



## Locations

### ***Centennial Campus***

5675 South Academy Boulevard  
Colorado Springs, CO 80906  
(719) 576-7711 or (800) 456-6847  
TTY (719) 540-7131 or 540-7081

### ***The Downtown Studio Campus***

100 West Pikes Peak Avenue  
Colorado Springs, CO 80903  
(719) 527-6000 or (800) 456-6847

### ***Rampart Range Campus***

11195 Highway 83  
Colorado Springs, CO 80921  
(719) 538-5000 or (800) 456-6847  
TTY (719) 538-5079

### ***Learning Enterprises Training Centers***

Downtown Center  
100 West Pikes Peak Avenue, Suite 200  
Colorado Springs, CO 80903  
(719) 527-6060 or (800) 456-6847

### ***Other Sites***

Fort Carson ..... (719) 576-7212  
Peterson Air Force Base ..... (719) 574-1169  
U.S. Air Force Academy ..... (719) 472-1583  
Woodland Park Center ..... (719) 687-8410  
(messages only)

### ***WEB Address***

[www.ppcc.ccco.es.edu](http://www.ppcc.ccco.es.edu)



Dear Students:

Welcome to the 2001-2002 academic year at Pikes Peak Community College. For over 33 years, we have dedicated ourselves to helping students realize their dreams through learning.

Lifelong learning has become a necessity brought about by the competitive work environment and the explosion of information and technology in recent years. Additionally, lifelong growth and discovery is the foundation for personal enrichment and fulfillment. For that reason, we are committed to bring you the finest education possible, and to make that education accessible, effective, and responsive to your needs and the needs of our community.

To meet the demand, we offer daytime, evening and weekend courses in a variety of formats and locations. In addition to traditional courses, we offer Internet and live interactive televised courses, telecourses, independent study, open-entry/open-exit and partial semester courses. We have three full-service campuses, as well as military base branches and other satellite locations throughout the Pikes Peak region. Our many services combine to help you have an outstanding learning experience.

At Pikes Peak Community College, we are committed to helping you achieve lifelong success.

Live and Learn!

Sincerely,

A handwritten signature in black ink that reads "Jack Lundberg". The signature is written in a cursive style with large, flowing letters.

Jack Lundberg  
Interim President



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## Accreditation

The College is accredited by the Commission on Institutions of Higher Education of the North Central Association of Colleges and Schools, 30 North LaSalle Street, Suite 2400, Chicago, IL 60602-2504, (312) 263-0456.

## Changes

Catalog information is subject to change without notice. Published changes, including courses and programs approved after the catalog deadline, are available in the Admissions and Records Offices at the Centennial Campus or the Rampart Range Campus.

This catalog takes effect at the beginning of summer registration.

## Nondiscrimination statement:



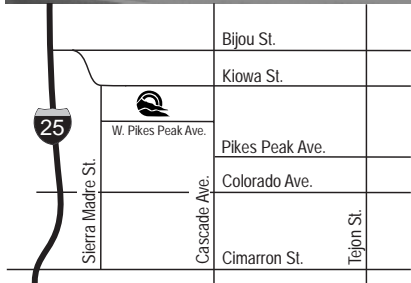
Pikes Peak Community College does not unlawfully discriminate on the basis of race, color, religion, national origin, sex, age, veteran's status, or disability in admission to, access to, treatment of, or employment in its educational programs or activities. Inquiries may be referred to Jeff Olson, AA/EEO/ADA Officer, Pikes Peak Community College, 5675 South Academy Boulevard, Colorado Springs, CO 80906, (719) 540-7557; the Director of Affirmative Action for the Colorado Community College and Occupational Education System, 1391 North Speer Boulevard, Denver, CO 80204, (303) 620-4000; or the Office for Civil Rights, U.S. Department of Education, 1961 Stout Street, Denver, CO 80294, (303) 844-5695. (NOTE: Other resources are the Colorado Civil Rights Commission and the U.S. Equal Employment Opportunity Commission.)

# All Around the COMMUNITY



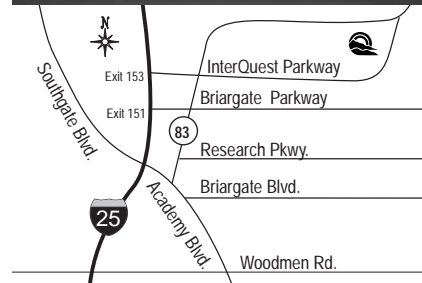
**Centennial Campus**  
5675 S. Academy Boulevard  
576-7711

The largest of the three campuses, Centennial Campus is home to programs in all of the college's academic divisions, and has a student center, child care, and athletic facilities. The Technical Industrial and Service Occupations Division offers most of its classes here.



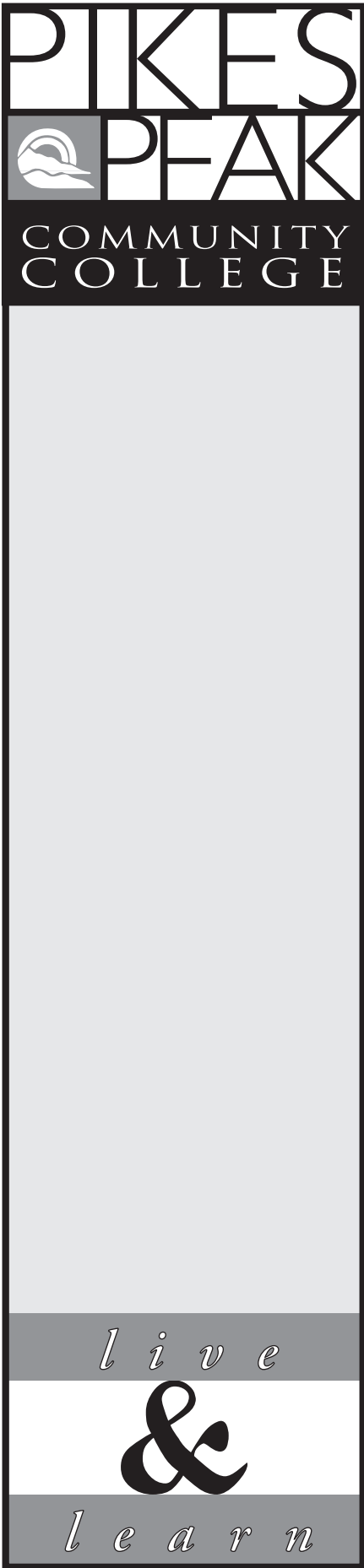
**The Downtown Studio Campus**  
100 West Pikes Peak Avenue  
527-6000

Nestled in the city's vibrant downtown area and close to fine restaurants, museums, and galleries, the Downtown Studio Campus features a Weekend College and an art gallery. Many of the college's fine arts classes are taught here as well as courses in the Legal Assistant program, and a variety of liberal arts and computer courses.



**Rampart Range Campus**  
11195 Highway 83  
538-5000

The newest facility, Rampart Range Campus is the most modern, featuring the latest in instructional technology including smart classrooms, computerized lab equipment, and a fiber optic network. Offering a wide variety of programs, Rampart Range Campus is the home of the college's health programs.



## All About PPCC

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## History of the College

Pikes Peak Community College, then El Paso Community College, was established in 1968. Classes began in September 1969 in rented buildings on the west side of the city. As enrollment grew, the full-service Centennial Campus was built at the south end of Colorado Springs in 1978. In that same year, the name of the college was changed to Pikes Peak Community College.

To meet the needs of our growing community, the Downtown Studio Campus opened in downtown Colorado Springs in 1986. At the same time, Pikes Peak Community College developed a partnership with School District 20 and opened a branch at Rampart High School.

As Colorado Springs continued to experience significant growth in the north and east parts of the city, the college outgrew the Rampart High School Campus. A new full-service facility, the Rampart Range Campus, was built and opened for classes in Fall 1998.

## Vision Statement

The motivating spirit of Pikes Peak Community College is a commitment to excellence. Through leadership, planning, and a spirit of optimism, we aspire to be an exemplary learning community. Our focus is on the individual student, the institutional family, and the community we serve.

We value the full development of individuals for participation in a changing society. Our services and programs are designed to infuse the values of applied learning, critical thinking, cultural understanding, and lifelong development. We commit to excellence in institutional structures and functions and the creation of an environment that is caring and supportive. Further, we strive to be an active, accessible, and sensitive presence in the diverse and changing communities we serve.

We are pledged to accomplish our mission with creativity and innovation. Within this context, we recognize and respect the worth of all individuals, and we are pledged to fulfill our mission with compassion, caring, and understanding. We believe the quality of service to students and to the community is bound to the quality of our faculty, staff, and administrators.

## Mission Statement

By Colorado statute, Pikes Peak Community College is established to provide

- two-year career, technical, and liberal arts programs allowing students to obtain employment or transfer to four-year colleges and universities
- special interest classes for personal growth

In order to fulfill this mission, the college offers

- lower division college courses for transfer to four-year schools
- career and technical training for employment
- courses to upgrade work skills
- developmental classes to build basic skills
- counseling to explore educational, career, and personal goals
- extracurricular and cultural activities and leadership development programs
- resources to support community growth and development

Pikes Peak Community College offers programs and services that develop individual potential and enhance the quality of community life.

## Transfer Programs

Students can take the first two years of a four-year bachelor's degree at Pikes Peak Community College and then transfer to a four-year school as a junior. They can complete a common core of liberal arts that will meet the lower division (freshman and sophomore) general education requirements of most bachelor degree programs at Colorado's public four-year schools.

PPCC is a member of the Colorado Core Transfer Consortium. This program guarantees transfer of specified core courses completed with a grade "C" or better to all public colleges and universities in Colorado (except School of Mines). Students can take the core courses as part of a two-year degree program for an Associate of Arts, Associate of Science, or Associate of General Studies degree.

## Career and Technical Education Programs

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

## Pikes Peak Community College Locations

To make a college education accessible and convenient to everyone, Pikes Peak Community College has twelve locations throughout the Pikes Peak region, including three full-service campuses. Pikes Peak Community College serves the residents of El Paso, Teller, and Elbert Counties; military bases; and other areas for special programs. Our locations include the Centennial Campus, the Downtown Studio Campus, and Rampart Range Campus. Other sites include Fort Carson; Learning Enterprises Training Center-the Downtown Center; Peterson Air Force Base; U.S. Air Force Academy; and Woodland Park Center.

## Come See Us

We welcome visitors to Pikes Peak Community College, and we'll be happy to show prospective students the college. To arrange for a tour of any of our locations, call the Admissions Office at the Centennial Campus at 540-7113 or (800) 456-6847, extension 7113.

## Use of College Facilities

Outside groups wanting to use a college facility should contact the Campus Director for Centennial Campus at 540-7290 or the Campus Director for the Rampart Range Campus at 538-5551. Facilities used by college groups are scheduled on a space-available basis at no charge unless special security or maintenance service is required. Groups interested in the use of the Learning Enterprises' Training Centers should contact the Training Center Coordinator at 527-6060.

### **CENTENNIAL CAMPUS**

5675 South Academy Boulevard  
Colorado Springs, CO 80906  
(719) 576-7711, (800) 456-6847, TTY (719) 540-7131

The Centennial Campus is a modern and well-equipped facility located in southern Colorado Springs. Transfer, career, and technical programs are offered. The full-service campus offers a complete range of student services, including admissions, advising, financial aid, records, testing, Veterans affairs, tutoring, disabled student services, and career services. The English Language Institute provides classes in English as a Second Language.

The Centennial Campus provides a library, theatre, lecture halls, multimedia center, videoconference center, writing center, computer laboratories, language and culture lab, child development center, meeting and conference rooms, distance learning classroom, and science, career, and technical laboratories. Sports and recreation facilities include a gymnasium, fitness center, sand volleyball court, tennis courts, soccer field, and running track. The Student Center houses the Student Life Office, Student Government, a meeting room, student lounge, game area, pool tables, vending machines, and bookstore.

Ample free parking is available to students, employees, and visitors in lots B, C, D, and E. Handicapped parking is reserved near most building entrances, including special spaces for wheelchair access. Parking Lot A has parking meters for people on short-term business at the college. Public bus service comes to Centennial Campus from all parts of the city. The Centennial Campus is fully accessible to persons with disabilities and those with wheelchairs. Special assistance is available through the Center for Students with Disabilities by calling 540-7128.

### **THE DOWNTOWN STUDIO CAMPUS**

100 West Pikes Peak Avenue  
Colorado Springs, CO 80903  
(719) 527-6000

The Downtown Studio Campus of PPCC has a convenient, central location in the heart of downtown Colorado Springs. It is located just minutes away from Bijou Exit 142 off I-25. The Downtown Studio Campus is a full-service facility, providing admissions, advising, registration, assessment testing, tutoring, and other services for students.

The Downtown Studio Campus offers courses leading to Associate of Arts, Associate of Science, and Associate of General Studies degrees. The Legal Assistant Program and the Arts Academy make their home at the Downtown Studio Campus. Courses and workshops are conveniently scheduled from 8 a.m. to 10 p.m. Monday through Friday and from 9 a.m. to 4 p.m. on Saturday.

The Downtown Studio Campus includes art and dance studios, an art gallery and performance area, a foreign language laboratory, a computer classroom, computer laboratories, a student lounge, classrooms, and faculty offices.

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

Free parking is available during class hours in the Palmer Center Garage across the street from the Downtown Studio Campus beneath the Antlers Doubletree Hotel. Parking is also available at metered spaces on the street.

### **RAMPART RANGE CAMPUS**

11195 Highway 83  
Colorado Springs, CO 80921  
(719) 538-5000

The newest location of Pikes Peak Community College, Rampart Range Campus, is conveniently located in northern Colorado Springs.

Students can earn an associate degree at the Rampart Range Campus in business, health, mathematics, sciences, communications, humanities, and social and behavioral sciences program areas. They may also take courses according to specific needs.

The Rampart Range Campus offers the latest in advanced learning technology. Many classrooms are equipped with student and faculty computers, multimedia presentation capabilities, VCRs, computerized projection units, and digitized white boards. An intercampus video network is provided for distribution of video media. Computerized lab equipment, a CD ROM library, and a fiber optic network are part of the instructional technology offered at the new campus.

A full array of support services and programs is available to students, including an admissions center, advising center, bookstore, career counseling, cashier/financial services, center for students with disabilities, financial aid/veterans affairs, food services, learning resources center (library), placement testing, records, student government, and student life and activities. Public bus service comes to the Rampart Range Campus from all parts of the city.

Free parking is available in conveniently located parking lots. The Rampart Range Campus is fully accessible facility.

### **Learning Enterprises Training Center**

Downtown Center  
100 West Pikes Peak Avenue, Suite 200  
Colorado Springs, CO 80903  
(719) 527-6060

Learning Enterprises training center primarily serves business and industry by providing training and meeting facilities in a professional atmosphere. These facilities include training rooms, computer labs, meeting rooms, conference rooms, and teleconferencing rooms. Organizations are welcome to reserve rooms at either facility for a very reasonable rental fee.

The Downtown Center uses parking in the Antlers Hotel parking garage across the street from the building at no charge to customers.

Training and consulting services are offered including customized training programs; workforce assessment and needs analysis; curriculum development and instructional design; management consultation; and technical, human, workplace, and computer skills training.

### **WOODLAND PARK CENTER**

Woodland Park High School  
221 North Baldwin  
Woodland Park, CO 80863  
(719) 540-7094

The Woodland Park Center serves residents of the city of Woodland Park, surrounding locations in Teller County, and Ute Pass. Classes are offered in the evening.

## MILITARY SITES

Pikes Peak Community College offers a variety of courses and programs at the local military sites. The courses are held at varying dates and times that differ from the traditional semester. The military sites include the following:

Fort Carson Education Center

Building 1117, Room 118  
Corner of Specker and Ellis  
Fort Carson, CO 80913  
(719) 576-7212

Peterson Air Force Base

Education Center  
301 West Stewart, Building 1141, Room 112  
PAFB, CO 80914  
(719) 574-1169

U.S. Air Force Academy  
Education Services Center  
Lower Level - Community Center  
5136 Red Tail Drive  
USAFA, CO 80840  
(719) 472-1583

Pikes Peak Community College also offers courses for service members through agreements with the Army, the Air Force, and the National Guard at the following locations: Little Rock Air Force Base, Arkansas, and Fort Sill, Oklahoma.

# Official College Calendar

## Summer 2001

### Standard Session (8 & 10 weeks)

April	16	M	Registration
May	28	M	Closed – Holiday (Phone Registration Only)
May	29	T	Classes Begin for 10 week term
May	29-30	TW	Late Registration
June	11	M	Classes Begin for 8 week term
July	4	W	Closed – Holiday
August	4	S	Classes End

### Bisesters (5 weeks each)

May	29	T	Classes Begin
June	30	S	Classes End
July	2	M	Classes Begin
July	4	W	Closed - Holiday
August	4	S	Classes End

## Fall 2001

### Standard Session (15 weeks + optional make-up/finals)

April	16	M	Registration Begins
May	28	M	Closed – Holiday (Phone Registration Only)
July	4	W	Closed – Holiday (Phone Registration Only)
August	20	M	Classes Begin
August	20-21	MT	Late Registration
September	3	M	Closed – Holiday
September	4	T	Open – No Classes
November	21	W	Open – No Classes
November	22	R	Closed – Holiday
November	23-24	FS	Open – No Classes
December	8	S	Classes End
December	25-January 1		Closed – Holidays (Phone Registration Only)

### Bisesters (7½ weeks each)

August	20	M	Classes Begin
October	13	S	Classes End
October	15	M	Classes Begin
December	8	S	Classes End

### Trimesters (5 weeks each)

August	20	M	Classes Begin
September	25	T	Classes End
September	26	W	Classes Begin
October	30	T	Classes End
October	31	W	Classes Begin
December	8	S	Classes End

## Spring 2002

### Standard Session (15 weeks + optional make-up/finals)

November	5	M	Registration Begins
December	25-31		Closed – Holidays (Phone Registration Only)
January	1	M	Closed – Holiday (Phone Registration Only)
January	14	M	Classes Begin
January	14-15	MT	Late Registration
March	25-30	M-S	Open – No Classes (SPRING BREAK)
May	4	S	Classes End
May	10	F	Graduation

### Bisesters (7½ weeks each)

January	14	M	Classes Begin
March	6	W	Classes End
March	7	R	Classes Begin
May	4	S	Classes End

### Trimesters (5 weeks each)

January	14	M	Classes Begin
February	16	S	Classes End
February	18	M	Classes Begin
March	23	S	Classes End
April	1	M	Classes Begin
May	4	S	Classes End

## Summer 2001

### Standard Session (10 weeks)

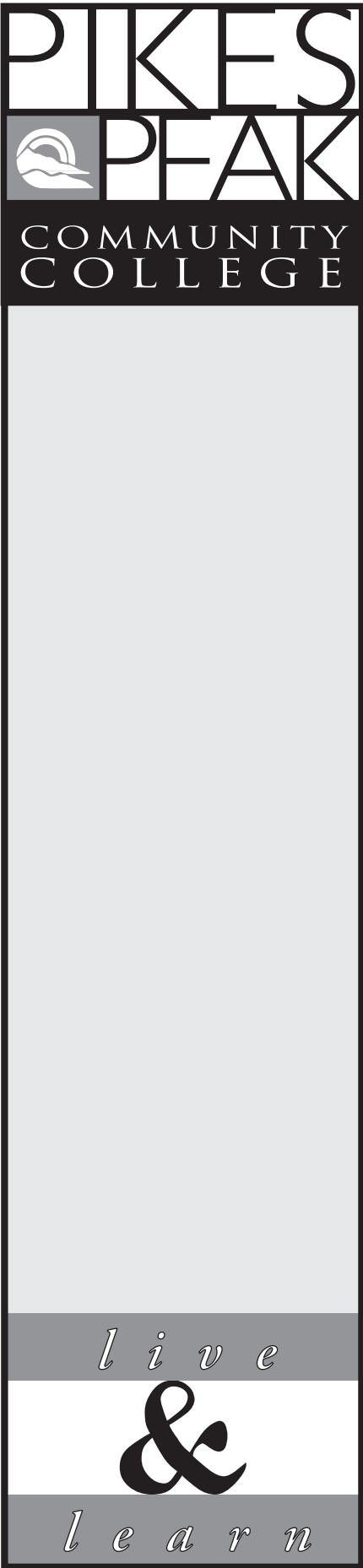
May	28	T	Classes Begin
July	4	R	Closed – Holiday
August	3	S	Classes End

### Bisesters (5 weeks each)

May	28	T	Classes Begin
June	29	S	Classes End
July	1	M	Classes Begin
August	3	S	Classes End

M = Monday    T = Tuesday    W = Wednesday    R = Thursday    F = Friday    S = Saturday





## Admission

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## How to Apply

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

Prospective students who are at least 16 years old or have a high school diploma, a GED (General Equivalency Diploma), or a college degree will, in most cases, be automatically admitted to PPCC.

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

## Class Schedule

Our class schedule is published every semester. It lists the time and location for each course. Fall and spring semesters are 15 weeks long and may include finals week in some areas. The summer semester compresses the mandated contact hours, usually into a 10-week block.

To provide more flexibility, we offer some classes for 5-week, 7  $\frac{1}{2}$ -week, or other scheduling options. Open-entry/open-exit (students enter and complete the course at their own pace) and distance learning (Internet, interactive television, or telecourse) opportunities offer even greater flexibility.

Class schedule information may change without notice. A list of new courses and changes is available from the Admissions Office or the Advising Centers.

## New Students

The first step is to submit an Application for Admission. An application is available on page 13 of this catalog. Students should apply early to get the best possible start in college.

## Readmit Students

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

## Transfer Students

To transfer credits from another college, students must request that an official transcript be sent to the Records Office at PPCC from their prior institution. Request forms are available from the Records Offices and the Downtown Studio Campus front desk. (See Academic Policies, page 16.)

## International Students

We welcome international students to Pikes Peak Community College. Students from other cultures enrich learning and campus life for everyone. Foreign students with current visas may enroll at PPCC and will pay out-of-state tuition.

If international students do not have permanent resident status, they must

- prove they can meet financial obligations for at least a year
- provide records of their level of education

- show proficiency in English by submitting a TOEFL score (minimum score 450 on the paper test or 133 on the computer test) or Michigan Test score (minimum score 60%). If needed, students can enroll in English Language Institute (ELI) classes to improve English proficiency before beginning a program of study at PPCC. Please contact the ELI office at 540-7047 for further information or to make an appointment for the ELI placement exam. Some students may be exempt from this requirement. For more information, contact the English Language Institute.

## Assessment/Placement Testing

All new students are required to participate in the assessment process. For most students, this consists of entry-level placement tests in English, reading, math, and study skills. The results have no effect on acceptance to Pikes Peak Community College but will indicate the initial level of academic coursework appropriate for students.

Students with certain college course work or satisfactory ACT/SAT scores may not need to take some portions of the placement test. See page 38 for more information.

## The English Language Institute

All new students entering the English Language Institute must take a placement test. This test will place new students into one of three levels: basic, intermediate, or advanced. A placement test schedule is announced prior to each semester. The test may be taken once, and no appointment is necessary.

**NOTE:** The ELI will remain at the Downtown Studio through the summer 2001 semester at 527-6022. Beginning fall semester, call 540-7047.

## Advising

All students will be assigned a program advisor during their first visit. Advising is required for new students in degree or certificate programs and is recommended for continuing students with majors. Advising Centers are located at the Centennial Campus; at the Downtown Studio Campus; and at the Rampart Range Campus. The following services are provided at the centers:

- explanation of basic skills assessment results and assistance in selecting courses to alleviate academic deficiencies
- help in selecting and registering for courses
- evaluation of courses for graduation
- help in adding or dropping courses
- information on course sequence and prerequisites
- referral of students for assistance in choosing a major or program of study
- assignment of a program advisor
- specific program planning for students who intend to transfer to four-year colleges and universities

## Registration

After meeting with an advisor and selecting a schedule of classes, the next step is to register. The registration period begins several months before the start of each new semester. Students may register by using the Internet, telephone registration system, or in person at the Centennial Campus, the Downtown Studio Campus, or the Rampart Range Campus. Late registration takes place during the first two days of the new semester, but open classes are limited at this time. The class schedule published each semester includes details about how to register. The schedule also explains how to add, drop, or change classes once enrolled.

## Physical Examinations

A physical examination may be required to enroll in courses with special physical requirements. This policy is designed to protect student health and the quality of education at the college.

## Tuition and Fees

### Tuition

For tuition purposes, students are considered either in-state or out-of-state when they enroll. This practice is governed by Colorado statute. To be entitled to in-state tuition, students must live in Colorado and fulfill specific citizen responsibilities for one full calendar year before they register. Contact the Admissions Office for more information or see page 2 of Application form on page 13.

**Seniors.** Persons age 60 or over may be eligible for financial tuition assistance. Visit the Financial Aid Office or the Downtown Studio front desk for details.

**Active Duty Military.** The Education Services Office on your base will certify your eligibility by completing the military resident classification form “green form.” **A separate “green form” must be submitted to the Cashier’s Office prior to the end of the first week of classes each term in which the in-state tuition rate is requested.** The college has no obligation to honor late requests, in which case, the student may be held responsible for payment of the non-resident tuition rates.

**Olympic Athletes.** Olympic athletes may pay in-state tuition rates. Student status must be verified by the U. S. Olympic Training Center.

### Tuition and Fees (2001-02)\*

#### In-state (resident) tuition

\$ 60.00 per credit hour

#### Out-of-state (nonresident) tuition

\$288.00 per credit hour

#### Student fees

\$ 36.00 per term for 3 or fewer credit hours

\$ 62.55 per term for 4 or more credit hours

#### Other fees

\$ 9.60 registration fee per term for all students  
(included above)

\$ 15.00 promissory note fee per each note

\*Tuition and fees are subject to change by the State Legislature and Governing Board. Tuition and fees at off-campus locations may vary according to operational costs. **Some courses have extra fees ranging from \$4.90 to \$200.00 per course while some courses also charge a higher tuition rate.** See the class schedule for more information.

### Student Activity Fees

These fees support school activities, concerts, recreation, theater productions, clubs and organizations, and special events for students. The fees also support Student Government and the Student Center.

Part of the student activity fee is used to provide and maintain parking areas. A service decal is available for vehicles at the Public Safety Office.

Upon first enrolling at PPCC, students must get a student ID card from the Student Life Office. Their cards will then be stamped for each successive semester. Students must have a valid ID to use the Learning Resources Center (library) and computer labs, to attend student activities, and to verify current student status.

### Residency Classification Appeals

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

To challenge the ruling on a petition, students may appeal to the Tuition Classification Review Committee. Ask the Admissions Office for details.

### Refunds/Adjustments

To receive a tuition refund or adjustment, students must drop class(es) by the deadline listed in the class schedule. No refunds or adjustments will be made after that date except in rare cases. Appeal forms are available in the Records Offices or at the Downtown Studio Campus front desk. Appeals for past school years cannot be considered. Contract programs may have different refund procedures.

### Books

The bookstores at Centennial Campus and the Rampart Range Campus stock all books and supplies needed for courses offered. A wide variety of other school supplies and PPCC insignia items are also available at the bookstores. Textbooks are also sold at the Downtown Studio Campus the first week of each semester and at Peterson AFB during the first two days of each semester for the classes offered at those locations. Check for times in the class schedule.

Textbooks may also be purchased from our bookstore website address: [www.pccbookstore.com](http://www.pccbookstore.com) or by calling 540-7575. These services are available to all Pikes Peak Community College students.

The bookstores buy back used textbooks at the beginning and end of each semester. Look for the dates posted at the campuses, on our website, or call 1-800-456-6847 ext. 7575 for information.

## Financial Aid

Several financial resources are available to assist students. If cost is standing in the way of access to a college education, contact the Financial Aid Office. Students will be shown how to check if they qualify for assistance and help will be available to fill out application forms.

### Applying

Students should turn in a completed financial aid application to the Financial Aid Office. Applications are available January 2 and are considered by financial need and on a "first-come, first-served" basis.

To learn more about financial aid programs, how aid is given out, student rights and responsibilities, college costs, and policies and procedures, contact the Financial Aid Office.

### HOPE Tax Credit

The HOPE Tax Credit, a feature in the federal Tax Relief Act of 1997, helps students save on tuition and fees. It may be available to students during their first two years at Pikes Peak Community College.

For more information, contact the following organizations:

**Internal Revenue Service**  
1-800-829-1040

**U.S. Department of Education**  
[www.ed.gov/budget/97918tax.html](http://www.ed.gov/budget/97918tax.html)

**American Association of Community Colleges**  
[www.aacc.nche.edu](http://www.aacc.nche.edu)

**Pikes Peak Community College**  
540-7089/[www.ppcc.ccco.es.edu](http://www.ppcc.ccco.es.edu)

### Programs

There are four types of financial aid. Scholarships are generally based on school grades, need, or accomplishments in a particular area of study. Grants are federal and state programs based on demonstrated financial need. Scholarships and grants do not need to be repaid. Loans provide funds while students are attending school but must be repaid. Work-study agreements allow students to work for the college while enrolled. The Student Financial Aid Handbook, available in the Financial Aid Office, describes each of these programs.

### Scholarships

- Colorado Undergraduate Merit Scholarships
- Private Donor Scholarships
- PPCC Foundation Scholarships

### Grants

- Colorado State Grants
- Colorado Leveraging Educational Assistance Partnerships Grants
- Federal Pell Grants
- Federal Supplemental Educational Opportunity Grants
- Colorado Governor's Opportunity Scholarships

### Loans

- Federal Stafford Student Loans (subsidized and unsubsidized)
- Federal Parent Loans (PLUS)

### Employment Opportunities

- Federal College Work-Study Employment
- Colorado Work-Study Employment



**Pikes Peak Community College**  
 5675 South Academy Blvd.  
 Colorado Springs, CO 80906  
 (719) 540-7112 • 1-800-456-6847

# Application for Admission

\*Responses to items marked by an asterisk (\*) are voluntary, will be kept confidential, will not be used in discriminatory manner, and are intended to support actions designed to promote students participation in the education programs offered by the College. The information will not be used as a factor in acceptance to the College. If you do not elect to respond to the request for this information you will not be subject to any adverse treatment.

**INSTRUCTIONS** - Please complete all sections of this application in **BLACK INK**.

**PLEASE PRINT LEGIBLY**

PLEASE INDICATE THE YEAR AND TERM YOU WISH TO ENROLL 20    SUMMER  FALL  SPRING

-  -

STUDENT ID/\*SOCIAL SECURITY NUMBER

MR.  MS. OR LIST OTHER \_\_\_\_\_

**BIRTHDATE**

-  -

MO. DAY YEAR

**GENDER**

(M) MALE  
 (F) FEMALE

LAST NAME

FIRST NAME

MIDDLE NAME

**\*Current Employment Status:**

- (F) full time (30+ hrs/week)
- (P) part time (1-29 hrs/week)
- (U) unemployed

**\*Ethnic Origin:**

- (I) American Indian or Alaskan Native
- (O) Asian or Pacific Islander
- (H) Hispanic
- (B) Black Non-Hispanic
- (W) White Non-Hispanic

PREVIOUS NAME

**\*Veteran/Military Service**

- None
- (1) Veteran or Dependent Eligible for VA Educational Benefits
- (2) Veteran Not Eligible for VA Educational Benefits
- (3) Active Duty Veteran
- (4) Active Duty Military

Are you a U.S. Citizen?  Yes  No  
 If NO, Country of Citizenship: Visa Type:

You must attach photocopy of I-94 (Arrival-Departure Record), or I-551 (Alien Registration Receipt Card) (both sides) and copy of parent(s) if you are under the age of 23.

**Office Use Only**

VISA  
  
 RESIDENCY  
  
 LOCAL COUNTY

LOCAL ADDRESS

COUNTY OF LOCAL ADDRESS

CITY

STATE

ZIP CODE

COUNTRY (AREA)

RESIDENCE PHONE NUMBER

PERMANENT ADDRESS (IF DIFFERENT FROM ABOVE)

E-MAIL ADDRESS

CITY

STATE

ZIP CODE

COUNTRY (AREA)

BUSINESS PHONE NUMBER

**STUDENT GOALS**

**While at this institution, do you intend to**

- (1) Earn an academic degree (AA/AS/AGS)
- (2) Earn a vocational - technical degree (AAS)
- (3) Earn a vocational - technical certificate
- (4) None of the above

**Do you plan to transfer to another institution?**

- (1) Yes, to a 4 year school **after** graduation
- (2) Yes, to a 4 year school **before** graduation
- (3) Yes, to a 2 year school **after** graduation
- (4) Yes, to a 2 year school **before** graduation
- (5) No, I do not plan to transfer

**Are you enrolling at this college for job or career reasons?**

- (Y) Yes  (N) No

**Please indicate planned length of study at this institution:**

- (1) Semester  (3) 2 years
- (2) 1 year  (4) More than 2 years

**Program/Major area of study:**

**ENROLLMENT DATA**

**Which best describes your current status?**

- (RA) Re-entering former student at this institution

**Transfer, attended another college**

- (TR) will transfer credit in
- (TN) will not transfer credit in

- (NE) New Student, first college attended

**Which best describes the level of education you have completed? (choose one)**

- (LH) Less than High School
- (HS) High School Graduate/GED
- (CE) Certificate
- (AD) Associate Degree
- (BD) Bachelor's Degree
- (PD) Professional Degree (MD, JD, MBA, Ed S)
- (DD) Doctorate (Ed D, Ph D)

\* Do you consider yourself economically disadvantaged?

- Yes  No

\* Do you consider yourself academically disadvantaged?

- Yes  No

\* Is your primary language other than English?

- Yes  No

Language \_\_\_\_\_

**Have your parents earned a baccalaureate (4-year) degree?**

- (M) Mother  (F) Father  (B) Both  (N) Neither
- (U) Unknown

Name of Last High School Attended \_\_\_\_\_

City \_\_\_\_\_ State

Name of Last College Attended \_\_\_\_\_

City \_\_\_\_\_ State

**Type of Secondary Diploma**

- (Y) High School Diploma, year received 19/20
- (G) G.E.D. - year received 19/20
- (C) Currently enrolled in High School
- Expected Graduation Date 20
- (N) Non-Graduate

**Office Use Only**

COLLEGE CLASS DEGREE MAJOR MINOR SPEC HIGH SCHOOL CODE COLLEGE CODE

**SELECTIVE SERVICE STATEMENT**

Information on Selective Service registration status must be provided in order to comply with Colorado state law. Individuals providing false information are subject to penalty of law.

Are you required to be registered with the Selective Service?  Yes  No

If Yes, are you registered?  Yes  No

**TUITION CLASSIFICATION: (Has no effect on admission to the college)**

**COMPLETE FOR COLORADO RESIDENCY CLASSIFICATION**

Please answer the following questions carefully. If appropriate, indicate "none" or "not applicable." You may write explanatory notes on this form and/or attach additional sheets as necessary. Use the word "present" for month/year if the date extends to the time you are completing this application. Failure to answer a question may result in your being misclassified. Please contact the Office of Admissions if you need assistance.

--	--

**CURRENT AGE**

Dates of continuous physical presence in Colorado .....

Dates of extended absences from Colorado during the last two years .....

List the last two years Colorado income taxes have been filed .....

List the last two years of employment or source of income.

Date current Colorado Driver's License or Colorado I.D. was issued .....

List the last two years of Colorado Motor Vehicle Registration .....

Date of Colorado Voter Registration .....

**YOU**

**and**

**YOUR PARENT or**  
 **LEGAL GUARDIAN**  
(if you are under 23)

			to			
mo	day	yr		mo	day	yr

		and		
mo	yr		mo	yr

		and	
yr			yr

			to		
Employer	State	mo	yr	mo	yr

			to		
Employer	State	mo	yr	mo	yr

				<input type="checkbox"/> New	<input type="checkbox"/> Renewal
mo	yr				

		and		
mo	yr		mo	yr

mo	yr

			to			
mo	day	yr		mo	day	yr

		and		
mo	yr		mo	yr

		and	
yr			yr

			to		
Employer	State	mo	yr	mo	yr

			to		
Employer	State	mo	yr	mo	yr

				<input type="checkbox"/> New	<input type="checkbox"/> Renewal
mo	yr				

		and		
mo	yr		mo	yr

mo	yr

\* Date of marriage (answer this question only if you will be under the age of 23 by the initial enrollment date) ..... 

mo	yr

\* Response to these items is voluntary, and will be kept confidential. Marital status may be relevant to determine whether you are entitled to be declared a Colorado resident for tuition purposes.

If you are on active duty military or a dependent of an active duty military and assigned to a Permanent Change of Station in Colorado, you may be eligible for in-state tuition rates. Contact your Military Base Education Office.

All items are subject to change without notice.

**STUDENTS WHO CLAIM A CHANGE IN TUITION CLASSIFICATION OR EMANCIPATION MUST FILE A PETITION FOR RESIDENCY PRIOR TO REGISTRATION.**

I hereby certify that, to the best of my knowledge, the information furnished in this application is true and complete without intent of evasion or misrepresentation. I understand the above information is submitted under penalty of perjury and false or misrepresented data is sufficient cause for rejection or dismissal.

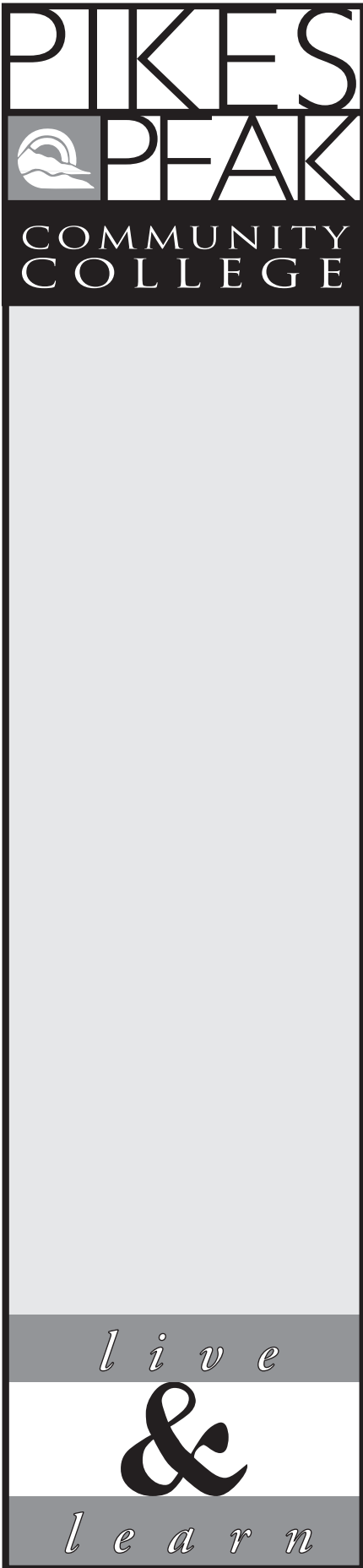
\_\_\_\_\_  
Student Signature AND Parent or Legal Guardian Signature if applicant is under 18 Date

Institutions using this application form do not discriminate on the basis of race, color, national origin, sex, age, or disability in admission or access to, or treatment or employment in its educational programs or activities. Inquiries concerning Title VI, Title IX, and Section 504 may be referred to the affirmative action officer of the institution to which you are applying.

THANK YOU FOR YOUR INTEREST IN OUR COLLEGE



COMMUNITY COLLEGES OF  
COLORADO



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## Academic Standards

Students are expected to attend all classes, laboratories, and shops as scheduled unless there is a compelling reason to be absent. Instructors may withdraw students from a course when a pattern of absences leads to unsatisfactory performance or progress. Instructors may also withdraw students from a course when they are not sufficiently prepared for the subject content, persistently neglect class preparation or assignments, or are unable to make satisfactory academic progress.

Courses are taught using stated objectives, and students are required to attain a specified minimum standard to receive credit for the course.

### Maximum Course Load

A course load, determined by the student and the advisor, may not exceed 20 credit hours per semester without the approval of the instructional division dean. Certain career and technical programs approved by the State Board for Community Colleges and Occupational Education may require students to take up to 24 credit hours per semester. For such programs, students will be allowed to take all necessary courses. In no case may a course load exceed 24 credit hours per semester except by written approval of the Vice President for Educational Services at or before the time of registration.

Student work load for a course should be estimated according to the following formula: two hours of outside preparation for every one hour of lecture and one hour of outside preparation for every two hours of laboratory. Any course syllabus that indicates different preparation times takes precedence over this general requirement.

### Change of Major/Program

To change a declared major, students must see staff in the Records Offices or the Advising Centers. A change in major places students under the academic and curriculum requirements of their new program as published in the current college catalog.

### Credit by Examination

Students may take a comprehensive examination for credit if they are enrolled in a course and have the approval of their instructor. If students pass the examination with a grade of C or higher, no further class attendance is required. Students receiving a grade of D, F, or U must attend the remaining classes and reach the specified standards to receive credit in the course. Students may attempt a test-out only once per course each semester.

### Transfer to PPCC

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

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

## Grading System

Grades are given for each credit course and are recorded on the student's permanent record. After each academic semester, students will receive a grade report which indicates the courses attempted, grades, grade point average (GPA) for that semester, and cumulative GPA. Grades used at PPCC are as follows:

Grade	Quality Points	Interpretation
A	4	Distinguished Grade for Superior Work: maximum proficiency in course objectives as set by the faculty and the division
B	3	Better than Acceptable: above-standard proficiency in course objectives as set by the faculty and the division
C	2	Acceptable: standard proficiency in course objectives as set by the faculty and the division
D	1	Less than Acceptable - Passing: poor but passes the course objectives as set by the faculty and the division
F	0	Failing: not demonstrating an adequate level of achievement of course objectives
U	0	Unsatisfactory: not satisfactorily achieving the course objectives and/or not officially withdrawing from the course. No credit assigned but computed in the GPA.
S	None	Satisfactory: credit assigned but not computed in the GPA
I	None	Incomplete: temporary grade granted at the discretion of the instructor for an emergency situation. Students must have substantially met the requirements of the course (75 percent of course requirements are completed, the remainder to be finished by a designated date) and must provide verifiable, justifiable reasons why the course cannot be completed. Course work must be completed by the date indicated on the Incomplete Grade Form or no later than the end of the next full 15-week semester. If not completed by this time, the "Incomplete" grade will automatically be changed to an "Unsatisfactory" grade. Students should arrange the terms of the "Incomplete" before the end of the semester with the faculty member who will outline the work to be done and determine the method of evaluation.
W	None	Official withdrawal: no credit assigned and not computed in the GPA. Official withdrawals are permitted through 80% of the semester only.
Z	None	A temporarily assigned code used when the grade is not available at the time of grade processing
AU	None	Audit: no credit assigned and not computed in the GPA
IP	None	In Progress: credit will be assigned and computed in GPA upon completion. (Example: Fitness Center courses)



## Grading Options

**Satisfactory/Unsatisfactory:** students may request to take up to six credit hours each semester on a Satisfactory/Unsatisfactory (S/U) grading basis. They may take a maximum of 15 credit hours under this grading option while enrolled at PPCC. (Credit hours earned in a course where S/U is the only grading standard count toward this 15-hour maximum.) Students must have prior approval by the appropriate division dean for each course unless the course is only offered with the S/U option. This option must be requested at the time of registration. After the drop/add period, this option may not be changed except by written recommendation from the appropriate division dean and approval by the Vice President for Educational Services. Courses taken under the S/U option do not always transfer to other institutions. A Satisfactory grade earned under this option does not affect the Grade Point Average (GPA) but increases the total number of credit hours passed. However, an unsatisfactory grade earned under this option affects the GPA and increases the total number of credit hours attempted. Courses taken S/U often will not transfer since PPCC considers as a D or higher.

**Audit:** students may register to audit any course by indicating this option on the registration form at the time of enrollment. The regular tuition rate applies. After the drop/add period, students may not change their registration from credit to audit, nor from audit to credit, except by written recommendation from the appropriate division dean and approval by the Vice President for Educational Services. Audit grades do not transfer and are not computed in the GPA. Courses taken by audit do not count toward enrollment status for financial aid or veterans' educational benefits.

## Grade Changes

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

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

- Grade review with faculty/instructor. If no resolution is reached nor satisfactory explanation given, then:
- Review by department chair. If no resolution nor satisfactory explanation, then:
- Review by division dean or assistant dean. If no resolution is reached nor satisfactory explanation given, then:
- Review by the Vice President for Educational Services or the appointed assistant to the Vice President. If no resolution is reached nor satisfactory explanation given, then:
- Appeal to the Academic Peer Review Committee for review and final resolution.

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

## Repeated Courses

When students receive a grade of A, B, C, or S in a course, they are not normally permitted to retake the course to raise the grade. If students receive a grade of D, F, or U in a course, they are permitted to retake the course once to raise the grade. An exception may be granted to retake the course more than once if a petition is filed and the Vice President for Educational Services grants approval.

If a course is repeated to raise the grade, the highest grade earned is calculated in the GPA. However, all grades earned will be reflected on the transcript. A course may be used only once to meet graduation requirements for any degree or program.

## Academic Probation/Suspension/Dismissal

Students must maintain at least a 2.00 cumulative grade point average (GPA), or they will automatically be placed on probation for the following semester.

During the probationary semester, students must average a C grade (2.00 GPA) or better, or they will automatically be suspended for one semester. If placed on probation, a student must make an appointment with an advisor as soon as possible. The advisor will explain the meaning of probation and recommend beneficial actions. As soon as the recommended activities are completed, students should take proof of completion to their respective advisors.

When readmitted following academic suspension, students must earn a GPA of at least 2.00 for the semester or be automatically dismissed from Pikes Peak Community College for one calendar year (12 months).

After academic dismissal, students must petition to return to the college. The petition must be approved by the Academic Standards Committee, which may impose conditions to assure progress and program completion. If reinstated, students must earn a GPA of at least 2.00 for the semester. If the committee rejects the petition, students may appeal to the Vice President for Educational Services.

## Academic Fresh Start

The Academic Fresh Start policy allows former PPCC students to apply to establish a new academic record. An Academic Fresh Start may be granted only once. If approved by the Academic Standards Committee, the Academic Fresh Start will be recorded as a permanent change to a student's Pikes Peak Community College academic record.

