political, economic, racial and cultural forces have interacted in the evolution of social welfare.

SWK 222

**INTRODUCTION TO SWK PRACTICE**

3 CR. (3L)

PRQ: SWK 100, SWK 201. PRQ/CORQ: SWK 202. Application of the foundation of generalist practice skills. Requires 15 clock hours of volunteer work in an approved human services agency.

SWK 275-277

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

## Spanish

SPA 101

**CONVERSATIONAL SPANISH I**

3 CR. (3L)

PRQ: REA 060 or equivalent assessment test score. Offers beginning students the skills necessary to understand and speak Spanish. The material includes basic vocabulary, grammar, and expressions that are used in daily situations and in travel.

SPA 102

**CONVERSATIONAL SPANISH II**

3 CR. (3L)

PRQ: SPA 101 or instructor approval. Offers students the skills necessary to understand and speak Spanish. The material continues to cover basic conversations patterns, expressions, and grammar.

SPA 109

**SPANISH FOR TRAVELLERS**

2 CR. (2L)

Introduces the basic vocabulary and expressions useful to travelers in the Spanish speaking countries. The course will concentrate on the customs, traditions and cultural attitudes to be discovered by a visitor to the destination country. Cultural diversity and global awareness are integral to this course of study. This course does not fulfill Humanities Area Requirements. Not intended for transfer.

SPA 111

**SPANISH LANGUAGE I**

5 CR. (5L)

PRQ: REA 090 or equivalent assessment test scores. Deals with the development of functional proficiency in listening, speaking, reading and writing the Spanish language. Note: The order of the topics and methodology will vary according to individual texts and instructors.

SPA 112

**SPANISH LANGUAGE II**

5 CR. (5L)

PRQ: REA 090 or equivalent assessment test scores, SPA 111 or permission of the instructor. Continues Spanish Language I in the development of 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.

SPA 114

**FAST-TRACK SPANISH I AND II**

5 CR (5L)

PRQ: REA 060 or equivalent assessment test scores. Designed to bridge beginning SPA courses with intermediate SPA courses. It is designed for students who have studied two years of the target language in high school and possess linguistic and cultural knowledge that true beginners do not, but are not ready yet to move to the intermediate level because they need an in-depth review of essential structures.

SPA 115

**SPANISH FOR THE PROFESSIONAL I**

3 CR. (3L)

PRQ: REA 090 or equivalent assessment test scores. Designed as an introduction 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 175

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

SPA 178

**SEMINAR**

0.25-6 CR (.25-6 SEM)

Provides students with an experiential learning opportunity.

SPA 201

**CONVERSATIONAL SPANISH III**

3 CR. (3L)

PRQ: SPA 112 or instructor's approval.

Provides students with the skills necessary continue to their study of understanding and speaking Spanish. The material includes intermediate level vocabulary, grammar, and expressions.

SPA 211

**SPANISH LANGUAGE III: GT-AH4**

3 CR. (3L)

PRQ: SPA 112 or permission of the instructor; REA 090; ENG 090; or equivalent assessment test scores. Continues Spanish Language I and II in 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 212

**SPANISH LANGUAGE IV: GT-AH4**

3 CR. (3L)

PRQ: SPA 211 or permission of the instructor; ENG 090; REA 090; or equivalent assessment test scores. Continues Spanish Language I, II and III in 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 235

**SPANISH READING-WRITING**

3 CR. (3L)

PRQ: SPA 211. Builds vocabulary and develop reading and writing strategies in Spanish to be able to analyze fictional and non-fictional texts and gain further cultural insight of the Hispanic world.

SPA 275-277

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

## Sport Vehicle Technology

SVT 101

**SVT ORIENTATION AND SAFETY**

1 CR. (0.5L/0.75 LBV)

PRQ: REA 060, ENG 060, MAT 030. 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 102

**SVT ROLLING CHASSIS**

3 CR. (1.5L/2.25 LBV)

PRQ: SVT 101. 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 103

**SVT ROLLING CHASSIS**

2 CR. (1L/1.5 LBV)

PRQ: SVT 101. Introduces automotive electricity and includes basic electrical theory, circuit designs, and wiring methods. Focuses on multi-meter usage and wiring diagrams.

SVT 104

**2 STROKE ENGINES**

2 CR. (1L/1.5 LBV)

PRQ: SVT 101. Introduction to Basic Two-Stroke engine theory, operation and repair.

SVT 105

**4 STROKE ENGINES**

2 CR. (1L/1.5 LBV)

PRQ: SVT 101. Introduction to Basic Four-Stroke engine theory, operation and repair.

SVT 106

**SVT ELECTRICAL REPAIR**

2 CR. (1L/1.5 LBV)

PRQ: SVT 101. Designed to expose students to the thought process required to correctly diagnose Sport Vehicle Electrical Systems as well as provide hand-on training to allow for learning of proper repair techniques.

SVT 107

**SVT DRIVE SYSTEMS**

2 CR. (1L/1.5 LBV)

PRQ: SVT 101. Designed to introduce students to Drive components used on modern Sport Vehicles, including Transmission Assemblies, clutch components, Chain and Belt Drive Systems.

SVT 109

**SVT SNOW/ATV/PWC**

2 CR. (1L/1.5 LBV)

PRQ: SVT 101. Designed to train students in the various unique aspects of Snowmobile, Personal Watercraft and ATV repair and maintenances.