An Academic Fresh Start may be granted

- only once
- only after three years have elapsed since attending PPCC
- only if, during previous attendance at PPCC, 30 or fewer credit hours were earned with a cumulative grade point average (GPA) of less than 2.00

After readmission, students must successfully complete the semester with a semester GPA of 2.00 or better. Otherwise, the Academic Fresh Start will be rescinded.

For more information or an application for an Academic Fresh Start, contact the Records Office.

## Honor Rolls

Each semester we give special recognition to students who demonstrate outstanding academic achievement. Students who complete at least 12 credits and earn between a 3.75 and 3.99 GPA are automatically included on the College Honor Roll. Students who complete at least 12 credits and earn a 4.0 GPA are automatically included on the President's Honor Roll. The honors received are listed on the transcript for the semester in which they were earned.

## Application for Certificate or Degree

To receive a certificate or degree, students must file an application for graduation with the Records Office no later than the fourth week of the semester (second week for the summer semester) in which they plan to graduate. Students completing certificate or degree requirements in the summer semester who want to participate in graduation ceremonies in the previous spring semester must file a graduation application by the fourth week of the spring semester.

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

## Accountability and Assessment

PPCC has an Accountability and Assessment Plan based on legislation enacted by the Colorado General Assembly (C.R.S. 23-13-101). The plan seeks to assess student outcomes, analyze the data, and use the findings to improve instruction and the overall college experience. Accountability and assessment activities are formally documented in an annual report to the state governing board. Copies are available for review in the Learning Resources Center at the Centennial Campus.

# Student Conduct

## Student Disciplinary Procedure

SP 4-30

### **Basis:**

Students are expected to adhere to the Student Code of Conduct and policies and procedures of the College and if a student is charged with violating his/her College's code, he/she is entitled to have these procedures followed in the consideration of the charge.

### **Definitions:**

1. Code of Conduct: A document developed and published by each college, which defines prescribed conduct of students.
2. Impartial Decision Maker: The individual/committee designated by the college president to hear student disciplinary appeals.
3. Chief Student Services Officer: The individual designated by the College President to administer student affairs and be responsible for administering the College's Student Conduct Code and this procedure.

4. Notice: Notices which are required to be given by this procedure shall be considered served upon the student when given by personal delivery or mailed by certified mail to the address the student has filed with the College's admissions and records office. If notice is mailed, student shall be given three (3) additional days to respond.
5. Sanctions: One or more of the following may be given when there is a finding that a student has violated the College's Code of Conduct.
  - a. Warning: A Notice served upon the student advising him/her that he/she is violating or has violated College regulations.
  - b. Probation: After a finding of violation of the Code of Conduct, restriction of student's privileges for a designated period of time and includes the probability of more severe disciplinary sanctions if the student is found to be violating any college regulations during the probationary period.
  - c. Other disciplinary sanctions: fines; restitution; denial of privileges; assignment to perform services for the benefit of the college or community; or other sanction that doesn't result in the student being denied the right of attending classes.
  - d. College suspension or expulsion: An involuntary separation of the student from the College for misconduct apart from academic performance for a specified period of time not to exceed one/two academic terms. Suspension differs from expulsion in that after the stated time period the student is eligible for re-admission. Expulsion is a separation for more than two academic semesters; student is not eligible for re-admission unless at the end of the separation, he/she can prove that the behavior that resulted in the expulsion has been resolved. Students may be suspended from a class, residence hall, use of a College facility or an activity in the sole determination by an authorized College employee that the conduct is in violation of the Code subject only to an appeal to the Chief Student Services Officer to ensure the action was taken pursuant to college policies. Students may be suspended from one class period by the responsible faculty member, longer suspensions can be done only in accordance with college procedures.
  - e. Summary Suspension: An immediate action taken by the Chief Student Services Officer to ensure the safety and well-being of members of the college community or preservation of college property; to ensure the student's own physical or emotional safety and well-being; or if the student poses a definite threat of disruption or interference with the normal operations of the college. In such event, the hearing before the Impartial Decision Maker (if requested by the student), shall occur as soon as possible following the suspension.
6. Day: Refers to calendar day unless otherwise noted below.

## Standards of Conduct

Specific misconduct which may subject a student to disciplinary action includes the following:

- dishonesty in the classroom or laboratory, such as cheating, plagiarism, or knowingly furnishing false information to the college.
- forgery, alteration, or misuse of college documents, records, identification, educational materials, or college property.
- obstruction or disruption of teaching, research, administration, disciplinary procedures, or other authorized activities on college premises.
- the threat to, or physical abuse of any person on college-owned or controlled property or at college-sponsored or supervised functions or conduct which threatens or endangers the welfare or safety of any such person.

- theft of or damage to property on the college premises or at authorized college functions (See Section E-708.7).
- unauthorized entry to or occupation of college facilities.
- use of, being under the influence of, possession of, or distribution of alcohol or illegal or dangerous drugs on campus or at a college-sponsored function, except as expressly permitted by law and college regulations (See Section 711-5f.).
- disorderly conduct, breach of the peace, lewd, indecent, or obscene conduct, gambling, aiding or inciting another to breach the peace, or infringement upon the rights of others either on college-owned property or at college-sponsored or supervised functions.
- failure to comply with the verbal or written directions of college employees acting in the performance of their duties.
- possession or use of firearms, explosives, dangerous chemicals or other weapons on campus or at college-sponsored activities except as permitted by law and college regulations.
- aiding or encouraging others in committing or inciting others to commit any act of misconduct set forth in any of the above.
- violation of college rules regarding the operation and parking of motorized vehicles on college property.
- Unacceptable uses of any college-owned computing equipment and/or network, including, but not limited to knowingly spreading computer viruses; sending harassing, intimidating and/or threatening messages; re-posting personal communications without the author's consent; copying protected material in violation of copyright law; using the network for financial gain, commercial activity, or illegal activity; accessing the network using another individual's account; downloading, loading or executing software without appropriate authorization; or attempting to compromise the network integrity in any other way.
- conviction of any crime or the performance of any act on or off the campus which, in the opinion of the college, gives rise to a reasonable belief that the continued presence of the student on campus will endanger the health, safety and welfare of any other student or employee of the college, will substantially disrupt the legitimate functions and activities of the college, or will impinge on the rights of others.

## PROCEDURES

### 1. DECISION

Chief Student Services Officer or his/her designee shall receive all allegations of student misconduct, investigate the complaints and make a Decision. He/she may decide that the charges can be disposed of administratively by mutual consent of the parties involved on a basis acceptable to him/her. If an administrative resolution is not achieved, the Chief Student Services Officer or designee shall issue a Decision which determines whether the alleged conduct occurred; whether the conduct violated the Code of Conduct or College policies or procedures; and impose a sanction(s) if appropriate. The student shall receive written Notice of the Decision and be advised of his/her right to appeal the Decision by filing a written appeal with the Chief Student Services Officer within seven (7) days of service of the Decision. In the case of suspension or expulsion, the sanction shall be imposed no earlier than six days after service of the Notice unless it is a summary suspension or the sanction is agreed to by the student. If an appeal is requested, suspension and/or expulsion shall not be imposed until the appeal procedures below have been completed.

### 2. APPEAL

- a. In the event of an appeal, the Chief Student Services Officer shall give written Notice to the student and the Impartial Decision Maker which describes the conduct to be inquired into; the Code of Conduct and/or College policies or procedures which were allegedly violated; the date, time and place of the alleged violation; the sanction that is threatened and the date, time and place of the hearing before the Impartial Decision Maker. The Notice shall be given at least seven (7) days prior to the hearing unless a shorter time is agreed to by the parties.
- b. **Conduct of Hearings.** The Impartial Decision Maker shall determine its own hearing procedures, keeping in mind the following guidelines:
  1. Student shall have the right to be heard by the Impartial Decision Maker; in the event that the student is under the age of eighteen or incapacitated, he/she may have an advisor present to assist him/her in presenting his/her case.
  2. Students do not have the right to be represented by an attorney during these proceedings except in the case where civil or criminal actions concerning the student are pending and in that case, the attorney's role shall be advisory only. The student is responsible for presenting his/her own case and, therefore, advisors are not permitted to speak or to participate directly in any hearing except as provided in #1 above.
  3. Student shall have the right to identify documents, witnesses and other material he/she would like the Impartial Decision Maker to review before making a final decision.
  4. Hearings shall be conducted in private unless all parties agree otherwise.
  5. A record of the hearing should be maintained by the Impartial Decision Maker.
- c. **Determination by Impartial Decision Maker.** The Decision Maker shall make its findings and determinations in closed meeting out of the presence of the Chief Student Services Officer and the student charged. Separate findings are to be made as to the conduct of the student and on the sanction(s), if any, to be imposed. No discipline shall be imposed on the student unless the Impartial Decision Maker is persuaded by a preponderance of the evidence that the student committed the alleged conduct and that it constituted a violation of the Code of Conduct and/or college regulations; that the student should be sanctioned (including modifying the sanction imposed below) and that the discipline is reasonable given the violation. The student and the Chief Student Services Officer shall be given written Notice of the decision. The decision shall be issued within five calendar days of the close of the hearing and it shall become final unless a petition for review is filed.
- d. **Petition for Review.** The Chief Student Services Officer or the student may petition the president to review the Impartial Decision Maker's decision by filing a written petition within five (5) days after notification of the decision. If a review is requested, the other party will be given three (3) days to respond to the petition, and his/her response materials will be given to the president to review before a decision on the petition is made.

e. **President's Decision.** The president shall review the record of the case and the petition and may affirm or reverse the decision of the Impartial Decision Maker. The record shall consist of the Impartial Decision Maker's written documents and the recording of the hearing and any written materials submitted in support of the Petition for Review. The president shall notify the Chief Student Services Officer and the student in writing of his/her decision within fourteen (14) days of service of the Petition for Review. The president's decision is final.

#### 4. MISCELLANEOUS

- a. College disciplinary proceeding may be instituted against a student charged with violation of a law if the violation occurred at the College or College-sanctioned activities or was of such a nature as to impact upon the College which is also a violation of the College's Student Code of Conduct. Proceedings under this Procedure may be carried out prior to, simultaneously with, or following civil or criminal proceedings off-campus.
- b. Time limits for scheduling of hearings may be extended at the discretion of the Impartial Decision Maker.
- c. The procedural rights afforded to students above may be waived by the student.

## Student Complaints/Grievances

### Reference:

Board Policy 4-31; Title VI of the Civil Rights Act of 1964; Title IX of the Education Amendments of 1972; Section 504 of the Rehabilitation Act of 1973 and Americans with Disabilities Act, Title II and Age Discrimination 1975.

### BASIS:

This Student Grievance Procedure is intended to allow students an opportunity to present an issue which they feel warrants action, including the right to secure educational benefits and services without regard to sex, race, national origin or ancestry, creed, color, disability, or age, and have the issue considered in a prompt and equitable fashion.

### Definitions:

**Grievant:** Enrolled student, a client, or volunteer who is providing a service to benefit the College under the supervision and control of a college employee. A client or volunteer may only grieve a decision which bans him or her from the campus.

**Grievance:** A grievable offense 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. A grievance must be brought to the formal stage within 20 calendar days of the date the student knew or reasonably should have known about the action.

**Chief Student Services Officer:** The college employee designated by the college president to administer student grievances. Grievances alleging discrimination issues may be referred to the employee responsible for ensuring equal opportunity and access.

**Remedy:** The relief that the Grievant is requesting.

**Respondent(s):** Another student, volunteer, client, faculty member and/or administrator identified by the Grievant as causing or contributing to the grievance.

**Non-grievable matters:** The following matters are not grievable under this procedure except as noted: matters over which the college is without authority to act; grades and other academic decisions unless there is an allegation that the decision was motivated by illegal discrimination; and disciplinary actions taken pursuant to BP 4-30.

### PROCEDURES:

#### 1. INFORMAL

Grievant is encouraged to resolve the issue with the Respondent or his/her supervisor. In the case of grievances based upon one's race, color, creed, national origin or ancestry, disability, age or gender, the Grievant may first contact the college employee responsible for affirmative action to seek informal resolution of the issues. If the complaint alleges facts which might constitute a violation of SP 3-120a concerning sexual harassment, the administrator shall investigate and process the complaint under that procedure. While the Grievant is encouraged to resolve the issues through the informal process, he/she may at any time elect to go to the formal stage by following the process outlined below.

#### 2. FORMAL

- a. Grievant timely files a written statement of the actions complained of and describes the remedy he/she is seeking with the Chief Student Services Officer. A matter could also be referred to this process by the College president or his/her designee. Once a written grievance is filed or referred, the Chief Student Services Officer or designee will determine whether or not the situation states a grievable offense. The matter will be closed if the situation is determined not grievable, and the Grievant will be notified of the reasons.
- b. If the matter is determined to be grievable, Chief Student Services Officer or designee (which may be an individual or a committee) shall hear the Grievance. A hearing will be held which will give the Grievant, Respondent, and others invited to appear, and given the opportunity to explain what they know about the issues surrounding the grievance. Considering the oral and written statements and documents, the Chief Student Services Officer or Designee shall issue a decision within ten (10) calendar days of close of the hearing. The Decision shall be served upon the Grievant and the Respondent personally or by certified mail to the addresses on file in the Admissions office. The Decision shall reject the grievance or grant the grievance and make recommendation(s) to resolve the issue(s). The Chief Student Services Officer or designee's decision is final unless a Petition for Review is filed with the president by either party within five (5) calendar days of service of the Decision.
3. Upon receipt of a Petition for Review, the college president will review the record and issue a written decision within ten calendar days of receipt of the Petition for Review. The president's decision is final.
4. The Chief Student Services Officer or Designee may extend the scheduling timelines described above for good cause.
5. If the grievance is against the Chief Student Services Officer, the Chief Academic Officer or other person designated by the president shall perform the duties of the Chief Student Services Officer.

## Academic Honesty

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

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

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

## Conduct in College Buildings

By Colorado Executive Order, smoking is not permitted in any college facility.

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

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

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

## Restricted Attendance

Faculty may temporarily suspend students from class if their conduct is obstructive, disruptive, or unacceptable in an instructional setting. Students may return to class after the faculty member has identified the conditions to allow continued attendance. If students return and these conditions are violated, the appropriate dean will review the circumstances and provide a recommendation to the Vice President for Educational Services. This recommendation shall state the appropriate administrative action, which may include continued attendance or permanent dismissal from the class.

## Drugs and Alcohol

In compliance with the Drug-Free Schools and Communities Act Amendments of 1989 (Public Law 101-226), students shall not engage in the unauthorized or unlawful manufacture, distribution, dispensation, possession, use/abuse of alcohol and/or illicit drugs on college property or as part of any college activity.

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

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

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

## Sexual Harassment

It is the policy of Pikes Peak Community College that unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature constitutes sexual harassment when (1) submission to such conduct is made either explicitly or implicitly a term or condition of an individual's academic status in course, program, or activity; (2) submission to or rejection of such conduct by an individual is used as the basis for academic, educational decisions affecting such individual; or (3) such conduct is sufficiently severe, persistent, or pervasive and affects an individual's academic educational performance or creates an intimidating, hostile, or offensive learning environment. Sexual harassment will not be tolerated at Pikes Peak Community College. Substantiated charges will result in disciplinary action which may include expulsion.

Questions or complaints should be directed to the Director of Human Resource Services/AA/EEO/ADA at the Centennial Campus, 540-7556.

## Security Report

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

All emergencies and suspected criminal actions must be promptly reported in person or by phone to the Department of Public Safety. Public Safety officials will take whatever action is deemed necessary to protect life and property and to enforce all laws and regulations.

The Department of Public Safety monitors and records all known criminal activities associated with the college, including criminal activity associated with off-campus student organizations.

The Crime Prevention section of the Department of Public Safety offers programs to the campus community, which include crime prevention, office safety, security awareness, and rape prevention. Ongoing programs include a modified D.A.R.E. program for the Child Development Center, a Campus Crime Prevention/Reduction program, and a Substance Abuse Awareness program.

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

## Required Disclosures

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

- the Security Report available on this page
- the consequences of drug and alcohol violations listed on page 21
- the manner in which the College calculates refunds and repayments listed on page 11 and as stated in the Financial Aid Handbook available in the Enrollment Services Center or on-line at [www.ppec.ccoes.edu](http://www.ppec.ccoes.edu)
- the graduation rates for the College are available by request through the Office of Institutional Research at 540-7623.

## Report of Criminal Offenses

### Centennial Campus

Offense	1998	1999	2000
Murder & Non-negligent Manslaughter	0	0	0
Forcible Rape	0	0	0
Robbery	0	0	0
Aggravated Assault	0	0	0
Burglary	0	0	0
Motor Vehicle Theft	0	0	0
Arrests Made			
Liquor Law Violations	0	0	0
Drug Abuse Violations	0	0	0
Weapons possessions	0	0	0

No crimes were determined to be hate related.

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

### Downtown Studio Campus

Offense	1998	1999	2000
Murder & Non-negligent Manslaughter	0	0	0
Forcible Rape	0	0	0
Robbery	0	0	0
Aggravated Assault	0	0	0
Burglary	0	0	0
Motor Vehicle Theft	0	0	0
Arrests Made			
Liquor Law Violations	0	0	0
Drug Abuse Violations	0	0	0
Weapons possessions	0	0	0

No crimes were determined to be hate related.

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

### Rampart Range Campus

Offense	1998	1999	2000
Murder & Non-negligent Manslaughter	0	0	0
Forcible Rape	0	0	0
Robbery	0	0	0
Aggravated Assault	0	0	0
Burglary	0	0	0
Motor Vehicle Theft	0	0	0
Arrests Made			
Liquor Law Violations	0	0	0
Drug Abuse Violations	0	0	0
Weapons possessions	0	0	0

No crimes were determined to be hate related.

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



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## Advising

Advising is required for new students in degree or certificate programs and is recommended for continuing students with majors. Program advisors, who will be assigned after an initial visit to the Advising Center, can be located in their respective division office. Advising Centers are located at the Centennial Campus, at the Downtown Studio Campus, and at the Rampart Range Campus. The following services are provided at the centers:

- explanation of basic skills assessment results and assistance in selecting courses to alleviate academic deficiencies
- help in selecting and registering for courses
- evaluation of courses for graduation
- help in adding or dropping courses
- information on course sequences and prerequisites
- referral of students for assistance in choosing a major or program of study
- assignment of a program advisor
- specific program planning for students who intend to transfer to four-year colleges or universities

## Career Services Center

The Career Services Center offers comprehensive services to help students make career decisions and obtain employment.

### Career Planning

We can provide resources which will help students identify goals, choose a college major, and make effective career decisions. Our services are available to students and the community. They include

- career counseling (individual and group) to help with decision making and goal setting
- DISCOVER Career Guidance and Information Software System, a comprehensive planning tool which includes career inventories and information databases
- Colorado Career Information System (COSIS), a computerized database of career and labor market information with emphasis on Colorado employment trends

### Job Placement and Self-Marketing

Services are available to help students market themselves productively and find a job, either after they graduate or while attending school. They include

- individual and group training for job seeking skills, including resume writing and interviewing (videotaped practice interviews available)
- resume production service for current and former PPCC students
- information on the local labor market and planning a job search
- listings of job openings from area employers (available to current and former PPCC students)
- Internet access to job banks

### Pikes Peak Workforce Center

The Career Services Center is pleased to host the Pikes Peak Workforce Center, our employment services partner at the Centennial Campus. The Pikes Peak Workforce Center provides comprehensive services to assist all community members in finding employment or training opportunities. For more information, call 579-3080 or 579-3082 or visit the website at [www.ppwfc.org](http://www.ppwfc.org)

For more information about the Career Services Center, call 540-7144.

## Center for Students with Disabilities

The Center for Students with Disabilities (CSD) provides support services and opportunities for individuals who, because of a disabling condition, are not able to succeed through the usual approaches to education. A student whose disability falls into one of the following categories is eligible for the services provided by the center: hearing, visual, speech, or orthopedic impairments; learning disabilities; mental or emotional disabilities; other health impairments; or multiple disabilities. The CSD is located at the Centennial Campus and at the Rampart Range Campus. Please call 540-7128 to schedule an appointment.

### Computer Access Center

The Computer Access Center is at the Centennial Campus. The center uses adaptive technology such as voice synthesizers, screen magnifiers, voice recognition, and other input/output modifications.

### Learning Disabilities Support Services

Assistance is provided for students with learning disabilities through a partnership with the Center for Students with Disabilities. Support services that encourage success include identification of strengths and weaknesses; promotion of self-advocacy; instruction in learning strategies, basic skills and study skills; help with course selection; and implementation of appropriate accommodations.

For more information about the Center for Students with Disabilities, call 540-7128 (TTY 540-7131).

## Child Development Center

The Child Development Center at the Centennial Campus offers a comprehensive daytime program for children ages one through five. Evening childcare is available for children ages one through twelve. Children participate in language arts, music, math, science, field trip, computer, and art activities.

The CDC is accredited by the National Association for the Education of Young Children and is staffed by certified early childhood teachers who are assisted by student staff teacher aides. The Center serves as a practicum site for students enrolled in the Early Childhood Professions Program and the Area Vocational Program.

Children of Pikes Peak Community College students, staff, and faculty are eligible to enroll. The CDC is open when college classes are in session. Advance registration is required. Please call 540-7215 for more information and hours of operation.

## Ethnic Student Enrichment Program

The Ethnic Student Enrichment Program (ESEP) promotes academic success and personal growth for students of all ethnic backgrounds. ESEP holds college survival and job search workshops as well as offering cultural awareness programs and social activities. ESEP also provides mentoring and scholarship support. The "Staying on Track" program targets enrollment, retention, graduation, and transfer of ethnic minority students to ensure successful completion of each student's educational program. For information, contact the Admissions Office.



## Information Technology Support Services

Information Technology Support Services provide networked computing services, telecommunications, and all other information technology for the college. This includes providing training, research and development, and support for software and emerging technologies in all forms of distance education and classroom/lab instruction.

There are approximately 1,000 instructional computers connected to three high speed LANs (local area networks) that provide students with the technological means to facilitate the learning process.

The video conferencing facilities are used for education and intercampus meetings.

For more information call 540-7584.

## Learning Resources Center

The Learning Resources Center (LRC/The Library) provides a pleasant learning environment at both Centennial Campus and Rampart Range Campus. The LRC enhances a student's education through a variety of materials and services. It includes the library, audio-visual production and distribution services, technical services, and the college archives. Community members may check out printed materials with a public library card and a picture ID. Our library has over 40,000 books, documents, and non-print materials. The non-print materials include 16mm films, records, CDs, maps, filmstrips, audiotapes, videotapes, and other materials, most kept in the open stacks. The library has a collection of about 300 serial publications, including magazines, journals, and newspapers. The LRC also has materials to aid in self-paced learning, such as videotapes, slide-tape sets, and computer-assisted instruction. Study rooms are open for individual students and groups. Study carrels, typewriters, and copiers (color and black & white) for print and microform media are available. At Centennial Campus a Leisure/Reading room and a children's library are available. The northwest corner at Rampart Range LRC is the Leisure/Reading area for that campus.

## Reference and Research Service

Our professional reference staff members serve as information guides and help students, faculty, staff, and community users find their way to the most relevant sources, whether in print or electronic form. The LRC staff consults with faculty to develop the library's collection and investigates various online databases to determine the most useful for the college community. It also provides library instruction to classes, and compiles bibliographies, help sheets, and other written materials. Several online services, which offer access to articles from many different publications, are available through the LRC website. The passwords for each can be obtained through either the circulation or reference desk. Our materials catalog is also accessible at the LRC website at <http://www.ppcc.ccoes.edu/dept/lrc/lrc.htm>.

The reference staff can advise students on how to connect to these and other resources and give assistance in using them.

## Interlibrary Loan Service

Through interlibrary loan, students can request information from other libraries. If the LRC cannot provide the material needed, staff will find a library that can. These items are normally received in two to four weeks. Ask any of the staff for a request form.

## Audio-Visual Production and Distribution Services

Professional staff from Audio-Visual Production and Distribution Services has the expertise to support instructors, students, and staff. This office reserves and delivers audio-visual equipment to classrooms and other areas of the college. Students and faculty may check out a variety of equipment. These include cassette players/recorders, Polaroid cameras, etc. Some equipment may be used off campus for a daily rental charge. Non-copyrighted audio and videotapes may be duplicated for a fee.

## Military Programs

PPCC provides alternate delivery formats of courses and special training through military programs.

Military programs offer a schedule of evening, weekend, and open-entry/open-exit classes that accommodate the busy schedule of students who are unable to attend traditional classes.

Registration dates, enrollment procedures, and fees vary. For more information, call the PPCC branches at Fort Carson, 576-7212; Peterson Air Force Base, 574-1169; or the U.S. Air Force Academy, 472-1583.

## Multimedia Instructional Design Center (MID Center)

The Multimedia Instructional Design Center is at the Centennial Campus. The lab is equipped with computers, video cameras and playback systems, authoring software and systems, interactive graphic systems, and other instructional design hardware. The MID Center supports both PC and Macintosh platforms. Students from the Visual Communications and Computer Aided Drafting programs are able to login and complete class assignments in the open lab area of the Center. Faculty throughout the college uses the facility for the multimedia enhancement of their classroom, online, and television presentations. The MID Center is open to the student population with preference given to Visual Communication and Computer Aided Drafting students working on course material.

The Center houses a Macintosh classroom, a PC classroom, and an open lab area. Each of the classrooms is equipped with 16 student computers, an LCD projector, instructor's computer, and VCR. The open lab is equipped with multimedia ready PC and Macintosh computers.

Software available in the MID Center includes AutoCAD, Photoshop, Director, PageMaker, Quark, MS Office, Toolbook, Premiere, Freehand, and 3D Studio Wiz. The staff in the MID Center is skilled in technology and curriculum design and can help students develop course and program materials. For more information about classes, workshops, and lab access, call 540-7063.

## Orientation Program for New Students

The Orientation Program for New Students is composed of open group sessions before each semester. The sessions provide useful information for new students. Admissions, Student Life, Public Safety, and Financial Aid staff explain more about their services. To attend an orientation, contact the Admissions Office.

## Pikes Peak News

"The Pikes Peak News" is the PPCC student newspaper, published by and for PPCC students. Students in the Newspaper Design I and II classes, as well as those in other journalism classes, write and edit articles, develop photos, and design pages. "The Pikes Peak News" also welcomes articles and photos from all PPCC-sanctioned clubs and organizations. PPCC students who participate in the production of the newspaper may also attend the 14-state Rocky Mountain Collegiate Media Association convention scheduled in Colorado Springs in March. The Pikes Peak News has won second place and honorable mention awards at previous conventions. For more information, contact us at 540-7480 or check out our website at [www.ppcc.ccoes.edu](http://www.ppcc.ccoes.edu).

## Records

All records of enrollment at PPCC are kept in the Records Office. Transcripts are available upon request within certain timelines. The fee for a transcript is \$3.00 for normal processing (two working days) when requested in person, with a signed request or via the web. The fee will be \$5.00 for immediate (on demand, issued to student) requests over the counter. Requests to have transcripts faxed are \$5.00 (note that faxed transcripts are not deemed official.) Students may review their records and ask to have information corrected or kept private.

The college releases directory information upon legitimate request. Directory information is defined as a student's name, date of birth, semesters attended, most recent previous school attended, major field of study, and degrees and awards received. To keep this information private, students may file a written request with the Records Office.

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

Information concerning the Family Educational Rights and Privacy Act is available in the Records Office.

## Re-Entry Program

The Re-Entry Program is designed to help students who have been out of school for a while or who are apprehensive about returning. Before each semester, staff presents workshops about going back to school. During the workshops, presenters discuss admissions, degree programs, financial aid, support services, and the local job market. For more information, call 540-7167 or 538-5115.

## Southern Colorado Educational Opportunity Center (SCEOC)

The SCEOC helps low-income or first-generation college students. Services include guidance in selecting a college, free career counseling, testing, and workshops. The SCEOC will also help students' complete financial aid and admission applications. It is located at the Workforce Center, 306 East Pikes Peak Avenue, Colorado Springs, CO 80909. For more information, call 667-3718.

## Testing Center

The Testing Center offers a variety of services in addition to placement testing. Students may take a test to receive college credit in subjects such as accounting, biology, college algebra, English composition, foreign languages, humanities, management, natural sciences, and social sciences by taking CLEP or DANES tests. GED testing for a high school equivalency diploma is also available. For more information, call 540-7115 or 538-5115.

## Tutoring Services

Pikes Peak Community College offers a variety of tutorial services to help students succeed with their educational goals. These services range from individualized tutoring and learning clusters to Math Labs and Writing Centers. Students are encouraged to consult with their instructors or academic advisors about these services.

The Writing Centers and Developmental Studies Math Labs offer drop-in services that do not require instructor referral. Students seeking tutorial services through Tutoring Services do require an instructor referral and may then be referred to individualized tutoring or specific learning clusters. The Tutoring Coordinator will determine the appropriate placement. An effort will be made to assign students to qualified tutors. Referral for tutoring services does not guarantee that a qualified tutor can be assigned.

Students seeking tutoring services are expected to:

- follow the course sequence outlined by their academic advisor, as tutoring does not take the place of course pre-requisites.
- be enrolled in the class for which tutoring is requested.
- be degree or certificate seeking, as priority will be given to students requesting help with those related classes.
- be prepared for the tutoring session, which includes bringing questions and doing follow-up homework and assignments specified by the tutor.
- attend and reasonably participate in class.

Students are also encouraged to consult with the Tutoring Coordinator at Centennial Campus, 540-7129, or at the Rampart Range Campus, 538-5075.

## Veterans Affairs Office

The Veterans Affairs (VA) Office will help eligible veterans and/or dependents enroll for veterans' education benefits. The VA Office will also help with VA tutoring, vocational rehabilitation, and advising. Contact the Financial Aid/Veterans Affairs Office for more information.

## Student Life

### Activities

The Student Activities Office directs a full schedule of recreation, wellness, cultural, and arts events. Wellness and lifestyle improvement programs include drug and alcohol education, AIDS education, and personal growth seminars. Special events and multicultural programs include Black History Month, Women's History Month, Cinco de Mayo, Native American Days, and others. The Student Activities Office invites students to participate in planning for these events by joining the Student Activities Program Board. Call 540-7106 for more information.

The performance and lecture series includes musical acts and guest lecturers on a wide range of topics. Free Colorado Springs Symphony tickets (monthly drawing) and free admission to the Colorado Springs Fine Arts Center are special benefits offered to PPCC students. Through this office, students can also rent lockers and reserve meeting room space in the Student Center at the Centennial Campus as well as space at the Rampart Range Campus.

### Athletics

PPCC has three independent sports teams. The teams compete regionally in athletics. Men's soccer and women's volleyball represent PPCC as major athletic teams. Coed karate competes as a minor sport for the college. The athletics program is housed at the Centennial Campus in the Recreation and Sports Programming Office. For information about athletic programs, team try-outs, and a schedule of team events, call 540-7442.

Limited scholarship assistance is available for eligible participants.

### ID Cards

Student identification cards are required for many student activities as well as obtaining access to computer labs and LRC (library) materials. An ID is issued upon first registration and updated for each semester enrolled. ID cards are available at the student activity counters at the Centennial Campus Student Center and Rampart Range Campus Student Life Office.

### Fitness Center

The Fitness Center is a state-of-the-art cardiovascular/weight training facility located at the Centennial Campus. The facility has computerized bicycles, rowers, and treadmills; a 30-station Universal "Super Circuit"; an elliptical trainer; and over a dozen "body parts" machines. The Fitness Center is open six days a week. To use the Fitness Center, students must enroll in PED 150, an "hours-by-arrangement" class, or join under the Student Wellness Program.

## Recreation/Sports Clubs

The Recreation and Sports Office is in the Centennial Campus gymnasium. The gymnasium is open for recreational use by students and staff. Open gym activities include basketball, volleyball, and aerobics. The recreation program includes intramural, recreational tournaments, wellness events, and outdoor equipment rentals. The office schedules/coordinates the gymnasium, track, tennis courts, sand volleyball court, and soccer field. Club sports such as skiing, basketball, volleyball, karate, soccer, billiards, cycling, and others are available. For information, call 540-7442.

## Student Center

Both the Centennial Campus and Rampart Range Campus have a student center where students can relax and meet other students. They are each a "home away from home" where students will find lounge areas, meeting rooms, study space, TV and music, and billiard tables. Student Life, Student Government, the Bookstore, Cafe 103, and some student club offices are also located here.

## Student Government

Participation in Student Government is a great way to strengthen leadership skills. Student leaders work with various issues affecting students and allocate student activity fees to enhance campus life. Student government is composed of the president, vice president, secretary, and treasurer; 11 senators; and a State Student Advisory Council representative.

Elections for the senate seats are held during fall semester. The executive officers are elected during spring semester.

## Student Clubs and Organizations

Over 20 active student clubs and organizations are available on campus. Some are active relative to an academic/professional area such as Phi Theta Kappa (PTK), Phi Beta Lambda (PBL), Student Colorado Registry of Interpreters for the Deaf (SCRID), Association of Information Technology Professionals (AITP), Instrument Society of America (ISA), Nurses Organization (PPCCANS), Journalism Club, etc. Others are related to activities/interests such as basketball, skiing, dance appreciation, etc. Still others are active along multicultural/ethnic interest lines, such as Movimiento Estudiantil Chicano de Aztlan (M.E.Ch.A.), Unity of Students, etc. Involvement in clubs and organizations is a great way to meet students, to learn and practice leadership skills, and to gain a sense of belonging and loyalty to PPCC. Please see the Student Guide publication or visit the Student Life Office at the Centennial or Rampart Range Campuses for more information about how to get involved with clubs and organizations.

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



# Ethnic Student Enrichment Program at Pikes Peak Community College



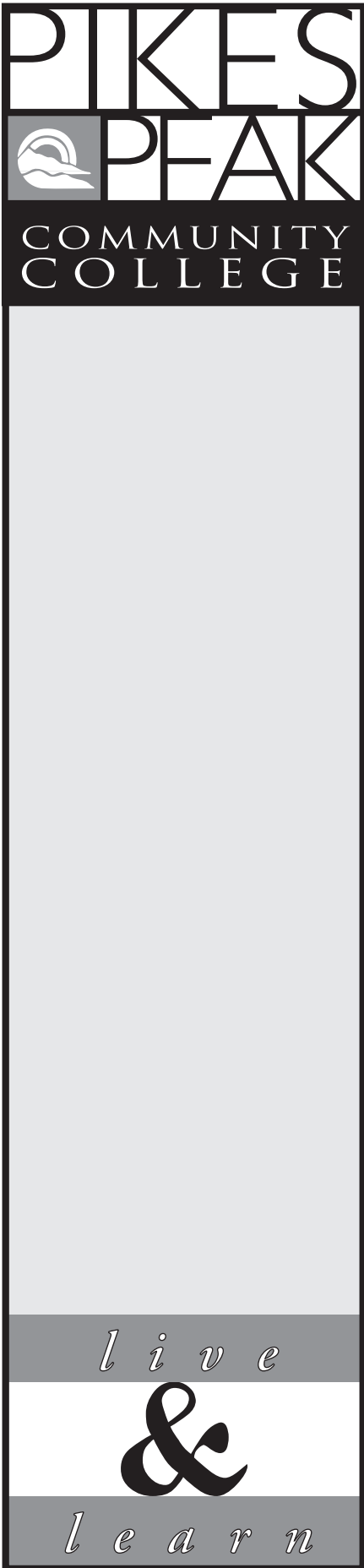
**T**he Ethnic Student Enrichment Program (ESEP) at Pikes Peak Community College is designed to encourage a successful academic and personal growth experience for students of all ethnic backgrounds.

- ▲ Staying on Track
- ▲ College Survival Workshops
- ▲ Cultural Awareness Workshop
- ▲ Social Activities
- ▲ Job Search Workshops
- ▲ ESEP Information Booth
- ▲ Mentors Program
- ▲ Scholarship Support

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Call 540-7113 or toll free 1-800-456-6847 extension 7113 for more information .

 **Pikes Peak Community College**  
5675 South Academy Boulevard • Colorado Springs, CO 80906



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## Activities and Events

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

- African American History Month
- American Indian Days Celebration
- Asian Culture Days
- Cinco de Mayo Celebration
- Alcohol Awareness Week and Drug Education Week
- Veteran's Day Observance
- HIV/AIDS Symposium
- Women's History Month

For more information, call the Student Life Office at 540-7105.

## The Downtown Studio Gallery

The Downtown Studio Gallery is located in the Downtown Studio Campus of Pikes Peak Community College at 100 West Pikes Peak Avenue. It is a public gallery with a multicultural emphasis. Six to eight exhibits created primarily by artists in the Pikes Peak region, including faculty and students, are offered each year, free and open to the public. Opening receptions often include music, poetry, and dance performances that enhance the theme of the show. The Gallery is a member of the Depot Arts District. For more information, call 527-6000.

## International and Multicultural Education

"The World is Our Community" is a trademark for Pikes Peak Community College. Faculty, staff, and administration of the college place a strong emphasis on the importance of international and multicultural education. We believe it is our responsibility as an educational institution to meet the needs of a changing world by expanding student knowledge and experience in the "global village."

To this end, the President of Pikes Peak Community College has established the Office of International Education, which provides oversight and guidance for international programs and activities.

Some of the special services, programs, and activities at Pikes Peak Community College which focus on international and multicultural education include:

- Ethnic Student Enrichment Program - This program of the Admissions Office provides many support services for ethnic minority students.
- Cultural celebrations - Through Student Life, special activities and events are scheduled in celebration of Black History Month, Cinco de Mayo, Asian Culture Day, and Native American Days.
- The International Education Committee - A committee of over 80 faculty and staff provides personnel resources and assistance in the planning and implementation of the many international education projects and activities.
- The English Language Institute - Housed at the Centennial Campus, the Institute brings approximately one hundred students from as many as twenty-eight countries to Pikes Peak Community College each semester.
- Grants from the International Education and Graduate Programs Service of the U.S. Department of Education - These provide opportunity for faculty and staff professional development, including travel abroad, curriculum development, and various community outreach programs.

## KEPC Radio - 89.7 FM

Students in the Radio, Television, and Telecommunications program at Pikes Peak Community College can be heard throughout El Paso County at 89.7 on the FM dial. Broadcasting in stereo with nearly 8,000 watts of power, KEPC programs provide a wide variety of music and other programming.

Throughout the semester, PPCC Radio, Television, and Telecommunications students produce many public service announcements and promotional announcements of interest to PPCC students and community members. Listeners will receive information about PPCC activities and events many that are free and open to the public. During inclement weather, KEPC will broadcast information regarding campus closures.

KEPC is on the air 24 hours a day, seven days a week. KEPC can be heard live globally on the Internet at [www.ppcc.ccooes.edu/dept/kepc/index.htm](http://www.ppcc.ccooes.edu/dept/kepc/index.htm).

For more information, call 540-7489.

## Learning Enterprises

The "first point of contact" for companies and community organizations doing business with the College is the Learning Enterprises Division. The division creates and manages entrepreneurial ventures of the college that serve the education, training, and workforce development needs of the region. Learning Enterprises offers the following specialized services to the community:

- developing strategic partnerships within industries and with community agencies
- development and delivery of workplace training or education programs
- providing customized training and consulting to local companies
- representing the college in regional economic and workforce development activities
- providing reasonably priced conference, meeting, and training facilities
- offering nontraditional, specialized academic programs
- coordinating the activities of the Pikes Peak Community College Foundation.

## The Masquers

The Masquers, the performing troupe of the PPCC Performing Arts Department, presents two major faculty-directed performances each academic year. Some of the plays have included *To Kill a Mockingbird*, *Bus Stop*, *Equus*, *Litko*, *Flowers for Algernon*, and *The Imaginary Invalid*. All performances are open to the public and are held in the PPCC theatre located at the Centennial Campus, 5675 South Academy Boulevard. For ticket information, call 540-7418 or 540-7314.

## Small Business Development Center

The Small Business Development Center is a joint effort between Pikes Peak Community College and Colorado University at Colorado Springs. It is located on the University Campus at 1420 Austin Bluffs Parkway. The center assists entrepreneurs through business planning, financing and marketing plans, and other areas of concern to small business owners and those desiring to go into business for themselves. It offers one-on-one counseling and an ongoing series of seminars and workshops and maintains a library of business resource information. For more information, call 592-1894.

## School Partnership Program

The School Partnership Program (SPP) facilitates partnerships between PPCC and K-12 education. The School Partnership Program Office works closely with local school districts to coordinate outreach efforts, activities, and programs for staff and students in the K-12 community. This office coordinates the Area Vocational Program and the Running Start Program for high school students. State and Federal financial aid as well as educational benefits through the Veterans Administration do not apply to these programs. The School Partnership Program Office is located at the Centennial Campus. For more information, call 540-7238.

## Area Vocational Program

High school students may enroll in the PPCC Area Vocational Program (AVP), which provides career and technical training in the program areas listed below. This program allows students to earn high school credit. At the end of a student's enrollment period, any college credit earned will be documented by the faculty and forwarded to the PPCC Records Office.

Students enroll in the Area Vocational Program as part of their daily high school schedule. School districts under contract pay the costs of this program. The Area Vocational Program delivers career and technical education that provides students with the concepts, academic and technical competencies, career skills, attitudes, and work habits essential to gain entry-level employment following high school graduation.

Instruction is provided in a two hour and forty minute day, five-day-a-week schedule throughout the school year. Most classes are offered during the morning session though some may be offered in the afternoon as well. Instruction is provided in classrooms, laboratories, and community settings that use equipment similar to what is used in business and industry. In most programs, only AVP students are enrolled; however, some classes include both secondary and post-secondary students.

All area vocational programs operated at Pikes Peak Community College are approved by the State Board for Community Colleges and Occupational Education. All AVP instructors are occupationally experienced and vocationally credentialed to teach in their area of expertise. Enrollment in AVP is completed at the high school level. Contact your high school counselor or call 540-7240 for more information.

## Occupational Programs Available

- Auto Collision Repair
- Automotive Technology
- Computer Applications Specialists
- Computer Aided Drafting
- CISCO
- Criminal Justice
- Culinary Arts
- Diesel Power Mechanics
- Early Childhood Professions
- Fire Science Technology
- Machining Technology
- Med-Prep
- Natural Resource Technology
- Radio, Television, Telecommunications
- Visual Communications-Design
- Welding

## Running Start

Running Start is designed for college-bound students seeking degrees in non-vocational areas or students who simply want to earn college credit while still in high school. Running Start enables high school juniors and seniors to take academic college classes at PPCC and earn high school and/or college credit. Students have the opportunity to enroll in any courses for which they meet the prerequisites, except for courses offered through the Area Vocational Program (AVP). Students may enroll in those courses through AVP (see above).

To enroll in Running Start, students must obtain permission from a parent or guardian, high school counselor, and district administrator. Some school districts have a cooperative agreement with PPCC and will reimburse the tuition for qualifying courses. Contact your high school counselor for more information or to enroll.



# Save on Tuition

## FACTS

About the HOPE Tax Credit and other education tax benefits

### 1. What is the HOPE Tax Credit?

The HOPE Tax Credit is a federal income tax credit available to eligible students during their first two years of postsecondary education. The tax credit covers 100 percent of the first \$1,000 of tuition paid and 50 percent of the second \$1,000 of tuition paid during the qualified period.

### 2. Who is eligible?

To be eligible, a student must be enrolled in a degree, certificate, or other program leading to a recognized education credential (i.e. associate degree, automotive technology certificate, etc.). The student must be enrolled at least half time.

### 3. When does it take effect?

The HOPE tax credit applies to tuition paid after December 31, 1997, and for education provided in academic periods beginning after that date.

### 4. How long is it available?

The HOPE tax credit is available for two tax years to those students who have not completed the first two years of postsecondary education.

### 5. What items are included in the tax credit?

HOPE applies only to tuition and certain mandatory fees – not to books, dormitory costs or other living expenses.

### 6. Are there any restrictions?

Yes. Students convicted of a felony related to the possession or distribution of a controlled substance such as heroin or marijuana are not eligible. In addition, there are income restrictions. The income ceiling for a single taxpayer is \$50,000 annually and for married taxpayers it is \$100,000 annually.

### 7. How do I apply?

Eligible individuals will claim the credit when they file their federal income tax forms.

### 8. How does it work for part-time students?

Students attending less than half time are not eligible for the HOPE tax credit. However, they may be eligible for the Lifetime Learning Credit described in item number 11.

### 9. Do I have to file a separate IRS form or will it be part of the standard 1040?

IRS form 8863–Education Credits (HOPE and Lifetime Learning Credits) should be used to take either of the credits. Additional information is available in IRS Publication 970 – Tax Benefits for Higher Education. Both the form and publication can be downloaded from the IRS website at [www.irs.gov](http://www.irs.gov).

### 10. Where can I get more information about the HOPE tax credit?

- ▲ **Financial Aid Office**  
Pikes Peak Community College  
540-7089 or 1-800-456-6847,  
extension 7089
- ▲ **[www.ppcc.ccoes.edu](http://www.ppcc.ccoes.edu)**  
(Pikes Peak Community College  
Web Site)
- ▲ **[www.aacc.nche.edu](http://www.aacc.nche.edu)**  
(American Association of  
Community Colleges Web Site)
- ▲ **Other**  
Call your tax preparer or the Internal  
Revenue Service at 1-800-829-1040.

### 11. What is the Lifetime Learning Credit?

The Lifetime Learning Credit will allow students studying for undergraduate, graduate or job skills training a 20% tax credit on the first \$5,000 of tuition paid.

### 12. What other new tax benefits are available?

Other tax benefits include Deduction of Student Loan Interest, Savings Incentives, Exemption of Scholarships and Tuition Remissions, and Exemption of Employer-Provided Assistance. Information on these benefits is also provided in IRS Publication 970.





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## Degree and Certificate Criteria

Pikes Peak Community College offers Associate of Arts (AA), Associate of Science (AS), Associate of Applied Science (AAS), and Associate of General Studies (AGS) degrees and Certificates of Completion. There are day and night classes in over 120 areas of study in arts and sciences (transfer) and career and technical areas. Career and technical programs prepare students to enter the workforce after graduation. Arts and sciences (transfer) courses provide the first two years of a bachelor's degree. Additionally, courses may be taken for personal enrichment or to learn specific skills. Some career and technical programs run for 5- or 7 1/2-week sessions, and some will accept student enrollments at any time.