SVT 201

**ADV. ROLLING CHASSIS**

4 CR. (2L/3LBV)

PRQ: SVT 102, SVT 103, SVT 104, SVT 105, SVT 106, SVT 107, SVT 109, Department Chair Permission. 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 202

**ADV. SVT ELECTRICAL SYST.**

4 CR. (2L/3LBV)

PRQ: SVT 102, SVT 103, SVT 104, SVT 105, SVT 106, SVT 107, SVT 109, Department Chair Permission. Advanced repair and troubleshooting of Sport Vehicle Electrical systems with an emphasis on Ignition and Charging system diagnosis and repair techniques.

SVT 203

**ADV. 2/4 STROKE ENGINES**

4 CR. (2L/3LBV)

PRQ: SVT 102, SVT 103, SVT 104, SVT 105, SVT 106, SVT 107, SVT 109, Department Chair Permission. 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 204

**SIMULATED SHOP OPERATIONS**

6 CR. (9 LBV)

PRQ: SVT 102, SVT 103, SVT 104, SVT 105, SVT 106, SVT 107, SVT 109, Department Chair Permission.

SVT 205

**SVT INTERSHIP**

6 CR. (18 INT)

PRQ: SVT 102, SVT 103, SVT 104, SVT 105, SVT 106, SVT 107, SVT 109, Department Chair Permission. 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.

## Theatre

THE 105

**THEATRE APPRECIATION: GT-AH1**

3 CR. (3L)

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 111

**ACTING I**

3 CR. (3L)

Covers basic acting techniques and approaches including scene study, improvisation, and script analysis. It includes practical application through classroom performance.

THE 112

**ACTING II**

3 CR. (3L)

PRQ: THE 111 or permission of the instructor. Continues to explore basic acting techniques and approaches including scene study, improvisation, and intermediate script analysis. It includes practical application through classroom performance.

THE 116

**TECHNICAL THEATRE**

3 CR. (3L)

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 125

**INDIVIDUAL SINGING LESSONS FOR MUSICAL THEATRE**

.5 CR (.5L)

Focuses on basic vocal technique including breath support, belt technique, diction, body alignment, expressive communication, stage presence and microphone techniques. Various repertoire and styles are explored. The course includes a final performance before an invited audience.

THE 126

**AUDITIONING FOR MUSICAL THEATRE**

3 CR. (3L)

Builds a confident, talented and exciting audition. It includes a mock video taped audition, and covers resumes, head shots, repertoire choices, stage fright, 16-bar audition and dressing for success. This course is presented in conjunction with producers from regional theaters providing valuable feedback for the participants.

THE 131

**THEATRE PRODUCTION I**

3 CR. (3L)

PRQ: THE 111 and/or THE 112 or permission of instructor. Allows students to put into practice theories of theatre production. Participation in set construction, scenic artistry, costuming, lighting, sound, acting, stage managing, and administration is available.

THE 132

**THEATRE PRODUCTION II**

3 CR. (3L)

PRQ: THE 111 and/or THE 112 or permission of instructor. 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 175

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

THE 210

**SINGING FOR ACTORS**

3 CR. (3L)

Allows students to explore and perform Musical Theatre songs. Students utilize a pedagogical approach to evaluate their vocal structure and formulate a systematized series of vocal and whole body exercises to develop and enhance their self-confidence and vocal instrument through in-class performance and variety show presentation.

THE 211

**DEVELOPMENT OF THEATRE GREEK RENAISSANCE: GT-AH1**

3 CR. (3L)

PRQ: REA 090 or equivalent. 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 Statewide Guaranteed Transfer Courses, GT-AH1.

THE 212

**DEVELOPMENT OF THEATRE II: GT-AH1**

3 CR. (3L)

PRQ: THE 211 or REA 090 or the equivalent recommended as a prerequisite. 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 Statewide Guaranteed Transfer Courses, GT-AH1.

THE 215  
**PLAYWRITING**  
3 CR. (3L)

PRQ: REA 090, ENG 090, or equivalent assessment test scores. 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.

THE 220  
**DIRECTING I**  
3 CR. (3L)

PRQ: THE 111 and 112. Covers basic techniques for stage directing in contemporary theatre. Topics to be covered include stage composition, script analysis, work with actors, and the collaborative role of the director.

THE 231  
**THEATRE PRODUCTION III**  
3 CR. (3L)

PRQ: THE 111 and/or THE 112 or permission of instructor. Allows students to put into practice theories of theatre production. Participation in set construction, scenic artistry, costuming, lighting, sound, acting, stage managing, and administration is available.

THE 232  
**THEATRE PRODUCTION IV**  
3 CR. (3L)

PRQ: THE 111 and/or THE 112 or permission of instructor. 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 240  
**THEATRE VOICE AND DICTION**  
3 CR. (3L)

Provides students with individual tutorials which define, design and apply specific vocal techniques to abate singing and speech difficulties. Master class performances provide the opportunity to conjure the energy, charisma and stage command necessary for presentations.

THE 275-277  
**SPECIAL TOPICS**  
0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

THE 283  
**INTERNSHIP: SUMMER STOCK THEATRE**  
1-3 CR. (1-3L)

Allows students to participate in summer play production that often includes outdoor performances and touring opportunities. Plays by classic authors, such as Shakespeare and Moliere, are frequently performed. Participation in all aspects of theatre production is available.