Certain courses are meant to be taken together as a set during one semester. Each of these courses builds on and complements the knowledge and skills learned in the other. The course description for each of these paired courses refers to the concurrent enrollment requirements.

Some programs require that a course sequence be completed. Courses in one sequence are not interchangeable with courses in the other.

Developmental courses in English, reading, mathematics, study skills, and English as a Second Language are designed to help improve skills and facilitate success in college work. Courses numbered below 100, ENG 100, MAT 100, and STS 100 normally are not accepted for transfer by other schools and normally do not count toward degree requirements at PPCC.

Many freshman and sophomore level courses (numbered in the 100s and 200s) will transfer to four-year colleges, universities in Colorado, and a number of public and private schools outside Colorado. PPCC is a member of the Colorado CORE Curriculum project, a statewide articulation process among all state community colleges, four-year colleges and universities. Courses designated CORE (□) in the Catalog are intended to meet the general education requirements of a bachelors degree program at a college or university in Colorado. Academic advising is available if students wish to transfer to another school after graduating from PPCC. Guaranteed admissions programs allow students to transfer directly to Colorado University-Colorado Springs, the University of Northern Colorado, Colorado State University, Franklin University, Adams State College, and the University of Southern Colorado as a junior upon completion of an Associate of Arts or Associate of Science degree. Other state schools are negotiating similar arrangements.

Independent study and selected topic courses are individually evaluated for transfer by the receiving school based on petition. Students should keep all records of the class (syllabus, tests, papers, and other projects) for evaluation by the receiving school.

## Degree Eligibility

Receiving an AGS degree enables students to pursue an AA, AS, or AAS degree. If they have received an AAS degree, they may pursue an AA, AS or AGS degree. However, students eligible for an AA or AS degree from PPCC may not also apply for an AGS degree.

Having earned an associate or higher academic degree from an accredited school generally disqualifies students from receiving an associate degree from PPCC in an identical or closely related program. However, the Vice President for Educational Services may waive this restriction.

## Academic Requirements

To receive a degree or certificate, students must satisfactorily complete the program requirements outlined in the PPCC Catalog in effect when they were first admitted to the college. If the program requirements change while students are actively enrolled, they may choose to pursue the new requirements. If students have not attended for two semesters (excluding the summer semester), they must meet the program requirements published in the catalog effective at the time of re-enrollment. In some cases, the Vice President for Educational Services may waive this requirement and specify an alternative course of study. Students may not re-enroll in a program, which has been or is in the process of being discontinued. If they take longer than five years to complete a program and the program requirements change, they will need to request a waiver from the program division to graduate under the old requirements.

## Developmental Studies

### Purpose and Goals

Developmental studies courses reinforce mathematics, writing, reading, and study skills for personal enrichment and to help students meet the prerequisites for other courses. Academic advisors use placement tests to help students select courses available at several skill levels.

Research indicates that students who need and take these courses do better in their college-level courses than they would have without them. Although no special GED preparation program is available, developmental studies courses can help students prepare for the GED.

### The Math Laboratory

The Math Laboratory, provides a variety of services, self-help, and computer-assisted materials. Free instructional assistance is also available.

### Specialized Courses

The Developmental Studies Division has designed courses to help increase student learning success. Among them are Memory Development and Study Techniques and Math Success Strategies.

### Developmental English

Developmental English courses cover basic writing, spelling, and grammar. These courses are a good refresher for students who have not written college reports or essays. The writing courses, assigned according to a placement test, help students to express their thoughts in complete sentences, organized paragraphs, and whole compositions. The writing courses progress in the following order:

- ENG 030 Basic Language Skills (basic grammar, usage, punctuation, sentence structure, and paragraphing)
- ENG 060 Language Fundamentals (grammar/punctuation, text interaction, paragraph structure)

ENG 060 is a prerequisite for  
SPE 125 Interpersonal Communication  
SPE 225 Introduction to Organizational Communication  
ENG 131 Technical Writing

ENG 100 Composition Style and Technique (writing process, critical thinking, text interaction, effective diction, and essay structure)

ENG 100 is a prerequisite for  
ENG 121 English Composition I

## Developmental Mathematics

Developmental mathematics prepares students for college-level mathematics courses or entry into many occupational programs. Enrollment is determined by a placement test. The courses progress in the following order:

MAT 036 General Skills in Mathematics or equivalent modules  
MAT 041-045 (review of arithmetic, fractions, decimals, ratio-proportion, and percent)

MAT 036 is a prerequisite for  
MAT 066 Basics of Algebra  
MAT 110 Basic Finite Mathematics

MAT 066 Basics of Algebra (Algebra I)(signed numbers, first degree equations, word problems and factoring)

MAT 066 is a prerequisite for  
MAT 100 Elementary Algebra

MAT 100 Elementary Algebra (Algebra II) (algebraic fractions, equations with two variables, quadratic equations, radicals, and graphing)

MAT 100 is a prerequisite for  
MAT 105 Intermediate Algebra or

## Developmental Reading

Developmental reading courses cover phonics, vocabulary, comprehension, speed, critical thinking, and reasoning skills. Enrollment is based on a placement test.

REA 060 Foundations of Reading (review of basic reading concepts)

REA 090 College Preparatory Reading (preparation for college level reading)

REA 115 College Reading (continuation of REA 090)

## College Study Skills

Through the courses in college study skills, students can learn ways to improve their learning strategies, test taking, time management, listening, note taking, problem solving, and communication. Several activities and guest lecturers encourage students to practice these skills which are necessary to be successful in college. Enrollment is based on a placement test. Courses in achieving math success and memory development are also included in the study skills program.

MEM020 Memory Development and Study Techniques

STS 030 Math Success Strategies

STS 060 Learning Success Strategies (introduction to college study skills)

STS 100 Advanced Learning Strategies (college study skills)

# Institutes and Academies

## English Language Institute

The English Language Institute (ELI) is located at the Centennial Campus, room A-324. It is a semi-intensive English as a Second Language program, designed to meet the needs of non-native English speakers. The ELI serves students who wish to improve their English reading, writing, and speaking skills. Many ELI students plan to attend an American college or university or need to improve their English skills for the workplace.

Many non-native English students may want to consider taking courses in the English Language Institute (ELI). Any student who is interested in taking ELI courses must take the ELI placement exam. Non-native speakers of English whose English placement level is below ENG 100 should take the ELI placement exam and be advised by the English Language Institute.

The English Language Institute has three levels of study - basic, intermediate and advanced. New students entering the ELI must take a placement exam to ensure that they receive the correct level of instruction in English. Courses in the English Language Institute include grammar, composition, reading, and conversation. In addition, there are special topic courses that include Pronunciation, Computer Basics, Reading and Research, and Workplace ESL. Full-time students may complete coursework in the English Language Institute in three semesters.

For more information about the English Language Institute at Pikes Peak Community College, visit our website at [www.pcc.ccoes.edu/eli/neweli](http://www.pcc.ccoes.edu/eli/neweli).

**NOTE:** The ELI will remain at the Downtown Studio through the summer 2001 semester at 527-6022. Beginning fall semester, call 540-7047.

## Deaf Prep

The Deaf Prep program is a four-semester option for deaf students in transition programs with local high schools and for deaf adults who have difficulty with basic academic skills. All faculty are deaf or native-like signers, and classes are taught in American Sign Language. The program has four levels of remedial English and mathematics, critical thinking, study skills, American Sign Language, and community resource management. Instruction is individualized according to need and placement level in language, mathematics, American Sign Language, and reading.

Students may enter the Deaf Prep program by referral from a social service agency or school district. After completing the Deaf Prep program, students may choose to continue with community college education, enroll in a four-year college, enter the workforce, or take short term vocational training.

The Deaf Prep program is a joint endeavor among Pikes Peak Community College, the Colorado School for the Deaf and the Blind, Colorado Vocational Rehabilitation, the Pikes Peak Center on Deafness, and the Pikes Peak Mental Health Center. For more information, call 540-7210 or 540-7146.

## Integrated Circuit Fabrication Institute

The Integrated Circuit Fabrication (IC Fab) Institute at Pikes Peak Community College is one of only a few programs in the United States that offers process and equipment technology programs specifically for the integrated circuit industry.

Integrated circuits (ICs), often called semiconductors, are found in items such as watches, CD players, modems, video games, dishwashers, computers, and space shuttles. Virtually every electronic device being sold today contains some type of integrated circuit. The semiconductor industry is experiencing tremendous worldwide growth, and Pikes Peak Community College is helping provide this booming industry with the highly trained workforce it needs.

The IC Fab Institute introduces basic microelectronics and integrated circuit fabrication technology. Team-building, communication, and organizational skills are woven throughout the curriculum. Students may schedule courses to complete the program requirements in as little as a two-semester period. In-depth studies prepare the student for work in either process technology or equipment technology. This blended curriculum is designed to address the realities of the workplace.

## Cisco Academy

The Cisco Networking Academies program consists of four courses (twenty credit hours) and can be completed in two semesters. The program is designed to teach students the skills needed to design, build, and maintain small to medium-size computer networks. This provides them with the opportunity to enter the workforce and/or further their education and training in the computer networking field. Students will become Cisco Certified Network Associates (CCNA's) upon successful completion of all four levels and the associated exams. The credits may be applied towards an Associates of Applied Science degree in Networking Technology.

For more information, contact the Division of Business Education at 538-5200 or 540-7258.

## Pikes Peak Regional Law Enforcement Academy

The Pikes Peak Regional Law Enforcement Academy is set up to follow a basic recruitment curriculum sanctioned by the Peace Officers Standards and Training (P.O.S.T.) certification board of Colorado. State law requires that all applicants for the position of police officer be P.O.S.T.-certified.

The Pikes Peak Regional Law Enforcement Academy meets and exceeds the basic requirements for P.O.S.T. certification eligibility with over 600 hours of complex training in the field of law enforcement. This training includes the required skills training such as shooting, law enforcement driving, arrest control, first aid, and CPR. All classes are taught by law enforcement professionals.

The Academy introduces the cadet to all areas of law enforcement that would allow the cadet to perform the duties of a police officer upon graduation. Additional training may be required by an individual agency after graduation and is determined by the agency based on specific needs of its area.

To get more information about the Academy or to inquire about an application packet call 540-7347.

## Real Estate Institute

The Real Estate Institute consists of four courses (twelve credit hours) which are offered on a five-week basis. The entire program can be completed in twenty weeks. Students who desire to begin a career in real estate will acquire a good working knowledge of real estate principles and practices and the rules and regulations concerning the conduct of a real estate broker in Colorado. Upon completion of the program, students will be prepared to take the State of Colorado Real Estate Licensing Exam.

For more information, contact the Division of Business Education at 538-5200 or 540-7276.

## Alternative Delivery Methods

### Distance Learning Options

Distance Learning is a convenient alternative to taking college courses in a traditional classroom setting. Distance Learning at Pikes Peak Community College includes interactive television (ITV) courses, telecourses, and courses on the Internet. For more information about Distance Learning, call 540-7538.

**Interactive television (ITV)** courses are broadcast live from PPCC's interactive television classroom. Students watch the class on television and call in with questions or comments, which the faculty member will answer during televised class time. Students may also attend the class as it is being taught in the interactive television classroom. ITV students use the same syllabus as "in-class" students.

**Telecourses** are based upon professionally produced video programs broadcast on public television. Lessons are combined with a book, study guide, assignments, and examinations. PPCC faculty guides distance learners through the lessons and evaluates their progress. Faculty may be contacted by e-mail, fax, telephone, or regular mail. Occasional person-to-person meetings may be scheduled.

**Internet** courses may be taken using home computers to communicate electronically with faculty and other students in the "virtual classroom." Students may also use the computers at PPCC in the instructional computer labs. Go to [www.ppcc.ccoes.edu](http://www.ppcc.ccoes.edu) to see the PPCC home page on the World-Wide Web. Click on Distance Learning to view all the options for learning from home or work.

### CCC-Online

CCC-Online classes are offered through a consortium of fourteen community colleges in Colorado. Students will register as a PPCC student, but an instructor may teach the classes from any of the fourteen schools. CCC-Online offers one full degree online (AAS in Business) and classes toward an AAS and certificate in Computer Information Systems, and an AA. Students may also apply appropriate CCC-Online classes toward degrees at PPCC.

Colorado Community Colleges have standing transfer agreements for their business core courses and general education core courses with most of the four-year public and private colleges in Colorado. In addition, there are transfer agreements with colleges both in-state and out-of-state that offer Baccalaureate completion programs using distance/electronic technology. Among these are Regis University, Colorado; Governor's State University, Illinois; Jones International University, Colorado; Franklin University, Ohio; and Northwest Missouri State University, Missouri.

For more information, please call 540-7538 or e-mail at Distance.Ed@ppcc.cccoes.edu, or visit our website at www.cconline.org.

Students in active military, please call 540-7740 or e-mail at mil.programs@ppcc.cccoes.edu.

## Independent Study

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

- independent study
- independent study (instructor enhanced)

College credit is awarded for these courses. Many programs sponsored by the division are self-supporting, and tuition may vary from that charged for state-supported activities.

Residents of El Paso, Teller, or Elbert counties who can benefit from a flexible degree plan are encouraged to contact the Enrollment Services Center at 540-7226.

## External Programs

PPCC offers three courses of study that may be completed through an external program. These courses of study may lead to the Associate of General Studies (AGS), Associate of Applied Science (AAS) in Fire Science Technology, and Associate of Applied Science (AAS) in Criminal Justice.

The external programs are offered for students who cannot attend classes on the PPCC campuses or at regularly scheduled times. They are usually completed in conjunction with the Student Work Experience Evaluation Program (SWEEP). After students are awarded applicable credits through credit for prior learning, they may complete the remainder of the required courses through the Independent Study program. A minimum of 15 semester hours of PPCC courses must be completed to receive a degree. The remaining courses may be transferred from another college or university or awarded as prior learning. For more information, stop by the Enrollment Services Center at the Centennial Campus, or call the SWEEP Evaluator at 540-7227 or (800) 777-9446.

## Military and Government Programs

A comprehensive career education program is offered off campus to government employees and military personnel for resident credit. Evaluation of previous military education and training, federal government education and training, and work experience for the possible awarding of credit is available.

Pikes Peak Community College is a member of Servicemembers Opportunity Colleges (SOC), a group of over 1,600 colleges and universities providing voluntary postsecondary education to members of the military throughout the world. The college awards credit for learning from appropriate military education and training experiences, eases the transfer of relevant course credits, and provides flexible academic residency requirements.

Servicemembers Opportunity Colleges, developed jointly by representatives of the Armed Services, the Office of the Secretary of Defense, and a consortium of leading national higher educational associations, is co-sponsored by the American Association of Community Colleges (AACC). PPCC also has been selected by the Defense Activity for Non-Traditional Education Support (DANTES) as one of the approved colleges and is listed in the

DANTES Guide to External Degree Programs. The Associate of General Studies (AGS) external degree is offered in conjunction with the Student Work Experience Evaluation Program (SWEEP).

Courses for resident credit are offered at the following military installations:

- Fort Carson, Colorado
- Peterson Air Force Base, Colorado
- United States Air Force Academy, Colorado
- Little Rock Air Force Base, Arkansas
- Fort Sill, Oklahoma

Veterans may be certified for educational benefits at several of the above locations. Special service is provided to the Army National Guard through the Veterans Affairs Office at the Centennial Campus.

## Open-Entry/Open-Exit Courses

Open-entry, open-exit courses are designed to allow students to work at their own pace at times that are convenient for them. These courses are available in the following areas

- A number of computer courses are offered as open-entry/open-exit so that students can begin a course during the first three business days of any month. Courses must be completed within 3-months of the starting date. For more information, contact the Division of Business Education at (719) 540-7258.
- The Technical, Industrial, and Service Occupations Division offers open-entry/open-exit classes in welding, machining, and automotive engines. For more information, call (719) 540-7346.
- All Fitness Center classes and Spaceflight (SPS 101) are offered on an open-entry/open-exit basis, as are some sections of CSC 105, 116, and 160. For more information, contact the Division of Mathematics, Sciences, and Health Sciences at (719) 540-7645.
- Military Programs offers a number of computer courses in an open-entry/open-exit format. For more information, call (719) 576-7212 or (719) 574-1169.

Also see Independent Study for additional open-entry/open-exit opportunities.

## Credit for Prior Learning (SWEEP)

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

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

PPCC evaluates prior learning through the Student Work Experience Evaluation Program (SWEEP). Students may receive up to 75% of their total credits for all types of prior learning. For more information, stop by the Enrollment Services Center at the Centennial Campus, or call 540-7227 or 1-800-777-9446.

Students who wish to receive credit for prior learning and plan to transfer to another college or university should make sure these credits will transfer. Policies on awarding transfer credit vary from school to school.

# Assessment and Success in College

## Do I Need to Take the COMPASS Placement Tests?

If student intends to seek a degree or certificate at PPCC, and unless he/she has previous successful college experience, ACT scores of Verbal 20 and Math 20, or SAT scores of at least Verbal 580 and Math 510, he/she will be required to be assessed. This assessment will take the form of COMPASS, which assesses his/her entry level in the areas of English, math, reading, and study skills.

## Where Can I Take the COMPASS Placement Test?

Centennial Campus  
5675 South Academy Blvd., Room 108  
Colorado Springs, CO 80906  
(719) 540-7115

Downtown Studio Campus  
100 West Pikes Peak Avenue, Room DO 115  
Colorado Springs, CO 80903  
(719) 527-6000

Rampart Range Campus  
11195 Highway 83, Room S-101  
Colorado Springs, CO 80921  
(719) 538-5115

Fort Carson  
Building 1117, Room 118  
Corner of Specker and Ellis  
Fort Carson, CO 80913  
(719) 576-7212

Fort Sill  
Building 2608  
Currie Road  
Fort Sill, OK 73503  
(580) 357-0198

Little Rock Air Force Base  
Building 840, Room 221  
Little Rock, AR 72099  
(501) 988-1403

Peterson Air Force Base  
Education Center  
301 West Stewart, Building 1141, Room 112  
PAFB, CO 80914  
(719) 574-1169

U.S. Air Force Academy  
Education Services Center  
5136 Red Tail Drive  
Lower Level – Community Center  
USAFA, CO 80840  
(719) 472-1583

## Can I Prepare Myself to Take the COMPASS Test?

To review before taking or retaking the test or a section of the test, students may request

- a sample packet of questions from any testing center
- a video tape offering arithmetic and algebra review at Centennial or Rampart Range Campuses' LRCs or Math Labs or the Downtown Studio Campus main office
- a video tape on writing, available at the Centennial Campus LRC

For questions about the test results, a program advisor is the best person to consult. If any student feels that the COMPASS test results do not accurately reflect his/her knowledge and abilities, he/she may retake any or all sections of the test once only at no cost.

## What Do My Scores Mean?

Students will be given a printed copy of their test results as soon as they've finished the tests, which usually take about two hours to complete. COMPASS scores will place students in the classes listed next to them.

	<u>COMPASS</u>	<u>Class</u>
<b>Math</b>		
2000	.....	MAT 036
3000	.....	MAT 066
4000	.....	MAT 100
5000	.....	MAT 105
8000	.....	MAT 121
<b>Reading</b>		
1000	.....	REA 060
2000	.....	REA 090
3000	.....	REA 115
8000	.....	None Needed
<b>English</b>		
1000	.....	ENG 030
2000	.....	ENG 060
3000	.....	ENG 100
8000	.....	ENG 121
<b>Study Skills</b>		
1000	.....	STS 060
1500	.....	STS 060 or STS 100
8000	.....	None Needed

Students can use these scores to determine if they have achieved the basic skill level standards listed under each degree or certificate program description. If they do not meet these standards, they would be well advised to bring their basic skills up to the suggested levels, but may waive the suggested developmental courses with approval by the appropriate dean.

Basic skill level standards mean that, to enter a program, students must either

- have tested higher than the basic skill level standards for their program, or
- successfully complete the indicated basic skills classes, or
- have the approval of the appropriate dean to waive basic skills course or courses indicated for their program.

**Example:**

Basic Skill Level Standards: ENG 060 MAT 066 REA 090 STS 060 means that students can enter the program if they have tested higher than these levels, or if they successfully complete ENG 060, MAT 066, REA 090 and STS 060, or if they sign a form waiving these courses.

Prerequisite means that students must either have passed the listed course or have placed at the next level higher on the COMPASS test.

**Example:**

**Course:** MAT 203 Calculus

**Prerequisite:** MAT 202

means that students can enroll in MAT 203 if and only if they have successfully completed MAT 202.

**Course:** MAT 121 College Algebra I **Prerequisite:** MAT 105

means that students can enroll in MAT 121 if they have completed MAT 105 or have been assessed at the MAT 121 level.

Corequisite means that students must take the corequired course during the same enrollment period.

**Example:**

**Course:** NUR 173 Family Centered Nursing I

**Corequisite:** NUR 171 and NUR 172

means that students must enroll in all three NUR courses; students cannot take just one.

Or concurrent means that students may take the prerequisite for a course during the same semester as the course itself.

**Example:**

**Course:** LIT 115 Listed Prerequisite: ENG 121 or concurrent

Either students must successfully complete ENG 121 before taking LIT 115 or they must enroll in ENG 121 during the same semester as enrolled in LIT 115.

Faculty consent means that students must receive written permission from the faculty or program coordinator of the course before enrolling in it.

Or faculty consent means that students must receive written permission from the faculty or program coordinator of the course before enrolling in it if they have not met the prerequisites.

**How Seriously Should I Take the Placement Recommendations of the COMPASS Test?**

Our studies have repeatedly shown that students who take the courses suggested by the COMPASS tests have much higher rates of success than students who choose to ignore their COMPASS scores.

## The CORE Curriculum

The Colorado Community College and Occupational Education System has entered into a series of agreements between Colorado's Community Colleges and Colorado's four-year colleges and universities on a General Education CORE Transfer Program. The agreements ensure access to higher education for students who wish to meet the lower division general education requirements of most bachelors degrees at a local community college before continuing at a public four-year college or university.

The General Education CORE Transfer Program makes it possible for Pikes Peak Community College students to complete a core of general education curriculum requirements and be guaranteed transfer credit for these classes at Colorado's public four-year colleges or universities. Each CORE course must be completed with a grade of "C" or better. Only courses taken Fall 1988 or after will count toward the CORE.

### Associate of Arts Degree (AA)

#### A. Colorado CORE Curriculum Requirements

##### I. English/Speech

(9 semester credits required)  
ENG 121, ENG 122, SPE 115

##### II. Mathematics

(3 semester credits required)  
Choose from MAT 121, MAT 125, MAT 135, MAT 201,  
MAT 202

##### III. Science

(4 semester credits required)  
Choose from BIO 105, BIO 111, BIO 112, CHE 101, CHE  
102, CHE 111, CHE 112, PHY 105, PHY 111, PHY 112,  
PHY 211, PHY 212, GEY 111, GEY 121, AST, 101,  
AST 102

##### IV. Social and Behavioral Sciences

(Choose 9 semester credits from two different disciplines)  
Choose from 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, SOC 101, SOC 102

##### V. Humanities

(Choose 9 semester credits from two different disciplines)  
Choose 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, THE 105, THE 211, THE 212, PHI 111,  
PHI 112, PHI 113,  
Foreign Language courses numbered 111, 112, 211, 212.

See page 41 for complete PPCC Degree requirements and checklist.

### Associate of Science Degree (AS)

#### A. Colorado CORE Curriculum Requirements

##### I. English/Speech

(9 semester credits required)  
ENG 121, ENG 122, SPE 115

##### II. Mathematics

(4 semester credits required)  
Choose from MAT 121, MAT 125, MAT 201, MAT 202

##### III. Science

(8 semester credits required)  
Choose from BIO 111, BIO 112, CHE 111, CHE 112, PHY  
111, PHY 112, PHY 211, PHY 212, GEY 111, GEY 121,  
AST, 101, AST 102

##### IV. Social and Behavioral Sciences

(Choose 6 semester credits from two different disciplines)  
Choose from 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, SOC 101, SOC 102

##### V. Humanities

(Choose 6 semester credits from one or two different  
disciplines)  
Choose 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, THE 105, THE 211, THE 212, PHI 111,  
PHI 112, PHI 113,  
Foreign Language Courses numbered 111, 112, 211, 212.

See page 43 for complete PPCC Degree requirements and checklist.



# Degree and Certificate Requirements

## Associate of Arts Degree (AA)

The Associate of Arts Degree is designed for students who want a traditional liberal arts education and who intend to transfer to four year colleges and universities. It provides a basis of study in the areas of arts and humanities, communications, or social sciences.

To earn the Associate of Arts Degree, students must complete the following course requirements for a total of 60 semester credit hours, 34 of which must be Colorado CORE (□).

### A. Minimum Curriculum Requirements

#### I. English/Speech (9 credit hours)

ENG 121, ENG 122, SPE 115

#### II. Computer Communication (3 credit hours)

Choose from CSC 105, 116, or 160

#### III. Mathematics and Science (9 credit hours)

##### Mathematics

Choose from approved course list, pg. 45, and include 3 CORE hours

##### Science

Choose from approved course list, pg. 45, and include 4 CORE hours

#### IV. Social and Behavioral Sciences (9 credit hours)

From approved CORE list pg. 40 choose 9 CORE hours from two different disciplines. Both categories must be included and include at least one CORE sequence\*.

##### Category 1

Behavioral Science Area {ANT, GEO (except GEO 115) PSY, SOC}

##### Category 2

Policy Studies Area {ECO, HIS, POS}

#### V. Humanities (9 credit hours)

From approved course list, pg. 46, choose 9 CORE hours from two different disciplines and include at least one CORE sequence\*.

#### VI. Communication Studies or Fine Arts

(3 credit hours)

Choose from approved course list pg. 47

#### VII. Electives (18 credit hours)

Choose from all categories, pp. 45-47, taking into account suggested courses for a program's "Recommended Track."

### B. Other Requirements

1. A minimum of 60 credit hours in a prescribed program of study with a cumulative grade point average of 2.0 (a C average). At least 15 of these credit hours must be earned from PPCC.
2. Only 6 elective credits are allowed in any combination from MIS and PED activity courses.
3. Students may concentrate their study in a specialized area such as speech communication, journalism, or political science. Many "Recommended Tracks" are included in the next section of this catalog.
4. Occupational/technical/vocational courses, whether taken at another institution or at PPCC, are not accepted toward this degree without approval of the chief instructional officer. Approval is given only when it is appropriate to the educational objectives of a student.
5. Courses numbered below 100 normally may not apply toward degrees. Courses numbered ENG 100 through ENG 105, MAT 100 through MAT 105, and STS 100 do not apply toward this degree.

\*See pages 45-47 for CORE sequence requirements.

# AA Degree Checklist

To avoid any confusion or disappointment, students should fill in this check list when meeting with their advisor. Many options are identified which will fulfill the CORE curriculum requirement for the AA degree.

## Minimum Curriculum Requirements:

### I. English/Speech (9 credit hours)

ENG 121 \_\_\_\_\_  
 ENG 122 \_\_\_\_\_  
 SPE 115 \_\_\_\_\_

### II. Computer Communication (3 credit hours)

Choose from CSC 105, 116 or 160  
 \_\_\_\_\_

### III. Mathematics and Science (9 credit hours)

#### Mathematics

Choose from approved CORE list, pg. 45  
 (minimum 3 credit hours)

MAT \_\_\_\_\_  
 MAT \_\_\_\_\_

#### Science

Choose from approved CORE list, pg. 45  
 (minimum 4 credit hours)

\_\_\_\_\_

Additional hours from approved elective list pg. 46

### IV. Social and Behavioral Science (9 credit hours)

Choose from approved CORE list, pg. 46  
 Choose 9 CORE hours from two different disciplines and  
 include at least one CORE sequence.

Both categories must be included.

#### Category 1 – Behavioral Sciences Area

{ANT, GEO (except 115), PSY, SOC}

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

#### Category 2 – Policy Studies Area

{ECO, HIS, POS}

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

### V. Humanities (9 credit hours)

Chose from approved CORE list, pg. 46

Choose 9 CORE hours from two different disciplines and  
 include at least one CORE sequence.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

### VI. Communication Studies or Fine Arts (3 credit hours)

Choose from approved elective list, pg. 47

\_\_\_\_\_

### VII. Electives (at least 18 credit hours)

Choose from all categories on the approved elective course  
 list, taking into account suggested courses from a programs  
 “Recommended Track.”

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

#### Total Credits

CORE Courses (minimum of 34)

Other Courses and Electives

#### Total Credits Earned Toward AA

(minimum 60 credits)

## Associate of Science Degree (AS)

The Associate of Science Degree is designed for students who want an emphasis in natural sciences, mathematics, computer science, pre-engineering, and allied health and who intend to transfer to four-year colleges and universities.

To earn the Associate of Science Degree, students must complete the following course requirements for a total of 60 semester credit hours, 33 of which must be Colorado CORE (□).

### A. Minimum Curriculum Requirements

#### I. English/Speech (9 credit hours)

ENG 121, ENG 122, SPE 115

#### II. Mathematics (4 credit hours)

Choose from CORE list, pg. 40

#### III. Science (8 credit hours)

Choose from CORE list, pg. 40

#### IV. Social and Behavioral Sciences (6 credit hours)

Choose from two different disciplines from CORE list, pg. 40

#### V. Humanities (6 credit hours)

Choose from one or two different disciplines from CORE list, pg. 40

#### VI. Computer Communication (3 credit hours)

(CSC 116 or 160)

#### VII. General Electives (6 credit hours)

Select from elective list, pp. 45-47

#### VIII. Mathematics or Science Electives

(18 credit hours) Select from elective list, pg. 45

### B. Other Requirements

1. A minimum of 60 credit hours in a prescribed program of study with a cumulative grade point average of 2.0 (a C average). At least 15 of these credit hours must be earned from PPCC.
2. Only 6 elective credits are allowed in any combination from MIS and PED activity courses.
3. Students may concentrate their study in a specialized area. "Recommended Tracks" are included in the next section of this catalog.
4. Occupational/technical/vocational courses, whether taken at another institution or at PPCC, are not accepted toward this degree without approval of the chief instructional officer. Approval is given only when it is appropriate to the educational objectives of a student.
5. Courses numbered below 100 normally may not apply toward degrees. Courses numbered ENG 100 through ENG 105, MAT 100 through MAT 105, and STS 100 do not apply toward this degree.

# AS Degree Checklist

To avoid any confusion or disappointment, students should fill in this check list when meeting with their advisor. Many options are identified which will fulfill the CORE curriculum requirement for the AS degree.

## Minimum Curriculum Requirements:

### I. English/Speech (9 credit hours)

ENG 121 \_\_\_\_\_  
 ENG 122 \_\_\_\_\_  
 SPE 115 \_\_\_\_\_

### II. Mathematics (minimum of 4 credits from CORE list, pg. 45)

MAT \_\_\_\_\_  
 MAT \_\_\_\_\_  
 MAT \_\_\_\_\_  
 MAT \_\_\_\_\_

### III. Sciences (minimum of 8 credits from CORE list, pg. 40)

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

### IV. Social and Behavioral Sciences

Choose 6 credit hours from CORE courses from two different disciplines. Choose from approved CORE list, pg. 40

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

### V. Humanities

Choose 6 credit hours from CORE courses from one or two different disciplines. Choose from approved CORE list, pg. 40

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

### VI. Computer Communications (minimum of 3 credit hours)

Choose from CSC 116 or 160

\_\_\_\_\_  
 \_\_\_\_\_

### VII. General Electives (at least 6 credit hours)

Choose from all categories on the approved course list, taking into account suggested courses from program's "Recommended Track."

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

### VIII. Mathematics or Sciences Electives (minimum of 18 credit hours)

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

### Total Credits

CORE Courses (minimum of 33)

Other Courses and Electives

**Total Credits Earned Toward AS**  
 (minimum 60 credits)

## Associate of Arts Degree

### Business Option (AA)

To earn the Associate of Arts (Business Option), students must complete the following course requirements for a total of 61 semester credits.

#### I. English/Speech

(9 semester credits required)  
ENG 121, ENG 122, SPE 115

#### II. Mathematics

(3 semester credits required)  
Choose from MAT 121, MAT 125, MAT 135, MAT 201, MAT 202

#### III. Science

(4 semester credits required)  
Choose from BIO 105, BIO 111, BIO 112, CHE 101, CHE 102, CHE 111, CHE 112, PHY 105, PHY 111, PHY 112, PHY 211, PHY 212, GEY 111, GEY 121, AST, 101, AST 102

#### IV. Social and Behavioral Sciences

(Choose 9 semester credits from two different disciplines)  
Choose from 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, SOC 101, SOC 102

#### V. Humanities

(Choose 9 semester credits from two different disciplines)  
Choose 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, THE 105, THE 211, THE 212, PHI 111, PHI 112, PHI 113,  
Foreign Language courses numbered 111, 112, 211, 212.

#### VI. Required Business Courses

ACC 121, ACC 122, BUS 115, BUS 216, BUS 217, BUS 226, CIS 118, ECO 201\*\*, ECO 202\*\*, MAN 226\*, MAR 216\*

\*Principles of Marketing and Principles of Management will be accepted at four-year institutions provided that the community college student completes the prerequisites (i.e., two accounting courses, one economics course, and business statistics) and has sophomore standing before enrolling in either Principles of Marketing or Principles of Management.

\*\*These courses can be taken as part of the Social and Behavioral Sciences category.

## Approved Elective Course List for AA/AS Degrees

Courses designated with  are CORE courses. All courses may be used as electives and are generally transferable. Please check with the receiving institution for details.

		<b>Credits</b>
<b>I. English/Speech</b>		
ENG121, 122	English Composition I,II	<input type="checkbox"/> 3,3
131, 132	Technical Writing I, II	3,3
221, 222	Creative Writing I,II	3,3
226	Fiction Writing	3
227	Poetry Writing	3
SPE	115 Principles of Speech Communication	<input type="checkbox"/> 3
	125 Interpersonal Communication	3
	216 Advanced Public Speaking	3
	217 Group Communication	3
	225 Introduction to Organizational Communication	3
<b>II. Mathematics</b>		
MAT	121 College Algebra	<input type="checkbox"/> 4
	122 College Trigonometry	3
	123 Pre-calculus	5
	124 Finite Mathematics	3
	125 Survey of Calculus	<input type="checkbox"/> 4
	135 Introduction to Statistics (AA only)	<input type="checkbox"/> 3
201,202	Calculus I,II	<input type="checkbox"/> 5,5
	203 Calculus III	4
	255 Linear Algebra	3
	265 Differential Equations	3
<b>III. Science</b>		
AST 101,102	Astronomy I,II	<input type="checkbox"/> 4,4
BIO	105 Science of Biology (AA only)	<input type="checkbox"/> 4
	110 Foundations of College Biology	5
111,112	General College Biology I,II	<input type="checkbox"/> 5,5
	123 Foundations of Microbiology	3
	130 Environmental Biology	3
	133 Ecology	4
	134 Plant Taxonomy	4
141,142	Applied Anatomy, Physiology, and Disease Processes I, II	5,4
151,152	Introduction to Nutrition I,II	3,3
201,202	Human Anatomy and Physiology I,II	4,4
	205 Microbiology	5
	207 Genetics	4
	225 Zoology	5
	226 Botany	5
CHE 101,102	Introduction to Chemistry I,II (AA only)	<input type="checkbox"/> 5,5
111,112	General College Chemistry I,II	<input type="checkbox"/> 5,5
211,212	Organic Chemistry I,II	5,5
CSC	105 Computer Literacy	3
	116 Problem Solving with Visual Basic for Applications	3
	148 FORTRAN Programming	3
	160 Computer Science I: C++	4
	161 Computer Science II: C++	4
	165 Discrete Structures	3
	225 Computer Organization/Assembly Language Programming	4
	255 Computer Programming Languages	3
	266 VAX Assembly Language	3
GEY	105 Geology of the National Parks	3
	106 Principles of Geology	3
	111 Physical Geology	<input type="checkbox"/> 4
	121 Historical Geology	<input type="checkbox"/> 4
	141 Landscapes of North America	3
	146 The Earth Revealed: Introductory Geology	4

CORE sequences are in bold type.

PHY 111,112	Physics: Algebra-Based I,II	□	5,5	<b>V. Humanities</b>	
	211,212 Physics: Calculus-Based I,II	□	5,5	ART 110	Art Appreciation □ 3
SPS 101	Spaceflight		3	<b>111, 112 Art History I, II</b>	□ 3
<b>IV. Social and Behavioral Sciences</b>				131	Design I 3
ANT 101	<b>Cultural Anthropology</b>	□	3	132	Design II 3
	107 Introduction to Archaeology		3	135	Computer Graphics I 3
	<b>111 Physical Anthropology</b>	□	3	205	Film Studies 3
	211 Cultural Resource Management		3	CHN <b>111,112 Chinese I, II</b>	□ 5,5
	221 Primitive Religions		3	211	Chinese III □ 3
	251 The Study of Folklore		3	FRE <b>111,112 French I,II</b>	□ 5,5
	266 Ethnographic Field Study:	1-3	3	<b>211,212 French III,IV</b>	□ 3,3
ECO 106	Consumer Economics		3	GER <b>111,112 German I,II</b>	□ 5,5
	<b>201 Principles of Macroeconomics</b>	□	3	<b>211,212 German III,IV</b>	□ 3,3
	<b>202 Principles of Microeconomics</b>	□	3	HUM <b>121,122,123 Survey of Hum. I,II,III</b>	□ 3,3,3
	205 Contemporary Economic Issues		3	137	The Arts and Cultures of Mexico 3
GEO 105	World Regional Geography	□	3	201	20th Century American Arts 3
	106 Human Geography		3	235	Pre-Columbian Indian Arts 3
	111 Physical Geography: Landforms		3	236	North American Indian Arts 3
	112 Weather and Climate		4	237	Hispanic Arts of the Southwest 3
	113 Economic Geography		3	238	Sacred Images, Sacred Spaces 3
	125 Geography of Colorado		3	266	Culture Studies 1-3
	206 Introduction to Cartography		4	ITA <b>111,112 Italian I, II</b>	□ 5,5
HIS 101,102	<b>Western Civilization I,II</b>	□	3,3	<b>211,212 Italian III, IV</b>	□ 3,3
	116 Native American Experience and Indian History		3	JPN <b>111,112 Japanese I,II</b>	□ 5,5
	136 The Southwest United States		3	<b>211,212 Japanese III, IV</b>	□ 3
	137 Contemporary World History		3	LIT 115	Introduction to Literature □ 3
	<b>201,202 U.S. History I,II</b>	□	3,3	121	Survey of Mythology 3
	205 American Environmental History		3	125	Study of the Short Story 3
	206 U.S. History and Family Genealogy		3	<b>201,202 Masterpieces of Literature I,II</b>	□ 3,3
	215 Women in U.S. History		3	211,212	American Literature I,II 3,3
	225 Colorado History		3	221,222	Survey of British Literature I,II 3,3
	235 The American West		3	255	Children's Literature 3
	236 Contemporary U.S. History		3	265	Native American Literature 3
	241 History of the Pikes Peak Area		3	270	Celtic Literature and Art 2
POS 105	Introduction to Political Science	□	3	MUS 100	Fundamentals of Music Theory 3
	111 American Government	□	3	101,102	Music Theory 1,II 4,4
	125 American State and Local Government		3	120	Music Appreciation □ 3
	205 International Relations		3	<b>121,122 Introduction to Music History I,II</b>	□ 3,3
	206 Environmental Policy		3	123	American Music: Ragtime Through Rock 3
	207 U. S. in Current World Affairs		3	131	Performance Class I-V 1
	212 Comparative Politics of Developing Nations		3	141, 142, 143, 144, 145	Private Instruction I, II, III, IV, V 1,1,1,1,1
	215 Current Political Issues		3	151, 152, 153, 154	Ensemble Groups I, II, III, IV 1, 1,1,1
	216 Comparative Government		3	PHI 105	Millennium Studies 3
PSY 101,102	<b>General Psychology I,II</b>	□	3,3	<b>111 Introduction to Philosophy</b>	□ 3
	106 Human Relations		3	<b>112 Ethics</b>	□ 3
	115 Psychology of Adjustment		3	<b>113 Logic</b>	□ 3
	215 The Criminal Mind		3	114	Philosophy of Religion 3
	217 Human Sexuality		3	115	Comparative Religions 3
	226 Social Psychology		3	155	Philosophy East and West 3
	227 Death and Dying		3	205	Environmental Ethics 3
	235 Human Growth and Development		3	215	Philosophy and Contemporary Issues 3
	243 Behavior Modification		3	255	Eastern Wisdom 3
	246 Psychology of Women and Men		3	RUS <b>111,112 Russian I,II</b>	□ 5,5
	247 Child Abuse and Neglect		3	SPA <b>111,112 Spanish I,II</b>	□ 5,5
	250 What is Normal?		1	<b>211,212 Spanish III,IV</b>	□ 3,3
	255 Psychology of the Exceptional Child		3	266	Culture Studies 3
	260 Psychology of Aging		3	SPE 216	Advanced Public Speaking 3
	265 Psychology of Personality		3	217	Group Communication 3
SOC <b>101,102</b>	<b>Introduction to Sociology I,II</b>	□	3,3	THE 105	Introduction to the Theatre Arts □ 3
	205 Marriage and Family		3	<b>211,212 Development of Theatre I,II</b>	□ 3,3
	206 Single Life: Divorce & Widowhood		3		
	215 Contemporary Social Problems		3		
	218 Sociology of Minorities		3		
	231 Deviant Behavior		3		
	232 Juvenile Delinquency		3		
	236 Age and Aging		3		
	250 Chicanos in a Changing Society		3		

**CORE sequences are in bold type.**

## VI. Communication Studies

ART	150 Fundamentals of Photography	3
	151 Photography I	3
	205 Film Studies	3
JOU	101 Broadcasting I	3
	102 Introduction to Editing	3
	105 Introduction to Mass Media	3
	106 Fundamentals of Reporting	3
	109 Introduction to Desktop Publishing	3
	111 Introduction to Print Media Advertising	4
	121 Introduction to Print Media Photography	3
	201 TV Production	3
	206 Intermediate Newswriting and Editing	3
	215 Publications Production and Design	3
	221,222 Newspaper Production I,II	3,3
	231 Introduction to Public Relations	4
	241 Magazine Article Writing	3
SPE	125 Interpersonal Communication	3
	216 Advanced Public Speaking	3
	217 Group Communication	3
	225 Introduction to Organizational Communication	3

## VII. Fine Arts

ART	114 Folk Arts of Latin America	3
	121,122 Drawing I,II	3,3
	131, 132 Design I, II	3,3
	135 Computer Graphics I	3
	141, 142 Jewelry & Metalwork I, II	3,3
	163, 164 Handbuilt Clay I, II	3,3
	150 Fundamentals of Photography	3
	151 Photography I	3
	161,162 Ceramics I,II	3,3
	261,262 Ceramics III, IV	3,3
	205 Film Studies	3
	211,212 Painting I,II	3,3
	224, 225 Sculpture I, II	3,3
	228 Printmaking I	3,3
	231,232 Watercolor I,II	3,3
	266 Culture Studies	3
	270,271 Figure Drawing I,II	3,3
	273, 274 Figure Painting I, II	3,3
DAN	111,112,113 Modern Dance I,II,III	1,1,1
	121,122,123 Jazz Dance I,II,III	1,1,1
	125 History of Dance I	3
	131,132,133 Ballet I,II,III	1,1,1
	141 Regional Dances	1
ENG	201, 202, 203, 204 Creative Writing I, II, III, IV	4,4,4,4
MUS	100 Fundamentals of Music Theory	3
	101,102 Music Theory I,II	4,4
	123 American Music: Ragtime through Rock	3
	131 Performance Class I-V	1
	141,142,143,144,145 Private Instruction I, II, III, IV, V	1,1,1,1,1
	151,152,153,154 Ensemble Groups I,II,III,IV	1,1,1,1
THE	111,112 Acting I,II	3,3
	121 Set Design: Film and Theatre	3
	131,132 Theatre Production I,II	2,2
	135 Theatre Make-up	1-2
	206 Technical Theatre	3
	216 Theatre Lighting	3
	218 Readers Theatre	3
	231,232 Theatre Production III,IV	2,2
	241,242 Intermediate Acting I,II	3,3

## VIII. Physical Education

PED	101 Body Toning	1
	103 Strength Training	1
	110 Physical Education Activities	1
	201 Intro. to Health, Physical Ed., and Recreation	3
	202 Community Recreation and Leadership	3
	213 Sports Officiating	2

## IX. Computing Skills

CSC	105 Computer Literacy	3
	116 Problem Solving with Visual Basic for Applications	3
	148 FORTRAN Programming	3
	160 Computer Science I: C++	4
	161 Computer Science II: C++	4
	165 Discrete Structures	3
	225 Computer Organization/Assembly Language Programming	4
	240 ADA Programming	3
	255 Computer Programming Languages	3
	266 VAX Assembly Language	3
CIS	110 Introduction to PC Operating Systems: DOS	2
	115 Introduction to Computers	3
	150 Introduction to PC Spreadsheets: Excel	1
	152 Advanced Electronic Spreadsheets: Excel	1
	165 RPG Programming	3
	166 Visual Basic Programming	3
	260 COBOL Programming	3
	261 Advanced COBOL Programming	3

NOTE: There are additional career-related courses, which may serve as electives for the AA/AS degrees. See list below.

## Business/Management

ACC	121 Principles of Accounting I	4
ACC	122 Principles of Accounting II	4
BUS	115 Introduction to Business	3
BUS	216 Legal Environment of Business	3
BUS	217 Business Communications	3
BUS	226 Business Statistics	3
CIS	118 Introduction to PC Applications	3
CIS	261 Advanced COBOL Programming	3
*MAN	226 Principles of Management	3
*MAR	216 Principles of Marketing	3
*Principles of Marketing and Principles of Management will be accepted at four-year institutions provided that the community college student completes the prerequisites (i.e., two accounting courses, one economics course, and business statistics) and has sophomore standing before enrolling in either Principles of Marketing or Principles of Management.		

## Criminal Justice

CRJ	110 Introduction to Criminal Justice	3
	111 Substantive Criminal Law	3
	210 Constitutional Law	3
	230 Criminology	3

## Early Childhood Professions

ECP	101 Introduction to Early Childhood Professions	3
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## Education

EDU	201 Introduction to Education	3
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## Military Science

MIS	101 Introduction to Leadership and Management	1
	102 Fundamentals of Leadership and Management	1
	201 Applied Leadership & Counseling	1

CORE sequences are in bold type.

## Associate of Applied Science Degree (AAS)

This two-year degree provides career skills to enable students to enter the job market after graduation, retrain in a new career, or upgrade employment skills. Occupational courses are designed to meet these needs instead of transferring to four-year institutions; however, many four-year institutions accept some of these courses. Check with the other college or university if planning to transfer these courses. CORE Courses (☐) are eligible for transfer.

### Requirements

1. A minimum of 60 credit hours in a prescribed program of study with a cumulative grade point average of 2.0 (a C average). At least 15 of these credit hours must be earned from PPCC. See specific degree program for additional requirements.
2. A minimum of 15 credit hours (of the 60 total) of general education courses from list will be chosen by the faculty for specific degrees.
3. Degree is intended to prepare students to enter skilled and/or paraprofessional occupations and is not intended for transfer toward a baccalaureate degree; however, some courses may transfer to some institutions. Academic advisors should be consulted for further information.
4. Courses used as electives in meeting degree requirements and taken in addition to those courses specified in a particular program are not accepted toward this degree without approval of the chief instructional officer. Approval is given only when it is appropriate to the educational objectives of a student.
5. A maximum of 4 credit hours in any combination of MIS and PED activity courses.
6. Specific degree requirements are listed with each program in the next section of this catalog.
7. Courses numbered below 100 normally may not apply toward degrees.

## General Education Electives for AAS Degree

These courses are approved as meeting the general education requirements for the AAS degree with limitations noted. Credits must be earned in at least three of the categories specified below.

<b>English/Speech</b>		<b>Credits</b>
ENG 121,122	English Composition I,II	☐ 3,3
	131 Technical Writing	3
SPE	115 Principles of Speech Communication	☐ 3
	225 Organizational Communication	3
<b>Mathematics and Science</b>		
MAT	110 Basic Finite Mathematics	3
	105 Intermediate Algebra	5
	121 College Algebra	☐ 4
	122 College Trigonometry	3
	124 Finite Mathematics	3
	125 Survey of Calculus	☐ 4
	135 Introduction to Statistics	☐ 3
	150 Basic Geometry	3
	151,152 Technical Mathematics I,II	4,3
	153 Statistical Techniques for Quality Control	4
	156 Problem Solving in College Math.	4
	201,202 Calculus I,II	☐ 5,5
AST	101,102 Astronomy I,II	☐ 4,4
BIO	105 Science of Biology	☐ 4
	110 Foundations of College Biology	5
	111,112 General College Biology I,II	5,5
	130 Environmental Biology	3
	133 Ecology	4
	141 Applied Anatomy, Physiology, and Disease Processes I	5
	151,152 Introduction to Nutrition I,II	3,3
	201,202 Human Anatomy and Physiology I,II	4,4
CHE	101,102 Introduction to Chemistry I,II	☐ 5,5
	111,112 General College Chemistry I,II	☐ 5,5
CSC	105 Computer Literacy	3
	116 Problem Solving with Visual Basic for Applications	3
GEY	106 Principles of Geology	3
	111 Physical Geology	☐ 4
	121 Historical Geology	☐ 4
	145 The Earth Revealed: Introduction Geology	3
PHY	111,112 Physics: Algebra-Based I,II	☐ 5,5
	121,122 Applied Physics I,II	8,8
	133 Technical Physics	5
	211,212 Physics: Calculus-Based I,II	☐ 5,5
SPS	101 Spaceflight	3



**Social and Behavioral Sciences**

ANT	101 Cultural Anthropology	<input type="checkbox"/>	3
	111 Physical Anthropology	<input type="checkbox"/>	3
ECO	106 Consumer Economics		3
	201 Principles of Macroeconomics	<input type="checkbox"/>	3
	202 Principles of Microeconomics	<input type="checkbox"/>	3
	205 Contemporary Economic Issues		3
	225 Money and Banking		3
GEO	105 Geography	<input type="checkbox"/>	3
	106 Human Geography		3
	113 Economic Geography		3
HIS	101,102 Western Civilization I,II	<input type="checkbox"/>	3,3
	201,202 U.S. History I,II	<input type="checkbox"/>	3,3
POS	105 Introduction to Political Science	<input type="checkbox"/>	3
	111 American Government	<input type="checkbox"/>	3
	125 American State and Local Government		3
	205 International Relations		3
	207 U. S. in Current World Affairs		3
PSY	101,102 General Psychology I,II	<input type="checkbox"/>	3,3
	106 Human Relations		3
	115 Psychology of Adjustment		3
	226 Social Psychology		3
	235 Human Growth and Development		3
SOC	101,102 Introduction to Sociology I,II	<input type="checkbox"/>	3,3
	205 Marriage and Family		3
	215 Contemporary Social Problems		3
	218 Sociology of Minorities		3

**Humanities**

ART	106 Art and the Human Form		3
	110 Art Appreciation	<input type="checkbox"/>	3
	111 Art History I	<input type="checkbox"/>	3
	112 Art History II	<input type="checkbox"/>	3
FRE	111,112 French I,II	<input type="checkbox"/>	5,5
	211,212 French III,IV	<input type="checkbox"/>	3,3
GER	111,112 German I,II	<input type="checkbox"/>	5,5
	211,212 German III,IV	<input type="checkbox"/>	3,3
HUM	121,122,123 Survey of Humanities I,II,III	<input type="checkbox"/>	3,3,3
	201 20th Century American Arts		3
LIT	115 Introduction to Literature	<input type="checkbox"/>	3
	125 Study of the Short Story		3
	201,202 Masterpieces of Literature I,II	<input type="checkbox"/>	3,3
	211,212 American Literature I,II		3,3

MUS	120 Music Appreciation	<input type="checkbox"/>	3
	121,122 Introduction to Music History I,II		3,3
	123 American Music: Ragtime through Rock		3
PHI	111 Introduction to Philosophy	<input type="checkbox"/>	3
	112 Ethics	<input type="checkbox"/>	3
	113 Logic	<input type="checkbox"/>	3
	114 Philosophy of Religion		3
	115 Comparative Religions		3
	118 Personal Decision Making		3
RUS	111,112 Russian I, II	<input type="checkbox"/>	5,5
SPA	111,112 Spanish I,II	<input type="checkbox"/>	5,5
	211,212 Spanish III,IV	<input type="checkbox"/>	3,3
SPE	115 Principles of Speech Communication	<input type="checkbox"/>	3
	125 Interpersonal Communication		3
	217 Group Discussion		3
	225 Introduction to Organizational Communication		3
THE	105 Introduction to the Theatre Arts	<input type="checkbox"/>	3
	211,212 Development of Theatre I,II	<input type="checkbox"/>	3,3

**Other General Education**

BUS	105 Business Mathematics		4
	115 Introduction to Business		3
CIS	110 Microcomputer Operating Systems		3
	115 Introduction to Computers		3
	118 Microcomputer Applications		3
CSC	105 Computer Literacy		3
PED	Any PED course		

# Associate of General Studies Degree (AGS)

## The Associate of General Studies

The Associate of General Studies degree provides an educational plan for the student to create a personalized program. It allows the blending of both career and transfer courses without the constraints of specialization. Transferability of the AGS depends upon the courses taken and the receiving institutions.

This degree requires at least 30 semester hours of general education courses. Fifteen semester hours must come from the Colorado CORE curriculum. In addition, students consult with an advisor and select 30 semester hours of open electives. They may include general education courses and/or occupational technical courses. The selected courses must not be considered developmental.

### Requirements

1. A minimum of 60 credit hours of course work.
2. 30 credits of general education with 15 credits from CORE (□) Courses.
3. A cumulative grade point average of 2.0 (a C average).
4. At least 15 of these credit hours must be earned from PPCC.
5. Courses numbered below 100, ENG 100-105, MAT 100-105, and STS 100 do not apply toward this degree.

## AGS Degree Checklist

To avoid any confusion or disappointment, students should fill in this check list when meeting with their advisor. Many options are identified which will fulfill the CORE curriculum requirement for the AGS degree.

### Minimum Curriculum Requirements:

(NOTE: Sections I & II must have a minimum of 15 credit hours of CORE (□) courses.)

#### I. General Education (15 credit hours)

##### English (3 credit hours)

ENG 121 or ENG 131

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##### Mathematics (3 credit hours)

MAT 110 or higher

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##### Science (3 credit hours)

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##### Social and Behavioral Science (3 credit hours)

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##### Humanities (3 credit hours)

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#### II. General Education Electives (15 credit hours)

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#### II. Open Electives (30 credit hours)

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#### Total Credits (minimum 60 credits)

**I. General Education (30 Credits - 15 CORE)**

(Minimum of 3 credits from English/Speech, Mathematics, Science, Social and Behavioral Sciences and Humanities)

	<b>Credits</b>
<b>English (minimum 3 credit hours)</b>	
ENG 121 English Composition I	□ 3
or	
131 Technical Writing	3
<b>Mathematics (minimum 3 credit hours)</b>	
MAT 110 Basic Finite Mathematics	3
121 College Algebra	□ 4
124 Finite Mathematics	3
125 Survey of Calculus	□ 4
135 Introduction to Statistics (AA only)	□ 3
150 Basic Geometry	3
151, 152 Technical Mathematics II, II	4,3
156 Problem Solving in College Mathematics	4
201,202 Calculus I,II	□ 5,5
<b>Science (minimum 3 credit hours)</b>	
AST 101,102 Astronomy I,II	□ 4,4
BIO 105 Science of Biology (AA only)	□ 4
110 Foundations of College Biology	5
111,112 General College Biology I,II	□ 5,5
130 Environmental Biology	3
133 Ecology	4
141 Applied Anatomy, Physiology, and Disease Processes I	5
151,152 Introduction to Nutrition I, II	3,3
201,202 Human Anatomy and Physiology I,II	4,4
226 Botany	5
CHE 101,102 Introduction to Chemistry I,II (AA only)	□ 5,5
110 Foundations of College Chemistry	4
111,112 General College Chemistry I,II	□ 5,5
GEY 106 Principles of Geology	3
111 Physical Geology	□ 4
121 Historical Geology	□ 4
141 Landscapes of North America	3
145 The Earth Revealed: Introductory Geology	3
PHY 111,112 Physics: Algebra-Based I,II	□ 5,5
121,122 Applied Physics I, II	8,8
211,212 Physics: Calculus-Based I,II	□ 5,5
<b>Social and Behavioral Sciences (minimum 3 credit hours)</b>	
ANT 101 Cultural Anthropology	□ 3
111 Physical Anthropology	□ 3
ECO 106 Consumer Economics	3
201 Principles of Macroeconomics	□ 3
202 Principles of Microeconomics	□ 3
GEO 105 World Regional Geography	□ 3
106 Human Geography	3
111 Physical Geography: Landforms	3
113 Economic Geography	3
HIS 101,102 Western Civilization I,II	□ 3,3
137 Contemporary World History	3
201,202 U.S. History I,II	□ 3,3
236 Contemporary U.S. History	3
POS 105 Introduction to Political Science	□ 3
111 American Government	□ 3
125 American State and Local Government	3
205 International Relations	3
207 U. S. in Current World Affairs	3
PSY 101,102 General Psychology I,II	□ 3,3
106 Human Relations	3
115 Psychology of Adjustment	3
226 Social Psychology	3

SOC 101,102 Introduction to Sociology I,II	□ 3,3
205 Marriage and Family	3
215 Contemporary Social Problems	3
218 Sociology of Minorities	3

	<b>Credits</b>
<b>Humanities (minimum 3 credit hours)</b>	
ART 110 Art Appreciation	□ 3
111 Art History I	□ 3
112 Art History II	□ 3
CHN 111,112 Chinese I, II	□ 5,5
FRE 111,112 French I,II	□ 5,5
211,212 French III,IV	□ 3,3
GER 111,112 German I,II	□ 5,5
211,212 German III,IV	□ 3,3
HUM 121,122,123 Survey of Hum. I,II,III	□ 3,3,3
JPN 111,112 Japanese I,II	□ 5,5
LIT 115 Introduction to Literature	□ 3
125 Study of the Short Story	3
201,202 Masterpieces of Literature I,II	□ 3,3
211,212 American Literature I, II	3,3
MUS 120 Music Appreciation	□ 3
121,122 Introduction to Music History I,II	□ 3,3
PHI 111 Introduction to Philosophy	□ 3
112 Ethics	□ 3
113 Logic	□ 3
114 Philosophy of Religion	3
115 Comparative Religions	3
118 Personal Decision Making	3
RUS 111,112 Russian I,II	□ 5,5
SPA 111,112 Spanish I,II	□ 5,5
211,212 Spanish III,IV	□ 3,3
SPE 115 Principles of Speech Communication	□ 3
125 Interpersonal Communication	3
217 Group Communication	3
225 Introduction to Organizational Communication	3
THE 105 Introduction to the Theatre Arts	□ 3
211,212 Development of Theatre I,II	□ 3,3

**Additional General Education Electives**

BUS 105 Business Mathematics	4
115 Introduction to Business	3
CIS 110 Microcomputer Operating Systems	3
115 Introduction to Computers	3
118 Introduction to Microcomputer Applications	3
CSC 105 Computer Literacy	3
ENG 122 English Composition II	□ 3

**Electives (30 credit hours)**

These may include courses from general education sources, AA/AS electives (pp. 45-47), and/or occupational/technical courses. The selected courses must not be considered developmental.

NOTE: Refer to page 58 for Art for Artisans' "Recommended Track."

**Certificate of Achievement**

Occupational training is available in fewer than two years through our certificate programs. Certificates of Achievement are awarded for several types of training outlined in the next section of this catalog. Certificate programs vary in length from one to three academic terms.

**Requirements**

1. Satisfactory completion of a prescribed program of study with a cumulative grade point average of 2.0 (a C average).
2. A minimum of 6 credit hours in the area of specialization earned from PPCC for programs requiring 6 hours or more.
3. Courses numbered below 100 normally may not apply toward certificates.

# Program Directory

	Rec. Track	AAS Deg.	Cert.	Pg.
<b>Business</b>				
Kathryn G. Lehner, Dean • 540-7258, 538-5200 Karla J. Rodie, Assistant Dean • 540-7262 Carl J. Sonntag, Assistant Dean • 540-7270				
<b>Accounting</b> Judy Jager • Louise Hunter		X	X	54
<b>Business Administration*</b> Charles F. Bowles • Robert R. Bricker • Raenelle S. Hanes Sharon Meyer • Carl J. Sonntag		X		61
<b>*Emphasis Areas Business Administration</b>				
<b>Business Foundations</b> Charles F. Bowles • Robert R. Bricker • Raenelle S. Hanes Sharon Meyer • Carl J. Sonntag		X	X	65
<b>Customer Service</b> Robert R. Bricker • Raenelle S. Hanes		X	X	61
<b>E-Commerce</b> Gary Florence			X	61
<b>Entrepreneurial</b> Charles F. Bowles		X	X	62
<b>Financial Services</b> Carl J. Sonntag		X	X	62
<b>Hospitality</b> Robert R. Bricker		X	X	63
<b>International Business</b> Sharon Meyer		X	X	63
<b>Management</b> Charles F. Bowles • Sharon Meyer • Carl J. Sonntag		X	X	63
<b>Marketing</b> Robert R. Bricker		X	X	63
<b>Office Administration</b> Raenelle S. Hanes • Janice A. Larson • Karla J. Rodie • Jeanette Walgren		X	X	64
<b>Real Estate</b> Charles Albrecht		X	X	64
<b>Supervision</b> Carl J. Sonntag		X	X	64
<b>CISCO Networking Academy</b> Richard Reynolds • Judy Hitchell			X	65
<b>Computer Information Systems</b> Mike Blackson • Jennifer Jirous • Mark Laskowski Diane Pirraglia • Stephen Walth • David Walters • Carol Ohle		X	X	66
<b>E-Commerce</b> Gary Florence			X	73
<b>Economics</b> Russell Flora		X		72
<b>Legal Assistant</b> Janice A. Larson		X		90
<b>Microsoft Certification</b> Clement Lee			X	
<b>Networking Technology</b> David Walters • Clement Lee		X	X	96
<b>Office Training Fast Track</b> Jeanette Walgren • Thelma Wiebke			X	99
<b>Travel Industry</b> Robert R. Bricker				

	Rec. Track	AAS Deg.	Cert.	Pg.
<b>Communications and Humanities</b>				
Jane Abbott, Ph.D., Dean • Phone: 540-7300, 538-5300				
<b>Art</b> Stephanie Mulliken • Mary Daly		X		57
<b>English</b> Chris Clendenin • Paul Dougan • Deidre Farrington • Barbara Graves • Cathy Henrichs • Mary Hiltbrand • Janele Johnson • Annette Lyttle • Mark Miller, Ph.D		X		75
<b>English Language Institute</b> Jean Echevarria • Rebecca Hicks				151
<b>Foreign Language</b> Kathryn Birkhead • Tim Davis		X		80
<b>Humanities</b> Chris Clendenin • Cathy Henrichs • Mary Hiltbrand • Nancy McCollum		X		84
<b>Journalism</b> Janet Rohan		X		87
<b>Latin American Studies</b> Nancy McCollum		X		89
<b>Music</b> Michael Stansbery • Sandra Craddock				177
<b>Philosophy</b> Ruth Beardsley, Ph.D. • Richard Trussell				184
<b>Southwest Studies</b> Nancy McCollum		X		107
<b>Speech</b> Hal Bergeson, Ph.D. • Steven Collins • Lois Kline, Ph.D.		X		108
<b>Theatre</b> Michael Stansbery		X		110
<b>Corporate, Workforce, and Economic Development</b>				
Nancy Meiklejohn, Interm Director • Phone: 540-2410				
<b>Deaf Studies</b>				
Jo Berger, Ed.D. Director • Phone: 540-7210/TTY 540-7081				
<b>Interpreter Preparation</b>			X	87
<b>Developmental Studies</b>				
Jo Berger, Ed.D. Dean • Phone: 540-7320, 538-5340				
<b>English</b> Karen Bowen • Christine Getz • Larry Giddings Sandra Miller • Karen Standridge, Ph.D. • Julie Witherow				150
<b>Mathematics</b> William C. Berry • Richard Harms • William R. Keating Gayle Krzemien • Robert LaMont • Michael Parcha Molly E. Sumner • Dorsey Templeton				173
<b>Reading</b> Kathy Beggs • Patricia A. Lichty				191
<b>Mathematics, Sciences, and Health Sciences</b>				
Judy D. Baros, Dean • Phone: 540-7393; 538-5400 Robert McMullen, Assistant Dean • 540-7401				
<b>Astronomy</b> Robert McMullen				128
<b>Biological Sciences</b> Karla Belew • Robert Henderson • Robert W. McMullen • Albert L. Threlfall		X		60

	Rec. Track	AAS Deg.	Cert.	Pg.
<b>Chemistry</b> Juan-Carlos Herraes • Evan McHugh	X			65
<b>Computer Science</b> Michael Simpson • Laurie DeHerrera	X			67
<b>Dental Assisting</b> Anne Maestas • Frank Delgesso		X	X	70
<b>Emergency Medical Technician-B</b> David Wells			X	75
<b>Emergency Medical Technology-Paramedic</b> David Wells			X	75
<b>Geology</b> Robert McMullen	X			82
<b>Mathematics</b> Sharon Butler • Deric Davenport • Gwen Wiley	X			92
<b>Medical Office Technology</b> Barbara Burke		X	X	92
<b>Medical Transcriptionist</b> Barbara Burke			X	93
<b>Nursing</b> Cynthia Askvig • Mary Ann Wermers • Sandra Zettel-Clark Angela Carrington • Deborah Center		X		97
<b>Physics</b> David Esker • Evan McHugh	X			99
<b>Pre-Allied Health</b> Robert McMullen	X			101
<b>Pre-Engineering</b> Sharon Butler	X			102
<b>Pre-Med Professions</b> Robert McMullen	X			102
<b>Space Science</b> David Esker	X			108
<b>Military Programs</b> Bart Guthrie, Director • 540-7740				
<b>Upholstery</b> Al Dierdorf			X	110
<b>Social and Behavioral Sciences</b> Wayne Artis, Interim Dean • Phone: 540-7430				
<b>Anthropology</b> Rhonda Burkhart	X			55
<b>Environmental Studies</b> Ronda Burkhart	X			77
<b>Geography</b> Mary Hayden	X			81
<b>History</b> Wayne Artis • Katherine Scott Sturdevant	X			83
<b>Political Science</b> Leonard Riley, II	X			100
<b>Psychology</b> John Andrade • Stefanie Bell • Cindy Kamlar, Ph.D. Calvin Toombs • Michael Trumball, Ph.D.	X			103
<b>Social Work</b> Calvin Toombs • Cindy Kamlar, Ph.D.	X			106
<b>Sociology</b> Joanna Grey • Lisa Donaldson	X			106

	Rec. Track	AAS Deg.	Cert.	Pg.
<b>Technical, Industrial and Service Occupations</b> Margarette Goodwin Dahl, Dean • Phone: 540-7346				
<b>Advanced Manufacturing Systems Technology</b> George W. Shaiffer		X		54
<b>Architectural Drafting</b> Thomas E. Kelly • William H. Wysong, Jr.			X	56
<b>Architecture and Construction Technology</b> Thomas E. Kelly • William H. Wysong, Jr.		X		56
<b>Art for Artisans</b> Stefanie Mulliken	X			58
<b>Auto Collision Repair</b> Wade Knight		X	X	59
<b>Automotive Technology/Diesel</b> Joe Magnuson • James L. McCarty Larry Schneider		X	X	59
<b>Computer Aided Drafting (CAD)</b>		X		66
<b>Criminal Justice</b> Michael Ensminger • Larry Iverson • Kenneth Jones • Colins McLean		X	X	68
<b>Culinary Arts</b> Rob Hudson		X		69
<b>Early Childhood Professions</b> Michelle Bender • Cynthia Webster-Buckley		X	X	71
<b>Electronics Technology</b> George W. Shaiffer		X		73
<b>Energy Management and Systems Management</b>		X		75
<b>Environmental Health and Safety</b>		X	X	76
<b>Facilities Maintenance Technology Management</b> Robert P. Smith		X		77
<b>Farrier Science</b> Franklin Moore			X	79
<b>Fire Science Technology</b> Lonnie Inzer • Bob Burton		X		80
<b>Integrated Circuit Fabrication</b> Phil Myers		X	X	85
<b>Interior Design</b> Ruth Garrett Graul		X		86
<b>Landscape Technician</b> Anne Cummings		X		89
<b>Law Enforcement Academy</b> Dan Dirscherl		X		100
<b>Machining Technology</b> Bill Johnson • Roger Weitzel		X	X	91
<b>Natural Resource Technology</b> Anne Cummings • Ruth-Ann Larish		X	X	94
<b>Radio, Television, Telecommunications Production</b> Kurt M. Grow • Dick Chase		X	X	103
<b>Social Services Technician</b> Jane Astor		X	X	105
<b>Visual Communications</b> Sandra K. Laxson • Robert L. Olson • Jenna Shearn		X		111
<b>Welding</b> Scott Mannering		X	X	112

# Educational Programs

## Accounting

Recommended basic skills standards are

- ENG 100
- MAT 066
- REA 090
- STS 060

Graduates of this program are prepared to enter an accounting career. Accountants work for business, industry, and various governmental agencies.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

### Associate of Applied Science Degree

ACC 121	Principles of Accounting I	4
ACC 122	Principles of Accounting II	4
ACC 138	Payroll Accounting	2
ACC 150	Introduction to PC Spreadsheet: Excel	1
ACC 151	Intermediate PC Spreadsheet: Excel	1
ACC 152	Advanced PC Spreadsheet: Excel	1
ACC 205	Computerized Accounting	3
ACC 211	Intermediate Accounting I	4
ACC 212	Intermediate Accounting II	4
BTE 108	Ten Key by Touch*	1
BUS 216	Legal Environment of Business	3
BUS 217	Business Communications and Report Writing	3
		<u>31</u>

### Accounting Electives

Choose 7 hours from the following courses:

ACC 222	Federal Income Tax	4
ACC 225	Accounting for Governmental and Nonprofit Organizations	3
ACC 226	Cost Accounting	4
		<u>7</u>

### Other Electives

Choose 6 hours from the following courses:

BUS 171	Cooperative Work Experience I/Internship I	3
CIS 110	Introduction to PC Operating Systems: DOS	2
CIS 112	Introduction to Windows: 98	1
CIS 120	Word Processing I: Word or WordPerfect (WIN)	3
CIS 130	Introduction to the Internet	2
CIS 131	Introduction to Web Authoring: HTML	1
CIS 140	Introduction to PC Database: Access	1
CIS 141	Intermediate PC Database: Access	1
CIS 142	Advanced PC Database: Access	1
		<u>16</u>

### General education courses

BUS 105	Business Mathematics	4
BUS 115	Introduction to Business	3
CIS 118	Introduction to PC Applications	3
ECO 201	Principles of Macroeconomics	3
SPE 115	Principles of Speech Communication	3
		<u>16</u>

### Total Credit Hours

**60**

\* If you are proficient in ten key by touch, contact your advisor for testing instructions.

## Certificate

The accounting certificate program is designed to allow students to become proficient in using the computer for basic bookkeeping and spreadsheet applications. Students will also be prepared to accomplish normal office procedures.

ACC 110	Business Records	3
	or	
ACC 121	Principles of Accounting I	(4)
ACC 138	Payroll Accounting	2
ACC 150	Introduction to PC Spreadsheet: Excel	1
ACC 151	Intermediate PC Spreadsheet: Excel	1
ACC 152	Advanced PC Spreadsheet: Excel	1
ACC 205	Computerized Accounting	3
*BTE 108	Ten Key by Touch	1
BUS 105	Business Mathematics	4
BUS 115	Introduction to Business	3
BUS 217	Business Communication and Report Writing	3
CIS 118	Introduction to PC Applications	3
		<u>25-26</u>

### Electives

Choose 6 hours from the following courses:

ACC 122	Principles of Accounting II	4
CIS 110	Introduction to PC Operating System: DOS	2
CIS 120	Word Processing I: Word or WordPerfect (WIN)	3
CIS 130	Introduction to the Internet	2
CIS 131	Introduction to WEB Authoring: HTML	1
CST 115	Introduction to Customer Service	3
SPE 115	Principles of Speech Communication	3
		<u>6</u>

### Total Credit Hours

**31-32**

\* If you are proficient in ten key by touch, contact your advisor for testing instructions.

## Advanced Manufacturing Systems Technology

Recommended basic skills standards are

- ENG 060
- MAT 105
- REA 090
- STS 060

This program is designed to enable students to qualify for entry level positions as technicians in a broad scope of industry in the manufacture and service of electronic/mechanical equipment. Theory, applications, and methods prepare students for job entry level in analyzing and repairing logic control systems and servomechanisms.

Students must also complete ELE 110, ELE 111, ELE 112, ELE 113, and PHY 131, PHY 132.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

### Associate of Applied Science Degree

SYS 200	Logic Control Systems	3
SYS 201	Logic Control Systems Lab	4
SYS 202	Servomechanisms	3
SYS 203	Servomechanisms Lab	3
SYS 232	Industrial Motors and Controls	4
ELE 114	Semiconductor Active Devices	4
ELE 115	Semiconductor Active Devices Lab	4
ELE 118	Digital Circuits	4

ELE 119	Digital Circuits Lab	4
ELE 216	Semicond. Active Devices & Mxd Signal ICs	6
ELE 217	Semicond. Active Devices & Mxd Signal ICs Lab	6
ELE 224	Enhanced Microprocessor Systems	6
ELE 225	Enhanced Microprocessor Systems Lab	6
		<u>6</u>
		57

### General education courses

BUS 217	Business Communication and Report Writing	3
MAN 109	Team Skills in the Business Environment	2
MAT 152	Technical Mathematics II	3
MAT 153	Statistical Techniques for Quality Control Elective*	4
		<u>3</u>
		15

**Total Credit Hours** **72**

\*Elective must meet general education requirements. See list of approved general education courses.

## Anthropology

Recommended basic skills standards are

- ENG 100
- MAT 036
- REA 090
- STS 060

Anthropology imparts a global, comparative, and historical (evolutionary) approach to human studies. Its subject is cultural diversity and biological variation among humans both contemporary and ancient. It seeks to answer who we are and where we come from what is learned and what is instinctual. Anthropology is divided into two major categories: cultural and physical. Cultural anthropology tests the accuracy of beliefs about human behavior. Physical anthropology seeks accuracy of beliefs about human biological nature and development. Specializations in anthropology include archaeology, linguistics, cultural resource management, forensics, paleontology, and medical anthropology and counseling. In any professional career, it is increasingly important to have a concrete understanding of human behavior in a cultural context. Anthropology offers that understanding.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

## Associate of Arts Degree

### Recommended Track

#### Minimum Requirements

##### I. English/Speech

ENG 121	English Composition I	3
ENG 122	English Composition II	3
SPE 115	Principles of Speech Communication	3
		<u>3</u>
		9

##### II. Computer Communication

CSC 105	Computer Literacy (or CSC 116 or CSC 160)	3
		<u>3</u>
		3

#### Suggested to Fulfill This Track

##### III. Mathematics and Science

MAT 135	Introduction to Statistics	3
BIO 105	Science of Biology	4
	or	
GEY 111	Physical Geology	(4)
	or	
GEY 121	Historical Geology	(4)
BIO 201	Human Anatomy and Physiology I	4
		<u>4</u>
		11

#### IV. Social and Behavioral Sciences (sequence needed)

ANT 101	Cultural Anthropology	3
ANT 111	Physical Anthropology	3
HIS 101	Western Civilization I	3
	or	
HIS 102	Western Civilization II	(3)
		<u>9</u>

#### V. Humanities\*

Choose 9 hours from the following courses:

ART 111	Art History I	3
	or	
ART 112	Art History II	(3)
	Any CORE Foreign Language	5
	or	
HUM 121	Survey of Humanities I	3
	or	
HUM 122	Survey of Humanities II	(3)
	or	
HUM 123	Survey of Humanities III	(3)
PHI 111	Introduction to Philosophy	3
		<u>3</u>
		9

#### VI. Communication Studies or Fine Arts

Choose 3 credit hours from list on p. 53

		<u>3</u>
		3

#### VII. Recommended Electives

Choose 16 credit hours from the following courses:

ANT 105	Millennium Studies	3
ANT 107	Introduction to Archaeology	3
ANT 201	Anthropology for Business	3
ANT 207	Introduction to Archeology	3
ANT 211	Cultural Resource Management	3
ANT 221	Primitive Religions	3
ECO 201	Principles of Macroeconomics	3
GEO 105	World Regional Geography	3
GEO 106	Human Geography	3
HIS 101	Western Civilization I	3
HIS 102	Western Civilization II	3
HUM 121	Survey of Humanities I	3
HUM 122	Survey of Humanities II	3
POS 105	Introduction to Political Science	3
PSY 101	General Psychology I	3
PSY 102	General Psychology II	3
SOC 101	Introduction to Sociology I	3
		<u>3</u>
		16

#### Total Credit Hours

\*See AA degree for sequence requirements

		<b>60</b>
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## Architectural Drafting

Recommended basic skills standards are

- ENG 100
- MAT 066
- REA 115
- STS 060

Students selecting the architectural certificate program develop job entry level skills in preparing detailed drawings from sketches, notes, specifications, and technical data furnished by architects, builders, or firms connected with the building industry. Students completing this option may enter Architecture and Construction Technology, a two-year degree program.

Students should schedule appointments with their program advisors to remedy any deficiencies and to verify equipment needed for specific courses.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

### Certificate

ARC 101	Architectural Drawing I*	5
ARC 102	Architectural Drawing II**	5
ARC 104	Architectural Drawing Theory	4
ARC 105	Architectural Building Materials I	2
ARC 108	Architectural CAD I	3
ARC 111	Architectural Technology Theory	2
ARC 114	Building Service Systems I	2
ARC 117	Presentation Drawings and Models	3
ARC 235	Contemporary Architectural Theory II	2
MAT 151	Technical Mathematics I	4
<b>Total Credit Hours</b>		<b>32</b>

\*Evening students may substitute ARC 151 and 152.

\*\*Evening students may substitute ARC 153 and 154.

## Architecture and Construction Technology

Recommended basic skills standards are

- ENG 100
- MAT 066
- REA 115
- STS 060

This program prepares students to be technical assistants in architectural or construction firms or to be building product representatives assisting architects, engineers, contractors, manufacturers, and other professionals connected with the building industry.

All students should schedule appointments with Architectural and Construction Technology program advisors before enrolling in class.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

## Associate of Applied Science Degrees

Recommended program sequence for all options

### Semester One - Fall

ARC 101	Architectural Drawing I*	5
ARC 104	Architectural Drawing Theory	4
ARC 111	Architectural Technology Theory	2
CIS 118	Introduction to PC Applications	3
MAT 151	Technical Mathematics I	4
	or	
MAT 121	College Algebra	(4)
		18

### Semester Two - Spring

ARC 102	Architectural Drawing II**	5
ARC 105	Architectural Building Materials I	2
ARC 108	Architectural CAD I	3
ARC 114	Building Service Systems I	2
ARC 117	Presentation Drawings and Models	3
MAT 152	Technical Mathematics II	3
	or	
MAT 122	College Trigonometry	(3)
		18

## Options

### Architectural Option

Students choosing this option are trained to be paraprofessionals in architectural, engineering, and construction offices with primary skills of architectural drawing and construction assembly technology.

#### Semester Three - Fall

ARC 201	Architectural Drawing III	5
ARC 208	Architectural Building Materials II	3
ARC 211	Building Service Systems II	2
ARC 223	Introduction to Building Codes	3
BUS 217	Business Communication and Report Writing	3
	or	
ENG 131	Technical Writing I	(3)
		16

#### Semester Four - Spring

ARC 202	Architectural Drawing IV	5
ARC 224	Construction Contracts and Management	3
ARC 227	Architectural Structures	5
ARC 235	Contemporary Architectural Theory II	2
		General Education electives (Must total 15)
		1-2
		16-17

**Courses required for all options**

**36**

**Total Credit Hours**

**68-69**

### Construction Option

Students choosing this option will primarily work for a construction company in an administrative capacity doing estimating, scheduling, project management, construction assembly technology, and job-site problem solving.

#### Semester Three - Fall

ARC 208	Architectural Building Materials II	3
ARC 211	Building Service Systems II	2
ARC 222	Estimating and Print Reading	5
ARC 223	Introduction to Building Codes	3
BUS 217	Business Communication and Report Writing	3
	or	
ENG 131	Technical Writing I	(3)
		16



### Semester Four - Spring

ARC 207	Level and Transit	3
ARC 224	Construction Contracts and Management	3
ARC 226	Construction Scheduling and Supervision	3
ARC 227	Architectural Structures	5
ARC 235	Contemporary Architectural Theory	2
	General Education electives (Must total 15)	<u>1-2</u>
		17-18

Courses required for all options **36**

Total Credit Hours **69-70**

\*Evening students may substitute ARC 151 and 152.

\*\*Evening students may substitute ARC 153 and 154.

\*\*\*Courses not a requirement for the Product Representative

### Product Representative Option

Students choosing this business-oriented option will learn basic selling and marketing techniques. Other items covered include estimating, bid submittals, and furnishing technical information to professionals in the building industry.

#### Semester Three – Fall

ARC 208	Architectural Building Materials II	3
ARC 211	Building Service Systems II	2
ARC 222	Estimating and Print Reading	5
ARC 223	Introduction to Building Codes	3
BUS 115	Introduction to Business	3
MAR 111	Principles of Sales	<u>3</u>
		19

#### Semester Four – Spring

ARC 224	Construction Contracts and Management	3
ARC 235	Contemporary Architectural Theory	2
BUS 216	Legal Environment of Business	3
BUS 217	Business Communication and Report Writing	3
MAR 216	Principles of Marketing	3
	General education electives (must total 15)	<u>1-2</u>
		15-16

Courses required for all options **36**

Total Credit Hours **70-71**

## Art

Recommended basic skills standards are

- ENG 100
- MAT 036
- REA 090
- STS 060

The human being is a creative animal. The fountainhead of creativity lies in the imagination, which manifests itself in the projection of images. Art, then, is the language in images by which man communicates ideas and concepts of the self, others, and the universe. This program is designed to allow students to discover and develop themselves and their creativity in such mediums as drawing, painting, watercolor, and ceramics.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

## Associate of Arts Degree

### Recommended Track

#### Minimum Requirements

##### I. English/Speech

ENG 121	English Composition I	3
ENG 122	English Composition II	3
SPE 115	Principles of Speech Communication	<u>3</u>
		9

##### II. Computer Communication

CSC 105	Computer Literacy (or CSC 116 or CSC 160)	<u>3</u>
		3

#### Suggested to Fulfill This Track

##### III. Mathematics and Science

**CORE Math (□)	3
**CORE Science (□)	4
Math/Science Elective	<u>3</u>
	10

##### IV. Social and Behavioral Sciences\*

ANT 101	Cultural Anthropology	3
ANT 111	Physical Anthropology	3
	or	
PSY 101	General Psychology	(3)
	**CORE History (□)	<u>3</u>
		9

##### V. Humanities\*

ART 110	Art Appreciation	3
	or	
ART 111	Art History I	3
ART 112	Art History II	3
	or	
HUM 121	Survey of Humanities I	(3)
HUM 122	Survey of Humanities II	(3)
	or	
HUM 123	Survey of Humanities III	(3)
MUS 120	Music Appreciation	<u>(3)</u>
		9

##### VI. Communication Studies or Fine Arts

ART 205	Film Studies	3
	or	
ART 114	Folk Arts of Latin America	<u>(3)</u>
		3

##### VII. Recommended Electives

Choose 17 hours from the following courses:

ART 121-ART 241		
(Any ART course excluding ART 280s)		3
**Any CORE Foreign Language Course (□)		5
HUM 237	Hispanic Arts of the Southwest	3
HUM 238	Sacred Images, Sacred Places	3
HUM 137	Arts and Cultures of Mexico	3
HUM 236	North American Indian Arts	3
THE 121	Set Design	<u>3</u>
		17

#### Total Credit Hours

\*See AA degree for sequence requirements

\*\*See CORE list

# Art for Artisans

Recommended basic skills standards are

- ENG 100
- MAT 036
- REA 090
- STS 060

The Art for Artisans program is a two-year degree program of refined craftsmanship in selected disciplines designed to provide in-depth concentration in one or several disciplines emphasizing craft as art. This program is grounded in basic fine art skills, principles, and understanding. The purpose is to equip craftsmen and craftswomen with skill, technique, aesthetic confidence, and the ability to exercise personal, original expression. This degree also provides history and cultural context related to each discipline.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

## Associate of General Studies Degree

### Recommended Track

#### I. Prescribed General Education

ANT 101	Cultural Anthropology	3
ART 110	Art Appreciation	3
ENG 131	Technical Writing	3
GEY 141	Landscapes of North America	3
MAT 110	Basic Finite Mathematics	3
		<hr/>
		15

#### II. Elective Courses in General Education

ART 121	Basic Drawing I	3
ART 122	Basic Drawing II	3
MUS 120	Music Appreciation	3
THE 105	Introduction to Theatre Arts	3
		<hr/>
		12

#### III. Professional/generally transferable

SPE 115	Principles of Speech	3
CIS 118	Introduction to PC Applications	3
	or	
CSC 105	Computer Literacy	(3)
ART 131	Design I	3
ART 132	Design II	3
VIC 141	Photoshop I	4
VIC 207	Animation for Macintosh	3
VIC 226	Rendering and Illustration	4
		<hr/>
		23

#### IV. Other courses as prescribed

Choose 22 hours from the following courses:

#### CERAMICS

ART 161	Ceramics I	3
ART 162	Ceramics II	3
ART 163	Handbuilt Clay I	3
ART 164	Handbuilt Clay II	3
ART 261	Ceramics III	3
ART 262	Ceramics IV	3

#### TEXTILES

ART 153	Fiber Design I	3
ART 154	Fiber Design II	3
ART 253	Fiber Design III	3
ART 254	Fiber Design IV	3

#### PRINTMAKING/PAPER & BOOKMAKING

ART 150	Fundamentals of Photography	3
ART 226	Papermaking	3
ART 227	Marbling of Paper	3
ART 228	Printmaking I	3
ART 230	Printmaking II	3
PRT 219	Book Binding	4

#### STAINED GLASS

ART 115	Stained Glass I	3
ART 202	Stained Glass II	3
ART 203	Stained Glass III	3
ART 204	Stained Glass IV	3

#### NEEDLECRAFT

ART 146	Needlecraft I	3
ART 147	Needlecraft II	3

#### SOUTHWEST CRAFTS

ART 156	Leathercraft & Wood	3
ART 157	Basketry	3
ART 158	Beading	3
HUM 236	North American Indian Arts	2
HUM 237	Hispanic Arts of the Southwest	2

#### MACHINING AND JEWELRY MAKING

MAG 114	Machining Process	4
MAG 115	Machining Lab	4
ART 141	Jewelry & Metalwork I	3
ART 142	Jewelry & Metalwork II	3
ART 143	Enameling on Metal	3
ART 241	Jewelry & Metalwork III	3
WEL 101	Oxyacetylene Welding & Cutting	4
WEL 107	Introduction to Ornamental Iron	4
WEL 203	Advanced Layout and Fabrication	4

#### ANIMATION

ART 137	Drawing from the Imagination	3
ART 206	The Art of Animation	3
VIC 245	Visual Communication Exit Portfolio and Career Development	1
MAN 227	Small Business Management	3
		<hr/>
		22

#### Total Credit Hours

**72**

## Auto Collision Repair

Recommended basic skills standards are

- ENG 060
- MAT 036
- REA 090
- STS 060

This program prepares students to enter into our upgrade skills in auto collision repair. Students have the opportunity to develop skills in non-structural metal repair, structural repair, and all aspects of refinishing. Students who complete a certificate program are prepared to enter into a specific area of the collision repair industry. The degree program provides students with a broader background and training in all areas of auto collision repair. Students completing either a degree or certificate program should have little difficulty in finding employment. The program utilizes late-model vehicles for training purposes and is certified by the National Institute for Automotive Service Excellence (ASE).

Students must provide their own work clothes and hand tools. A complete set of collision repair tools should be purchased before job entry.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

Additionally, students should work with a program faculty advisor to ensure that they are taking the correct classes for their program.

## Associate of Applied Science Degree

### Recommended Program Sequence

#### Semester One - Fall

ACR 110	Orientation and Safety	4
ACR 116	Introduction to Refinishing	4
ACR 121	Introduction to Metal Repair	4
WEL 108	Auto Body Welding	4
		<u>16</u>

#### Semester Two - Spring

ACR 122	Non-Structural Metal Repair I	4
ACR 123	Part Replacement and Alignment	4
ACR 127	Refinishing I	4
MAT 156	Problem Solving in College Mathematics	4
		<u>16</u>

#### Semester Three - Summer

CIS 115	Introduction to Computers	3
	General Education Elective	2
		<u>5</u>

#### Semester Four - Fall

ACR 124	Non-Structural Metal Repair II	4
ACR 125	Plastic Repair and Refinishing	4
ACR 219	Structural Repair I	4
SPE 225	Introduction to Organization Communication	3
		<u>15</u>

#### Semester Five - Spring

ACR 128	Refinishing II	4
ACR 220	Structural Repair II	4
ACR 226	Production	4
	General Education Elective	3
		<u>15</u>

**Total Credit Hours 67**

\*Electives must meet general education requirements in humanities or social and behavioral sciences. See list of approved general education courses.

## Certificate

### Non-Structural Repair Technician

ACR 110	Orientation and Safety	4
ACR 121	Introduction to Metal Repair	4
ACR 122	Non-Structural Metal Repair I	4
ACR 123	Part Replacement and Alignment	4
ACR 124	Non-Structural Metal Repair II	4
WEL 108	Auto Body Welding	4

**Total Credit Hours 24**

### Structural Repair Technician

ACR 110	Orientation and Safety	4
ACR 121	Introduction to Metal Repair	4
ACR 123	Part Replacement and Alignment	4
ACR 219	Structural Repair I	4
ACR 220	Structural Repair II	4
WEL 108	Auto Body Welding	4

**Total Credit Hours 24**

### Refinish Technician

ACR 110	Orientation and Safety	4
ACR 116	Introduction to Refinishing	4
ACR 123	Part Replacement and Alignment	4
ACR 125	Plastic Repair and Refinishing	4
ACR 127	Refinishing I	4
ACR 128	Refinishing II	4

**Total Credit Hours 24**

## Automotive Technology

Recommended basic skills standards are

- ENG 060
- MAT 036
- REA 090
- STS 060

This program leads to an interesting and challenging career in the automotive or diesel service, sales, or supply field. The program is designed for students who intend to pursue a career in an automotive or diesel field. Two options are available in the degree program: the diesel option specializing in diesel and light truck services and the automotive option specializing in automotive service. Both options are compatible with each other. Additional advanced classes are offered in the engine and diesel areas.

Students entering this program should exhibit the following qualities: mechanical aptitude, ability to read and follow instructions and specification manuals, and enjoyment of precision work and problem solving. Appropriate work clothes, safety equipment, and a basic set of hand tools are required. (See program faculty for requirements).