## Travel and Tourism

TRA 175-177  
**SPECIAL TOPICS**  
0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

TRA 275-277  
**SPECIAL TOPICS**  
0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

## Upholstery

UPH 100  
**BASIC UPHOLSTERY TECHNIQUES**  
3 CR. (1L/3 LBV)

Covers the upholstery industry: safety, familiarization with tools and materials, sewing, tacking, layout and pattern work.

UPH 101  
**AUTO UPHOLSTERY I**  
3 CR. (1 L/3 LBV)

PRQ: UPH 100 or department chair approval. Covers auto seat upholstery, including removal and replacement, teardown, correct use of materials, cutting and stretching.

UPH 102  
**AUTO UPHOLSTERY II**  
3 CR. (1L/3 LBV)

PRQ: UPH 101 or department chair approval. Continues UPH 101, emphasizing skill development. Carpet, trim, convertible tops, tonneau covers and convertible boots are course components.

UPH 103  
**AUTO UPHOLSTERY III**  
3 CR. (1L/3 LBV)

PRQ: UPH 102 or department chair approval. Introduces repair and/or replacement of armrests, carpet, wind lace, door panels, headliner, convertible tops, tonneau covers and convertible boots.

\*\*UPH 104  
**FURNITURE UPHOLSTERY I**  
3 CR. (1L/3 LBV)

Introduces the mechanics and upholstering of reclining household furniture. Completion of upholstery of a reclining chair is required.

\*\*UPH 105  
**FURNITURE UPHOLSTERY II**  
3 CR. (1L/3 LBV)

Provides instruction in layout, cut, sewing and application of final covers on pillow type household furniture. Recovering of one pillow-back chair is required.

\*\*UPH 106  
**FURNITURE UPHOLSTERY III**  
3 CR. (1L/3 LBV)

Includes reupholstering larger pieces of household furniture such as couches or loveseats. Completion of upholstery of a couch or loveseat is required.

UPH 107  
**ADVANCED UPHOLSTERY TECHNIQUES I**  
3 CR. (1L/3LBV)

PRQ: UPH 100, UPH 101, UPH 102, UPH 103. Provides advanced upholstery techniques dealing with channeling, layout, cutting, sewing padding and application of channels. Completion of upholstery of a channel-backed chair is required.



UPH 108  
**ADVANCED UPHOLSTERY TECHNIQUES II**  
3 CR. (1L/3LBV)  
PRQ: UPH 107. Continues UPH 107; methods of button tufting. Completion of upholstering of a tufted chair is required.

\*\*UPH 109  
**RESTORATION OF ANTIQUE FURNITURE**  
3 CR. (1L/3 LBV)  
Includes repairing, recovering and refinishing an antique chair.

UPH 111  
**UPHOLSTERY TECHNIQUES II**  
3 CR. (1L/3LBV)  
PRQ: UPH 108. Covers the upholstering of a variety of advanced styles of furniture. Furniture could include reclining chairs, attached-pillow chairs, channel back chairs, tufted chairs, ottomans, rockers, and assorted material covered furniture.

UPH 275-277  
**SPECIAL TOPICS**  
0-12 CR.  
*Provides students with a vehicle to pursue in depth exploration of special topics of interest.*

## Welding

WEL 100  
**SAFETY FOR WELDERS**  
1 CR. (1L)  
Covers the hazards of welding on health and safety, locating essential safety information from a code or other standard, and identifying and applying shop safety procedures.

WEL 101  
**ALLIED CUTTING PROCESSES**  
4 CR. (1L/4.5 LBV)  
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 102  
**OXYACETYLENE JOINING PROCESS**  
4 CR. (1L/4.5 LBV)  
Introduces safety inspections, minor repairs, operating parameters, oxyacetylene welding equipment, and oxyacetylene welding, brazing, and soldering operations. Blueprint reading skills will be practiced in this course.

WEL 103  
**BASIC SHIELDED METAL ARC I**  
4 CR. (1L/4.5 LBV)  
PRQ: WEL 102. Covers performing safety inspections, making minor repairs, adjusting operating parameters, and operating SMAW equipment utilizing E-6010 electrodes. Layout procedures and practices will also be introduced.

WEL 104  
**BASIC SHIELDED METAL ARC II**  
4 CR. (1L/4.5 LBV)  
PRQ: WEL 103. Covers performing safety inspections, making minor repairs, adjusting operating parameters, and operating SMAW equipment utilizing E-7018 electrodes. Layout procedures will be practiced during this course.

WEL 106  
**BLUEPRINT READING FOR WELDERS AND FITTERS**  
4 CR. (2L/3 LBV)  
PRQ: ENT 131. Covers interpreting weld symbols on blueprints, identifying proper layout methods and tools, and proper joint design necessary for various welding processes.

WEL 111  
**ADVANCED SHIELDED METAL ARC II**  
4 CR. (1L/4.5 LBV)  
Covers safety inspections, minor repairs, operating parameters, operation of SMAW equipment utilizing various electrodes, essential welding information from codes or other standards, and performance of weld inspections.

WEL 113  
**OXYFUEL AND PLASMA CUTTING**  
2 CR. (3 LBV)  
Outlines the skills needed to set up equipment and perform cutting and gouging operations utilizing the oxyacetylene and plasma arc cutting processes.