The engines and the diesel classes are open-entry/open-exit and self-paced.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

## Associate of Applied Science Degrees

### Courses required for all options

AUT 103	Auto Electricity I	4
AUT 111	Power Trains	4
AUT 113	Fuel Systems	4
AUT 114	Brake and Front End Systems	4
AUT 115	Suspension and Alignment	4
AUT 123	Tune-Up Services	4
AUT 125	Engines I	4
AUT 203	Auto Air Conditioning, Heating, and Ventilating Systems	4
AUT 204	Auto Electricity II	4
		<u>4</u>
		36

### General education courses

MAT 156	Problem Solving in College Mathematics	4
PSY 115	Psychology of Adjustment	3
SPE 225	Introduction to Organizational Communication Electives*	3
		<u>5</u>
		15

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

### Diesel Option

DPM 100	Introduction to Diesel Mechanics	4
DPM 103	Diesel Engines I	4
DPM 106	Fuel Injection	4
DPM 107	Fund of Four-Wheel and Front-Wheel Drive	4
DPM 203	Diesel Engines II	4
DPM 210	Air Induction and Engine Analysis	4
		<u>4</u>
		24

### General education courses

		<b>15</b>
		<b>36</b>
		<b>75</b>

### General Automotive Option

#### Recommended Program Sequence

##### Semester One - Fall

AUT 100	Basic Auto Mechanics	4
AUT 103	Auto Electricity I	4
AUT 111	Power Trains	4
AUT 113	Fuel Systems	4
SPE 225	Organizational Communication	3
		<u>3</u>
		19

##### Semester Two - Spring

AUT 114	Brake and Front End Systems	4
AUT 115	Suspension and Alignment	4
AUT 123	Tune-Up Services	4
AUT 125	Engines I	4
PSY 115	Psychology of Adjustment	3
		<u>3</u>
		19

##### Semester Three - Fall

AUT 126	Engines II	4
AUT 204	Auto Electricity II	4
AUT 211	Tune-Up and Diagnosis	4
MAT 156	Problem Solving in College Mathematics Electives (AAS Degree Options Page 55)	4
		<u>3</u>
		19

##### Semester Four - Spring

AUT 203	Auto Air Conditioning, Heating, and Ventilating Systems	4
AUT 213	Production Mechanics	4
AUT 215	Automatic Transmission I	4
AUT 216	Automatic Transmission II	4
	Electives (AAS Degree Option Page 55)	2
		<u>2</u>
		18

<b>General education courses</b>	<b>15</b>
<b>Courses required for all options</b>	<b>36</b>
<b>Total Credit Hours</b>	<b>75</b>

### Certificate

AUT 100	Basic Auto Mechanics	4
AUT 103	Auto Electricity I	4
AUT 111	Power Trains	4
AUT 113	Fuel Systems	4
AUT 114	Brake and Front End Systems	4
AUT 115	Suspension and Alignment	4
AUT 123	Tune-Up Services	4
AUT 125	Engines I	4
AUT 126	Engines II	4
AUT 203	Auto Air Conditioning, Heating, and Ventilating Systems	4
AUT 204	Auto Electricity II	4
		<u>4</u>
<b>Total Credit Hours</b>	<b>44</b>	

## Biological Sciences

Recommended basic skills standards are

- ENG 060
- MAT 066
- REA 090
- STS 060

The study of biological sciences prepares one for a variety of fields including the traditional ones—biology teacher, doctor, nurse, or conservationist. New fields have developed in several life science areas such as paramedicine, cellular biology, wildlife management, and forestry. Other fields, which may require a modified program, include agriculture, allied health, natural resources management, and home economics. It is strongly recommended that students consult with an advisor for the specific requirements in these fields.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

## Associate of Science Degree

### Recommended Track

CSC 116	Problem Solving with Visual Basic for Applications (or 160)	3
ENG 121	English Composition I	3
ENG 122	English Composition II	3
SPE 115	Principles of Speech Communication	3
		<u>3</u>
		12

### Recommended to satisfy area requirements

#### Mathematics and Science

MAT 121	College Algebra	4
MAT 122	College Trigonometry	3
BIO 111	General College Biology I	5
BIO 112	General College Biology II	5
BIO 2XX	200-level science elective	5
CHE 111	General College Chemistry I	5
CHE 112	General College Chemistry II	5
	Science Electives	4
		<u>4</u>
		36

#### Social and Behavioral Sciences

	Electives*	6
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#### Humanities

	Electives*	6
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<b>Total Credit Hours</b>	<b>60</b>
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\*Electives must be from the approved elective course list for AA/AS degrees.

# Business Administration

Recommended basic skills standards are

- ENG 060
- MAT 066
- REA 090
- STS 060

Students may select from various programs to meet their specific career goals. Certificate programs can be completed in one year or less in the areas of Accounting, Business Foundations, Customer Service, Entrepreneurial, Financial Services, Hospitality, International Business, Management, Marketing, Office Administration, Real Estate, and Supervision. These certificate programs are listed alphabetically in this catalog.

Two-year associate of applied science degrees are available in several emphasis areas as detailed in the following section of this catalog. Transfer degrees intended to prepare the student for transfer to four-year institutions are also offered. See page 45 for the AA Business Option transfer degree.

Faculty advisors are available to assist students in evaluating the various options. Call 540-7258 at the Centennial Campus or 538-5200 at the Rampart Range Campus for program information or to schedule a personal appointment with a program advisor.

## Associate of Applied Science Degree

This degree program is designed for students who wish to pursue a career in business with a specific area of emphasis.

Students must also have demonstrated proficiency equivalent to the completion of CIS 100.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

### General Education Requirements

BUS 105	Business Mathematics	4
BUS 115	Introduction to Business	3
CIS 118	Introduction to PC Applications	3
ECO 106	Consumer Economics	3
	or	
ECO 201	Macroeconomics	(3)
SPE 225	Organizational Communication	<u>3</u>
		16

### Business Foundation Requirements

ACC 110	Business Records	3
	or	
ACC 121	Principles of Accounting I	(4)
BUS 216	Legal Environment of Business	3
BUS 217	Business Report Writing and Comm.	3
MAN 225	Management Skills for Supervisors	3
MAR 111	Principles of Sales	<u>3</u>
		15-16

### Total General Education and Business Foundations

31-32

NOTE: Completion of the above 31-32 hours in General Education and Business Foundation courses earns the student a Certificate of Business Foundations.

# Customer Service Emphasis

The Customer Service Emphasis is designed to prepare the student for entry-level positions in business and governmental organizations that require customer contact roles, which lead to customer satisfaction and the improved image of the organization.

BUS 171	Cooperative Work Experience I/Internship I	3
CST 115	Introduction to Customer Service	3
CST 221	Advanced Customer Service Concepts	3
PSY 226	Social Psychology	3
PSY 237	Assertiveness Training	3
SPE 125	Interpersonal Communications	<u>3</u>
		18

### \* Customer Service Emphasis Electives

Choose 11 hours from the following courses:

ANT 101	Cultural Anthropology	3
CIS 112	Introduction to Windows: 98	1
MAN 104	Time Management	1
MAN 105	Contemporary Business Ethics	3
MAN 106	Action Planning	1
MAN 107	Team Building	1
MAN 108	Personal Leadership Development	1
MAR 216	Principles of Marketing	3
PHI 113	Logic	<u>3</u>
		11

\*Program advisors may approve additional elective choices.

### Summary of Customer Services Emphasis

General Education and Business Foundations	31-32
Customer Service Emphasis	29

### Total Degree Requirement

60-61

## Electronic-Commerce - Business Emphasis

The Electronic-Commerce (E-Commerce) - Business Emphasis is designed to provide the student with a thorough knowledge of E-commerce concepts and terminology. This emphasis also covers how E-commerce applications, methodologies, services address the business solution needed for E-commerce. All courses applied to the emphasis must be completed with a grade of "C" or above.

Program prerequisites: BUS 115 and CIS 115 or faculty consent.

Students must meet requirements for College Composition (ENG 121) and Intermediate Algebra prior to enrollment in the E-Commerce-Business Emphasis.

### Core requirements

MAR 221	Introduction to Electronic-Commerce	3
CWB 221	Technology Foundations for E-Commerce	3
BUS 260	Business Process Foundations for E-Commerce	<u>3</u>
		9

### Program requirements

BUS 261	E-Commerce Business Value	3
MAR 222	Implementing E-Commerce	3
MAR 295	E-Commerce Business Seminar	<u>1</u>
		7

### Optional electives

MAR 297	E-Commerce Business Internship	1-2
MAR 299	E-Commerce Business Independent Study	(1-2)
		<u>1-2</u>
		17-18

**Choose 12-13 hours from the following courses**

ACC 122	Principles of Accounting	4
BUS 171	Coop. Work Experience I/Internship I	3
BUS 172	Coop. Work Experience II/Internship II	3
BUS 265	Investments	3
BUS 271	Advanced Coop. Work Experience I/Internship II	3
MAN 106	Action Planning	1
MAN 107	Team Building	1
MAN 108	Personal Leadership Development	1
MAN 225	Management Skills for Supervisors	3
		<u>12-13</u>
		29-31

**Summary of E-Commerce - Business Emphasis**

General Education and Business Foundations	31-32
E-Commerce - Business Emphasis	29-31

**Total Degree Requirement 60-63**

**Electronic-Commerce - Technology Emphasis**

The Electronic-Commerce (E-Commerce) - Technology Emphasis is designed to provide the student with an in-depth functional and technical overview of how network technologies and architecture integrate in the design of E-commerce applications. All courses applied to the emphasis must be completed with a grade of "C" or above.

Program prerequisites: BUS 115 and CIS 115 or faculty consent.

Students must meet requirements for College Composition (ENG 121) and Intermediate Algebra prior to enrollment in the E-Commerce-Technology Emphasis.

**Core requirements**

MAR 221	Introduction to Electronic-Commerce	3
CWB 221	Technology Foundations for E-Commerce	3
BUS 260	Business Process Foundations for E-Commerce	3
		<u>9</u>

**Program requirements**

CWB 222	Java Technologies for E-Commerce	3
CWB 223	Advanced E-Commerce Technologies	3
CWB 295	E-Commerce Technology Seminar	1
		<u>7</u>

**Optional electives**

CWB 297	E-Commerce Technology Internship	1-2
CWB 299	E-Commerce Technology Independent Study	(1-2)
		<u>1-2</u>
		17-18

**Choose 12-13 hours from the following courses**

CIS 131	Introduction to the Web Authoring: HTML	1
CIS 133	Advanced Web Authoring Front Page	1
CIS 145	PC Database Concepts: Access	3
CIS 166	Visual Basic Programming	3
CIS 167	C Language Programming	3
CIS 168	Java Programming	3
CIS 260	COBOL Programming	3
CIS 266	Advanced Visual Basic	3
CIS 267	Advanced C Language Programming	3
MAN 104	Personal Time Management	1
MAN 225	Management Skills for Supervisors	3
		<u>12-13</u>
		29-31

**Summary of E-Commerce - Business Emphasis**

General Education and Business Foundations	31-32
E-Commerce - Technology Emphasis	29-31

**Total Degree Requirement 60-63**

**Entrepreneurial Emphasis**

The Entrepreneurial Emphasis is designed for those who either wish to start up their own business or have an existing business they want to further develop. It provides students with an understanding of small business and its place within the U.S. economy and society. The program focuses on the fundamental factors concerned with the establishment and successful operation of small business including financing and sources of funds; organizing the business, and establishing policies; learning characteristics necessary for business success; and examining the future prospects of small business on both a national and international level. The curriculum requires direct student involvement in the understanding and analysis of various approaches and situations in buying, selling, and operating different kinds of business investments.

CST 115	Introduction to Customer Service	3
MAN 104	Time Management	1
MAN 105	Contemporary Business Ethics	3
MAN 107	Team Building	1
MAN 227	Small Business Management	3
MAN 251	Human Resource Management	3
MAN 258	Principles of Finance	3
MAR 102	Principles of Advertising	3
MAR 117	Principles of Retailing	3
MAR 145	Merchandising	3
MAR 216	Principles of Marketing	3
		<u>29</u>

**Summary of Entrepreneurial Emphasis**

General Education and Business Foundations	31-32
Entrepreneurial Emphasis	29

**Total Degree Requirement 60-61**

**Financial Services Emphasis**

The Financial Services Emphasis is designed for students who wish to pursue a career in financial planning, credit management, or insurance.

Nine (9) hours of cooperative work experience/internship are required. Cooperative work experience/internship will be conducted with a variety of local businesses on an arranged basis. For this program of study, students should provide a resume to the program coordinator upon declaring this emphasis area and must realize that in their second year of study they will be required to work at an assigned, approved training location.

BUS 171	Coop. Work Experience I/Internship I	3
BUS 172	Coop. Work Experience II/Internship II	3
BUS 271	Advanced Coop. Work Experience I/Internship I	3
CST 115	Introduction to Customer Service	3
IRM 121	Principles of Insurance	3
IRM 126	Introduction to Financial Planning	3
IRM 154	Essentials of Risk Management	3
MAN 106	Action Planning	1
MAN 107	Team Building	1
MAN 258	Principles of Finance	3
MAR 216	Principles of Marketing	3
		<u>29</u>

**Summary of Financial Services Emphasis**

General Education and Business Foundations	31-32
Financial Services Emphasis	29

**Total Degree Requirement 60-61**

## Hospitality Emphasis

The Hospitality Emphasis is certified by the American Hotel and Motel Association's Educational Institute. Students are prepared to enter the hospitality and tourism industry in a variety of training positions the industry offers.

HOM 103	Introduction to Hospitality	3
HOM 132	Front Office Procedures	3
HOM 139	Housekeeping Management	3
*HOM151	Hospitality Supervision	3
HOM 186	Hotel/Motel Security	3
*HOM191	Hospitality Law	3
BUS 171	Coop. Work Experience I/Internship I	3
CST 115	Introduction to Customer Service	3
CUA 162	Purchasing for the Food Service Industry	4
MAN 107	Team Building	1
		<u>29</u>

### Hospitality Emphasis Electives

Choose 6 hours from the following courses:

BUS 172	Coop. Work Experience II/Internship II	3
HOM 221	Tourism and Hospitality Industry	3
HOM 255	Hospitality Industry Training	3
HOM 262	Financial Accounting for the Hospitality Industry	3
HOM 269	Hospitality Industry Computer Systems	3
HOM 271	Marketing of Hospitality Services	3
HOM 273	Hospitality Sales and Marketing	3
HOM 275	Convention Management and Services	3
		<u>6</u>

### Summary of Hospitality Emphasis

General Education and Business Foundations	25-26
Hospitality Emphasis	35

### Total Degree Requirement 60-61

\*For students choosing the Hospitality Emphasis, HOM 151 – Hospitality Supervision replaces MAN 225 – Management Skills for Supervisors in the Business Foundations and HOM 191 – Hospitality Law replaces BUS 216 – Legal Environment of Business.

## International Business Emphasis

The International Business Emphasis is designed for students who already work for a business entity or who would like to become familiar with operating businesses in the international environment.

INT 210	International Business Office Administration	1
INT 221	Principles of International Business	3
INT 222	Exporting and Importing	3
INT 241	Doing Business in a Global Environment	3
	or	
BUS 171	Coop. Work Experience I/Internship I	(3)
ANT 201	Anthropology for Business	3
GEO 113	Economic Geography	3
INT 243	Principles of International Marketing	3
MAN 105	Contemporary Business Ethics	3
PHI 115	Comparative Religion	3
POS 205	International Relations	3
		<u>3</u>
		28

### Choose one foreign language course from the following

CHN 111	Chinese I	3
FRE 111	French I	3
GER 111	German I	3
ITA 111	Italian I	3
JPN 111	Japanese I	3
KOR 111	Korean I	3
RUS 111	Russian I	3
SPA 111	Spanish I	3
		<u>3</u>
		3

## Summary of International Business Emphasis

General Education and Business Foundations	31-32
International Business Emphasis	31

### Total Degree Requirement 62-63

## Management Emphasis

The Management Emphasis is designed for those students whose career path or occupational goal includes working in a corporate organizational structure as a manager of a particular department or functional area.

MAN 104	Personal Time Management	1
MAN 105	Contemporary Business Ethics	3
MAN 226	Principles of Management	3
MAN 251	Human Resource Management	3
MAN 258	Principles of Finance	3
MAR 216	Principles of Marketing	3
BUS 226	Business Statistics	3
		<u>3</u>
		19

### Management Emphasis Electives

Choose 10 hours from the following courses:

ACC 122	Principles of Accounting	4
BUS 171	Coop. Work Experience I/Internship I	3
BUS 172	Coop. Work Experience II/Internship II	3
BUS 265	Investments	3
BUS 271	Advanced Coop. Work Experience I/Internship I	3
MAN 106	Action Planning	1
MAN 107	Team Building	1
MAN 108	Personal Leadership Development	1
MAN 227	Small Business Management	3
		<u>3</u>
		10

### Summary of Management Emphasis

General Education and Business Foundations	31-32
Management Emphasis	29

### Total Degree Requirement 60-61

## Marketing Emphasis

The Marketing Emphasis is designed to prepare students for entry level and management training positions in advertising, marketing, purchasing, retailing and sales. Paid Cooperative/Internships are an integral part of the program emphasis. In addition to the Business Foundations courses, the student must complete the following:

BUS 171	Coop. Work Experience I/Internship I	3
BUS 172	Coop. Work Experience II/Internship II	3
BUS 226	Business Statistics	3
CST 115	Introduction to Customer Service	3
MAN 226	Principles of Management	3
MAR 102	Principles of Advertising	3
MAR 203	Marketing Problems	3
MAR 216	Principles of Marketing	3
		<u>3</u>
		24

**\*Marketing Electives**

Choose 5 hours from the following courses:

ACC 122	Principles of Accounting II	4
BUS 271	Advanced Coop. Work Experience I/Internship I	3
MAR 233	Professional Selling	3
MAR 262	Purchasing	3
MAN 106	Action Planning	1
MAN 107	Team Building	1
MAN 108	Personal Leadership Development	1
MAN 227	Small Business Management	3
		<u>3</u>
		5

\*Program advisors may approve additional elective choices.

**Summary of Marketing Emphasis**

General Education and Business Foundations	31-32
Marketing Emphasis	29
<b>Total Degree Requirement</b>	<b>60-61</b>

**Office Administration Emphasis**

The Office Administration Emphasis is designed to prepare students to become office professionals in entry-level positions that require skills in computer technology, communication skills, customer service, and office applications.

ACC 205	Computerized Accounting	3
BTE 101	Keyboarding Skill Building	1
BTE 102	Keyboarding Applications	2
BTE 108	Calculating Machines	1
BTE 110	Business Language Skills	3
BTE 116	Files Management	1
CIS 120	Word Processing I - WordPerfect (WIN)	3
	or	
CIS 120	Word Processing I - Microsoft Word	(3)
CIS 122	Word Processing II - WordPerfect (WIN)	3
	or	
CIS 122	Word Processing II - Microsoft Word	(3)
CIS 130	Introduction to the Internet	2
CIS 137	Desktop Publishing	3
CST 115	Introduction to Customer Service	3
		<u>3</u>
		25

**Electives**

Choose 5 hours from the following courses

ACC 138	Payroll Accounting	2
BUS 171	Cooperative Work Experience I/Internship I	3
CIS 133	Advanced Web Authoring: FrontPage	1
CIS 136	Presentation Graphics: PowerPoint	3
CIS 140	Introduction to PC Database: Access	1
CIS 141	Intermediate PC Database: Access	1
CIS 142	Advanced PC Database: Access	1
CIS 150	Introduction to PC Spreadsheet: Excel	1
CIS 151	Intermediate PC Spreadsheets: Excel	1
CIS 152	Advanced PC Spreadsheets: Excel	1
MAN 104	Time Management	1
MAN 105	Contemporary Business Ethics	3
MAN 106	Action Planning	1
MAN 107	Team Building	1
MAN 108	Personal Leadership Development	1
		<u>1</u>
		5

**Summary of Office Administration Emphasis**

General Education and Business Foundations	31-32
Office Administration Emphasis	30
<b>Total Degree Requirements</b>	<b>61-62</b>

**Real Estate Emphasis**

The Real Estate Emphasis prepares students to take the state license exam. Upon successful completion, students can secure employment as an associate broker in the residential or commercial Real Estate fields.

RES 141	Real Estate Practice and Law	3
RES 142	Colorado Real Estate Contracts & Regs.	3
RES 143	Current Legal Issues & Practical Apps.	3
RES 144	Record Keeping Trust Accts. & Closings	3
		<u>3</u>
		12

**\*Real Estate Electives**

Choose 17 hours from the following courses

BUS 226	Business Statistics	3
CIS 110	Introduction to PC Operating Systems: DOS	2
HIS 241	History of Pikes Peak Area	3
MAN 226	Principles of Management	3
MAN 227	Small Business Management	3
MAR 102	Principles of Advertising	3
MAR 121	Sales/Advertising/Real Estate Techniques	1
MAR 216	Principles of Marketing	3
MAT 156	Problem Solving in College Math	3
	General Electives	<u>3</u>
		17

\* Program advisors may approve additional elective choices.

**Summary of Real Estate Emphasis**

General Education and Business Foundations	31-32
Real Estate Emphasis	29
<b>Total Degree Requirement</b>	<b>60-61</b>

**Supervision Emphasis**

The Supervision Emphasis is designed for those students who are primarily interested in the supervisory or operational level of management in a small business or corporate entity. Skills, attitudes, and knowledge gained are based on effective first-level management needs. BUS 171 – Cooperative Work Experience I/ Internship I is an integral part of this emphasis area.

BUS 171	Coop. Work Experience I/Internship I	3
CIS 112	Introduction to Windows: 98	1
CST 115	Introduction to Customer Service	3
MAN 104	Personal Time Management	1
MAN 105	Contemporary Business Ethics	3
MAN 106	Action Planning	1
MAN 107	Team Building	1
MAN 108	Personal Leadership Development	1
MAN 226	Principles of Management	3
MAN 251	Human Resource Management	3
		<u>3</u>
		20

**Supervision Electives**

Choose 9 hours from the following courses:

BUS 172	Coop. Work Experience II/Internship II	3
BUS 271	Advanced Coop. Work Experience I/Internship I	3
PSY 115	Psychology of Adjustment	3
EHS 131	Introduction to Industrial and Environmental Safety	3
SPE 125	Interpersonal Communications	3
SSE 100	Introduction to Human Services	3
		<u>3</u>
		9

**Summary of Supervision Emphasis**

General Education and Business Foundations	31-32
Supervision Emphasis	29
<b>Total Degree Requirement</b>	<b>60-61</b>



## Business Foundations

Recommended basic skills standards are

- ENG 060
- MAT 066
- REA 090
- STS 060

This certificate will allow students exposure to most of the major areas of business. For Associate of Applied Science Degree - Business Administration - Business Foundations, see page XX of this catalog.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

### Certificate

ACC 110	Business Records	3
	or	
ACC 121	Principles of Accounting	(4)
BUS 105	Business Mathematics	4
BUS 115	Introduction to Business	3
BUS 216	Legal Environment of Business	3
BUS 217	Business Report Writing and Communication	3
CIS 118	Introduction to PC Applications	3
ECO 106	Consumer Economics	3
	or	
ECO 201	Macroeconomics	(3)
MAN 225	Management Skills for Supervisors	3
MAR 111	Principles of Sales	3
SPE 225	Organizational Communication	3

**Total Credit Hours** 31 -32

## Chemistry

Recommended basic skills standards are

- ENG 060
- MAT 066
- REA 090
- STS 060

Chemistry is one of the most diverse sciences. A chemist can study in a wide range of areas such as nuclear chemistry, biochemistry of life, chemistry of inorganic and/or organic compounds, the theory of chemical processes, and chemistry of the environment. There are many career opportunities relating to chemistry such as teaching, industrial processes, medical science, criminology, metallurgy, food processing, pharmacology, geochemistry, and environmental sciences.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

## Associate of Science Degree

### Recommended Track

CSC 116	Problem Solving with Visual Basic for Applications (or 160)	3
ENG 121	English Composition I	3
ENG 122	English Composition II	3
SPE 115	Principles of Speech Communication	3
		<u>12</u>

### Recommended to satisfy area requirements:

#### Mathematics and Science

CHE 111	General College Chemistry I	5
CHE 112	General College Chemistry II	5
CHE 211	Organic Chemistry I	5
CHE 212	Organic Chemistry II	5
MAT 201	Calculus I	5
MAT 202	Calculus II	5
PHY 211	Physics: Calculus-Based I	5
	Math/Science Elective	<u>1</u>
		36

#### Social and Behavioral Sciences

Electives\* 6

#### Humanities

Electives\* 6

12

**Total Credit Hours** 60

\*Electives must be from the approved elective course list for the AA/AS degrees.

## Cisco Certified Network Associate

Recommended basic skills standards are

- ENG 060
- MAT 066
- REA 090
- STS 060

This certificate program prepares students to design, build, and maintain networks capable of supporting national and global organizations. Course work covers a complete range of basic through advanced networking concepts from pulling cable for such complex concepts as subnet masking rules and strategies. Methods of learning are varied with interactive on-line lessons, texts, movies, and extensive hands-on applications. Upon successful completion, the program graduate is qualified to take the Cisco Networking Associate Certification examination.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

### Certificate

CIS 206	Cisco Networking Associate I	5
CIS 207	Cisco Networking Associate II	5
CIS 208	Cisco Networking Associate III	5
CIS 209	Cisco Networking Associate IV	<u>5</u>

**Total Credit Hours** 20

## Computer Aided Drafting (CAD)

Recommended basic skills standards are

- ENG 100
- MAT 105
- REA 115
- STS 060

This program prepares students for drafting positions in manufacturing, engineering, and other areas requiring production-ready drawings and models. Students will learn to prepare 2D and 3D drawings for fabrication using the latest release of AutoCAD. In addition, students will learn blueprint reading, problem-solving techniques, methods for customizing AutoCAD, use of research tools, general organizational skills, and applications in geometry and trigonometry.

Students should schedule a meeting with the computer aided drafting program advisor prior to enrolling in classes. During this meeting, students goals and preparedness can be assessed.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

### Certificate

DRT 102	Blueprint Reading	3
DRT 103	Introduction to AutoCAD	3
DRT 104	Advanced AutoCAD	3
DRT 105	AutoCAD Drafting Applications I	3
DRT 106	AutoCAD Drafting Applications II	3
MAT 152	Technical Mathematics II	3
CIS 115	Introduction to Computers	3
*12 Credit Hours of Guided Technical Electives		12

**Total Credit Hours 33**

\*Students must meet with an advisor to select appropriate technical electives.

## Computer Information Systems

Recommended basic skills standards are

- ENG 100
- MAT 066
- REA 090
- STS 060

The associate of applied science degree is designed for students who plan careers as information systems specialists. The student will learn and demonstrate basic programming skills, use of spreadsheets, databases, communications, and network software.

Students must also have the ability to type 20 wpm or complete CIS 100.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

## Associate of Applied Science Degree

CIS Core

CIS 110	Introduction to PC Operating Systems: DOS	2
CIS 112	Introduction to Windows: 98	1
CIS 145	PC Database Concepts: Access	3
CIS 150	Introduction to PC Spreadsheet: Excel	1
CIS 151	Intermediate PC Spreadsheet: Excel	1
CIS 152	Advanced PC Spreadsheet: Excel	1
CIS 175	Introduction to Telecommunications	3
CIS 276	Systems Analysis and Design	3
or		
CIS 279	Computer Information Systems Management	(3)
NET 115	Introduction to Computer Networking	3
		18

### Introduction to programming courses

Choose 6 hours from the following courses:

CIS 166	Visual Basic Programming	3
CIS 167	C Language Programming: C++	3
CIS 168	Java Programming	3
CIS 260	COBOL Programming	3
		6

### Advanced programming courses

Choose 3 hours from the following courses:

CIS 261	Advanced COBOL Programming	3
CIS 266	Advanced Visual Basic Programming	3
CIS 267	Advanced C Language Programming: C++	3
		3

### Business courses required

ACC 110	Business Records	3
BUS 217	Business Communications and Report Writing	3
CST 115	Introduction to Customer Service	3
		9

### General education courses

BUS 105	Business Mathematics	4
BUS 115	Introduction to Business	3
CIS 115	Introduction to Computer Information Systems	3
ECO 106	Consumer Economics	3
ENG 131	Technical Writing	3
SPE 125	Interpersonal Communication	3
		19

### Electives

Choose 6 hours from the following courses:

CIS 131	Introduction to Web Authoring: HTML	1
CIS 133	Advanced Web Authoring: Front Page	1
CIS 166	Visual Basic Programming	3
CIS 167	C Language Programming	3
CIS 168	Java Programming	3
CIS 260	COBOL Programming	3
CIS 261	Advanced COBOL Programming	3
CIS 266	Advanced Visual Basic Programming	3
CIS 267	Advanced C Language Programming	3
CIS 276	Systems Analysis and Design	3
CIS 279	Computer Information Systems Management	3
BUS 171	Cooperative Work Experience I/Internship I	3
MAN 104	Personal Time Management	1
MAN 225	Management Skills for Supervisors	3
		6

**Total Credit Hours 61**

## Certificate

This certificate program is designed to develop proficiency in using microcomputer software to solve business problems, create output for financial and management transactions, and develop microcomputer techniques to support the total organizational environment. Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

CIS 110	Introduction to PC Operating Systems: DOS	2
CIS 112	Introduction to Windows: 98	1
CIS 115	Introduction to Computer Information Systems	3
CIS 145	PC Database Concepts: Access	3
CIS 150	Introduction to Electronic Spreadsheets: Excel	1
CIS 151	Intermediate PC Spreadsheets: Excel	1
CIS 152	Advanced PC Spreadsheets: Excel	1
CIS 175	Introduction to Telecommunications	3
CIS 276	Systems Analysis and Design	3
	or	
CIS 279	Computer Information Systems	(3)
NET 115	Introduction to Computer Networking	<u>3</u>
		21

### Introduction to programming courses

Choose 6 credit hours from the following:

CIS 166	Visual Basic Programming	3
CIS 167	C Language Programming: C++	3
CIS 168	Java Programming	3
CIS 260	COBOL Programming	<u>3</u>
		6

### Advanced programming courses:

Choose 3 credit hours from the following:

CIS 261	Advanced COBOL Programming	3
CIS 266	Advanced Visual Basic Programming	3
CIS 267	Advanced C Language Programming: C++	<u>3</u>
		3

**Total Credit Hours** **30**

## Computer Science

Recommended basic skills standards are

- ENG 060
- MAT 066
- REA 090
- STS 060

This program prepares students for transfer to a four-year school to obtain a baccalaureate degree. Individual courses are needed by students who wish to use the computer to solve problems in engineering, mathematics, sciences, and social sciences leading toward careers in telecommunications, computer design, and computer applications within various science and engineering fields. These courses are also of interest to people who are striving to master their personal computers.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

## Associate of Science Degree

### Recommended Track

CSC 160	Computer Science I: C++	4
ENG 121	English Composition I	3
ENG 122	English Composition II	3
SPE 115	Principles of Speech Communication	<u>3</u>
		13

### Recommended to satisfy area requirements

#### Mathematics and Science

CSC 161	Computer Science II: C++	4
CSC 225	Computer Organization/Assembly Language Programming	4
CSC 230	C Programming: UNIX	3
MAT 201	Calculus I	5
MAT 202	Calculus II	5
MAT 203	Calculus III	4
PHY 211	Physics: Calculus-Based I	5
PHY 212	Physics: Calculus-Based II	<u>5</u>
		35

#### Social and Behavioral Sciences

Electives\* 6

#### Humanities

Electives\* 6  
12

#### Total Credit Hours

**60**

\*Electives must be from the approved elective course list for AA/AS degrees.

### Programming Languages Emphasis Area

CSC 116	Problem Solving with Visual Basic for Applications	3
ENG 121	English Composition I	3
ENG 122	English Composition II	3
SPE 115	Principles of Speech Communication	<u>3</u>
		12

### Recommended to satisfy area requirements:

#### Mathematics and Science

CSC 125	Programming for the Internet	3
CSC 150	Visual Basic Programming	3
CSC 160	Computer Science I: C++	4
CSC 161	Computer Science II: C++	4
CSC 225	Computer Organization/Assembly Language Programming	4
CSC 230	C Programming: UNIX	3
MAT 201	Calculus I	5
PHY 211	Physics: Calculus Based I	5
PHY 212	Physics: Calculus Based II	5
	or	
BIO 111	General College Biology I	(5)
BIO 112	General College Biology II	(5)
	or	
CHE 111	General College Chemistry I	(5)
CHE 112	General College Chemistry II	<u>(5)</u>
		36

#### Social and Behavioral Sciences

Electives\* 6

#### Humanities

Electives\* 6  
12

#### Total Credit Hours

**60**

# Criminal Justice

Recommended basic skills standards are

- ENG 100
- MAT 036
- REA 090
- STS 060

This program is designed to upgrade the skills and knowledge of employed criminal justice and private security personnel and to provide a pre-employment program for persons interested in a career in one of the following areas: corrections, investigation/management, and police patrol. A retail/industrial security certificate program is offered. Employment possibilities exist at federal, state, county, and municipal levels in the law enforcement, management, and investigation field as well as in corrections, probation, and parole. Many opportunities exist in the private security sector.

Students may complete deficiencies concurrently with the beginning courses in the program. Many agencies impose requirements other than education for employment, retention, and/or promotion. These requirements may be related to age, physical condition, height, weight, and vision. The majority of employers in the criminal justice field will not hire persons with a felony conviction, arrest or conviction record involving moral turpitude, or with certain psychological and personality traits. Prospective students with questions concerning their qualification should consult with advisors.

## Associate of Applied Science Degrees

### Courses required for all options

CRJ 110	Introduction to Criminal Justice	3
CRJ 111	Substantive Criminal Law	3
CRJ 118	Report Writing	3
CRJ 135	Judicial Function	3
CRJ 209	Criminal Investigation I	3
CRJ 210	Constitutional Law	3
CRJ 216	Juvenile Law and Procedures	3
CRJ 220	Human Relations and Social Conflicts	3
CRJ 230	Criminology	3
CRJ 251	Police Supervision Techniques	2
CRJ 262	Introduction to Crime Scene Technology	<u>3</u>
		32

### General education courses

CSC 105	Computer Literacy	3
ENG 121	English Composition I	3
	or	
ENG 131	Technical Writing I	(3)
ENG 122	English Composition II	3
	or	
SPE 115	Principles of Speech Communication	(3)
PSY 115	Psychology of Adjustment	3
	or	
PSY 215	The Criminal Mind	(3)
	Elective*	3

\*Elective must meet general education requirements in humanities or mathematics and science. See list of approved general education courses on page 48.

## Corrections Option

CRJ 113	Criminal Justice Information Systems	3
CRJ 117	Defensive Tactics	3
CRJ 145	Correctional Process	3
CRJ 146	Community Based Corrections	3
CRJ 203	F.A.T.S. Judgmental Shooting	1
CRJ 215	Constitutional Rights of Inmates	3
CRJ 236	Criminal Justice Crisis Intervention	3
CRJ 250	Penology	3
CRJ 255	Organization and Management of Correctional Institutions	3
CRJ 275	Correctional Field Experience	2
	Electives	<u>1</u>
		28

### General education courses

<b>Courses required for all options</b>	<b>32</b>
<b>Total Credit Hours</b>	<b>75</b>

## Investigations/Management Option

CRJ 112	Procedural Criminal Law	3
	or	
CRJ 113	Criminal Justice Information	(3)
CRJ 118	Police Report Writing	3
CRJ 125	Law Enforcement Operations	3
CRJ 160	Fingerprinting	3
CRJ 211	Criminal Investigation II	3
CRJ 212	Criminal Investigation III	2
CRJ 213	Criminal Investigation IV	2
CRJ 260	Police Photography	3
CRJ 264	Practical Crime Scene Investigation	3
CRJ 276	Investigations Field Experience	2
	Electives	<u>1</u>
		28

### General education courses

<b>Courses required for all options</b>	<b>32</b>
<b>Total Credit Hours</b>	<b>75</b>

## Patrol Option

CRJ 112	Procedural Criminal Law	3
CRJ 115	Law Enforcement Driving	3
CRJ 117	Defense Tactics	3
CRJ 125	Law Enforcement Operations	3
CRJ 161	Police Pistol Training	2
CRJ 201	Police Patrol Procedures	3
CRJ 211	Criminal Investigation II	3
CRJ 236	Criminal Crisis Intervention	3
CRJ 246	Accident Investigation	3
CRJ 277	Patrol Field Experience	<u>2</u>
		28

### General education courses

<b>Courses required for all options</b>	<b>32</b>
<b>Total Credit Hours</b>	<b>75</b>

## Certificate

### Retail/Industrial Security

CRJ 110	Introduction to Criminal Justice	3
CRJ 111	Substantive Criminal Law	3
CRJ 112	Procedural Criminal Law	3
CRJ 117	Defense Tactics	3
CRJ 140	Introduction to Retail Security	2
CRJ 141	Introduction to Industrial Security	2
CRJ 201	Police Patrol Procedures	3
CRJ 209	Criminal Investigation I	3
CRJ 210	Constitutional Law	3
CRJ 240	Security Administration	2
CRJ 241	Security of Specialized Facilities	<u>2</u>

**Total Credit Hours** **29**

### Culinary Arts

Recommended basic skills standards are

- ENG 060
- MAT 036
- REA 090
- STS 060

Culinary Arts is a program of training, both extensive and difficult. The culinary profession is a field different from most others as it demands unusual circumstances and lengthy hours. The traits necessary to become a culinarian are dedication, endurance, and ambition. Upon completion of this program students will be able to work in a professional establishment as second cooks or station supervisors in all preparation areas of an establishment. After further experience with development of culinary skills, we hope to see students considered for responsibility in kitchen managerial areas in the food service industry.

Once students complete the culinary courses, they can apply for certification with the American Culinary Federation by completing the point working requirements. The completion of the culinary courses will give students the required American Culinary Federation educational experience points needed for certification. This program will also help students receive the required work experience points needed for certification levels. Certification levels depend on the individual work experience in the field and by years of job related positions in food service. The culinary program encourages the students to receive certification due to the increase of positions in the United States that require certification to work in different professional establishments.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

Examinations will be given throughout the duration of the program. Please contact a faculty advisor before registering for courses.

## Associate of Applied Science Degree

### Recommended Program Sequence

#### Semester One - Fall

CUA 101	Introduction to Food Production and Cooking	3
CUA 105	Restaurant Management and Menu Planning	4
CUA 106	Applied Food Service Sanitation	2
CUA 141	Baking Principles and Yeast Products	<u>3</u>
		12

#### Semester Two - Spring

CUA 125	Breakfast Line Cookery	3
CUA 156	Nutrition for the Food Service Professional	3
CUA 271	Food Service Internship I	<u>4</u>
		10

#### Semester Three - Summer

CUA 116	Catering, Buffets, and Tableside Cooking	3
CUA 120	Wine and Spirits	2
CUA 128	Center of the Plate	3
ENG 121	English Composition I	<u>3</u>
		11

#### Semester Four - Fall

CUA 272	Food Service Internship II	4
SPE 225	Organizational Communication	3
MAT 156	Problem Solving in College Mathematics	<u>4</u>
		11

#### Semester Five - Spring

CUA 127	Soups, Sauces, and Consommés	3
CUA 162	Purchasing for the Food Service Industry	4
PSY 101	General Psychology I	3
CIS 118	Introduction to PC Applications	<u>3</u>
		13

#### Semester Six - Summer

CUA 201	Advanced Cuisine and Garde Manger	4
CUA 233	Advanced Line Cooking and Preparation	4
ECO 201	Principles of Macroeconomics	<u>3</u>
		11

**Total Credit Hours** **68**

## Certificates

### Culinary Arts

Recommended basic skills standards are

- ENG 060
- MAT 036
- REA 090
- STS 060

This program is designed for students that seek employment as a journeyman cook, station cook, or entry level cook in a professional establishment. Students will develop skills and understanding of line cookery, basic baking, saucier station, production, nutrition, sanitation, menu planning, cold food production, and entree preparation. Examinations will be given throughout the program. Please contact a faculty advisor before registering for courses.

#### Semester One - Fall

CUA 101	Introduction to Food Production and Cooking	3
CUA 105	Restaurant Management and Menu	4
CUA 106	Applied Food Service Sanitation	2
CUA 141	Baking Principles and Yeast Products	<u>3</u>
		12

#### Semester Two - Spring

CUA 125	Breakfast Line Cookery	3
CUA 127	Soups, Sauces, and Consommés	3
CUA 156	Nutrition for the Food Service Professional	<u>3</u>
		9

#### Semester Three - Summer

CUA 128	Center of the Plate	3
CUA 201	Advanced Cuisine and Garde Manger	4
CUA 233	Advanced Line Cookery and Preparation	<u>4</u>
		11

**Total Credit Hours** **32**

## Baking\*

Recommended basic skills standards are

- ENG 060
- MAT 036
- REA 090
- STS 060

This program will prepare students for employment in baking and the art of pastries. The certificate program will develop the students skills and understanding in the areas of: chocolates, confections items, ice creams and frozen desserts, yeast products, quick breads, sculpted items, sugar work, use of fruits, and national desserts. Students completing the certificate program could find employment in these specific areas: baker, baking assistant, journeyman baker, cake decorator, candy maker, or pastry cook. Examinations will be given throughout the duration of the program. Please contact a faculty advisor before registering for this program.

### Semester One - Fall

CUA 105	Restaurant Management and Menu	4
CUA 106	Applied Food Service Sanitation	2
CUA 141	Baking Principles and Yeast Products	3
CUA 150	Baking: Cake and Pastry Preparation	<u>3</u>
		12

### Semester Two - Spring

CUA 151	Baking: Intermediate Bread Preparation	3
CUA 156	Nutrition for the Food Service Professional	3
CUA 162	Purchasing for the Food Service Industry	<u>4</u>
		10

### Semester Three - Summer

CUA 152	Individual Fancy Dessert Production	3
CUA 236	Advanced Baking	<u>3</u>
		6

### Total Credit Hours

\*Pending State approval

28

## Customer Service

Recommended basic skills standards are

- ENG 060
- MAT 066
- REA 090
- STS 060

The customer service certificate is designed to prepare the student for entry-level positions in business and governmental organizations in the Colorado Springs area.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

For the Associate of Applied Science degree, see Business Administration - Customer Service – located on page 61 of this catalog.

### Certificate

BUS 171	Cooperative Work Experience I/Internship I	3
CST 115	Introduction to Customer Services	3
CST 221	Advanced Customer Service Concepts	3
PSY 226	Social Psychology	3
PSY 237	Assertiveness Training	3
SPE 125	Interpersonal Communication	<u>3</u>
		18

### \* Customer Service Electives

Choose 11 hours from the following courses:

CIS 112	Introduction to Windows: 98	1
MAN 104	Personal Time Management	1
MAN 105	Contemporary Business Ethics	3
MAN 106	Action Planning	1
MAN 107	Team Building	1
MAN 108	Personal Leadership Development	1
MAR 216	Principles of Marketing	3
ANT 101	Cultural Anthropology	3
PHI 113	Logic	<u>3</u>

### Total Electives

11

### Total Credit Hours

29

\* Your Program Advisor may approve additional elective choices.

## Dental Assisting

Recommended basic skills standards are

- ENG 100
- MAT 036
- REA 090
- STS 060

A dental assistant is a skilled and essential member of the dental health care team in the delivery of preventive and restorative dentistry. The continuing demand for dental assistants makes this program an opportunity for a productive career.

The dental assisting certificate program prepares students for employment as chair-side dental assistants. In addition to the prescribed coursework, a minimum of 300 clinical hours is required to complete the program. Students must provide their own transportation to their clinical sites. A complete physical examination is required prior to the beginning of the clinical experience, and a Hepatitis B vaccination is strongly recommended. Students must be at least 18 years of age before enrolling in Dental Radiology courses. Students must earn a "C" or better in all dental assisting courses, in order to graduate.

The dental assisting certificate program is accredited by the American Dental Association. (ADA). Graduates of the certificate program are eligible to take the Dental Assisting National Board (DANB) Examination

Students who wish to pursue the Associate of Applied Science (AAS) Degree in Dental Assisting must be a graduate of an ADA accredited dental assisting certificate program, be a certified dental assistant, or have two years of full time experience as a dental assistant. Students participating in the AAS Degree program will be given instruction, laboratory experience, and clinical experience in expanded functions as permitted by the Colorado Dental Practice Act.

Students who are interested in either the certificate program or the AAS degree program must meet with a dental assisting program advisor prior to enrolling in any dental assisting courses.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

## Associate of Applied Science Degree

DEA 101	Dental Science	5
DEA 102	Principles of Clinical Practice	7
DEA 106	Preventive and Dental Emergency Procedures	5
DEA 108	Dental Radiology I	3
DEA 109	Dental Radiology II	3
DEA 111	Dental Office Procedures	3
DEA 114	Dental Materials I	3
DEA 115	Dental Materials II	3
DEA 173	Clinical Work Experience and Cert. Review	7
DEA 200	Introduction to Expanded Duties	4
DEA 205	Expanded Functions for Dental Auxiliary	4
		<u>47</u>

#### General education courses

PSY 101	General Psychology I	3
	or	
PSY 115	Psychology of Adjustment	(3)
SPE 125	Communication Interpersonal	3
	or	
ENG 121	English Composition I	(3)
CIS 115	Introduction to Computers	3
	or	
CIS 118	Introduction to PC Applications	(3)
SPE 115	Principles of Speech Communications	3
	or	
SPE 225	Organizational Communication	(3)
	or	
ENG 122	English Composition II	(3)
PSY 226	Social Psychology	3
	or	
PSY 235	Human Development	(3)
		<u>15</u>

#### Total Credit Hours

62

#### Certificate

DEA 101	Dental Science	7
DEA 102	Principles of Clinical Practice	6
DEA 106	Preventive and Dental Emergency Procedures	5
DEA 108	Dental Radiology I	3
DEA 109	Dental Radiology II	3
DEA 111	Dental Office Procedures	3
DEA 114	Dental Materials I	3
DEA 115	Dental Materials II	3
DEA 173	Clinical Work Experience and Cert. Review	7
CIS 115	Introduction to Computer Information Systems	3
SPE 125	Interpersonal Communication	3
	or	
ENG 121	English Composition I	(3)
		<u>46</u>

#### Total Credit Hours

46

## Early Childhood Professions

Recommended basic skills standards are

- ENG 100
- MAT 036
- REA 115
- STS 060

Early childhood education, like all education, demands well-prepared teachers. A growing body of research supports the value of high-quality early childhood programs for children's later success in school and in life, the most important determinant of which is the teacher.

Pikes Peak Community College and the early childhood professions program faculty are committed to providing the optimal course of study that meets the career goals of each student. The early childhood professions program is the foundation for a challenging and rewarding career in early childhood care and education as well as other related fields.