WEL 115  
**AUTOBODY WELDING & CUTTING**  
4 CR. (1L/4.5 LBV)  
Introduces welding in all positions on light gauge carbon steel using the GMAW and OAW processes on various joint configurations. Student should be familiar with basic metallurgy pertaining to the weldability of metals, structural joints, and safety in the welding industry.

WEL 121  
**STRUCTURAL WELDING I**  
3 CR. (1L/3.5 LBV)  
Covers theory and practice in oxy-acetylene processes with emphasis toward AWS welder qualification with mild steel electrode E-7018 welding in the horizontal and vertical position.

WEL 122  
**STRUCTURAL WELDING II**  
3 CR. (1L/3 LBV)  
Continues WEL 121 with final emphasis toward AWS welder qualification with mild steel electrode E-7018 qualification test in the 2G, 3GU, and 4G position.

WEL 124  
**INTRODUCTION TO GAS TUNGSTEN ARC WELDING**  
4 CR. (1L/4.5 LBV)  
Covers welding in all positions and on various joint configurations using the GTAW (tig) 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 125  
**INTRODUCTION TO GAS METAL ARC WELDING**  
4 CR. (1L/4.5 LBV)  
PRQ: WEL 124. Covers welding in all positions and on various joint configurations using the GMAW (mig) welding process on carbon steel, stainless steel and aluminum. Student should be familiar with basic metallurgy pertaining to the weldability of metals, structural joints, and safety in the welding industry.

WEL 130

**MAINTENANCE WELDING**

2 CR. (1L/1.5 LBV)

Gives the student a basic understanding of the Oxyacetylene cutting and Arc welding processes, and introduction to the skills and techniques used to develop fillet and groove welds. Students will be introduced to oxyacetylene, shielded, gas metal arc welding equipment set up, and various welding techniques. Safety will be stressed during the course.

WEL 160

**BASIC OXYACETYLENE CUTTING**

1 CR. (1.5 LBV)

Teaches how to safely set up and operate manual and machine operated oxy-acetylene cutting equipment.

WEL 161

**BASIC OXYACETYLENE WELDING**

1 CR. (1.5 LBV)

Teaches how to safely set up and operate manual and machine operated oxy-acetylene welding equipment.

WEL 175-177

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

WEL 201

**GAS METAL ARC WELDING I**

4 CR. (1L/4.5 LBV)

Covers safety inspections, minor repairs, operating parameters, operation of GMAW equipment on plain carbon steel utilizing short circuit and spray transfer, and fundamental metallurgy principles.

WEL 202

**GAS METAL ARC WELDING II**

4 CR. (1L/4.5 LBV)

Covers safety inspections, minor repairs, operating parameters, operation of GMAW equipment utilizing a variety of electrodes and base metals, and fundamental principles of welding metallurgy to welding, fabrication, and inspection.

WEL 203

**FLUX CORED ARC WELDING I**

4 CR. (1L/4.5 LBV)

Covers safety inspections, minor repairs, operating parameters, operation of FCAW equipment utilizing self shielded wire, and principles of joint design, preparation, and material selection to welding operations.

WEL 204

**FLUX CORED ARC WELDING II**

4 CR. (1L/4.5 LBV)

Covers safety inspections, minor repairs, operating parameters, operating FCAW equipment utilizing gas shielded wire, and applying fundamentals of welding applications and cost estimating to welding, fabrication, and inspection.

WEL 205

**INTRODUCTION TO ORNAMENTAL IRON**

4 CR. (1L/4.5 LBV)

Covers designing, drawing and fabricating a welded project. Student will demonstrate their ability to use (in a practical application) previously learned techniques using different welding processes.

WEL 224

**ADVANCED GAS TUNGSTEN ARC WELDING**

4 CR. (1L/4.5 LBV)

PRQ: WEL 124, WEL 125. Covers welding in all positions on carbon steel, stainless steel and aluminum plate and carbon steel pipe with the GTAW process. Student should be familiar with basic metallurgy pertaining to the weldability of metals, structural joints, and safety in the welding industry.

WEL 225

**ADVANCED GAS METAL ARC WELDING**

4 CR. (1L/4.5 LBV)

PRQ: WEL 124, WEL 125. Covers welding in all positions on carbon steel plate with the GMAW process. Student should be familiar with basic metallurgy pertaining to the weldability of metals, structural joints, and safety in the welding industry.

WEL 230

**PIPE WELDING I**

4 CR. (1L/4.5 LBV)

PRQ: WEL 103. Covers safety inspections, minor repairs, operating parameters, and operation of SMAW, GMAW, and FCAW equipment in a variety of positions on plain carbon steel pipe joints. Also covers evaluating and solving complex welding and fabrication problems and administering hands on training and supervision to other students during assigned fabrication and welding operations.

WEL 232

**PIPE PREPARATION**

2 CR. (1L/1.5 LBV)

Covers the proper set-up and adjustments of pipe cutters, grinding and preparation techniques including spacing, alignment and positioning.

WEL 233

**2G-HORIZONTAL PIPE A.P.I.**

4 CR. (1L/4.5 LBV)

PRQ: WEL 104 or equivalent. 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 234

**5G-VERTICAL DOWN A.P.I.**

4 CR. (1L/4.5 LBV)

PRQ: WEL 233. 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 235

**6G-45° DOWN A.P.I.**

4 CR. (1L/4.5 LBV)

PRQ: WEL 234. 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 236

**PIPE WELDING PRACTICES**

3 CR. (3L)

Familiarizes the welding students and experienced welders with industrial practices and standards of the pipe welding industry, pipe welding machinery and tools, pipe definitions, American Society of Mechanical Engineers and American Petroleum Institute Pipe Code welding codes, testing procedures and pipe welding practices.

WEL 237

**PIPE-TO-PLATE**

2 CR. (1L/1 LBV)

Includes instruction for Basic Contour Welding Techniques of pipe-to-plate in various positions and circumstances using E-XX10 and E-7018 electrodes in all positions.

WEL 238

**FABRICATION OF PIPE**

3 CR. (1L/3.5 LBV)

Upgrades experienced welders in the area of cutting, fitting and pipe welding. Students make and use templates and apply proper welding techniques, the use of mathematics and shop drawings as applied to pipe welding procedures and layout methods is covered.

WEL 239

**2G-HORIZONTAL PIPE A.S.M.E.**

4 CR. (1L/4.5 LBV)

PRQ: 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 Society of Mechanical Engineers Pipe Code using the GTAW process and SMAW process with E-XX18 and E-XX10 type electrodes.

WEL 241

**5G-VERTICAL UP A.S.M.E.**

4 CR. (1L/4.5 LBV)

PRQ: WEL 239. 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 242

**6G-45 ALL SIZES PIPE**

4 CR. (1L/4.5 LBV)

PRQ: WEL 241. 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 243

**TESTING ALL SIZES PIPE**

4 CR. (1L/4.5 LBV)

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 248

**PIPE LAYOUT**

4 CR. (1L/4.5 LBV)

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 250

**LAYOUT AND FABRICATION**

4 CR. (1L/4.5 LBV)

PRQ: WEL 102. Develops welding and associated skills in the use of drawings and blueprints in planning. Includes designing and layout projects.

WEL 251

**DESIGN, LAYOUT AND FABRICATION**

4 CR. (1L/4.5 LBV)

PRQ: WEL 102, WEL 124, WEL 250. Develops advanced welding and associated skills in the use of drawings and blueprints in planning. Includes designing and layout projects.

WEL 263

**APPLIED METAL PROPERTIES**

4 CR. (3L/1.5 LBV)

Introduces the study of metal properties, hardness testing, heat treatment, cold working microscopic examination and application of common commercial alloys in industry.

WEL 275-277

**SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

## Wind Turbine Technology

WTG 100

**INTRODUCTION TO WIND INDUSTRY**

3 CR. (3L)

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.

WTG 110

**WTG POWER & CONTROL SYSTEMS**

3 CR. (2L/1.5 LBV)

PRQ: WTG 100, ELT 106. Provides a comprehensive overview of the wind turbine generator systems. Focus will be on the power distribution and systems controls, including theory, application, component identification, and schematics. Safety and appropriate Personal Protective Equipment will be emphasized in lab environment.

WTG 280

**WIND TECHNICIAN INTERNSHIP**

3 CR. (9 INT)

PRQ: Instructor Approval. Provides students with the opportunity to supplement coursework with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor.

# Women's Studies

WST 200

## **INTRODUCTION TO WOMEN'S STUDIES: GT-SS3**

3 CR. (3L)

PRQ: REA 090 or equivalent assessment test score.

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.

WST 275-277

## **SPECIAL TOPICS**

0-12 CR.

Provides students with a vehicle to pursue in depth exploration of special topics of interest

# *College Personnel*

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M.B.A., University of Phoenix  
B.S.B.A., University of Southern Colorado

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M.Ed., Colorado State University  
P.T., B.S., University of Colorado

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M.B.A., B.S., University of Southern Colorado

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Ph.D., M.S., Colorado State University  
B.S., Fort Lewis College

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Ph.D., M.S., University of Idaho  
M.S., B.A., University of Pennsylvania

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B.A., Regis University  
A.G.S., A.A.S., Pueblo Community College

**Sue Kochevar**, *Dean of Health Professions*  
M.A., Adams State College  
B.S. Regis University  
R.D.H., A.A.S., University of Southern Colorado

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M.S., Moorhead State University  
B.S., University of Illinois

**Shannon South**, *West Campus Dean, Southwest Colorado Community College*  
M.A., Adams State College  
B.A., Ft. Lewis College

**Dr. Lynn Urban**, *East Campus Dean, Southwest Colorado Community College*  
Ph.D., University of Southern California  
B.A., Rice University

**John Vukich**, *Dean of Economic and Workforce Development Division*  
B.S. University of Southern Colorado

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M.D., University of Minnesota  
B.S., University of Southern Colorado

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M.Ed., Lesley University  
B.A., Colorado State University-Pueblo

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M.Ed. University of Vermont  
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B.A., University of Northern Colorado

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# Index

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About PCC.....14-20  
Academic Advising .....22, 45  
Academic Alert.....52  
Academic Appeal.....53  
Academic Calendar .....9-13  
Academic Honors Program.....58  
Academic Integrity .....49  
Academic Probation.....52-53  
Academic Quality Improvement  
Program (AQIP) ..... 16  
Academic Recognition .....60  
Academic Regulations .....49-54  
Academic Renewal .....53-54  
Academic Suspension .....52-53  
Academic Testing .....65  
Accounting .....99, 150-151  
Accreditation ..... 3-4  
Accuplacer Test .....21  
Adding Courses .....46  
Administration .....270  
Admission Policy.....24  
Admissions .....21, 24-31  
Admissions & Records.....24  
Advancing Academic  
Achievement.....151-152  
Advising and Registration .....22, 45-48  
Advising, New Students & Re-admit...45  
Affirmative Action / Equal  
Opportunity .....76  
AGS Degrees with Transfer  
Articulation Agreements.....82, 91-93  
Alcohol Prevention Information .....63  
Alternative High School  
Diploma Program .....70  
Alternative Methods of Instruction.....57  
American Sign Language Courses ...152  
Anthropology Courses .....152  
Applications, Deadlines.....35