Upon completion of the early childhood professions program students will be able to meet the educational qualifications for group leader and director as defined by the Colorado Department of Human Services.

All students should schedule an appointment with an Early Childhood Professions program advisor prior to enrolling in a class. Please call (719) 540-7450 to schedule an appointment.

## Associate of Applied Science Degree

#### Courses required for all options

ECP 101	Introduction to Early Childhood Professions	3
ECP 102	Introduction to Early Childhood Lab Techniques	3
ECP 111	Infant and Toddler Theory and Practice	3
ECP 112	Introduction to Infant/Toddler Lab Techniques	3
ECP 120	Infant and Toddler Practicum II	3
ECP 148	Guidance Strategies for Children	3
ECP 161	School Age Practicum	3
ECP 205	Health, Safety, and Nutrition	3
ECP 216	Administration: Human Relations	3
ECP 224	The Exceptional Child Practicum	3
ECP 226	Administration of Early Childhood Care and Education Programs	3
ECP 227	Methods/Techniques: Curriculum Development	3
ECP 238	Child Development	3
ECP 251	Recreational Activities	3
ECP 262	Administrative Practicum	3
ECP 273	Early Childhood Education Internship	5
ECP 287	The Exceptional Child	3
		<u>53</u>

#### General education courses

BUS 105	Business Mathematics	4
CIS 118	Introduction to PC Applications	3
PSY 115	Psychology of Adjustment	3
	or	
PSY 101	General Psychology	(3)
SOC 205	Marriage and Family	3
	or	
SOC 101	Introduction to Sociology	(3)
	Art/Humanities or Math/Science Elective*	3
		<u>16</u>

#### Total Credit Hours

69

\*Elective must meet general education requirements. See list of approved general education courses.

#### Certificate

##### Group Leader

ECP 101	Introduction to Early Childhood Professions	3
ECP 102	Introduction to Early Childhood Lab Techniques	3
ECP 148	Guidance Strategies for Children	3
ECP 227	Methods/Techniques: Curriculum Development	3
ECP 238	Child Development	3
		<u>3</u>

#### Total Credit Hours

15

## Certificate

### Director

ECP 101	Introduction to Early Childhood Professions	3
ECP 102	Introduction to Early Childhood Lab Techniques	3
ECP 148	Guidance Strategies for Children	3
ECP 205	Health, Safety, and Nutrition	3
ECP 226	Administration of ECP Programs	3
ECP 227	Methods/Techniques: Curriculum Dev.	3
ECP 238	Child Development	3
	ECP Elective*	3
	*Psychology	3
	*Sociology	3

**Total Credit Hours** **30**

## Certificate

### Level III

ECP 101	Introduction to Early Childhood Professions	3
ECP 102	Introduction to Early Childhood Lab Techniques	3
ECP 111	Infant and Toddler Theory and Practice	3
ECP 112	Introduction to Infant/Toddler Lab Techniques	3
ECP 148	Guidance Strategies for Children	3
ECP 205	Health, Safety, and Nutrition	3
ECP 226	Administration of Early Childhood Care and Educational Programs	3
ECP 227	Methods/Techniques: Curriculum Development	3
ECP 238	Child Development	3
SOC 205	Marriage and Family	3
	or	
SOC 101	Introduction to Sociology	(3)
PSY 115	Psychology of Adjustment	3
	or	
PSY 101	General Psychology	(3)

**Total Credit Hours** **33**

## Certificate

### Professional Development

Any combination of 3 classes in the following areas:

- Preschool\*
- School Age\*
- Administration\*

\*Student must see advisor before enrolling in this program

## Certificate

### Infant Toddler

ECP 111	Infant and Toddler Theory and Practice	3
ECP 112	Introduction to Infant/Toddler Lab Techniques	3
ECP 238	Child Development	3

**Total Credit Hours** **9**

## Economics

Recommended basic skills standards are

- ENG 100
- MAT 036
- REA 090
- STS 060

Economics is a social science which studies the allocation of scarce or limited resources to satisfy the unlimited wants and desires of society. Students will study, in addition to economics, a wide range of subjects including humanities, mathematics, science, and social and behavioral sciences. Economics integrates a wide spectrum of academics with practical applications to business and real-world events. This program provides graduates an Associate of Arts Degree, and prepares them for transfer to a four-year school to obtain a Bachelors Degree.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

## Associate of Arts Degree

### Recommended Track

#### Minimum Requirements

##### I. English/Speech

ENG 121	English Composition I	3
ENG 122	English Composition II	3
SPE 115	Principles of Speech Communication	3
		<u>9</u>

##### II. Computer Communication

CSC 105	Computer Literacy	3
		<u>3</u>

#### Suggested to Fulfill This Track

##### III. Mathematics and Science

MAT 121	College Algebra	4
MAT 135	Introduction to Statistics	3
GEY 111	Physical Geology	4
		<u>11</u>

##### IV. Social and Behavioral Sciences\*

ECO 201	Principles of Macroeconomics	3
ECO 202	Principles of Microeconomics	3
POS 111	American Government	3
		<u>9</u>

##### V. Humanities\*

GER 111	German I (or any □ Language)	5
GER 112	German II (or any □ Language)	5
PHI 111	Introduction to Philosophy	3
		<u>13</u>

##### VI. Communication Studies or Fine Arts

Any course from approved list p.47		3
		<u>3</u>

##### VII. Recommended Electives

ECO 205	Contemporary Economic Issues	3
ECO 225	Money and Banking	3
HIS 101	Western Civilization I	3
PSY 101	General Psychology I	3
		<u>12</u>

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

\* See AA degree for sequence requirements.

See the Associate of Arts Degree listing on page 41. In addition, many courses can be substituted using the courses listed on pages 45-47.



## Education

Colorado teacher certification guidelines require that prospective teachers first pursue a bachelor's degree in the subject area they wish to teach. PPCC students interested in a teaching career will work toward an AA or AS degree in that specific subject area. It is important for prospective teachers to work with advisors who are specially trained in and assigned to the area of education. An education advisor can also assist students in working with education requirements at four-year colleges and universities. Call the Communications/Humanities or Social and Behavioral Sciences Divisions at 540-7300 for further information.

## Electronic Commerce

This program covers a complete range of basic through advanced electronic commerce and architectural concepts. A total of 16-18 credit hours are required for certification. The program is designed to give students a choice between a business track (E-Commerce Business Certificate) and a technology track (E-Commerce Technology Certificate) or they can choose to take both. All courses applied to the certificate must be completed with a grade of "C" or above.

Program Prerequisite: BUS 115 and CIS 115 or faculty consent.

Note: Students must meet requirements for College Composition (ENG 121) and Intermediate Algebra prior to enrollment in the E-Commerce Technology certificate program.

### Certificates

#### E-Commerce Business Track

##### Core requirements

BUS 260	Business Process Foundations for E-Commerce	3
CWB 221	Technology Foundations for E-Commerce	3
MAR 221	Introduction to Electronic Commerce	3

##### Program requirements

BUS 261	E-Commerce Business Value	3
MAR 222	Implementing E-Commerce	3
MAR 295	E-Commerce Business Seminar	1

##### Electives

MAR 297	E-Commerce Business Value	1-2
MAR 299	E-Commerce Business Independent Study	1-2

**Total Credit Hours** **18-20**

#### E-Commerce Technology Track

##### Core requirements

BUS 260	Business Process Foundations for E-Commerce	3
CWB 221	Technology Foundations for E-Commerce	3
MAR 221	Introduction to Electronic Commerce	3

##### Program requirements

CWB 222	Java Technologies for E-Commerce	3
CWB 223	Advanced E-Commerce Technologies	3
CWB 295	E-Commerce Technology Seminar	1

##### Electives:

CWB 297	E-Commerce Technology Seminar	1-2
CWB 299	E-Commerce Technology Independent Study	1-2

**Total Credit Hours** **18-20**

## Electronics Technology

Recommended basic skills standards are

- ENG 060
- MAT 066
- REA 090
- STS 060

This degree program prepares students with technical job entry skills as electronics technicians. Graduates become qualified to work in electronic automation and in control systems environments. Measurement, instrumentation, and control systems automation are work-related areas for career path employment.

Maximizing student success in the electronic program is the department goal. The program faculty recommends the following desirable skill and knowledge foundations be developed to enhance student success:

- developed college-level study skills
- working knowledge of algebraic principles and basic trigonometric functions
- college-level reading and comprehension skills
- working knowledge and application of college-level English
- demonstrated time management skills
- awareness of workplace utilization of self-management workteams
- basic understanding of physics principles
- keyboarding, mouse and MS Windows experience
- understanding of basic science and physics principles

Students desiring individualized program planning suggestions are encouraged to acquire recommendation information from program faculty. Please call (719) 540-7450 to schedule an appointment.

Fall semester course sequencing provides concurrent enrollment in ELE 110, 111, 112, and 113 for both day and evening classes. Please see a program faculty person if you are unable to take these courses concurrently.

Detailed descriptions of each program course can be accessed under the ELE prefix listing at the back of this catalog.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

### Associate of Applied Science Degree

#### Recommended Program Sequence – Days

##### Semester One - Fall

ELE 110	Electronic Programming Applications	3
ELE 111	Data Acquisition and Applications	2
ELE 112	Passive Circuits	4
ELE 113	Passive Circuits Lab	4
		<u>13</u>

##### Semester Two - Spring

ELE 114	Semiconductor Active Devices	4
ELE 115	Semiconductor Active Devices Lab	4
ELE 118	Digital Circuits	4
ELE 119	Digital Circuits Lab	4
		<u>16</u>

##### Semester Three - Fall

ELE 216	Semiconductor Active Devices and Mixed Signal IC's	6
ELE 217	Semiconductor Active Devices and Mixed Signal IC's Lab	6
ELE 222	Microprocessor Control Systems	4
		<u>16</u>

**Semester Four - Spring**

ELE 223	Microprocessor Interface and Industry Applications	3
ELE 224	Enhanced Microprocessor Systems	6
ELE 225	Enhanced Microprocessor Systems Lab	6
		<u>15</u>

General education courses to be scheduled by student 15

**Total Credit Hours 75**

**Recommended Program Sequence - Nights**

**Semester One - Fall**

ELE 110	Electronic Programming Applications	3
ELE 111	Data Acquisition and Applications	2
ELE 112	Passive Circuits	4
ELE 113	Passive Circuits Lab	4
		<u>13</u>

**Semester Two - Spring**

ELE 114	Semiconductor Active Devices	4
ELE 115	Semiconductor Active Devices Lab	4
	or	
ELE 118	Digital Circuits	(4)
ELE 119	Digital Circuits Lab	(4)
		<u>8</u>

**Semester Three - Summer**

ELE 216	Semiconductor Active Devices	6
ELE 217	Semiconductor Active Devices Lab	6
	or	
ELE 222	Microprocessor Systems	(4)
ELE 223	Microprocessor Interface and Industry Applications	(3)
		<u>12/7</u>

**Semester Four - Fall**

ELE 118	Digital Circuits	4
ELE 119	Digital Circuits Lab	4
	or	
ELE 224	Enhanced Microprocessor Systems	(6)
ELE 225	Enhanced Microprocessor Systems Lab	(6)
		<u>8/12</u>

**Semester Five - Spring**

ELE 224	Enhanced Microprocessor Systems	6
ELE 225	Enhanced Microprocessor Systems Lab	6
	or	
ELE 114	Semiconductor Active Devices	(4)
ELE 115	Semiconductor Active Devices Lab	(4)
		<u>12/8</u>

General education courses to be scheduled by student 15

**Total Credit Hours 63-68**

**General education courses:**

BUS 217	Business Communication and Report Writing	3
MAN 109	Team Skills in the Business Environment	2
MAT 151	Technical Mathematics I	4
PHY 133	Technical Physicals	5
	Electives*	1
		<u>15</u>

\*Electives must meet general education requirements. See list of approved general education courses.

NOTE: ELE 210, ELE 216, ELE 217, and ELE 229 are also available for students who desire advanced microprocessor training.

# Emergency Medical Services

Recommended basic skills standards are

- ENG 060
- REA 060
- MAT 036
- STS 060

Pikes Peak Community College offers a variety of courses in the Emergency Medical Services field. It is a State of Colorado, Department of Health and Environment, Pre-hospital Care Division, approved training center and training group. It has the approval of the State Board for Community Colleges and Occupational Education. The programs are implemented with the cooperation of local medical societies and emergency medical agencies.

## Associate of Applied Science Degree

This program provides the Emergency Medical Technician of any level of training with the opportunity to complete the educational requirements for the AAS Degree in Emergency Medical Services. Students at the EMT – Basic and EMT – Intermediate level can advance their knowledge in emergency medical care. Options are designed for the EMT – Paramedic level to allow the student an opportunity to pursue a career compatible with their interest. A single option or combination of options may be pursued.

### General Education Requirements

BIO 141	Applied Anatomy and Physiology and Disease Processes I	5
BIO 142	Applied Anatomy and Physiology and Disease Processes II	5
PSY 101	General Psychology I	3
	or	
ENG 121	English Composition I	(3)
CIS 115	Introduction to Computers	3
	or	
CIS 118	Introduction to PC Applications	(3)
	or	
CSC 105	Computer Literacy	(3)
		<u>16</u>
MOT 181	Medical Terminology I	2
MOT 185	Medical Terminology II	2
EMS 130	Pediatric Emergencies	3
EMS 131	Geriatric Emergencies	3
EMS 136	Wellness for Emergency Services	2
EMS 137	Advanced Patient Assessment & History Taking	2
PSY 226	Social Psychology	3
PSY 227	Death and Dying	3
PSY 247	Child Abuse and Neglect	3
		<u>23</u>

EMS 125	Emergency Medical Technician - Basic Approved EMS Electives	8
		<u>14</u>

**Total Credit Hours 61**

## Certificate

### Emergency Medical Services

EMS 115	First Responder	3
EMS 125	Emergency Medical Technician-Basic	8
EMS 126	Emergency Medical Technician – Basic Refresher	3
		<u>14</u>

**Total Credit Hours 14**

## Emergency Medical Services Certificates

### First Responder

EMS 115	First Responder	<u>3</u>
<b>Total Credit Hours</b>		<b>3</b>

### Emergency Medical Technician – Basic

EMS 125	Emergency Medical Technician-Basic	<u>8</u>
<b>Total Credit Hours</b>		<b>8</b>

### Emergency Medical Technician – Basic Refresher

EMS 126	Emergency Medical Technician – Basic Refresher	<u>3</u>
<b>Total Credit Hours</b>		<b>3</b>

### Emergency Medical Technician – Paramedic

EMS 211	EMT-Paramedic I	10
EMS 212	EMT-Paramedic II	10
EMS 213	EMT-Paramedic III	10
BIO 141	Applied Anatomy and Physiology and Disease Processes I	5
BIO 142	Applied Anatomy and Physiology and Disease Processes II	5
MOT 181	Medical Terminology	2
MOT 185	Advanced Medical Terminology	<u>2</u>
<b>Total Credit Hours</b>		<b>44</b>

## Energy Management and Control Systems Technology

Recommended basic skills standards are

- ENG 060
- MAT 066
- REA 090
- STS 060

This program prepares students to enter the field of building control systems as it pertains to energy management and environmental control systems. Students learn how digital management systems interface with energy systems such as heating, ventilation, and air conditioning of commercial and industrial buildings.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

Student's must also demonstrate proficiency equivalent to or completion of ELE 110, ELE111, ELE 112, ELE 113.

## Associate of Applied Science Degree

### Courses required for all options

FMT 121	Refrigeration Fundamentals	4
FMT 132	Residential HVAC Controls	4
FMT 222	Heating, Ventilating, and Air Conditioning Systems Troubleshooting	7
FMT 231	Advanced Control Systems I	4
FMT 232	Advanced Heating	3
FMT 241	Advanced Air Conditioning	3
ELE 114	Active Devices I	4
ELE 115	Active Devices Lab I	4
ELE 118	Digital Circuits	4
ELE 119	Digital Circuits Lab	4
ELE 224	Enhanced Microprocessor Systems	6
ELE 225	Enhanced Microprocessor Systems Lab	<u>6</u>
		<b>53</b>

### General education courses

ENG 131	Technical Writing	3
PSY 106	Human Relations	3
MAT 151	Technical Mathematics I	4
MAT 152	Technical Mathematics II	3
SPE 217	Group Communication	<u>3</u>
		<b>16</b>

### Total Credit Hours

**69**  
NOTE: ELE 216, ELE 217, FMT 242, and SYS 200, SYS 201, SYS 202, SYS 203 are also available for students who desire advanced training.

## English

Recommended basic skills standards are

- ENG 100
- MAT 036
- REA 090
- STS 060

To major in English in the new millennium is to do more than select a profession; it is to identify one's vocation. Whether students decide someday to specialize in rhetoric and composition, literary criticism, or creative writing, or to become journalists, songwriters, screenwriters, or teachers of English, they will learn to promote literacy and thoughtful dissent in contemporary society. They will learn that connections between life and literature are basic to living in and understanding a complex global community.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

## Associate of Arts Degree

### Recommended Track

#### Minimum Requirements

##### I. English/Speech

ENG 121	English Composition I	3
ENG 122	English Composition II	3
SPE 115	Principles of Speech Communication	<u>3</u>
		<b>9</b>

##### II. Computer Communication

CSC 105	Computer Literacy (or CSC 116 or CSC 160)	<u>3</u>
		<b>3</b>

#### Suggested to Fulfill This Track

##### II. Mathematics and Science

MAT 135	Introduction to Statistics	3
GEY 111	Physical Geology	4
GEO 111	Physical Geography: Landforms	<u>3</u>
		<b>10</b>

##### III. Social and Behavioral Sciences\*

Choose 9 hours from the following courses:

ANT 101	Cultural Anthropology	3
	or	
ANT 111	Physical Anthropology	(3)
HIS 101	Western Civilization I	3
	or	
HIS 102	Western Civilization II	(3)
HIS 201	American History I	3
	or	
HIS 202	American History II	(3)
PSY 101	General Psychology I	3
	or	
PSY 102	General Psychology II	<u>(3)</u>
		<b>9</b>

<b>V. Humanities*</b>		
HUM 121	Survey of Humanities I	3
LIT 201	Masterpieces of Literature I	3
LIT 202	Masterpieces of Literature II	3
		<u>9</u>
<b>VI. Communication Studies or Fine Arts</b>		
ART 205	Film Studies	3
		<u>3</u>
<b>VII. Recommended Electives</b>		
Choose 17 hours from the following courses:		
ART 111	Art History I	3
ENG 221	Creative Writing I	4
ENG 222	Creative Writing II	4
HUM 122	Survey of Humanities II	3
HUM 123	Survey of Humanities III	3
JOU 102	Introduction to Editing	3
LIT 115	Introduction to Literature	3
LIT 121	Survey of Mythology	3
LIT 125	Study of the Short Story	3
LIT 211	Survey of American Literature I	3
LIT 212	Survey of American Literature II	3
LIT 221	Survey of British Literature I	3
LIT 222	Survey of British Literature II	3
LIT 265	Native American Literature	3
LIT 270	Celtic Literature and Art	2
PHI 111	Introduction to Philosophy	3
THE 211	Development of the Theatre I	3
THE 212	Development of the Theatre II	3
		<u>17</u>
		<b>60</b>

**Total Credit Hours**

\*See AA degree for sequence requirements

## Entrepreneurial\*

Recommended basic skills standards are

- ENG 060
- MAT 066
- REA 090
- STS 060

The entrepreneurial certificate program is designed for those who either wish to start up their own business or further develop an existing business. It provides students with an understanding of small business and its place within the U.S. economy and society. The program focuses on the fundamental factors concerned with the establishment and successful operation of small business including financing and sources of funds; organizing the business and establishing policies; learning characteristics necessary for business success; and, the future prospects of small business on both a national and international level. The curriculum requires direct student involvement in the understanding and analysis of various approaches and situations in buying, selling, and operating different kinds of business investments.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

For the Associate of Applied Science Degree, see Business Administration – Entrepreneurial located on page 62 of this catalog.

### Certificate

CST 115	Introduction to Customer Service	3
MAN 104	Time Management	1
MAN 105	Contemporary Business Ethics	3
MAN 107	Team Building	1
MAN 227	Small Business Management	3

MAN 251	Human Resource Management	3
MAN 258	Principles of Finance	3
MAR 102	Principles of Advertising	3
MAR 117	Principles of Retailing	3
MAR 145	Merchandising	3
MAR 216	Principles of Marketing	3

**Total Credit Hours** **29**

\*Pending State approval.

## Environmental Health and Safety

Recommended basic skills standards are

- ENG 100
- MAT 036
- REA 090
- STS 060

This program prepares individuals for employment in safety management positions or helps those employed in the field to upgrade.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

### Associate of Applied Science Degree

Courses required for all options

EHS 105	Management of Occupational Injuries	2
EHS 131	Introduction to Industrial and Environmental Safety	3
EHS 142	General Industry Construction and Mine Safety Standards	4
EHS 165	Principles of Emergency Response	3
EHS 205	Air Pollution Control	3
EHS 206	Risk Assessment and Risk Management	3
EHS 207	Waste Management	3
EHS 208	Water Pollution Control	3
EHS 221	DOT and Fleet Safety Requirements	3
EHS 223	Principles of Industrial Hygiene	2
EHS 239	Principles of Safety Engineering	3
EHS 242	Introduction to Hazardous Materials Management	3
		<u>35</u>

General education courses

BIO 105	Science of Biology	4
BIO 133	Ecology	4
BUS 217	Business Communication and Report Writing	3
CHE 101	Introduction to Chemistry I	5
CIS 115	Introduction to Computers	3
MAT 151	Technical Mathematics I	4
PHY 133	Technical Physics	5
SPE 115	Principles of Speech Communication	3
		<u>31</u>

**Total Credit Hours** **66**

### Certificate

EHS 105	Management of Occupational Injuries	3
EHS 131	Introduction to Industrial and Environmental Safety Practice	3
EHS 142	General Industry Construction and Mine Safety Standards	4
EHS 205	Air Pollution Control	5
EHS 206	Risk Assessment and Risk Management	3
EHS 221	DOT and Fleet Safety Requirements	3
EHS 223	Principles of Industrial Hygiene	2
EHS 239	Principles of Safety Engineering	3
EHS 242	Introduction to Hazardous Materials Management	3
		<u>31</u>

**Total Credit Hours** **29**

# Environmental Studies

Recommended basic skills standards are

- ENG 100
- MAT 036
- REA 090
- STS 060

Environmental studies is an interdisciplinary program intended to provide liberal and practical education in the science and culture of critical, contemporary environmental issues. This track includes courses from over fifteen different departments. Most environmental studies track courses are already incorporated into already existing tracks in math and sciences, the humanities, and social sciences. This program is composed of required common curriculum and some specially designed courses, introducing students to the basics of those physical, natural, and social sciences related to the environment and to human interaction within the natural world.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

## Associate of Arts Degree

### Recommended Track

#### Minimum Requirements

##### I. English/Speech

ENG 121	English Composition I	3
ENG 122	English Composition II	3
SPE 115	Principles of Speech Communication	<u>3</u>
		9

##### II. Computer Communications

CSC 105	Computer Literacy	3
	or	
CSC 116	Problem Solving with Visual Basic for Applications	<u>3</u>
		3

#### Suggested to fulfill this track

##### III. Mathematics and Science

Choose 9 credit hours total, of which only one in science may be non-core (3-4 from math and 6-7 from science)

MAT 135	Introduction to Statistics	3
	or	
MAT 121	College Algebra	(4)
	and	
BIO 111	General College Biology I	5
GEY 111	Physical Geology	4
GEY 121	Historical Geology	4
CHE 111	General College Chemistry I	5
PHY 111	Physics: Algebra Based	<u>5</u>
		9

##### IV. Social and Behavioral Sciences

Choose 9 credit hours (Sequence Needed)

ANT 101	Cultural Anthropology	3
ANT 111	Physical Anthropology	3
	(ANT 101 and ANT 111 are a sequence)	
	or	
POS 105	Introduction to Political Science	3
POS 111	American Government	3
	(POS 105 and POS 111 are a sequence)	
	and	
ECO 202	Microeconomics	3
GEO 105	World Regional Geography	3
HIS 202	U.S. History II	<u>3</u>
		9

##### V. Humanities

Choose 9 credit hours (Sequence Needed)

HUM 122	Survey of Humanities II	3
	or	
HUM 123	Survey of Humanities III	(3)
LIT 115	Introduction to Literature	3
PHI 111	Introduction to Philosophy	3
PHI 112	Ethics	3
	(PHI 111 and PHI 112 are a sequence)	
ART 110	Art Appreciation	3
	Any CORE Foreign Language	<u>(5)</u>
		9

##### VI. Communication Studies or Fine Arts

Choose 3 credits, from approved Fine Arts electives list, or choose from the following recommended courses.

ART 121	Drawing I	3
ART 150	Fundamentals of Photography	3
JOU 121	Photojournalism	<u>3</u>
		3

##### VII. Recommended Electives

Choose 18 credit hours

ANT 211	Cultural Resource Management	3
ANT 266	Culture Studies	3
ANT 107	Archeology	3
BIO 133	Ecology	4
ECO 205	Contemporary Economic Issues	3
GEO 111	Physical Geography: Landforms	3
GEO 112	Weather and Climate	4
GEO 113	Economic Geography	3
GEO 206	Cartography	4
GEO 125	Geography of Colorado	3
HIS 207	American Environmental History	3
HIS 225	Colorado History	3
HUM 266	Culture Studies	3
PHI 205	Environmental Ethics	3
POS 206	Environmental Policy Making	<u>3</u>
		18

#### Total Credit Hours

60

# Facilities Maintenance Technology

This program prepares students to enter the facilities maintenance field. This field of work involves different trade disciplines. The one-year core courses train students in residential heating, ventilation, air conditioning, and refrigeration. Students can then choose from three options that will enable them to choose an area of concentration as it pertains to facility maintenance.

The AAS degree should enhance students' initial entry placement and better prepare them for upward mobility within any of the three option areas.

All students should schedule advising appointments with the facilities maintenance technology program advisor before enrolling in classes.

For success in this program the faculty recommends proficiency in math, reading, and English.

The following is a listing of core courses required for all options. Students entering on a full-time basis beginning in the fall semester should adhere to the following sequence of courses. Please note that the FMT courses as listed below in all options are offered ONLY as listed. Failure to take a course within the recommended sequence may result in an unnecessary delay in reaching program goals.

Students may wish to attend summer classes to fulfill their general education course requirements, thereby lightening their fall and spring semester loads.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

### Associate of Applied Science Degree

#### Fall Semester - First Year

FMT 121 Refrigeration Fundamentals	4
FMT 122 E.P.A. Certification	1
FMT 131 Electrical Fundamentals	4
FMT 141 Residential Heating	4
MAT 156 Problem Solving in College Mathematics	4
	<u>17</u>

#### Spring Semester - First Year

FMT 123 Refrigerator Repair & Service	4
FMT 132 Residential HVAC Controls	4
FMT 142 Residential Air Conditioning	4
FMT 143 Residential HVAC Trouble Shooting	4
PSY 106 Human Relations	3
	<u>19</u>

### Heating, Ventilation, Air Conditioning, and Refrigeration Option

The Heating, Ventilation, Air Conditioning, and Refrigeration (HVAC&R) Option will prepare the student for entry-level residential and commercial heating, ventilating, air conditioning, and refrigeration. The emphasis will be on the servicing and maintenance of equipment found in residences, commercial buildings, and large facilities.

#### Fall Semester - Second Year

FMT 221 Advanced Refrigeration	5
FMT 231 Advanced Controls I	4
FMT 232 Advanced Heating	3
CIS 115 Introduction to Computers	3
SPE 217 Group Discussion	3
	<u>18</u>

#### Spring Semester - Second Year

FMT 222 HVAC Systems Trouble Shooting	5
FMT 241 Advanced Air Conditioning	3
FMT 242 Advanced Controls II	4
ENG 131 Technical Writing	3
	<u>15</u>

**Total Hours for HVAC & R Degree Option** **69**

### General Maintenance Option

The General Maintenance Option prepares the student for entry-level employment as a multi-faceted, multi-skilled technician who will be prepared to maintain and make minor repairs to residential and commercial HVAC&R, appliances, electrical, and plumbing systems.

#### Summer Semester - First Year

FMT 102 Facilities Electrical	4
FMT 204 Facilities Maintenance	4
CIS 115 Introduction to Computers	3
	<u>11</u>

#### Fall Semester - Second Year

FMT 112 Swimming Pool Maintenance	2
FMT 201 Appliance Technology I	7
ENG 131 Technical Writing	3
	<u>12</u>

#### Spring Semester - Second Year

FMT 103 Facilities Plumbing	4
FMT 202 Appliance Technology II	7
SPE 217 Group Discussion	3
	<u>14</u>

**Total Hours for General Maintenance Degree Option** **73**

### Major Appliance Repair Option

The major appliance option prepares the student for entry-level employment in the repair and service of residential HVAC equipment and major appliances.

#### Fall Semester - Second Year

FMT 201 Appliance Technology I	7
ENG 131 Technical Writing	3
CIS 115 Introduction to Computers	3
SPE 217 Group Discussion	3
	<u>16</u>

#### Spring Semester - Second Year

FMT 103 Facilities Plumbing	4
FMT 202 Appliance Technology II	7
FMT 203 Appliance Technology III	4
	<u>15</u>

**Total Hours for Major Appliance Degree Option** **67**

### Certificate

#### Facilities Maintenance - Residential

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

#### Fall Semester - First Year

FMT 121 Refrigeration Fundamentals	4
FMT 122 E.P.A. Certification	1
FMT 131 Electrical Fundamentals	4
FMT 141 Residential Heating	4
	<u>13</u>

#### Spring Semester - First Year

FMT 123 Refrigerator Repair & Service	4
FMT 132 Residential HVAC Controls	4
FMT 142 Residential Air Conditioning	4
FMT 143 Residential HVAC Trouble Shooting	4
	<u>16</u>

**Total Hours for Residential Certificate** **29**

### Industry Upgrade

The industry upgrade certificate is designed for technicians currently employed in the HVAC&R field who desire to upgrade their skills. The courses within this certificate option are constantly updated to include discussion of new technologies and equipment found in modern large facilities.

#### Fall Semester - First Year

FMT 221 Advanced Refrigeration	5
FMT 231 Advanced Controls I	4
FMT 232 Advanced Heating	3
	<u>12</u>

#### Spring Semester - Second Year

FMT 222 HVAC Systems Trouble Shooting	5
FMT 241 Advanced Air Conditioning	3
FMT 242 Advanced Controls II	4
	<u>12</u>

**Total Hours for Industry Upgrade Certificate** **24**

## Educational Facilities Management\*

The program is specially designed for maintenance personnel responsible for the care and upkeep of public education facilities. The program covers the areas of custodial, electrical, plumbing, and HVAC, as well as supervisory and industrial safety practices.

FMT 101	Custodial Techniques	4
FMT 102	Facilities Electrical	4
FMT 103	Facilities Plumbing	4
FMT 204	Facilities Maintenance	4
FMT 232	Advanced Heating	3
FMT 241	Advanced Air Conditioning	4
MAN 225	Management Skills for Supervisors	3
EHS 131	Introduction to Industrial Safety Practices	3

### Total Hours for Educational Facilities

### Management Certificate **29**

\*Pending State Approval

## Farrier Science

Farrier Science is the knowledge, technique, and process of shoeing horses. This program is designed for private horse owners as well as those who wish to become commercial farriers. The complete 12 credit program is offered each year from April through July with a 4 credit class offered in the fall. Theory classes are generally held in the evening. Lab sessions are held on the weekends at various ranches and stables throughout the area. Students must have average skill in handling horses and possess a general knowledge of ordinary hand tools.

Detailed descriptions of each program course can be accessed under the FAS prefix listing at the back of this catalog.

Because of the unique schedule and special tuition of this program, students should contact the division office at (719) 540-7347.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

### Certificate

#### Farrier Option

FAS 100	Farrier Science I	4
FAS 110	Farrier Science II	4
FAS 120	Farrier Science III	4
<b>Total Credit Hours</b>		<b>12</b>

## Master Farrier Option

FAS 130	Master Farrier I	4
FAS 140	Master Farrier II	4
FAS 150	Master Farrier III	4
<b>Total Credit Hours</b>		<b>12</b>

## Financial Services\*

Recommended basic skills standards are

- ENG 060
- MAT 066
- REA 090
- STS 060

The financial services certificate program is designed for students who wish to pursue a career in financial planning, credit management, or insurance.

Nine (9) hours of cooperative work experience/internship are required. Cooperative work experience/internship will be conducted with a variety of local businesses on an arranged basis. For this program of study, students should provide a resume to the program coordinator upon declaring this emphasis area and must realize that in their second year of study, they will be required to work at an assigned, approved training location.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

For the Associate of Applied Science Degree, see Business Administration – Financial Services – located on page 62 of this catalog.

### Certificate

BUS 171	Coop. Work Experience I/Internship I	3
BUS 172	Coop. Work Experience II/Internship II	3
BUS 271	Advanced Coop. Work Experience I/Internship I	3
CST 115	Introduction to Customer Service	3
IRM 121	Principles of Insurance	3
IRM 126	Introduction to Financial Planning	3
IRM 154	Essentials of Risk Management	3
MAN 106	Action Planning	1
MAN 107	Team Building	1
MAN 258	Principles of Finance	3
MAR 216	Principles of Marketing	3

### Total Credit Hours **29**

\*Pending State approval

# Fire Science Technology

Recommended basic skills standards are

- ENG 100
- MAT 036
- REA 115
- STS 060

This program is designed to prepare individuals who have little or no experience with the firefighting profession for entry-level positions in the fire service industry. This program is also designed to allow experienced firefighters to receive awarded credits for knowledge gained through experience and training through the Fire Science Student Work Experience Evaluation Program, after which their learning can be expanded by successfully completing additional courses to complete their degree.

A plan for the entry into and completion of the fire science technology degree should be discussed with the Fire Science Faculty advisors. This advising is needed to provide thorough information of the requirements of the degree program as well as to align the courses of the degree with the students' academic and career goals.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

## Associate of Applied Science Degree

### Technical Courses

FST 102	Introduction to Fire Science/Suppression	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 I	3
FST 201	Instructional Methodology	3
FST 202	Fire Fighting Strategy and Tactics	3
FST 203	Fire Science Hydraulics	3
FST 204	Fire Codes and Ordinances	3
FST 205	Fire Cause and Determination	3
FST 206	Company Officer Leadership/Supervision	3
FST 250	Chemistry for Fire Protection	3
		<u>39</u>

### Technical Elective Courses

Choose 15 hours from the following courses		
FST 100	Firefighter I	7
FST 101	Firefighter II	6
FST 151	Driver/Operator	4
FST 150	Introduction to Fire Prevention and Education	3
FST 207	Fire Fighting Strategy and Tactics II	3
FST 252	Fire Arson Detection	3
FST 253	Fire Ground Organization and Command	3
FST 254	Hazardous Materials II	3
FST 255	Fire Department Administration	3
FST 256	Fire Service EMS Management	3
FST 257	Volunteer Fire Department Administration	3
FST 259	Wildland Fires	3
EMS 125	EMT - Basic	8
		<u>15</u>

\*Other related technical courses may be substituted under technical electives with permission from the program coordinator.

### General education courses

CIS 118	Introduction to PC Applications	3
SPE 225	Introduction to Organizational Communication and	3
ENG 131	Technical Writing	3
ENG 121	English Composition I	(3)
ENG 122	English Composition II	(3)
POS 111	American Government	3
POS 125	American State and Local Government	(3)
MAT 110	Basic Finite Mathematics	<u>3</u>
		15

**Total Credit Hours**

**69**

# Food Management (See Culinary Arts)

## Foreign Language

Recommended basic skills standards are

- ENG 100
- MAT 036
- REA 090
- STS 060

PPCC's foreign language programs are built around the Foreign Language Standards put forward by the American Council on the Teaching of Foreign Languages. Our goals are that our students communicate in the target language; learn about and experience the cultures of that language; build connections between the target language and other disciplines; make comparisons between languages and cultures; and participate in communities of speakers of the target language. Students who are considering careers in education, law enforcement, health sciences, social and behavioral sciences, business, journalism and art history, among others, will find fluency in a foreign language particularly beneficial.

All native speakers must have permission of full-time foreign language faculty to enroll.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

## Associate of Arts Degree

### Recommended Track

#### Minimum Requirements

##### I. English/Speech

ENG 121	English Composition I	3
ENG 122	English Composition II	3
SPE 115	Principles of Speech Communication	<u>3</u>
		9

##### II. Computer Communication

CSC 105	Computer Literacy (or CSC 116 or CSC 160)	<u>3</u>
		3

##### Suggested to Fulfill This Track

##### III. Mathematics and Science

MAT 135	Introduction to Statistics	3
GEY 111	Physical Geology	4
BIO 105	Science of Biology	<u>4</u>
		11



#### IV. Social and Behavioral Sciences\*

ANT 101	Cultural Anthropology	3
ANT 111	Physical Anthropology	3
HIS 101	Western Civilization I	3
	or	
HIS 102	Western Civilization II	(3)
		<u>9</u>

#### V. Humanities\*

**FOL111	Foreign Language I	5
**FOL112	Foreign Language II	5
HUM 121	Survey of Humanities I	3
	or	
HUM 122	Survey of Humanities II	(3)
	or	
HUM 123	Survey of Humanities III	(3)
		<u>13</u>

#### VI. Communication Studies or Fine Arts

Choose 3 credit hours from list on p. 47		<u>3</u>
		3

#### VII. Recommended Electives

**FOL211	Foreign Language III	<u>3</u>
**FOL212	Foreign Language IV	3

#### Choose 6 hours from the following courses

GEO 105	World Regional Geography	3
HUM 237	Hispanic Arts of the Southwest	3
HUM 238	Sacred Images, Sacred Places	3
LIT 121	Survey of Mythology	3
LIT 202	Masterpieces of Literature II	3
PHI 111	Introduction to Philosophy	3
SOC 101	Sociology I	3
SOC 102	Sociology II	<u>3</u>
		6

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

\*See AA degree for sequence requirements

\*\*FOL is a standard course prefix. Each specific foreign language has it's own prefix, for example, SPA = Spanish.

## Geography

Recommended basic skills standards are

- ENG 100
- MAT 036
- REA 090
- STS 060

Geography means, from its Greek origin, "to describe the earth." It is the scientific description, analysis, and explanation of spatial variations of the earth, answering questions of location and place. Geography is divided into two major fields: physical and cultural. Physical geography describes all phenomena of land, sea, and air at the surface of the earth. It focuses on processes that influence surface events, involving energy systems and environmental subsystems and materials. Cultural geography is the scientific study of the human-land relationship. It explores how humans impact the land, sea, and air and how they are influenced by the same. A background in geography lends itself to many professional fields including cartography, natural resource conservation, remote sensing and satellite imagery, geology, GIS (Geographic Information Systems), economics, community planning, historic preservation and resource analysis, and meteorology.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

## Associate of Arts Degree

### Recommended Track

#### Minimum Requirements

##### I. English/Speech

ENG 121	English Composition I	3
ENG 122	English Composition II	3
SPE 115	Principles of Speech Communication	<u>3</u>
		9

##### II. Computer Communication

CSC 105	Computer Literacy (or CSC 116 or CSC 160)	<u>3</u>
		3

##### III. Mathematics and Science

MAT 135	Introduction to Statistics	3
GEO 111	Physical Geography - Landforms	3
GEY 111	Physical Geology	4
	or	

GEY 121	Historical Geology	(4)
		<u>10</u>

##### IV. Social and Behavioral Science

GEO 105	World Regional Geography	3
HIS 101	Western Civilization I	3
	or	

HIS 102	Western Civilization II	(3)
ANT 101	Cultural Anthropology	<u>3</u>
		9

##### V. Humanities\*

HUM 121	Survey of Humanities I	3
HUM 122	Survey of Humanities II (or 123)	3
LIT 115	Introduction to Literature	<u>3</u>
		9

##### VI. Communication Studies or Fine Arts

Choose 3 credit hours from list on p. 47		<u>3</u>
		3

#### Recommended Electives

Choose 17 hours from the following courses

ANT 266	Culture Studies	1
GEO 106	Human Geography	3
GEO 112	Weather and Climate	3
GEO 113	Economic Geography	3
GEO 125	Geography of Colorado	3
HIS 225	Colorado History	3
POS 111	American Government	<u>3</u>
		17

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

\*Electives must be from the approved elective course list for AA/AS degrees.

## Geology

Recommended basic skills standards are

- ENG 060
- MAT 066
- REA 090
- STS 060

This program provides basic preparation in geology for students planning to transfer at the junior level. A study of geology leads to careers in a variety of sub-disciplines such as earth science teaching, petroleum geology, economic geology, mining geology, paleontology, and construction geology. Because of the location of the college in the southern Rockies, field experience is emphasized in all of the offerings.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

### Associate of Science Degree

#### Recommended Track

CSC 116	Problem Solving with Visual Basic for Applications (or 160)	3
ENG 121	English Composition I	3
ENG 122	English Composition II	3
SPE 115	Principles of Speech Communication	<u>3</u>
		12

#### Recommended to satisfy area requirements

##### Mathematics and Science

CHE 111	General College Chemistry I	5
CHE 112	General College Chemistry II	5
GEY 111	Physical Geology	4
GEY 121	Historical Geology	4
MAT 121	College Algebra	4
MAT 122	College Trigonometry	3
MAT 201	Calculus I	5
MAT 202	Calculus II	5
	Math/Science Elective*	<u>1</u>
		36

##### Social and Behavioral Sciences

Electives*	6
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##### Humanities

Electives*	<u>6</u>
	12

**Total Credit Hours 60**

\*Electives must be from the approved elective course list for AA/AS degrees.

## Gerontology

Recommended basic skills standards are

- ENG 100
- MAT 036
- REA 090
- STS 060

Gerontology is the study of aging and of elderly people within society—their needs, their influence, and the growing effect upon daily life created by their ever increasing number. As more and more people reach advanced ages, the social concerns created are demanding qualified people to find the correct answers. Professionals are needed in social work, medicine, psychology, nursing, administration of long-term care facilities, community planning, recreation, and finance. Courses on aging and related topics can be used for continuing education credit for those recertifying their state nursing home administrator's license.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

### Associate of Arts Degree

#### Recommended Track

##### Minimum Requirements

##### I. English/Speech

ENG 121	English Composition I	3
ENG 122	English Composition II	3
SPE 115	Principles of Speech Communication	<u>3</u>
		9

##### II. Computer Communication

CSC 105	Computer Literacy (or CSC 116 or CSC 160)	<u>3</u>
		3

##### Suggested to Fulfill This Track

##### III. Mathematics and Science

MAT 135	Introduction to Statistics	3
BIO 105	Science of Biology	4
	Math/Science	<u>3</u>
		10

##### IV. Social and Behavioral Sciences\*

HIS 101	Western Civilization I	3
	or	
HIS 102	Western Civilization II	(3)
PSY 101	General Psychology I	3
PSY 102	General Psychology II	<u>3</u>
		9

##### V. Humanities\*

HUM 121	Survey of Humanities I (or HUM 122)	3
HUM 122	Survey of Humanities II (or HUM 123)	3
PHI 112	Ethics	<u>3</u>
		9

##### VI. Communication Studies or Fine Arts

SPE 216	Advanced Public Speaking	<u>3</u>
		3

##### VII. Recommended Electives

Choose 17 hours from the following courses:

PSY 217	Human Sexuality	3
PSY 227	Death and Dying	3
PSY 235	Human Development	3
PSY 260	Psychology of Aging	3
SOC 101	Introduction to Sociology I	3
SOC 102	Introduction to Sociology II	3
SOC 205	Marriage and Family	3
SOC 236	Age and Aging	<u>3</u>
		17

**Total Credit Hours 60**

\*See AA degree for sequence requirements

# History

Recommended basic skills standards are

- ENG 100
- MAT 036
- REA 090
- STS 060

History is collecting and analyzing the record of what past life was like, why events occurred, and how those events led to later and present circumstances. Historians may specialize in particular time periods; communities, states, countries, or regions; aspects of life such as society, politics, economics, the military, diplomacy, science, and culture; or groups in society such as farmers and workers, women and families, or racial and ethnic minorities. Careers for historians include teaching, research, and writing; law, politics, and government; and applied or public history such as historical editing and publishing, interpreting in museums and management at historic sites, archival records collection analysis, and historical consulting for public and private agencies. Without understanding our past, how can we hope to comprehend the present, let alone the future?

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

## Associate of Arts Degree

### Recommended Track

#### Minimum Requirements

##### I. English/Speech

ENG 121	English Composition I	3
ENG 122	English Composition II	3
SPE 115	Principles of Speech Communication	3
		<u>9</u>

##### II. Computer Communication

CSC 105	Computer Literacy (or CSC 116 or CSC 160)	3
		<u>3</u>

### Suggested to Fulfill This Track

#### III. Mathematics and Science (9 credit hours)

MAT 135	Introduction to Statistics	3
GEY 121	Historical Geology	4
GEO 111	Physical Geography: Landforms	3
	or	
GEO 112	Weather and Climate	4
	or	
GEO 206	Introduction to Cartography	4
		<u>9</u>

#### IV. Social and Behavioral Sciences\* (9 core credit hours)

ANT 101	Cultural Anthropology	3
	or	
GEO 105	World Regional Geography	(3)
HIS 101	Western Civilization I	3
HIS 102	Western Civilization II	3
	or	
HIS 201	U.S. History I	3
HIS 202	U.S. History II	3
		<u>9</u>

#### V. Humanities\* (9 core credit hours)

HUM 121	Survey of Humanities I	3
	or	
HUM 122	Survey of Humanities II	(3)
	or	
HUM 123	Survey of Humanities III	(3)
PHI 111	Introduction to Philosophy	3
	or	

\*\*Any CORE Foreign Language Course (5)  
9

## VI. Communication Studies or Fine Arts

Choose 3 credit hours from list on p. 47 3  
3

## VII. Recommended Electives

Choose 18 hours from the following courses:

HIS 101	Western Civilization I	3
HIS 102	Western Civilization II	3
HIS 201	U.S. History I	3
HIS 202	U.S. History II	3
HIS 116	The Native American Experience	3
HIS 136	The Southwest United States	3
HIS 137	Contemporary World History	3
HIS 206	U.S. Family History and Genealogy	3
HIS 215	Women in U.S. History	3
HIS 225	Colorado History	3
HIS 235	The American West	3
HIS 236	Contemporary U.S. History	3
HIS 241	History of the Pikes Peak Area	2
		<u>18</u>

### Total Credit Hours

\*See AA degree for sequence requirements

\*\*See CORE list

60

# Hospitality\*\*

Recommended basic skills standards are

- ENG 060
- MAT 066
- REA 090
- STS 060

The hospitality certificate program is certified by the American Hotel and Motel Association's Educational Institute. Students are prepared to enter the hospitality and tourism industry in a variety of training positions the industry offers.