Applied Technology ..... 100  
Applying for Admission .....21, 24-31  
Arabic ..... 153  
Architectural Technology ..... 153  
Armed Forces Tuition Rates ..... 39  
Art.....153-155  
Art Club ..... 73  
Assessment of Student Learning..... 17  
Associate Degree Requirements ..... 59  
Associate of Applied  
Science..... 59, 82, 96, 99-148  
Associate of Arts..... 59, 83-87  
Associate of General  
Studies..... 59, 82, 90-93  
Associate of Science ..... 82, 88-89  
Assessment Testing (see Basic Skills  
Assessment)..... 65  
Assessment Review ..... 62  
Associated Student Government ..... 72  
Astronomy ..... 156  
Attendance Policy.....49-50  
Audit Grade ..... 51  
Auditor .....26  
Auditor Status/Full-Part-time..... 26  
Automotive Collision  
Technology ..... 100-101, 158-161  
Automotive Service  
Technology ..... 102-104, 156-158  
Auxiliary Services ..... 62  
Awards, Types of..... 36

## B

Background and Drug Checks..... 79  
Barber Courses ..... 161-162  
Basic Skills Assessment.....42-44  
Benefit Programs.....37-38  
Bibliographic Services ..... 66

Biology .....162-163  
 Bookstore.....23, 64  
 Broadcasting Media Production ..... 104  
 Broadcasting and Production  
     Technology .....105  
 Business Courses.....164  
 Business Education .....105  
 Business Management .....85, 106-108  
 Business Technologies .....165-166  
     (also see Office Administration)

## C

Campus Crusade for Christ Club .....73  
 Campus Locations .....6  
 Campus Security Act .....78  
 Campuses.....18-20  
 Career and Technical  
     Programs .....82, 96-98  
 Career Services .....62  
 Carpentry .....166-168  
 Catalog Requirements .....61  
 CCCOnline.....55  
 CCCS Guaranteed Transfer  
     Courses .....94-95  
 Certificate Programs .....60, 97-98  
 Certificate Requirements .....59  
 Certificates.....60, 97-98  
 Certification.....4  
 CETD Non-Credit Courses .....70  
 CETD Pre-College Programs.....70  
 Change of Degree .....27  
 Change of Major .....27  
 Chemistry.....168-169  
 Child Care Referral Service .....64  
 Children First .....64  
 Cisco Certified Network Associate ....110  
 City & State Training Grant Funds .....69  
 Class Rank .....26  
 Class Schedule Changes.....46  
 Classes, Register.....22  
 Classification Requirements .....26  
 Classified Status, Student.....25  
 Colorado-ADN Club .....73  
 College Closures .....9-10  
 Colorado Community Colleges  
     Online (CCCOOnline) .....55

College Opportunity Fund (COF)... 21,39  
 College Personnel .....269-282  
 Colorado Leveraging Educational  
     Assistance Partnership (CLEAP)... 36  
 Colorado Libraries, Access to.....66  
 Colorado Student Grant (CSG).....36  
 Commencement .....61  
 Communication Courses .....169  
 Community Education Training  
     & Pre-College .....70-71  
 Complaints.....78  
 Computer Aided Drafting .....170  
 Computer Information  
     Systems.....91, 108-110,170-173  
 Computer Access .....65  
 Computer Networking.....173-175  
 Computer Science Courses.....175-176  
 Computer Web-Base .....176  
 Construction Technologies  
     .....110, 176-177  
 Continuing Students, Advising.....45  
 Cooperative Experience .....57  
 Cosmetology.....111-112, 177-179  
 Cosmetology Club .....73  
 Counseling and Career Services ...62-63  
 Counseling Services .....62  
 Counselor .....179-180  
 Course Cancellation .....47  
 Course Corequisites .....48  
 Course Descriptions .....149-268  
 Course Fees .....40  
 Course Load.....47  
 Course Numbering .....48  
 Course Prerequisites .....48  
 Course Registration.....46  
 Course Repeats.....52  
 Course Reserves.....66  
 Credit for Prior Learning (CPL).....33  
 Criminal Justice ....92, 112-113, 180-182  
     (also see Law Enforcement Academy)  
 Criminal Justice Club.....73  
 Culinary Arts .....125-126, 182-185  
     (also see Hospitality Studies)  
 Culinary Arts Club.....73  
 Customer Service Academy .....70

## D

Dance Courses .....	185
Dean's List .....	60
Declaration of Degree or Major, Change .....	27
Degree and Certificate Programs .....	82-148
Demonstrating Lawful Presence .....	25
Dental Assisting .....	114-115, 185-187
Dental Assisting Student Organization (DASO) Club.....	73
Dental Hygiene .....	115-116, 187-189
Diagnostic Medical Sonography (also see Medical Sonography) .....	134-135, 189-190
Diesel/Heavy Equipment.....	117
Diesel Power Mechanics.....	190-191
Digital Media .....	117-118
Dining Services.....	65
Directors .....	271-272
Disability Resources .....	65
Disclaimer Notices .....	79-80
Driving.....	191-192
Drop for Non-Payment.....	41
Dropping Courses.....	46-47
Drug Prevention Information .....	63

## E

E-mail Account.....	22
Early Childhood Education.....	86-87, 118-119, 192-193
Economic Development.....	69
Economic & Workforce Development.....	69
Economics .....	193-194
Education.....	85-86, 194-195
Electricity Ind/Commercial .....	195
Electronics .....	196-198
E-mail Account, Activate .....	22
Emergency Medical Services .....	119-120, 198-200
Emeritus Employees .....	282
Emphasis in Social Work .....	87
Energy Maintenance Technology .....	120-121

Energy Technology.....	200-201
Engineering .....	201
Engineering Technology .....	121-123, 201-203
English.....	203-204
English as a Second Language (ESL) .....	71
Enrollment Center (Go!Zone) .....	21
Environmental Science.....	204
Esthetician (Also see Cosmetology) .....	111, 204
Ethnic Studies.....	204-205

## F

Facilities Maintenance Tech .....	205
Faculty .....	277-281
Federal Pell Grant .....	36
Federal Title IV Financial Aid Funds .....	36
Federal Supplemental Educational Opportunity Grant (FSEOG) .....	36
Fees .....	40
FERPA .....	76
Film & Video Technology.....	205-206
Final Examinations .....	52
Financial Aid.....	21, 35-38
Financial Aid Deadlines .....	35
Financial Aid Eligibility .....	35
Financial Aid Office .....	35
Financial Aid Warning, Probation and Suspension.....	37
Financial Obligation .....	40
Fine Woodworking.....	206
Fire Science Technology .....	123-124, 207-209
Fire Science Wildland (Also see Wildland Firefighter.....	210-211
Floral Design .....	211
Fremont Campus.....	6, 19, 67, 72
French Courses .....	212
Full-Time Student .....	26
Future Educators Association (FEA) Club.....	73

## G

Gateway to College .....	71
GED Preparation .....	71
General Education Learning Objectives .....	16
General Education Philosophy.....	16
Generalist Degree.....	82, 90
Geography .....	212
Geography Information Systems .....	212-213
Geology .....	213
German.....	213-214
Getting Started at PCC .....	21-23
Governance .....	3
Go!Zone.....	21
Grade Changes .....	52
Grade Requirements for Graduation .....	59
Grading System .....	50-52
Graduation, Preparing for .....	60-61
Graduation Requirements.....	59-61
Graduation with Honors .....	60
Grants .....	36
Grant Funds, City & State.....	69
Grievance Process .....	77
Group Fitness Classes.....	67
Guaranteed Transfer (GT) Pathways Courses .....	94-95

## H

Hairstylist (Also see Cosmetology).....	111
Health Information Technology ..	214-215
Health and Wellness .....	67, 216
Health Insurance.....	78
Health Professions.....	216-217
Heating and Air Conditioning .....	217
Heavy Equipment .....	217-218
Heavy Equipment Mechanics .....	218
High School Students/Concurrent Enrollment Programs .....	27
History Courses .....	218-219
History of the College.....	17-20

History Society Club .....	73
Holistic Health Professional .....	219
Honors.....	60
Honors Program, Admission .....	58
HOPE Bridge Project.....	71
Horticulture .....	219-221
Hospitality Studies .....	125-126, 221
Humanities .....	221-222
Hybrid Courses.....	55

## I

Identification Card.....	22
Incomplete Grades .....	51
Independent Study .....	57
Individual Fitness.....	67
Industrial Electronics Technology .....	127-128
Insurance .....	79
Interior Design .....	128-129, 222-224
Interlibrary Loans.....	67
International Student Applicants ...	28-30
Internship.....	57
Intramurals Program.....	67
Italian.....	224

## J

Jewelry Repair and Design.....	224-225
Journalism .....	225

## K

Kids College .....	70
--------------------	----

## L

Law Enforcement Academy (also see Criminal Justice) .....	129, 225-226
Lawful Presence .....	25
Learning Center.....	65-66
Legal Information.....	76-80
Letter Grades.....	50
Liability Insurance.....	79
Library .....	66-67

Libraries, Access to Colorado .....	66
Library Technician .....	130, 226
Life Skills.....	63
Limited-Entry Programs .....	30
Literature .....	227
Loans .....	36
Loans, Interlibrary .....	67
Local Anesthesia and Nitrous Oxide/Oxygen Sedation .....	116

## M

Machining Technology .....	131, 227-230
Malpractice Insurance.....	79
Management Courses.....	230-231
Mandatory Student Fees.....	40
Manicurist (Also see Cosmetology) ..	111
Manufacturing Technology .....	132, 231-232
Marketing Courses.....	232-233
Marketing and Public Relations Office .....	67
Mass Communications.....	93
Massage Therapy .....	132-133, 233-234
Mathematics .....	234-235
Medical Assistant.....	133
Medical Imaging Student Society (MISS) Club .....	74
Medical Office Technology.....	236-237
Med-Prep.....	134
Medical Sonography (also see Diagnostic Medical Sonography) .....	134-135
Meteorology .....	237
Methods of Payment.....	41
Military Withdrawal.....	47
Miscellaneous Fees .....	40
Mission.....	15
Multimedia and Graphic Design.....	237-240
Music .....	241