Student may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

For the Associate of Applied Science Degree, see Business Administration – Hospitality located on page 63 of this catalog.

## Certificate

HOM 103	Introduction to Hospitality	3
HOM 132	Front Office Procedures	3
HOM 139	Housekeeping Management	3
*HOM151	Hospitality Supervision	3
HOM 186	Hotel/Motel Security	3
*HOM191	Hospitality Law	3
BUS 171	Coop. Work Experience I/Internship I	3
CST 115	Introduction to Customer Service	3
CUA 162	Purchasing for the Food Service Industry	4
MAN 107	Team Building	1
		<u>29</u>

### Hospitality Electives

Choose 6 hours from the following courses:

BUS 172	Coop. Work Experience II/Internship II	3
HOM 221	Tourism and Hospitality Industry	3
HOM 255	Hospitality Industry Training	3
HOM 262	Financial Accounting for the Hospitality Industry	3
HOM 269	Hospitality Industry Computer Systems	3
HOM 271	Marketing of Hospitality Services	3
HOM 273	Hospitality Sales and Marketing	3
HOM 275	Convention Management and Services	3

**Total Electives** **6**

**Total Credit Hours** **35**

\*For students choosing Hospitality, HOM 151 – Hospitality Supervision replaces MAN 225 – Management Skills for Supervisors in the Business Foundations and HOM 191 – Hospitality Law replaces BUS 216 – Legal Environment of Business.

\*\*Pending State approval.

## Humanities

Recommended basic skills standards are

- ENG 100
- MAT 036
- REA 090
- STS 060

Humanities is the study of human beings through their creations. Students study paintings, sculpture, architecture, music, literature, and philosophy to discover the nature of humankind and the values held by those living during a particular historical period. Students learn to look at the concerns of other cultures and to evaluate their own values. Humanities majors may later specialize in any of the fine arts, literature, and philosophy or in the history of the arts of a particular period or country. Survey courses include the study of the arts of Asia, Africa, Latin America, and ethnic American groups.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

### Associate of Arts Degree

#### Recommended Track

##### Minimum Requirements

I. English/Speech

ENG 121	English Composition I	3
ENG 122	English Composition II	3
SPE 115	Principles of Speech Communication	3
		<u>9</u>

##### II. Computer Communication

CSC 105	Computer Literacy (or CSC 116 or CSC 160)	3
		<u>3</u>

##### Suggested to Fulfill This Track

##### III. Mathematics and Science

MAT 135	Introduction to Statistics	3
GEY 111	Physical Geology	4
GEY 121	Historical Geology	4
		<u>11</u>

### IV. Social and Behavioral Sciences\*

ANT 101	Cultural Anthropology	3
HIS 101	Western Civilization I	3
HIS 102	Western Civilization II	3
		<u>9</u>

### V. Humanities\*

HUM 121	Survey of Humanities I	3
	or	
HUM 122	Survey of Humanities II	(3)
	or	
HUM 123	Survey of Humanities III	(3)
LIT 115	Introduction to Literature	3
	Any CORE Foreign Language Course	5
		<u>11</u>

### VI. Communication Studies or Fine Arts

Choose 3 credit hours from list on p. 47 **3**

### VII. Recommended Electives

Choose 14 hours from the following courses

	Any CORE Foreign Language Course	5
ANT 111	Physical Anthropology	3
ART 114	Folk Arts of Latin America	3
ART 121	Drawing I	3
DAN 111-DAN 133	Various Dance Courses	1
HUM 137	Arts and Cultures of Mexico	3
HUM 236	North American Indian Arts	3
HUM 237	Hispanic Arts of the Southwest	3
HUM 238	Sacred Images, Sacred Places	3
LIT 201	Masterpieces of Literature I	3
LIT 202	Masterpieces of Literature II	3
MUS 121	Music History I	3
MUS 122	Music History II	3
MUS 123	American Music: Ragtime through Rock	3
PHI 112	Ethics	3
THE 111	Acting I	3
		<u>14</u>

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

\*See AA degree for sequence requirements

# Integrated Circuit Fabrication

Recommended basic skills standards are

- ENG 100
- REA 090
- MAT 105
- STS 060

The integrated circuit fabrication program in microelectronics technologies is designed to prepare graduates for immediate employment in the technician workforce of companies creating semiconductor integrated circuit devices. This degree program emphasizes transportable skills for individuals desiring to work at technician levels and above within the semiconductor and microfabrication industries.

This program is offered with two scheduling options: fast track and extended track. Fast track program courses meet eight hours a day, five days a week. This allows completion of the AAS degree in forty academic weeks. Extended track courses meet either early week or late week to allow individuals working split week shifts to attend classes when they are off shift. The extended track program can be completed in two years or extended to longer periods to accommodate individual course load preferences.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

## Associate of Applied Science Degree

### Courses required for all options

ICF 101	Microelectronics Fabrication	6
ICF 102	Cleanroom Processes	1
ICF 104	Vacuum Systems	4
ICF 106	Semiconductor Active Devices & Mixed -Signal IC's Lecture	6
ICF 107	Semiconductor Active Devices & Mixed -Signal IC's Lab	3
ICF 108	Control Systems	5
ICF 214	RF Energy	3
ICF 218	Automated Process Control Systems	6
ICF 219	Automated Process Control Systems – Lab	3
ELE 112	Passive Circuits	4
ELE 113	Passive Circuits Lab	4
		<u>45</u>

### General education courses:

CHE 101	College Chemistry	5
ENG 131	Technical Writing	3
MAN 109	Team Skills in the Business Environment	2
MAT 135	Introduction to Statistics	3
SPE 125	Interpersonal Communications	3
PHY 133	Technical Physics	5
		<u>21</u>

### Process Option

Courses required for all options	45	
General education courses	21	
ICF 230	Advanced Process: Thin Films, Dopants	5
ICF 240	Advanced Process: Photo, Etch	4
		<u>4</u>
<b>Total Credit Hours</b>		<b>75</b>

### Process Equipment Option

Courses required for all options	45	
General education courses	21	
ICF 212	High-Vacuum Systems	4
ICF 216	Electromechanical & Pneumatic Systems	5
		<u>5</u>
<b>Total Credit Hours</b>		<b>75</b>

## Certificates

### Entry Level Operator

ICF 101	Microelectronics Fabrication	6
ICF 102	Cleanroom Processes	1
		<u>7</u>
<b>Total Credits Hours</b>		<b>7</b>

### Operator

ICF 101	Microelectronics Fabrication	6
ICF 102	Cleanroom Processes	1
ENG 131	Technical Writing	3
MAN 109	Team Skills in the Business Environment	2
MAT 135	Introduction to Statistics	3
SPE 125	Interpersonal Communication	3
		<u>3</u>
<b>Total Credit Hours</b>		<b>18</b>

### Advanced Operator (Technical)

ICF 101	Microelectronics Fabrication	6
ICF 102	Cleanroom Processes	1
ICF 104	Vacuum Systems	4
ICF 108	Control Systems	5
CHE 101	College Chemistry	5
ELE 112	Passive Circuits	4
ELE 113	Passive Circuits Lab	4
ENG 131	Technical Writing	3
MAN 109	Team Skills in the Business Environment	2
MAT 135	Introduction to Statistics	3
PHY 133	Technical Physics	5
SPE 125	Interpersonal Communication	3
		<u>3</u>
<b>Total Credit Hours</b>		<b>45</b>

### Vacuum

ICF 104	Vacuum Systems	4
ICF 212	High-Vacuum Systems	4
ICF 214	RF Energy	3
		<u>3</u>
<b>Total Credit Hours</b>		<b>11</b>

All courses in the integrated circuit fabrication technology degree program are newly designed courses. The curriculum design was accomplished by collaboration with business, industry, and PPCC. The course content and program prerequisites reflect semiconductor company requirements.

## Interior Design

Recommended basic skills standards are

- ENG 060
- MAT 036
- REA 090
- STS 060

The interior design program provides students an opportunity to develop an understanding of the principles and elements of design, study technical and visual interior elements as well as professional business practices related to the multi-faceted design industry. Students have the opportunity for more in-depth study of residential or commercial design through studio classes. The educational experience is enhanced with an internship.

As student success is our focus, the interior design faculty recommends that each student possess the fundamental skills in the following areas:

- effective study skills
- basic math skills
- reading and comprehension skills
- working knowledge and application of English skills
- time management and problem solving skills

Students may take placement testing in the Testing Center (A-108). Students are encouraged to seek individual program planning suggestions by consulting program faculty. Please call (719) 579-3061 to schedule an appointment.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

### Associate of Applied Science Degree

#### Semester One - Fall

IDE 105	Introduction to Interior Design	3
IDE 110	Interior Design I - Overview and Application	3
IDE 115	History of Interior Design	3
ARC 101	Architecture Drawing I	5
ARC 104	Architecture Drawing Theory	4
		<u>18</u>

#### Semester Two - Spring

IDE 120	Interior Design II - Space Planning and Human Factors	4
IDE 116	Estimating Interior Materials	3
IDE 117	Textiles and Resources	2
ARC 108	Architectural CAD I	3
MAR 111	Principles of Sales	3
SPE 115	Principles of Speech Communication	3
		<u>18</u>

#### Semester Three - Summer

IDE 201	Local Market Tour	3
IDE 270	Internship	3
		<u>6</u>

#### Semester Four - Fall

IDE 210	Interior Design III - Materials, Details, Codes and Specs	4
IDE 215	Professional Practice for Interior Designers	2
IDE 217	Window Treatments	2
	or	
IDE 205	Special Topic Studies	(2)
IDE 230	Studio I - Residential	3
	or	
IDE 240	Studio I - Commercial	(3)
	General Education Electives	6
		<u>17</u>

#### Semester Five - Spring

IDE 220	Interior Design IV - Specialty CAD Applications	3
IDE 231	Studio II - Residential	4
	or	
IDE 241	Studio II - Commercial	(4)
ARC 117	Presentation Drawing	3
	or	
THE 121	Set Design: Film and Theatre	(3)
	General Education Electives	6
		<u>16</u>

#### Total Credit Hours

75

## International Business\*

Recommended basic skills standards are

- ENG 060
- MAT 066
- REA 090
- STS 060

This certificate program is intended for students already working for a business entity or those who have the basic business education background and would like to become familiar with operating businesses in the international environment.

Student may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

For Associate of Applied Science degree, see Business Administration - International Business located on page 63 of this catalog.

### Certificate

INT 210	International Business Office Administration	1
INT 221	Principles of International Business	3
INT 222	Principles of Exporting & Importing	3
INT 241	Doing Business in a Global Environment	3
	or	
BUS 171	Coop. Work Experience I/Internship I	(3)
INT 243	Principles of International Marketing	3
MAN 105	Contemporary Business Ethics	3
ANT 201	Anthropology for Business	3
GEO 113	Economic Geography	3
PHI 115	Comparative Religions	3
POS 205	International Relations	3
		<u>28</u>

#### Choose one foreign language course from the following

CHN 111	Chinese I	3
FRE 111	French I	3
GER 111	German I	3
ITA 111	Italian I	3
JPN 111	Japanese I	3
KOR 111	Korean I	3
RUS 111	Russian I	3
SPA 111	Spanish I	3
		<u>3</u>

#### Total Credit Hours

31

\* Pending State approval.

## Interpreter Preparation

This program prepares students for entry-level employment as either interpreters or transliterators or both for deaf and hard of hearing individuals.

Students must apply for admission to the interpreter preparation program. In order to be accepted into the program, students must demonstrate proficiency in American Sign Language. This may be accomplished by passing a proficiency test or by completing ASL 100 with a "C" grade or better and ASL 111 with a "B" grade or better. Contact the Interpreter Preparation Office for more details about applying.

Students must earn a "B" or better in ASL skills classes to advance to the next level. To enroll in internship (IPP 244), students must have a "B" average with no more than one "C" grade in IPP 221, IPP 222, IPP 224, or ASL 212.

Program prerequisite: ENG 100, REA 090, MAT 036 or placement scores of ENG 121, REA 115, and MAT 066 or higher.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

## Associate of Applied Science Degree

### Recommended Program Sequence

#### Semester One - Fall

ASL 112	American Sign Language II	5
IPP 111	Text Analysis	3
IPP 121	Aspects of Interpreting I	3
IPP 144	Diversity within the Deaf Community	2
ANT 101	Cultural Anthropology	3
		<u>16</u>

#### Semester Two - Spring

ASL 147	Survey of Deaf Culture	3
ASL 211	American Sign Language III	3
IPP 114	Theory of Oral Transliteration	2
IPP 122	Aspects of Interpreting II	3
IPP 134	Introduction to Interpreting	3
IPP 203	Educational Interpreting	4
		<u>18</u>

#### Semester Three - Fall

ASL 212	American Sign Language IV	3
ASL 214	American Sign Language Literature	3
IPP 221	Voice to Sign Interpreting	3
IPP 222	Sign to Voice Interpreting	3
IPP 224	Transliteration	3
		<u>15</u>

#### Semester Four - Spring

IPP 235	Sign Vocabulary Expansion	2
IPP 230	Advanced Interpreting	4
IPP 240	Interpreter Seminar	3
IPP 244	Interpreter Internship	5
		<u>14</u>

#### General education courses

ENG 121	English Composition I	3
MAT 110	Basic Finite Mathematics (or higher)	3
SPE 115	Principles of Speech	3
	Science or humanities elective.	
	Choose from AAS course list on p. 48	3
		<u>12</u>

**Total Credit Hours** **75**

## Journalism

Recommended basic skills standards are

- ENG 100
- MAT 036
- REA 090
- STS 060

From the early days of our nation, the founding fathers realized the importance of a free press. Through the civil rights movement and our present Information Age, journalism has played a vital role in our nation's well-being. Journalists witness and record our lives. Journalism also makes a great partner with other careers. It is learning how to write and then developing an expertise in a cognate area such as business, science, law, the performing arts, literature, and the social and behavioral sciences.

Many of our authors, including Ernest Hemingway, Tom Clancy, Erma Bombeck, Edna Buchanan, Dave Barry, Mary Brody, Katherine Anne Porter, and Stephen King began their careers as reporters. Photojournalists as well as reporters have served as historians by recording messages and providing images.

In the Pikes Peak Community College Journalism Department, students have access to a black-and-white photo lab and to a Macintosh computer lab where they can learn how to retrieve information; develop, print and edit photos; conduct computer-assisted reporting; edit copy; interview; design and lay out news pages on a computer; and produce newsletters. They also learn to write news releases, features, newspaper articles, advertisements, and headlines. Along with these skills, journalism students are encouraged to gain a general education background and start a portfolio by working for the school newspaper, The Pikes Peak News. After completing the journalism program at PPCC, students transferring to four-year colleges may obtain editorial positions with college newspapers.

Students enrolled in the PPCC journalism program can earn an associate of arts degree and choose from four emphasis areas: advertising/public relations, news/editorial, newsletter, and multimedia.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

## Associate of Arts Degree

### Recommended Track

#### Minimum Requirements

##### I. English/Speech

ENG 121	English Composition I	3
ENG 122	English Composition II	3
SPE 115	Principles of Speech Communication	3
		<u>9</u>

##### II. Computer Communication

CSC 105	Computer Literacy	3
		<u>3</u>

##### Suggested to Fulfill This Track

##### III. Mathematics and Science

MAT 135	Introduction to Statistics	3
	Science CORE (□)	4
	Math/Science Electives	3
		<u>10</u>

**IV. Social and Behavioral Sciences\***

Choose 9 hours from the following courses

ECO 201	Principles of Macroeconomics	3
HIS 101	Western Civilization I	3
	or	
HIS 102	Western Civilization II	(3)
POS 111	American Government	3
POS 125	American State and Local Government	3
PSY 101	General Psychology I	3
	or	
PSY 102	General Psychology II	(3)
		<u>9</u>

**V. Humanities\***

HUM 121	Survey of Humanities I	3
	or	
HUM 122	Survey of Humanities II	(3)
	or	
HUM 123	Survey of Humanities III	(3)
LIT 201	Masterpieces of Literature I	3
	or	
LIT 202	Masterpieces of Literature II	(3)
PHI 113	Logic	3
	or	
THE 211	Development of Theatre I	(3)
		<u>9</u>

**VI. Communication Studies or Fine Arts**

Choose 3 credit hours from list on p. 47

		<u>3</u>
		3
		48

**VII. Recommended Electives**

Choose 18 hours from pages 45-47

		<u>18</u>
		18

**Summary of Journalism**

Recommended Track	48
Recommended Electives	18

**Total Credit Hours 60****Advertising Public Relations Emphasis****Recommended courses**

JOU 102	Introduction to Editing	3
JOU 111	Introduction to Print Media Advertising	4
JOU 121	Introduction to Print Media	3
JOU 231	Introduction to Public Relations	4

**Choose from the following**

JOU 105	Introduction to Mass Media	3
JOU 109	Introduction to Desktop Publishing	4
JOU 221	Newspaper Production I	3
JOU 222	Newspaper Production II	<u>3</u>
		17-18

**Summary of Advertising Public Relations Emphasis**

Recommended Track	48
Advertising Public Relations Emphasis	17-18

**Total Degree Requirement 60****Multimedia Emphasis****Recommended courses**

JOU 102	Introduction to Editing	3
JOU 109	Introduction to Desktop Publishing	4
JOU 215	Publications and Design	3
	or	
JOU 221	Newspaper Production	(3)

**Choose 6 to 8 credits from the following categories**

JOU 106	Fundamentals of Reporting	3
JOU 206	Intermediate News Writing and Editing	3
	or	
JOU 111	Introduction to Print Media Advertising	(4)
JOU 231	Introduction to Public Relations	4
	or	
JOU 121	Introduction to Print Media Photography	(3)
ART 150	Fundamentals of Photography	3
	or	
ART 205	Film Studies	(3)
ART 131	Design I	<u>3</u>
		6-8
		16-18

**Summary of Multimedia Emphasis**

Recommended Track	48
Multimedia Emphasis	16-18

**Total Degree Requirement 60****For the News Editorial Emphasis, see the electives below:****Recommended courses**

JOU 102	Introduction to Editing	3
JOU 109	Introduction to Desktop Publishing	3
JOU 121	Introduction to Print Media Photography	3
JOU 206	Publications Production and Design	3
JOU 221	Newspaper Production I	3

**Choose 3 credits from these courses**

JOU 105	Introduction to Mass Media	3
JOU 106	Fundamentals of Reporting	3
JOU 222	Newspaper Production II	<u>3</u>
		18

**Summary of News Editorial Emphasis**

Recommended Track	48
News Editorial Emphasis	19

**Total Degree Requirement 67****For the Newsletter Emphasis****Recommended Courses**

JOU 102	Introduction to Editing	3
JOU 109	Introduction to Desktop Publishing	3
JOU 121	Introduction to Print Media Photography	3
JOU 215	Publications Production and Design	3
JOU 221	Newspaper Production I	3

**Choose 3 credits from these courses**

JOU 105	Introduction to Mass Media	3
JOU 106	Fundamentals of Reporting	3
JOU 222	Newspaper Production II	<u>3</u>
		18

\*See AA degree for sequence requirements

**Summary of Newsletter Emphasis**

Recommended Track	48
Newsletter Emphasis	18

**Total Degree Requirement 60**



# Landscape Technician

The landscape technician program will address the main categories of study to develop awareness and understanding of landscape projects. It is the intent of this program to prepare the students for an entry-level position in the multi-faceted industry of landscaping.

There will be a common core curriculum for all landscape technology majors pursuing an Associate of Applied Science (AAS) degree. The core courses will provide a solid platform on which to build an AAS degree in landscape technology. New students are encouraged to meet with a landscape technology faculty advisor before first semester registration.

Students may complete deficiencies concurrently with the beginning courses in the option. Students not meeting a course prerequisite must have instructor permission to enroll.

## Associate of Applied Science

### Recommended Program Sequence

#### Semester One - Fall

NRT 101	Introduction to Soils	4
LTE 105	Woody Landscape Plants	3
LTE 106	Green Industry Equipment	2
PED	Any PED course	1
BIO 135	Biology of Plants	4
MAT 151	Technical Math I	4
		<hr/>
		18

#### Semester Two - Spring

LTE 112	Landscape Irrigation Design & Installation	3
LTE 113	Landscape Drafting and Design	3
LTE 124	Landscape Installation	3
LTE 127	Herbaceous Plants	3
BUS 217	Business Communication and Report Writing	3
	Any approved elective	3
		<hr/>
		18

#### Semester Three - Summer

LTE 270	Landscape Internship	5
		<hr/>
		5

#### Semester Four - Fall

LTE 205	Landscape Insects and Diseases	4
LTE 207	Landscape Maintenance	3
LTE 217	Hardscape Construction	3
LTE 218	Principles of Grading and Drainage	3
PED	Any PED course	1
	Any approved elective	3
		<hr/>
		17

#### Semester Four - Spring

LTE 225	Landscape Pesticides and Fertilizers	2
LTE 226	Green Industry Business Operations	3
LTE 227	Principles of Turf Grasses	3
LTE 235	Introduction to Arboriculture	4
SPE 225	Organizational Communications	3
	Any approved elective	3
		<hr/>
		18

<b>Total Credit Hours</b>		<b>76</b>
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### Approved Electives

LTE 135	Weed Identification and Control	2
LTE 137	Plant Propagation	3
LTE 202	Landscape Irrigation Maintenance & Repair	3
LTE 203	Introduction to LanCAD	3
LTE 208	Green Industry Large Equipment	2
LTE 228	Landscape Plant Usage	2
LTE 236	Xeriscape Landscapes	3
LTE 237	Green Industry Bidding and Estimating	3
NRT 102	Natural Resource Conservation	4
NRT 202	Introduction to Surveying	3
NRT 203	Introduction to Forestry	4
NRT 204	Range Management and Restoration	4
NRT 214	Environmental Ethics	3
DRT 103	Introduction to Autocad	3
CIS 115	Introduction to Computers	3
CIS 118	Introduction to PC Applications	3
MAN 225	Management Skills for Supervisors	3
BIO 134	Plant Taxonomy	4

\*Pending State Approval

## Latin American Studies

Recommended basic skills standards are

- ENG 100
- MAT 036
- REA 090
- STS 060

The Latin American Studies program provides students an opportunity to study the various cultures in Mexico, Central and South America, and the Caribbean from the aspects of language, literature, arts, history, archeology, anthropology, geography, and religion.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

## Associate of Arts Degree

### Recommended Track

#### Minimum Requirements

##### I. English/Speech

ENG 121	English Composition I	3
ENG 122	English Composition II	3
SPE 115	Principles of Speech Communication	3
		<hr/>
		9

##### II. Computer Communication

CSC 105	Computer Literacy	3
		<hr/>
		3

#### Recommended to satisfy area requirements

##### III. Mathematics and Science

Choose 10 hours from the following courses:

MAT 135	Introduction to Statistics (or MAT 121)	3
GEY 111	Physical Geology (or BIO 111 or AST 101)	4
GEY 121	Historical Geology (or BIO 112 or AST 102)	4
GEO 115	Physical Geography - Landforms	3
		<hr/>
		10

**IV. Social and Behavioral Sciences\***

Choose 9 hours from the following courses

ANT 101	Cultural Anthropology	3
ANT 111	Physical Anthropology	3
HIS 101	Western Civilization I	3
HIS 102	Western Civilization II	3
HIS 201	U.S. History I	3
HIS 202	U.S. History II	3
GEO 105	World Regional Geography	3
		<u>3</u>
		9

**V. Humanities\***

HUM 122	Survey of Humanities II	(3)
HUM 123	Survey of Humanities III	(3)
SPA 111,112	Spanish I, II	5/10
SPA 211, 212	Spanish III, IV	3/6
MUS 120	Music Appreciation	3
		<u>3</u>
		9

**VI. Communication Studies or Fine Arts**

Choose 3 hours from the following courses

ART 121,122	Drawing I,II	3
ART 161,162	Ceramics I,II	3
DAN 141	Regional Dance: Latin American Ballroom	1-3
DAN 121,122		
THE 204	Voice and Articulation I	2
		<u>2</u>
		3

**VII. Recommended Electives**

Choose 17 hours from the following courses

ANT 107	Introduction to Archeology	3
ART 114	Folk Arts of Latin America	3
DAN 141	Regional Dances: Mexican Folk	1
HIS 137	Contemporary World History	3
HUM 137	Arts and Cultures of Mexico	3
HUM 235	Pre-Columbian Indian Arts	3
HUM 236	North American Indian Arts	3
HUM 238	Sacred Images Sacred Spaces	3
INT 221	Principles of International Business	3
PHI 115	Comparative Religions	3
ANT,HUM,SPA 266	Culture Studies	1-3
POS 212	Comparative Politics of Developing Nations	3
		<u>3</u>
		17

**Total Credit Hours**

\*See AA degree for sequence requirements

**60**

**Legal Assistant**

Recommended basic skills standards are

- ENG 100
- MAT 036
- REA 115
- STS 060

Approved by the American Bar Association.

This program is designed to prepare students with job-entry office skills to become legal assistants (paralegals). Emphasis is on interviewing clients, conducting legal research, drafting legal documents, and preparing exhibits for trial. To be competitive in this career, students are advised to develop keyboarding/computer skills.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

**Associate of Applied Science Degree**

LEG 200	The Paralegal in the Legal System	2
LEG 201	Legal Research I	2
LEG 202	Legal Research II	2
LEG 203	Corporation Law	2
LEG 204	Legal Writing	2
LEG 211	Family Law	2
LEG 212	Real Estate Law	2
LEG 213	Bankruptcy - Principles and Practices	2
LEG 221	The Court Sys - Pleading and Practice I	2
LEG 222	The Court Sys - Pleading and Practice II	2
LEG 231	Commercial Law I	2
LEG 232	Commercial Law II	2
LEG 243	Probate	2
LEG 245	Torts	2
LEG 247	Legal Ethics	2
CRJ 111	Substantive Criminal Law	3
CRJ 210	Constitutional Law	3
		<u>3</u>
		36

**Electives**

Choose 9 hours from the following courses

ACC 110	Business Records	3
	or	
ACC 121	Principles of Accounting I	(4)
BUS 217	Business Communication and Report Writing	3
CIS 118	Introduction to PC Applications	3
CIS 120	Word Processing I - WordPerfect or Word	3
CIS 122	Word Processing II - WordPerfect or Word	3
CIS 130	Introduction to the Internet	2
CIS 131	Introduction to Web Authoring: HTML	1
CIS 140	Introduction to PC Database: Access	1
CIS 150	Introduction to PC Spreadsheets: Excel	1
CIS 151	Intermediate PC Spreadsheets: Excel	1
CIS 152	Advanced PC Spreadsheets: Excel	1
CRJ 112	Procedural Criminal Law	3
CRJ 135	Judicial Function	3
CRJ 216	Juvenile Law and Procedures	3
LEG 250	Employment and Labor Law	2
LEG 271	Cooperative Work Experience	3
		<u>3</u>
		9

**General education courses**

ENG 121	English Composition I	3
ENG 122	English Composition II	3
POS 111	American Government	3
PSY 101	General Psychology I	3
		<u>3</u>
		12

**Choose two courses from the following**

AST 101	Astronomy I	4
BIO 105	Science of Biology	4
HUM 121	Survey of Humanities I	3
PHI 111	Introduction to Philosophy	3
		<u>3</u>
		6-8

**Total Credit Hours**

**63-65**

## Machining Technology

Recommended basic skills standards are

- ENG 100
- MAT 066
- REA 115
- STS 060

The majority of the machining classes are offered on an open-entry, open exit, self-paced basis. Classes in this program include both theoretical and laboratory experiences. Students learn to operate standard machine tools as well as advanced, more sophisticated computer-controlled machines. An AAS degree may be earned, or students may choose from seven certificate options. Upgrading by local machinists is another option.

Students may complete deficiencies concurrently with the beginning courses in the program. Students must arrange with advisors to remedy deficiencies in program requirements. Courses marked with \* are not offered on an open-entry, self-paced basis.

### Associate of Applied Science Degree

#### Courses required for all options

MAG 101	Introduction to Machine Shop	3
MAG 102	Blueprint Reading	3
DRT 103	Introduction to AutoCAD	3
	or	
WEL 108	Welding and Cutting	(4)
MAG 110	Engine Lathe I	3
MAG 111	Engine Lathe II	3
MAG 112	Engine Lathe III	3
MAG 120	Milling Machine I	3
MAG 121	Milling Machine II	3
MAG 122	Milling Machine III	3
MAG 201	CNC Lathe Operations I*	3
MAG 202	CNC Lathe Operations II*	3
MAG 203	CNC Lathe Lab*	3
MAG 204	CNC Milling Operations I*	3
MAG 205	CNC Milling Operations II*	3
MAG 206	CNC Milling Lab*	3
MAG 215	CADCAM 2D	3
MAG 216	CADCAM 2D Lab	3
MAG 225	CADCAM 3D	3
MAG 226	CADCAM 3D Lab	3
MAG 240	Practical Metallurgy	3
		<u>3</u>
		60-61

#### General education courses

CIS 115	Introduction to Computers	3
SPE 125	Interpersonal Communication	3
	or	
ENG 121	English Composition I	(3)
MAT 152	Technical Mathematics II	3
MAT 156	Problem Solving in College Mathematics	3
PSY 115	Psychology of Adjustment	3
	or	
SPE 217	Group Communication	(3)
		15

**Total Credit Hours** **75-76**

### Certificate

#### Courses required for all options

MAG 101	Introduction to Machine Shop	3
MAG 102	Blueprint Reading	3
		<u>6</u>

### Computer Aided Machining Option

MAG 201	CNC Lathe Operations I*	3
MAG 202	CNC Lathe Operations II*	3
MAG 203	CNC Lathe Lab*	3
MAG 204	CNC Milling Operations I*	3
MAG 205	CNC Milling Operations II*	3
MAG 206	CNC Milling Lab*	3
MAG 215	CADCAM 2D	3
MAG 216	CADCAM 2D Lab	3
MAG 225	CADCAM 3D	3
MAG 226	CADCAM 3D Lab	3
	Courses required for all options	<u>6</u>
	<b>Total Credit Hours</b>	<b>36</b>

### Lathe Journeyman Option

MAG 110	Engine Lathe I	3
MAG 111	Engine Lathe II	3
MAG 112	Engine Lathe III	3
MAG 201	CNC Lathe Operations I*	3
MAG 202	CNC Lathe Operations II*	3
MAG 203	CNC Lathe Lab*	3
MAG 215	CADCAM 2D	3
MAG 216	CADCAM 2d Lab	3
	Courses required for all options	<u>6</u>
	<b>Total Credit Hours</b>	<b>30</b>

### Milling Journeyman Option

MAG 120	Milling Machine I	3
MAG 121	Milling Machine II	3
MAG 122	Milling Machine III	3
MAG 204	CNC Milling Operations I*	3
MAG 205	CNC Milling Operations II*	3
MAG 206	CNC Milling Lab*	3
MAG 215	CADCAM 2D	3
MAG 216	CADCAM 2D Lab	3
	Courses required for all options	<u>6</u>
	<b>Total Credit Hours</b>	<b>30</b>

## Management\*

Recommended basic skills standards are

- ENG 060
- MAT 066
- REA 090
- STS 060

The management certificate program is designed for those students whose career path or occupational goal includes working in a corporate organizational structure as a manager of a particular department or functional area.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

For the Associate of Applied Science Degree, see Business Administration – Management located on page 63 of this catalog.

### Certificate

MAN 104	Personal Time Management	1
MAN 105	Contemporary Business Ethics	3
MAN 226	Principles of Management	3
MAN 251	Human Resource Management	3
MAN 258	Principles of Finance	3
MAR 216	Principles of Marketing	3
BUS 226	Business Statistics	3
		<u>19</u>

### Management Electives

Choose 10 hours from the following courses:

ACC 122	Principles of Accounting	4
BUS 265	Investments	3
MAN 106	Action Planning	1
MAN 107	Team Building	1
MAN 108	Personal Leadership Development	1
BUS 171	Coop. Work Experience I/Internship I	3
BUS 172	Coop. Work Experience II/Internship II	3
BUS 271	Advanced Coop. Work Experience I/Internship I	3
MAN 227	Small Business Management	3
Total Electives		10

**Total Credit Hours** 29

\* Pending State approval.

### Marketing\*

Recommended basic skills standards are

- ENG 060
- MAT 066
- REA 090
- STS 060

The marketing certificate program is designed to prepare students for entry level and management training positions in advertising, marketing, purchasing, retailing and sales. Paid cooperative/internships are an integral part of the program.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

For the Associate of Applied Science degree, see Business Administration – Marketing – located on page 63 of this catalog.

### Certificate

MAR 102	Principles of Advertising	3
MAR 203	Marketing Problems	3
MAR 216	Principles of Marketing	3
MAN 226	Principles of Management	3
BUS 171	Coop. Work Experience I/Internship I	3
BUS 172	Coop. Work Experience II/Internship II	3
BUS 226	Business Statistics	3
CST 115	Introduction to Customer Service	3
		24

### Marketing Electives

Choose 5 hours from the following courses:

ACC 122	Principles of Accounting II	4
BUS 271	Advanced Coop. Work Exp. I/Internship I	3
MAR 233	Professional Selling	3
MAR 262	Purchasing	3
MAN 106	Action Planning	1
MAN 107	Team Building	1
MAN 108	Personal Leadership Development	1
MAN 227	Small Business Management	3
		5

**Total Credit Hours** 29

\* Pending State approval.

## Mathematics

Recommended basic skills standards are

- ENG 060
- MAT 066
- REA 090
- STS 060

An understanding of mathematics is necessary for the study of many disciplines such as psychology, business, biology, computer science, engineering, physics, chemistry, and statistics. Students should consult with advisors to ensure that they study the proper curriculum for their respective discipline.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

### Associate of Science Degree

#### Recommended Track

CSC 160	Computer Science I: C++	4
ENG 121	English Composition I	3
ENG 122	English Composition II	3
SPE 115	Principles of Speech Communication	3
		13

#### Recommended to satisfy area requirements

##### Mathematics and Science

CSC 161	Computer Science II: C++	4
MAT 121	College Algebra	4
MAT 122	College Trigonometry	3
MAT 201	Calculus I	5
MAT 202	Calculus II	5
MAT 203	Calculus III	4
PHY 211	Physics: Calculus-Based I	5
PHY 212	Physics: Calculus-Based II	5
		35

##### Social and Behavioral Sciences

Electives\* 6

##### Humanities

Electives\* 6

**Total Credit Hours** 60

\*Electives must be from the approved elective course list for AA/AS degrees.

## Medical Office Technology

Recommended basic skills standards are

- ENG 100
- REA 090
- MAT 036
- STS 060

The area of medical office technology is designed to prepare individuals to assist with clinical and administrative functions as employees within the health care system of the community. All students become familiar with the health care system, medical terminology, and interpersonal relationships. Four certificate options and one associate of applied science degree option are available within the Medical Office Technology Program. These options are designed to allow students an opportunity to pursue careers compatible with their interest and abilities. A single option or a combination of options may be pursued.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have permission of coordinator to enroll.

## Medical Assistant

This associate of applied science degree option is designed to prepare individuals to work in both administrative and clinical areas of medical clinics or physicians' offices. Students successfully completing this degree program will be able to perform the administrative tasks of a medical receptionist and work in the clinical areas by providing assistance with physical examinations, diagnostic tests, and treatment procedures.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have permission of coordinator to enroll.

## Associate of Applied Science Degree

MOT 108	Medical Career Options & Readiness	1
MOT 110	Medical Office Procedures I	3
MOT 120	Clinical Procedures I	2
MOT 130	Basic Pharmacology for Medical Careers	2
MOT 210	Medical Office Procedures II	3
MOT 220	Clinical Procedures II	3
MOT 251	Medical Assistant Externship I	3
MOT 252	Medical Assistant Externship II	3
BIO 141	Applied Anatomy and Physiology and Disease Processes I	5
BIO 142	Applied Anatomy and Physiology and Disease Processes II	4
CIS 120	Word Processing I – WordPerfect (WIN)	3
MOT 221	Beginning Medical Transcription	4
MOT 247	Medicolegal Concepts & Ethics	3
MOT 181	Medical Terminology	2
MOT 185	Advanced Medical Terminology	2
NUR 108	Accelerated CAN	3
EMS 107	Standard First Aid – CPR	1
		<u>47</u>

### General education courses:

ENG 131	Technical Writing	3
PSY 101	General Psychology	3
ENG 131	Technical Writing	3
PSY 101	General Psychology	3
SPE 225	Organizational Communication	3
	General education electives for AAS degree	6
		<u>15</u>

**Total Credit Hours 62**

## Clinical Office Assistant

This certificate option is designed to prepare individuals to work in clinics or physicians' offices as clinical assistants or aides. Students successfully completing this course of study will be able to receive and prepare patients for various laboratory examinations. Successful graduates from this option will also be able to provide physicians assistance with physical examinations, diagnostic tests, and treatment procedures. Credits from this certificate may be transferred to the medical assistant AAS degree program.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have permission of coordinator to enroll.

## Certificate

MOT 108	Medical Career Options and Readiness	1
MOT 110	Medical Office Procedures I	2
MOT 120	Clinical Procedures I	3
MOT 130	Basic Pharmacology for Medical Careers	2
MOT 181	Medical Terminology	2
MOT 220	Clinical Procedures II	3
MOT 247	Medicolegal Concepts and Ethics	3

BIO 141	Applied Anatomy and Physiology and Disease Processes I	5
BIO 142	Applied Anatomy and Physiology and Disease Processes II	4
CIS 120	Word Processing I - WordPerfect (WIN)	3
NUR 108	Accelerated Nurse Aide	3
ENG 131	Technical Writing	3
	or	
SPE 225	Organizational Communication	(3)
	<b>Total Credit Hours</b>	<b>34</b>

## Medical Transcriptionist

Recommended basic skills standards are

- ENG 100
- REA 090
- MAT 036
- STS 060

The medical transcription certificate is designed to prepare students for entry-level employment as medical transcriptionists by providing the basic knowledge, understanding, and skills required to transcribe medical dictation with accuracy, clarity, and timeliness, applying the principles of professional and ethical conduct.

Students must also have demonstrated proficiency with a keyboarding speed at a minimum of 40 words per minute.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have permission of coordinator to enroll.

## Certificate

BTE 110	Business Language Skills	3
BIO 141	Applied Anatomy and Physiology and Disease Processes I	5
BIO 142	Applied Anatomy and Physiology and Disease Processes II	4
CIS 120	Word Processing I - WordPerfect	3
MOT 181	Medical Terminology	2
MOT 185	Advanced Medical Terminology	2
MOT 247	Medicolegal Concepts & Ethics	3
MOT 221	Beginning Medical Transcription	4
MOT 222	Advanced Medical Transcription	4
MOT 223	Medical Transcription Practicum	3
	or	

Approved elective (3)

**Total Credit Hours 33**

## Medical Receptionist

This certificate option is designed to prepare individuals to work as receptionists in the health care industry. Students successfully completing this course of study will be able to register new patients, use proper telephone techniques, schedule appointments, file medical records, process mail, and type and transcribe miscellaneous medical reports. Students will gain exposure to both computerized and manual systems to organize a medical office. Credits from this program may be transferred to the Medical Transcriptionist certificate program, or to the Medical Assistant AAS degree option.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have permission of coordinator to enroll.

## Certificate

MOT 108	Medical Career Options and Readiness	1
MOT 110	Medical Office Procedures I	3
MOT 120	Clinical Procedures I	2
MOT 181	Medical Terminology	2
MOT 210	Medical Office Procedures II	3
MOT 221	Beginning Medical Transcription	4
MOT 247	Medicolegal Concepts and Ethics	3
CIS 120	Word Processing I - WordPerfect	3
NUR 101	Certified Nurse Aide	6
ENG 131	Technical Writing	3
	or	
SPE 225	Organizational Communication	(3)
<b>Total Credit Hours</b>		<b>30</b>

## Phlebotomy

In the phlebotomy certificate program, students will learn theory, anatomy and physiology, microbiology, and proficiency in collection of tissue and blood samples from patients in a variety of settings. Students will also learn customer service and communication skills necessary to work with patients. Career options are covered, and students will be prepared for a career in phlebotomy. Upon completion of the required courses, students will receive a certificate of phlebotomy from PPCC and will qualify to take the National Certification Board Exam for Certificate Phlebotomy Technician (CPT). This certificate can be completed within one year, if coursework is completed as advised. There are no other prerequisites required other than BIO 110 as a prerequisite for BIO 123.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have permission of coordinator to enroll.

## Certificate

MOT 108	Medical Careers Options and Procedures	1
MOT 115	Phlebotomy/Specimen Collection/ Special Procedures	3
MOT 116	Pathology Laboratory Terminology	1
MOT 125	Customer Service and Health Care	2
BIO 110	Foundations of College Biology	5
BIO 123	Foundations of College Microbiology	3
<b>Total Credit Hours</b>		<b>15</b>

## Professional Household Health Assistant\*

EMS 107	Standard First Aid - CPR	1
MOT 140	Professional Household Health Assistant	5
MOT 141	Pharmacology for the Health Assistant	1
		7

\*Pending State Approval

## Natural Resource Technology

Recommended basic skills standards are

- ENG 060
- MAT 036
- REA 090
- STS 060

This program is designed to prepare students for employment at the technician level in the following options: natural resources, zookeeping, interpretation, geographic information systems, and the adventure industry. This program is a two-year AAS degree program. The training includes science foundations, technical skills, an internship, group projects, and resource management techniques. A wide range of career opportunities in this ever-rising field will be available to the graduate of this program.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

## Associate of Applied Science Degree

### Recommended Program Sequence

#### Semester One - Fall

NRT 101	Introduction to Soils	4
NRT 102	National Resource Conservation	4
NRT 103	Equipment Use and Maintenance	3
BIO 133	Ecology	4
MAT 151	Technical Mathematics I	4
		19

#### Semester Two - Spring

NRT 104	Wilderness Skills and First Aid	3
NRT 202	Surveying and Measurement	3
NRT 203	Principles Forestry and Measurement	4
BIO 134	Plant Taxonomy	4
	or	
BIO 135	Biology of Plants	(4)
BUS 217	Business Communication & Report Writing	3
PED 150	Fitness Center I	1
		18

#### Semester Three - Summer

NRT 210	Natural Resource Internship	5
		5

#### Semester Four - Fall

NRT 205	Wildlife and Fisheries Principles	3
NRT 211	Environmental Policies and Economics	3
NRT 236	Public Relations of Natural Resources	2
GEY 106	Principles of Geology	3
SPE 214	Natural Resource Interpretation and Communication	3
*NRT Approved Elective/Any LTE Elective		3
		17

#### Semester Five - Spring

NRT 117	Introduction to Natural Resource GIS	1
NRT 204	Range Management and Restoration	4
NRT 212	Ecosystem Management	2
NRT 214	Environmental Issues and Ethics	3
*NRT Approved Elective/Any LTE Elective		3
		13

### Total Credit Hours

74

#### \*NRT Approved Electives

ANT 101	Cultural Anthropology	3
BIO 105	Science of Biology	4
BIO 110	Foundations of College Biology	5
CHE 101	Introduction to Chemistry I	5
CIS 115	Introduction to Computers	3
DRT 103	Introduction to AutoCAD	3
GEO 112	Weather and Climate	3
HIS 207	American Environmental History	3
HIS 225	Colorado History	3
Any NRT or LTE course not required in specific program		
SPE 216	Advanced Speech	3

## Associate of Applied Science Degree

### Zookeeping Technology Option

#### Recommended Program Sequence

#### Semester One - Fall

NRT 106	Career Development for Zookeepers	.5
NRT 113	Reptile and Amphibian Husbandry	4
NRT 142	Safety, Zoonoses and Hazardous Materials	.5
NRT 236	Public Relations of Natural Resources	2
BIO 137	Animal Biology	4
MAT 156	Problem Solving Mathematics	4
PED 150	Fitness Center I	1
		16

**Semester Two - Spring**

NRT 114	Bird Husbandry	4
NRT 209	Zookeeping Internship**	5
BIO 134	Plant Taxonomy	4
	or	
BUS 135	Biology of Plants	(4)
BUS 217	Business Communication & Report Writing	3
*NRT Approved Zookeeping Elective		<u>3</u>

**Semester Three - Fall**

NRT 115	Mammal Husbandry	4
NRT 209	Zookeeping Internship**	5
BIO 133	Ecology	4
SPE 214	Natural Resource Interpretation and Communication	3
	NRT Approved Elective*	<u>3</u>

**Semester Four - Spring**

NRT 116	Fish and Invertebrate Husbandry	4
NRT 135	Horticulture for the Zookeeper	1
NRT 206	Exhibit Design	2
NRT 209	Zookeeping Internship**	5
NRT 214	Environmental Issues and Ethics	3
NRT 215	Veterinary Zookeeping	<u>4</u>

**Total Credit Hours****73**

\*NRT Zookeeping approved electives

NRT 102	Natural Resource Conservation	4
NRT 137	Outdoor Leadership	2
NRT 205	Wildlife and Fisheries Management	3
NRT 216	Elephant Management	3
NRT 217	Animal Behavior	3
NRT 236	Public Relations of Natural Resources	2
BIO 110	Foundations of College Biology	5
EMS 115	First Responder	2
CHE 101	Introduction to Chemistry I	5

**\*\*Zookeeping Internships**

209 101	Hoofstock
209 102	Primates and Carnivores
209 103	Birds and Reptiles

**Associate of Applied Science Degree\*****Adventure Guide\*\*****Recommended Program Sequence****Semester One - Fall**

NRT 120	The Adventure Guide Industry	3
NRT 132	Outdoor Skills Level I	2
NRT 137	Outdoor Leadership	2
NRT 220	The Business of Adventure Travel	3
BUS 217	Business Communication and Report Writing	3
SPE 214	NRT Interpretation & Communication	<u>3</u>

**Semester Two - Spring**

NRT 102	Natural Resources Conservation	4
NRT 109	Leave No Trace Certification Course	1
NRT 130	Introduction to Outdoor Education & Recreation	3
NRT 133	Outdoor Skills Level II	2
NRT 155	Wilderness Theory	1
NRT 156	Wilderness Food Prep	2
NRT 257	Avalanche Safety	1
EMS 115	First Responder	<u>2</u>

**Semester Three - Summer**

NRT 134	Outdoor Skills Level III	2
NRT 255	Adventure Guide Expedition	<u>5</u>

**Semester Four - Fall**

NRT 103	Equipment Use & Maintenance	3
NRT 230	Desert Field Studies	2
NRT 236	Public Relations of Natural Resources	2
BIO 133	Ecology	4
MAN 225	Management Skills for Supervisors	3
MAT 156	Problem Solving in College Mathematics	<u>4</u>

**Semester Five - Spring**

NRT 207	Adventure Guide Internship	5
NRT 214	Environmental Issues and Ethics	3
NRT 225	Adventure Guide Seminar	1
NRT 245	Mountain Field Studies	2
IRM 154	Essentials of Risk Management	<u>2</u>

**Total Credit Hours****70**

\*Pending State Approval

\*\*No new student enrollments effective Spring 2001.