## N

Nail Technician (Also see Cosmetology).....	241
New Student Advising.....	45

New Student Orientation .....	22
Non-Credit Classes .....	70
Nursing .....	135-136, 242-243
Nursing Aide .....	137
Nursing Assistant.....	243

## O

Occupational Experience.....	57
Occupational Safety Technician .....	243
Occupational Therapy Assistant.....	137-138, 243-245
Office Administration .....	138-139 (also see Business Technologies)
Online Courses.....	55
Online Full Text Resources .....	66
Orientation, New Student .....	22
Outdoor Adventure Leadership Program.....	68

## P

Panther One Card(ID) .....	22
Parking Permit.....	22
Part-time Student.....	26
PCC Online.....	55
Performing Arts Club .....	74
Permanent Resident Status.....	25
Pharmacy Technician .....	140, 245
Phi Beta Lambda (PBL).....	74
Phi Theta Kappa.....	74
Philosophy Courses.....	245-246
Phlebotomy Technician .....	140
Physical Education .....	246-247
Physical Therapist Assistant .....	141, 248-249
Physical Therapist Assistant Club (PTA) .....	74
Physics .....	249-250
Political Science .....	250
Polysomnography Technology .....	142, 250-251
Pre-College Programs .....	70
Pre-Engineering.....	89
President's List .....	60
Printing Technology Courses.....	251
Privacy Rights.....	76

Process Technology Courses .....	251
Professional Development .....	70
Professional/Technical Staff .....	273-276
P.S. C.A.R.E. Club.....	74
Psychiatric Technician .....	142, 251-252
Psychology .....	252-254
Public Relations Office.....	67
Public Safety .....	67
Pueblo Campus .....	6, 18, 67, 72
Purposes.....	16

## R

Radio and Television Courses...	254-255
Radiologic Technology.....	143, 255-256
Recreation Center.....	67-68
Reading .....	256
Re-admission to PCC .....	27
Re-admit Student.....	45
Real Estate Courses.....	256
Recruitment, Office of .....	64
Reference .....	66
Refunds .....	41
Registration.....	22, 45, 56
Requirements for Classification .....	26
Residency Classification .....	31
Respiratory Care.....	144, 257-258
Restricted Courses .....	149

## S

Satisfactory Progress Grades .....	51
Scholarships .....	36
Science Courses.....	258
Selective Service Registration	
Requirements .....	31
Semester Length .....	9
Senior Citizen Scholarship.....	37
Senior Focus.....	70
Services for Students.....	62-68
Sexual Harassment Notice .....	76-77
Skills USA Club.....	75
Small Business Development	
Center.....	15
Small Business	
Management.....	145, 258-259

Sociology .....	259-260
Social Work .....	260-261
Southwest Campuses.....	6, 19-20, 67
Spanish .....	261-262
Special Study Aids.....	66
Sport Vehicle Technology.....	262-263
Student Activities .....	72-75
Student Activities Board .....	72
Student Ambassador Program .....	75
Student American Dental Hygienists	
Association (SADHA) .....	75
Student Association for Respiratory	
Care (SARC) .....	75
Student Center & Auxiliary Services...	62
Student Classification .....	25-26
Student Computer Access.....	65
Student Fees .....	40
Student Governing Organizations.....	72
Student Health Insurance .....	79
Student and Judicial Affairs .....	63
Student Malpractice & Liability Ins.....	79
Student Occupational Therapy	
Assistants Club.....	75
Student Organizations .....	72-75
Student Orientation.....	22
Student Records.....	24
Student Right-to-Know .....	78
Surveys and/or Research .....	78

## T

Table of Contents .....	7
Textbooks.....	23
Theatre .....	263-264
Title IV Financial Aid Funds.....	37
Transcript Review.....	62
Transcripts.....	34
Transfer Appeals Process .....	33
Transfer Applicants.....	28
Transfer Degrees.....	33-34, 82-148
Transferring Credits.....	32-34
Travel and Tourism.....	264
TRiO Student Support Services/	
Project Success.....	63
TRiO Upward Bound .....	63



TRiO Veterans Upward Bound .....	64
Tuition and Fees .....	22, 39-41
Tutoring.....	66
Twenty-First Century Courses (Virtual Campus).....	55-56
Two-way Interactive Classrooms .....	55

## U

Unclassified Status, Students .....	25
Undeclared Students, Advising.....	45
Upholstery.....	264-265
U.S. Citizenship .....	25

## V

Values.....	15
Vehicle, Register.....	23
Veterans Administration Benefits...37-38	
Veterans Club .....	75
Vice President's List.....	60
Virtual Campus .....	55-56
Virtual Campus Course Registration...56	
Vision .....	15
Visual Communications .....	146

## W

Welcome to PCC .....	5
Welding.....	147, 265-267
Welding Technologies.....	148
Western Undergraduate Exchange (WUE).....	38
Wildland Firefighter (Also see Fire Science Wildland) .....	148
Wind Turbine Technology .....	267
Withdrawing from Courses.....	47
Women's Studies .....	268
Workforce Development .....	69
Workshops.....	70
Work Study .....	36
Writer's Society Club.....	75

## Y

Youth Academies.....	71
----------------------	----