**Associate of Applied Science Degree****Technical GIS for Natural Resources Option****Recommended Program Sequence****Semester One**

NRT 101	Introduction to Soils	4
NRT 102	Natural Resource Conservation	4
NRT 111	ARC View & Technical GIS for Natural Resources	4
DRT 103	Introduction to AutoCAD	3
MAT 151	Technical Mathematics I	<u>4</u>

**Semester Two**

NRT 202	Introduction to Surveying	3
NRT 240	ArInfo & Natural Resources	3
CIS 145	PC Database Concepts: Access	3
GEY 111	Physical Geology	4
GEO 206	Introduction to Cartography	<u>4</u>

**Semester Three**

NRT 239	GIS Internship	<u>5</u>
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**Semester Four**

NRT 249	Technical GPS & Remote Sensing	3
BIO 133	Ecology	4
BUS 217	Business Communication & Report Writing	3
CIS 166	Visual Basic Programming	3
	or	
CIS 167	Language Programming C++	(3)
GEO 105	World Regional Geography	3
MAT 135	Introduction to Statistics	<u>3</u>

**Semester Five**

NRT 212	Ecosystem Management	2
NRT 214	Environmental Issues and Ethics	3
BIO 134	Plant Taxonomy	4
CSC 116	Problem Solving with Visual Basic for Applications	<u>3</u>

**Total Credit Hours****72**

# Networking Technology

Recommended basic skills standards are

- ENG 100
- MAT 066
- REA 090
- STS 060

The associate of applied science degree is designed to provide students with practical and relevant skills in the field of computer networking. Students will demonstrate basic skills in computer software, computer hardware, network operating systems, and networking device configuration. Students entering this program should have a good foundation in math, reading, and computer basics such as Win 95/98 together with Internet browser familiarity. Students may be advised to take additional courses to prepare them for the degree program.

Students must also have the ability to type 20 wpm or complete CIS 100. Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

## Associate of Applied Science Degree

CIS 110	Introduction to PC Operating Systems: DOS	2
CIS 112	Introduction to Windows: 98	1
CIS 120	Word Processing I - MS Word	3
CIS 130	Introduction to the Internet	2
CIS 131	Introduction to Web Authoring: HTML	1
CIS 140	Introduction to PC Database: Access	1
CIS 141	Intermediate PC Database: Access	1
CIS 142	Advanced PC Database: Access	1
CIS 150	Introduction to PC Spreadsheets: Excel	1
CIS 151	Intermediate PC Spreadsheets: Excel	1
CIS 152	Advanced PC Spreadsheets: Excel	1
CIS 166	Visual Basic Programming	3
CIS 167	C Language Programming: C++	3
*NET 115	Introduction to Computer Networking and	3
*NET 120	Local Area Networks or	3
*CIS 206	Cisco Networking Level I	(5) 27-29

\*Students must take both NET 115 and NET 120 or they may take only CIS 206.

## General education courses

BUS 217	Business Communication and Report Writing	3
CIS 115	Introduction to Computer Information Systems	3
CST 115	Introduction to Customer Service	3
ENG 131	Technical Writing I	3
MAN 105	Contemporary Business Ethics	3
SPE 115	Principles of Speech Communication	3
		<u>18</u>

## Software Track

NET 150	MCP Test Preparation or	3
NET 151	CNA Test Preparation	(3)
NET 155	Wide Area Networks	3
NET 201	Networking Architectures and TCP/IP	3
NET 230	Network Design and Installation	3
		<u>12</u>

## Hardware Track

CIS 207	Cisco Networking Level II	5
CIS 208	Cisco Networking Level III	5
CIS 209	Cisco Networking Level IV	5
		<u>15</u>

## Electives

Choose 4 hours from the following courses

BUS 171	Coop. Work Experience I/Internship I	3
CIS 133	Advanced Web Authoring: FrontPage	1
CIS 136	Presentation Graphics: PowerPoint	3
CIS 168	Java Programming	3
CIS 266	Advanced Visual Basic Programming	3
CIS 267	Advanced C Language Programming: C++	3
MAN 104	Personal Time Management	1
MAN 105	Contemporary Business Ethics	1
MAN 106	Action Planning	1
MAN 107	Team Building	1
MAN 108	Personal Leadership Development	1
		<u>4</u>

**Degree with Software track 60-62**

**Degree with Hardware track 63-65**

## Certificate

CIS 115	Introduction to Computer Information Systems	3
CIS 120	Word Processing I - MS Word	3
CIS 130	Introduction to the Internet	2
CIS 131	Introduction to Web Authoring: HTML	1
CIS 140	Introduction to PC Database: Access	1
CIS 141	Intermediate PC Database: Access	1
CIS 142	Advanced PC Database: Access	1
CIS 150	Introduction to PC Spreadsheet: Excel	1
CIS 151	Intermediate PC Spreadsheet: Excel	1
CIS 152	Advanced PC Spreadsheet: Excel	1
*NET 115	Introduction to Computer Networking and	3
*NET 120	Local Area Networks or	3
*CIS 206	Cisco Networking Level I	(5) 20-21

\*Students must take both NET 115 and NET 120 or they may take only CIS 206.

## Software Track

CIS 110	Introduction to PC Operating Systems: DOS	2
CIS 112	Introduction to Windows	1
NET 150	MCP Test Preparation or	3
NET 151	CAN Test Preparation	(3)
NET 155	Wide Area Networks	3
NET 201	Networking Architectures and TCP/IP	3
		<u>12</u>

## Hardware Track

CIS 207	Cisco Networking Level II	5
CIS 208	Cisco Networking Level III	5
CIS 209	Cisco Networking Level IV	5
		<u>15</u>

**Certificate with Software track 32-33**

**Certificate with Hardware track 35-36**



# Nursing

Pikes Peak Community College offers an accredited nursing program. There are a variety of programs offered to meet the educational needs of students interested in a career in nursing. The nursing program offers four certificate programs including nursing assistant, rehabilitation aide, licensed practical nursing, and psychiatric technician. In addition, the nursing program offers an associate of applied science degree. This degree program includes two tracks, the first for students pursuing an associate of applied science degree who do not have prior nursing licensure, and the second for licensed practical nurses pursuing an Associate Degree in Nursing (referred to as the advanced placement program). Both tracks lead to eligibility to take the NCLEX-RN licensing examination.

Admission to the college does not assure admission to the nursing program. Admission to the programs offered through nursing may require separate admission criteria. All students interested in the nursing program who do not have previous college courses must complete the COMPASS exams prior to being advised. Interested students should inquire and seek advising through the Math, Science, and Health Science Office at (719) 538-5400.

Students should be aware that all clinical facilities require current CPR certification; tuberculin skin tests; proof of rubella and rubeola vaccines or titers; proof of hepatitis vaccination or signed waiver; and current tetanus vaccine. Additionally, some clinical facilities require criminal background checks on all students. Students who have any record of acts of violence or failure to adhere to restraining orders may not be able to enroll in specific courses. Students are also required at some clinical facilities to take and pass drug and alcohol screening prior to their clinical experience.

## Certificates

### Nursing Assistant\*\*

The nursing assistant certificate is available through completion of the following courses and their prerequisites.

NUR 101	Certified Nurse Aide	6
NUR 108	Accelerated Nurse Aide*	3
NUR 106	Rehabilitation Aide/Rehabilitative Technician	2

\*NUR 108 is designed for students who are pursuing the LPN Certificate, or the RN or MOT degree.

\*\*Pending State approval.

### Licensed Practical Nursing

Recommended basic skills standards are

- ENG 100
- MAT 066
- REA 090
- STS 060

The licensed practical nursing certificate program is designed to be completed in twelve months. Nursing courses begin every January and may be completed in December. It is required that students be advised to develop a schedule of courses that will meet their individual needs.

Students completing the licensed practical nursing certificate are eligible to take the licensed practical nursing licensure examination. Admission to the college does not assure admission into the Licensed Practical Nursing Program. Applications for this program are available the first working day of October. Admission to this program is determined through a selection process, and criteria for selection is available through the Math, Science, and Health Science Office. Students interested in this program should seek advising for an individualized program schedule.

### General education courses

BIO 141	Applied Anatomy, Physiology and Disease Processes I	4
BIO 142	Applied Anatomy, Physiology and Disease Processes II	4
ENG 121	English Composition	3
PSY 101	General Psychology	3
PSY 235	Human Growth and Development	3
MOT 130	Basic Pharmacology for Medical Careers	<u>2</u>
		19

### Nursing courses

NUR 108	Accelerated Nurse Aide	3
NUR 130	Introduction to Practical Nursing	3
NUR 131	Fundamental Concepts of Practical Nursing	3
NUR 132	Practical Nursing I	5
NUR 133	Practical Nursing II	6
NUR 134	Clinical Synthesis	1
NUR 140	Personal and Vocational Adjustments	1
NUR 164	Nutrition for Health Occupations	1
NUR 173	Family Centered Nursing I	<u>5</u>
		28

**Total Credit Hours** **47**

## Psychiatric Technician

Recommended basic skills standards are

- ENG 100
- MAT 036
- REA 090
- STS 060

The psychiatric technician certificate program is designed to be completed in twelve months. Courses specific to the psychiatric technician certificate program begin every January and may be completed in December. Students will be advised to develop a schedule of courses that will meet their individual needs.

Students completing the psychiatric technician certificate are eligible to take the Colorado Psychiatric Technician Certification Exam. Applications are available the first working day of October. Admission to this program is determined through a selection process, and criteria for selection are available through the Math, Science, and Health Science Office. Students interested in this program should seek advising for an individual program schedule.

### General education courses

BIO 141	Applied Anatomy, Physiology, and Disease Processes I	4
BIO 142	Applied Anatomy, Physiology, and Disease Processes II	4
ENG 121	English Composition	3
PSY 101	General Psychology	3
PSY 235	Human Growth and Development	3
MOT 130	Basic Pharmacology for Medical Careers	<u>2</u>
		19

### Nursing courses

NUR 108	Accelerated Nurse Aide	3
NUR 130	Introduction to Practical Nursing	3
NUR 131	Fundamental Concepts of Practical Nursing	3
NUR 132	Practical Nursing I	5
NUR 151	Dynamics of Psychiatric Nursing I	3
NUR 152	Dynamics of Psychiatric Nursing Lab I	4
NUR 153	Dynamics of Psychiatric Nursing II	3
NUR 154	Dynamics of Psychiatric Nursing Lab II	<u>4</u>
		28

**Total Credit Hours** **47**

## Associate of Applied Science Degree

### Nursing - Track One

Recommended basic skills standards are

- ENG 100
- MAT 066
- REA 115
- STS 060

The registered nursing program is an associate of applied science program. Nursing courses begin every summer semester and may be completed in five semesters. Students will be advised to develop a schedule of courses that will meet their individual needs.

Students completing the Associate of Applied Science Degree in Nursing are eligible to take the Registered Nursing Licensure Examination. Admission to the college does not assure admission into the registered nursing program. Applications for this program are available the first working day of November. Admission to this program is determined through a selection process, and criteria for selection are available through the Math, Science, and Health Science Office. Students interested in this program should seek advising for an individualized program schedule.

#### General education courses

BIO 123	Foundations of Microbiology	3
BIO 201	Human Anatomy and Physiology I	4
BIO 202	Human Anatomy and Physiology II	4
ENG 121	English Composition I	3
PSY 101	General Psychology I	3
PSY 235	Human Development	3
		<u>20</u>

#### Nursing courses

NUR 108	Accelerated Nurse Aide	3
NUR 109	Introduction to Nursing	1
NUR 171	Fundamental Concepts of Nursing Practices	5
NUR 172	Basic Concepts of Medical Nursing	4
NUR 173	Family Centered Nursing I	5
NUR 174	Medical/Surgical Nursing I	13
NUR 221	Medical/Surgical Nursing II	15
NUR 222	Mental Health Nursing I	4
NUR 223	Mental Health Nursing II	4
NUR 224	Family Centered Nursing II	4
		<u>58</u>

**Total Credit Hours 78**

## Associate of Applied Science Degree

### LPN Advanced Placement – Track Two

Pikes Peak Community College offers an advanced placement associate degree program for licensed practical nurses. Upon completion of the program, graduates are eligible to take the Registered Nurse licensure examination. LPNs interested in pursuing this degree are required to meet with a nursing advisor for career planning.

LPNs may pursue an Associate Degree in Nursing by completing the requirements as outlined in the Colorado Nursing Articulation Model. Admission to the advanced placement program is determined through a selection process and criteria for selection are available through the Math, Science, and Health Science Office. Applications are available the first working day of February and are due back the first working day of March each year.

### Nursing credits transferred in from the LPN transcript:

NUR 171	Fundamental Concepts of Nursing Practice	5
NUR 172	Basic Concepts of Medical Nursing	4
NUR 173	Family Centered Nursing I	5
NUR 174	Medical/Surgical Nursing I	13
		<u>27</u>

#### General education courses

BIO 123	Foundations of Microbiology	3
BIO 201	Human Anatomy and Physiology I	4
BIO 202	Human Anatomy and Physiology II	4
ENG 121	English Composition I	3
PSY 101	General Psychology I	3
PSY 235	Human Development	3
		<u>20</u>

#### Nursing courses

NUR 186	LPN Advanced Placement for ADN	2
NUR 187	Medical/Surgical Bridge Course for LPN's	2
NUR 221	Medical/Surgical Nursing II	15
NUR 222	Mental Health Nursing I	4
NUR 223	Mental Health Nursing II	4
NUR 224	Family Centered Nursing II	4
		<u>31</u>

**Total Credit Hours 78**

## Office Administration\*

Recommended basic skills standards are

- ENG 060
- MAT 066
- REA 090
- STS 060

This certificate program is designed to prepare students to become office professionals in entry-level positions that require skills in computer technology, communication skills, customer service, and office applications.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

For the Associate of Applied Science Degree, see Business Administration - Office Administration - located on page 64 of this catalog.

### Certificate

ACC 205	Computerized Accounting	3
BTE 101	Keyboard Skill Building	1
BTE 102	Keyboarding Applications	2
BTE 108	Ten Key by Touch	1
BTE 110	Business Language Skills	3
BTE 116	Files Management	1
CIS 120	Word Processing I - WordPerfect (WIN)	3
	or	
CIS 120	Word Processing I - Microsoft Word	(3)
CIS 122	Word Processing II - WordPerfect (WIN)	3
	or	
CIS 122	Word Processing II - Microsoft Word	(3)
CIS 130	Introduction to the Internet	2
CIS 137	Desktop Publishing	3
CST 115	Introduction to Customer Service	3
		<u>25</u>

### Office Administration Electives

Choose 5 hours from the following courses

ACC 138	Payroll Accounting	2
BUS 171	Coop. Work Experience I/Internship I	3
CIS 133	Advanced Web Authoring: FrontPage	1
CIS 136	Presentation Graphics: PowerPoint	3
CIS 140	Introduction to PC Database: Access	1
CIS 141	Intermediate PC Database: Access	1
CIS 142	Advanced PC Database: Access	1
CIS 150	Introduction to PC Spreadsheet: Excel	1
CIS 151	Intermediate PC Spreadsheets: Excel	1
CIS 152	Advanced PC Spreadsheets: Excel	1
MAN 104	Time Management	1
MAN 105	Contemporary Business Ethics	3
MAN 106	Action Planning	1
MAN 107	Team Building	1
MAN 108	Personal Leadership Development	1
		<u>1</u>
		5

### Total Credit Hours

\*Pending State approval.

30

### Office Training Fast Track

Recommended basic skills standards are

- ENG 060
- MAT 066
- REA 090
- STS 060

This certificate program is designed to prepare students for the modern office environment by using current software application packages. The accelerated schedule is designed for basic skill development and/or updating of office skills. Students must have the ability to type, by touch, 20 WPM or permission of instructor.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

### Fast-Track Program

ACC 110	Business Records	3
BTE 101	Keyboard Skill Building	1
BTE 102	Keyboarding Applications	2
BTE 108	Ten Key by Touch	1
BTE 110	Business Language Skills	3
BTE 116	Files Management	1
CIS 118	Introduction to PC Applications	3
CIS 120	Word Processing I - WordPerfect (WIN)	3
	or	
CIS 120	Word Processing I - Microsoft Word	(3)
CIS 122	Word Processing II - WordPerfect (WIN)	3
	or	
CIS 122	Word Processing II - Microsoft Word	(3)

### Total Credit Hours

20

## Physics

Recommended basic skills standards are

- ENG 060
- MAT 066
- REA 090
- STS 060

Physics is concerned with the nature of energy and matter, space and time. The laws of physics govern everything in the universe from the tiniest bit of matter to the largest star. Physics is a prerequisite to any in-depth study of the sciences and technologies. It leads to careers in engineering, astronomy, astronautics, medical research, geophysics, meteorology, and biophysics. This program provides the necessary background for transfer to a four-year school.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

### Associate of Science Degree

#### Recommended Track

CSC 116	Problem Solving with Visual Basic for Applications (or 160)	3
ENG 121	English Composition I	3
ENG 122	English Composition II	3
SPE 115	Principles of Speech Communication	3
		<u>12</u>

#### Recommended to satisfy area requirements

##### Mathematics and Science

CHE 111	General College Chemistry I	5
CHE 112	General College Chemistry II	5
CSC 160	Computer Science I: C++	4
MAT 201	Calculus I	5
MAT 202	Calculus II	5
MAT 203	Calculus III	4
PHY 211	Physics: Calculus-Based I	5
PHY 212	Physics: Calculus-Based II	5
SPS 201	Principles of Astronautics	3
SPS 205	Space Science Laboratory	1
		<u>42</u>

##### Social and Behavioral Sciences

Electives\* 6

##### Humanities

Electives\* 6  
12

### Total Credit Hours

66

\*Electives must be from the approved elective course list for AA/AS degrees.

## Pikes Peak Regional Law Enforcement Academy

Recommended basic skills standards are

- ENG 100
- MAT 036
- REA 115
- STS 060

The Pikes Peak Regional Law Enforcement Academy provides qualified individuals the opportunity to gain the skills to become a law enforcement officer. The Academy offers a basic recruit curriculum sanctioned by the Peace Officers Standards and Training (P.O.S.T.) During their enrollment, students receive approximately 525 hours of coursework. At the end of the training program, P.O.S.T. administers the final certification exam. Those who successfully complete the exam are granted P.O.S.T. certification for three years. Colorado State Law requires that all individuals be P.O.S.T. certified prior to applying to a law enforcement agency.\* Candidates will be subject to appropriate background checks.

Admission to the Pikes Peak Regional Law Enforcement Academy is accomplished through an application and selection process. Admission to the college does not guarantee admission into the Academy.

Additional requirements for admission to the Pikes Peak Regional Law Enforcement Academy may apply. For further information please call 540-7347.

\*Some agencies may require employees to attend their academy as a condition of employment.

CRJ 110	Introduction to Criminal Justice	3
CRJ 111	Substantive Criminal Law	3
CRJ 115	Law Enforcement Driving	3
CRJ 135	Judicial Functions	3
CRJ 117	Defensive Tactics	3
CRJ 161	Police Pistol Training	2
CRJ 216	Juvenile Law and Procedures	3
CRJ 220	Human Relations & Social Conflicts	3
CRJ 201	Police Patrol Procedures	3
CRJ 203	F.A.T.S. Judgmental Shooting	1
CRJ 246	Traffic Investigations & Management	3
EMS 107	Standard First Aid - Adult CPR	1
*PED 150	Fitness Center I	1
*PED 175	Fitness Concepts and Testing	1
<b>Total Credit Hours</b>		<b>33</b>

\*Day Academy only

## Political Science

Recommended basic skills standards are

- ENG 100
- MAT 036
- REA 090
- STS 060

Political science is the study of government: what it is, what it does, and how and why. Political scientists are interested in government at every level: local, county, state, regional, national, and international. Many of them specialize in one general area of political science such as political theory, U.S. political institutions and processes, comparative political institutions and processes, or international relations and organizations. Some specialize in a particular type of political institution or in the politics of a specific era.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

### Associate of Arts Degree

#### Recommended Track

#### Minimum Requirements

##### I. English/Speech

ENG 121	English Composition I	3
ENG 122	English Composition II	3
SPE 115	Principles of Speech Communication	3
		<u>9</u>

##### II. Computer Communication

CSC 105	Computer Literacy (or CSC 116 or CSC 160)	3
		<u>3</u>

#### Suggested to Fulfill This Track:

##### III. Mathematics and Science

MAT 135	Introduction to Statistics	3
GEY 121	Historical Geology	4
Math or Science Course		3
		<u>10</u>

##### IV. Social and Behavioral Sciences\*

POS 105	Introduction to Political Science	3
POS 111	American Government	3
	or	
POS 125	American State and Local Government	(3)
PSY 101	General Psychology I	3
		<u>9</u>

##### V. Humanities\*

LIT 115	Introduction to Literature	3
PHI 111	Introduction to Philosophy	3
PHI 112	Ethics	3
		<u>9</u>

##### VI. Communication Studies or Fine Arts

Choose 3 credit hours from list on p. 47		3
		<u>3</u>

##### VII. Recommended Electives

Choose 17 hours from the following courses:

GEO 105	World Regional Geography	3
HIS 101	Western Civilization I	3
HIS 102	Western Civilization II	3
JOU 102	Introduction to Editing	3
JOU 106	Fundamentals of Reporting	3
POS 205	International Relations	3
POS 212	Comparative Politics of Developing Nations	3
POS 215	Current Political Issues	3
POS 216	Comparative Government	3
		<u>17</u>

**Total Credit Hours 60**

\*See AA degree for sequence requirements

# Pre-Allied Health

Recommended basic skills standards are

- ENG 060
- MAT 066
- REA 090
- STS 060

The degree options are designed for students applying to programs at four-year schools in Colorado for medical technology and physical therapy. These emphasize physiology, anatomy, chemistry, and physics. Either one or two years may be used for transfer credit to other schools. As specific requirements may vary among different schools, students are encouraged to consult catalogs of the colleges to which they plan to apply. Programs should be planned with academic advisors prior to beginning classes. A recommended transfer track for pre-nursing is also available. While not necessarily resulting in an AS degree, the track does offer the equivalent of the course work of the first two years for transfer to four-year nursing schools in Colorado.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

## Associate of Science Degree

### Recommended Track

#### Medical Technology Option

CSC 116	Problem Solving with Visual Basic for Applications (or 160)	3
ENG 121	English Composition I	3
ENG 122	English Composition II	3
SPE 115	Principles of Speech Communication	3
		12

#### Recommended to satisfy area requirements

##### Mathematics and Science

BIO 111	General College Biology I	5
BIO 205	Microbiology	5
CHE 111	General College Chemistry I	5
CHE 112	General College Chemistry II	5
MAT 121	College Algebra	4
PHY 111	Physics: Algebra-Based I	5
PHY 112	Physics: Algebra-Based II	5
	Math/Science Electives	2
		36

##### Social and Behavior Sciences

Electives\* 6

##### Humanities

Electives\* 6

**Total Credit Hours 60**

\*Electives must be from the approved elective course list for AA/AS degrees.

#### Physical Therapy Option

CSC 116	Problem Solving with Visual Basic for Applications (or 160)	3
ENG 121	English Composition I	3
ENG 122	English Composition II	3
SPE 115	Principles of Speech Communication	3
		12

#### Recommended to satisfy area requirements:

##### Mathematics and Science

BIO 111	General College Biology I	5
BIO 201	Human Anatomy and Physiology I	4
BIO 202	Human Anatomy and Physiology II	4
CHE 111	General College Chemistry I	5
CHE 112	General College Chemistry II	5
PHY 111	Physics: Algebra-Based I	5
PHY 112	Physics: Algebra-Based II	5
	Math/Science Elective	3
		36

##### Social and Behavior Sciences

Electives\* 6

##### Humanities

Electives\* 6

**Total Credit Hours 60**

\*Electives must be from the approved elective course list for AA/AS degrees.

#### Pre-Nursing Option

CSC 116	Problem Solving with Visual Basic for Applications (or 160)	3
ENG 121	English Composition I	3
ENG 122	English Composition II	3
SPE 115	Principles of Speech Communication	3
		12

#### Recommended Courses

##### Mathematics and Science

BIO 151	Introduction to Nutrition I	3
BIO 201	Human Anatomy and Physiology I	4
BIO 202	Human Anatomy and Physiology II	4
BIO 205	Microbiology	5
MAT 121	College Algebra	4
	Math/Science Electives	16
		36

##### Social and Behavior Sciences

Electives\* 6

##### Humanities

Electives\* 6

**Total Credit Hours 60**

## Pre-Engineering

Recommended basic skills standards are

- ENG 060
- MAT 066
- REA 090
- STS 060

The AS degree recommended track offers students the requisite fundamental engineering sciences background and the strong mathematical foundation necessary for pursuing upper-level classes in engineering. Because of the varied differences of freshman and sophomore level courses needed for specific engineering programs, it is strongly recommended that students plan a program of study with pre-engineering advisors prior to or during the first term of study. The recommended transfer track, while not necessarily resulting in an AS degree, does offer the equivalent of the course work of the first two years of college engineering studies in preparation for transfer to an engineering school.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

### Associate of Science Degree

#### Recommended Track

CSC 160	Computer Science I: C++	4
ENG 121	English Composition I	3
ENG 122	English Composition II	3
SPE 115	Principles of Speech Communication	3
		<u>13</u>

#### Recommended to satisfy area requirements

##### Mathematics and Science

CHE 111	General College Chemistry I	5
CHE 112	General College Chemistry II	5
MAT 201	Calculus I	5
MAT 202	Calculus II	5
MAT 203	Calculus III	4
PHY 211	Physics: Calculus-Based I	5
PHY 212	Physics: Calculus-Based II	5
	Math/Science Elective	1
		<u>35</u>

##### Social and Behavioral Sciences

ECO 201	Principles of Macroeconomics	3
ECO 202	Principles of Microeconomics	3
		<u>6</u>

##### Humanities

Electives*	6
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**Total Credit Hours 60**

\*Electives must be from the approved elective course list for AA/AS degrees.

## Pre-Med Professions

Recommended basic skills standards are

- ENG 060
- MAT 066
- REA 090
- STS 060

Health professions are necessary to provide comprehensive health care to all types of people. This program is designed to meet the needs of students who wish to go into professional health care positions in dentistry, medicine, veterinary medicine, pharmacy, and chiropractic.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

### Associate of Science Degree

#### Recommended Track

CSC 116	Problem Solving with Visual Basic for Applications (or 160)	3
ENG 121	English Composition I	3
ENG 122	English Composition II	3
SPE 115	Principles of Speech Communication	3
		<u>12</u>

#### Recommended to satisfy area requirements

##### Mathematics and Science

BIO 111	General College Biology I	5
BIO 112	General College Biology II	5
CHE 111	General College Chemistry I	5
CHE 112	General College Chemistry II	5
MAT 201	Calculus I	5
PHY 111	Physics: Algebra-Based I	5
PHY 112	Physics: Algebra-Based II	5
	Math/Science Elective	1
		<u>36</u>

##### Social and Behavioral Sciences

PSY 101	General Psychology I	3
SOC 101	Introduction to Sociology I	3
		<u>6</u>

##### Humanities

Electives*	6
(Languages or Literature are Recommended)	

**Total Credit Hours 60**

\*Electives must be from the approved elective course list for the AA/AS degrees.

## Psychology

Recommended basic skills standards are

- ENG 100
- MAT 036
- REA 090
- STS 060

Psychologists study the behavior of individuals and groups and often help individuals achieve satisfactory personal adjustments. Their work includes varied activities such as teaching in colleges and universities, counseling and psychotherapy, psychological testing, planning and conducting training programs for workers, performing basic and applied research, advising on psychological methods and theories, and administering psychology programs in hospitals, clinics, research laboratories, etc. Students pursuing a bachelor's degree in psychology can fulfill lower division requirements at Pikes Peak Community College. Students should note that graduate degrees are required for most professional positions in psychology.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

### Associate of Arts Degree

#### Recommended Track

##### Minimum Requirements

##### I. English/Speech

ENG 121	English Composition I	3
ENG 122	English Composition II	3
SPE 115	Principles of Speech Communication	3
		<u>9</u>

##### II. Computer Communication

CSC 105	Computer Literacy (or CSC 116 or CSC 160)	3
		<u>3</u>

##### Suggested to Fulfill This Track:

##### III. Mathematics and Science

MAT 135	Introduction to Statistics	3
BIO 111	General College Biology I	5
BIO 112	General College Biology II	5
		<u>13</u>

##### IV. Social and Behavioral Sciences\*

PSY 101	General Psychology I	3
PSY 102	General Psychology II	3
HIS 101	Western Civilization I	3
	or	
HIS 102	Western Civilization II	(3)
		<u>9</u>

##### V. Humanities\*

HUM 121	Survey of Humanities I	3
HUM 122	Survey of Humanities II	3
	or	
HUM 123	Survey of Humanities III	(3)
PHI 111	Introduction to Philosophy	3
		<u>9</u>

##### VI. Communication Studies or Fine Arts

Choose 3 credit hours from list on p. 47		3
		<u>3</u>

##### VII. Recommended Electives

Choose 14 hours from the following courses

PSY 115	Psychology of Adjustment	3
PSY 205	Psychology of Women	3
PSY 215	The Criminal Mind	3
PSY 217	Human Sexuality	3
PSY 226	Social Psychology	3
PSY 227	Death and Dying	3

PSY 235	Human Development	3
PSY 243	Behavior Modification	3
PSY 246	Psychology of Women and Men	3
PSY 247	Child Abuse and Neglect	3
PSY 255	Psychology of the Exceptional Child	3
PSY 260	Psychology of Aging	3
PSY 265	Psychology of Personality	3
		<u>3</u>
		14

#### Total Credit Hours

60

\*See AA degree for sequence requirements

## Radio, Television, Telecommunications

Recommended basic skills standards are

- ENG 060
- MAT 036
- REA 090
- STS 060

The Telecommunications Production degree program prepares students to enter the television and radio broadcast industry. Students will learn to write, produce and package programs for the broadcast and video production community. To enhance the learning process, students will also complete internships at local broadcast and/or video production facilities. Upon successful completion of the degree program, students may gain employment as announcers, producers, directors, writers, board operators, as well as other non-broadcast occupations, in audio and video production.

Students who elect to complete a certificate program learn specialized broadcast skills in a shorter period of time. Coursework completed in the certificate program may be applied to one of the options in the Associates of Applied Science Degree program.

Students may complete deficiencies concurrently with the beginning courses in the program. Students must arrange with advisors to remedy deficiencies in program requirements.

### Associate of Applied Science Degree

#### Telecommunications Production

##### Recommended Program Sequence

##### Semester One - Fall

TCM 101	Radio Programming & Production I	3
TCM 106	Radio Programming & Production Lab I	3
TCM 132	Introduction to Telecommunications	2
TCM 123	Writing for Television and Radio	3
	or	
TCM 216	Corporate Scriptwriting	(3)
CIS 100	Computer Keyboarding	1
CIS 115	Introduction to Computers	3
	or	
CIS 118	Introduction to PC Applications	(3)
ENG 121	English Composition I	3
		<u>3</u>
		18

##### Semester Two - Spring

TCM 201	Television Production	3
TCM 206	TV Studio Production	3
TCM 213	News Writing and Reporting	3
TCM 214	Principles of Audio	3
SPE 115	Principles of Speech Communication	3
		<u>3</u>
		15

**Semester Three - Fall**

TCM 102	Radio Programming & Production II or	3
TCM 202	Advanced Television Production	(3)
TCM 107	Radio Programming & Production Lab II or	3
TCM 207	Advanced TV Studio Production	(3)
TCM 221	Basic Video Production	4
TCM 271	Internship – Television Station/Video Production Company or	4
TCM 272	Internship – Radio Station/Audio Production Company or	(4)
TCM 273	Internship – KEPC Radio	(4)
BUS 115	Introduction to Business	<u>3</u>

**Semester Four - Spring**

TCM 278	Internship in Telecommunications	4
SOC 101	Introduction to Sociology I or	3
ANT 101	Cultural Anthropology TCM Electives	(3)

**Total Credit Hours****63**

TCM Electives: Students must choose elective credits from the list below. Students may meet with an advisor to discuss alternatives.

TCM 102	Radio Programming and Production II	3
TCM 107	Radio Programming and Production Lab II	3
TCM 131	Radio Broadcast Technical Operations	2
TCM 202	Advanced Television Production	3
TCM 207	Advanced TV Studio Production	3
TCM 222	Advanced Videotape Editing	4
TCM 270	Internship in News - KEPC Radio	4
TCM 271	Internship – Television Station/Video Production Company	4
TCM 272	Internship – Radio Station/Audio Production Company	4
TCM 273	Internship – KEPC Radio	4
TCM 275	Internship - KEPC II	3
TCM 276	Internship – Radio Station/Audio Production Company II	3
TCM 277	Internship – Television Station/Video Production Company II	3

**Certificates****Television Option**

TCM 123	Writing for TV & Radio or	3
TCM 216	Corporate Scriptwriting	(3)
TCM 201	TV Production	3
TCM 202	Advanced TV Production	3
TCM 206	TV Studio Production	3
TCM 207	Advanced Studio Production	3
TCM 221	Basic Video Production	4
TCM 222	Advanced Videotape Editing	4
TCM 271	Internship – Television Station/Video Production Company	4
TCM 274	Internship – College/Interactive TV Studio	3
CIS 100	Computer Keyboarding	<u>1</u>

**Total Credit Hours****31****Radio Option**

TCM 101	Radio Programming & Production I	3
TCM 102	Radio Programming & Production II	3
TCM 106	Radio Programming & Production Lab I	3
TCM 107	Radio Programming & Production Lab II	3
TCM 123	Writing for TV & Radio or	3
TCM 216	Corporate Scriptwriting	(3)
TCM 131	Radio Broadcast Technical Operations	2
TCM 213	News Writing and Reporting	3
TCM 214	Principles of Audio	3
TCM 272	Internship – Radio Station/Audio Production Company	4
TCM 273	Internship – KEPC Radio	<u>4</u>

**Total Credit Hours****31****Beginning Radio Production\***

TCM 101	Radio Programming & Production I	3
TCM 106	Radio Programming & Production Lab I	3

**Total Credit Hours****6****Advanced Radio Production\***

TCM 101	Radio Programming & Production I	3
TCM 102	Radio Programming & Production II	3
TCM 106	Radio Programming & Production Lab I	3
TCM 107	Radio Programming & Production Lab II	<u>3</u>

**Total Credit Hours****12****Basic Radio Operations\***

TCM 101	Radio Programming & Production I	3
TCM 106	Radio Programming & Production Lab I	3
TCM 131	Radio Broadcast Technical Operations	2
TCM 273	Internship – KEPC Radio	<u>4</u>

**Total Credit Hours****12****Advanced Radio Operations\***

TCM 101	Radio Programming & Production I	3
TCM 102	Radio Programming & Production II	3
TCM 106	Radio Programming & Production Lab I	3
TCM 107	Radio Programming & Production Lab II	3
TCM 131	Radio Broadcast Technical Operations	2
TCM 272	Internship – Radio Station/Audio Production Company	4
TCM 273	Internship – KEPC Radio	<u>4</u>

**Total Credit Hours****22****Beginning TV Production\***

TCM 201	Television Production	3
TCM 206	TV Studio Production	3
TCM 221	Basic Video Production	<u>4</u>

**Total Credit Hours****10****Advanced TV Production\***

TCM 201	Television Production	3
TCM 202	Advanced Television Production	3
TCM 206	TV Studio Production	3
TCM 207	Advanced TV Studio Production	3
TCM 222	Advanced Video Tape Editing	<u>4</u>

**Total Credit Hours****16****Beginning TV Production and Editing\***

TCM 221	Basic Video Production	4
TCM 222	Advanced Video Tape Editing	<u>4</u>

**Total Credit Hours****8**



## Advanced TV Production and Video Editing\*

TCM 201	Television Production	3
TCM 202	Advanced TV Production	3
TCM 206	TV Studio Production	3
TCM 207	Advanced TV Studio Production	3
TCM 221	Basic Video Production	4
TCM 222	Advanced Video Tape Editing	4

**Total Credit Hours** **20**

## Basic Copywriting\*

TCM 123	Writing for TV and Radio	3
TCM 216	Corporate Script Writing	3

**Total Credit Hours** **6**

## Sales and Copywriting\*

TCM 123	Writing for TV and Radio	3
TCM 213	News Writing and Reporting	3

**Total Credit Hours** **6**

\*Pending State approval.

## Real Estate

Recommended basic skills standards are

- ENG 060
- MAT 066
- REA 090
- STS 060

The Real Estate Certificate Program prepares students to take the State License Exam to become a Real Estate associate broker. Upon successful completion of the state exam, students can secure employment as residential or commercial Real Estate agents.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

For the Associate of Applied Science Degree, see Business Administration – Real Estate – located on page 64 of this catalog.

## Certificate

RES 141	Real Estate Practice and Law	3
RES 142	Colorado Real Estate Contracts & Regs.	3
RES 143	Current Legal Issues & Practical Apps.	3
RES 144	Record Keeping Trust Accts. & Closings	3

**12**

### \*Real Estate Electives

Choose 17 hours from the following courses:

BUS 226	Business Statistics	3
CIS 110	Introduction to PC Operating Systems: DOS	3
HIS 241	History of Pikes Peak Area	3
MAN 226	Principles of Management	3
MAN 227	Small Business Management	3
MAR 102	Principles of Advertising	3
MAR 121	Sales/Advertising/Real Estate Techniques	1
MAR 216	Principles of Marketing	3
MAT 156	Problem Solving in College Mathematics	4

**17**

**Total Credit Hours** **29**

\*Program advisors may approve additional elective choices.

## Risk and Safety Management (See Environmental Health and Safety)

## Social Services Technician

Recommended basic skills standards are

- ENG 060
- MAT 036
- REA 090
- STS 060

This program prepares students to enter the social services career field at the paraprofessional level. The training includes individual casework skills, group skills, case management skills, and family group work skills. Students receive supervised work experience in various social agencies within the community, which often serves as an avenue of obtaining employment. Elective courses are offered to help students learn more advanced helping skills.

Social Services Technician faculty recommend that in order to maximize the chances of success, students possess foundational skills in the following areas

- Effective study skills
- Basic math skills
- Reading and comprehension skills
- Working knowledge and application of English skills
- Time management and problem solving skills

Students desiring individualized program planning suggestions are encouraged to consult program faculty. Please call (719) 540-7450 to schedule an appointment.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

## Associate of Applied Science Degree

SSE 100	Introduction to Human Services	3
SSE 115	Social Welfare and Community Agencies	3
SSE 122	Intervention Techniques	3
SSE 133	Application of Group Counseling	3
SSE 192	Community Field Experience I	6
SSE 193	Community Field Experience II	6
SSE 211	Human Behavior in the Social Environment	3
SSE 212	Client Development	3
SSE 213	Differential Approaches in Social Services	3
SSE 271	Community Field Experience III	6
ECP 212	Family Health	2

**41**

### General education courses

ENG 121	English Composition I and English Composition II	3
ENG 122	English Composition II or Introduction to Organizational Communication and either	3
SPE 225	Introduction to Organizational Communication and either	(3)
BUS 217	Business Communication & Report Writing or Technical Writing	(3)
ENG 131	Technical Writing	(3)
PSY 115	Psychology of Adjustment	3
SOC 101	Introduction to Sociology I	3
SOC 102	Introduction to Sociology II	3
	Electives	6

**6**

**Total Credit Hours** **62**

\*Electives must meet general education requirements in humanities. See list of approved general education courses.

## Certificate

SSE 100	Introduction to Human Services	3
SSE 115	Social Welfare and Community Agencies	3
SSE 122	Intervention Techniques	3
SSE 192	Community Field Experience I	6
SSE 212	Client Development	3
SSE 213	Differential Approaches in Social Services	3
SOC 101	Introduction to Sociology I	3
	Elective*	3

**Total Credit Hours** **27**

\*Students must consult with advisors for selection of elective courses.

## Foster Parent\*\*

SSE 101	The Foundation for Meeting the Developmental Needs of Children at Risk	.5
SSE 102	Using Discipline to Protect, Nurture and Meet Developmental Needs	.5

**Total Credit Hours** **1**

\*\*Pending State Approval

## Social Work

Recommended basic skills standards are

- ENG 100
- MAT 036
- REA 090
- STS 060

This program provides the first two years for transfer students who wish to pursue a career in social work or the human services field. Because of different requirements at four-year institutions, it is important that students work with advisors.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

NOTE: The University of Southern Colorado has specific program requirements for transfer; consult your program advisor for specifics.

## Associate of Arts Degree

### Recommended Track

#### Minimum Requirements

##### I. English/Speech

ENG 121	English Composition I	3
ENG 122	English Composition II	3
SPE 115	Principles of Speech Communication	3

##### II. Computer Communication

CSC 105	Computer Literacy	3
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#### Suggested to Fulfill This Track

##### III. Mathematics and Science

MAT 135	Introduction to Statistics	3
	CORE Science	4
	Math/Science Elective	2

##### IV. Social and Behavioral Sciences\*

	CORE Sequence SOC or PSY	6
	CORE POS or ECO or HIS	3

##### V. Humanities\*

	Choose 9 credit hours from CORE courses listed on p. 46	9
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## VI. Communication Studies or Fine Arts

SPE 125	Interpersonal Communication	3
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## VII. Recommended Electives

Choose 18 hours from the following courses:

**SSE 100	Introduction to Human Services	3
**SSE 115	Social Welfare and Community Agencies	3
**SSE 122	Intervention Techniques	3
**SSE 211	Human Behavior and Social Environment	3
**SSE 212	Client Development	3
ANT 101	Cultural Anthropology	3
POS 111	American Government	3
PSY 101	General Psychology I	3
PSY 102	General Psychology II	3
PSY 115	Psychology of Adjustment	3
PSY 205	Psychology of Women	3
PSY 246	Psychology of Women and Men	3
SOC 101	Introduction to Sociology I	3
SOC 102	Introduction to Sociology II	3
SOC 205	Marriage and Family	3
SOC 231	Deviant Behavior	3
SOC 232	Juvenile Delinquency	3
SOC 250	Chicanos in a Changing Society	3

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

\*See AA degree for sequence requirements

\*\*SSE courses must be taken for the University of Southern Colorado Social Work program. SSE courses require paperwork from your advisor to be used in an AA degree. SSE courses transfer to the University of Southern Colorado Social Work program.

## Sociology

Recommended basic skills standards are

- ENG 100
- MAT 036
- REA 090
- STS 060

Sociology is a systematic study of society which includes people in groups, cultures and subcultures, the socialization process, social organization, social institutions (political, religious, educational, economic, etc.), social stratifications, social change, race and ethnic relations, human ecology, and social problems. As an intellectual discipline, it deals with developing scientific and reliable knowledge about human social relationships in group life. Courses are designed to increase personal awareness of the social environment, to prepare for interpersonal relationships in careers, and to equip students for further studies in sociology.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

## Associate of Arts Degree

### Recommended Track

#### Minimum Requirements

##### I. English/Speech

ENG 121	English Composition I	3
ENG 122	English Composition II	3
SPE 115	Principles of Speech Communication	3

##### II. Computer Communication

CSC 105	Computer Literacy (or CSC 116 or CSC 160)	3
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#### Suggested to Fulfill This Track

**III. Mathematics and Science**

MAT 135	Introduction to Statistics	3
CORE Science (□)		4
Math/Science (□)		<u>3</u>
10		10

**IV. Social and Behavioral Sciences\***

SOC 101	Introduction to Sociology I	3
SOC 102	Introduction to Sociology II	3
HIS 202	U.S. History II	<u>3</u>
		9

**V. Humanities\***

HUM 121	Survey of Humanities I	3
HUM 122	Survey of Humanities II	3
	or	
HUM 123	Survey of Humanities II	(3)
PHI 111	Introduction to Philosophy	<u>3</u>
		9

**VI. Communication Studies or Fine Arts**

Choose 3 credit hours from list on p. 47		<u>3</u>
		3

**VII. Recommended Electives**

Choose 17 hours from the following courses:		
ANT 101	Cultural Anthropology	3
ANT 111	Physical Anthropology	3
HIS 101	Western Civilization I	3
HIS 102	Western Civilization II	3
HIS 201	U.S. History I	3
POS 105	Introduction to Political Science	3
PSY 101	General Psychology I	3
SOC 205	Marriage and Family	3
SOC 215	Contemporary Social Problems	3
SOC 218	Sociology of Minorities	3
SOC 231	Deviant Behavior	3
SOC 232	Juvenile Delinquency	3
SOC 236	Age and Aging	<u>3</u>
		17

**Total Credit Hours**

\*See AA degree for sequence requirements

**Southwest Studies**

Recommended basic skills standards are

- ENG 100
- MAT 036
- REA 090
- STS 060

The Southwest Studies program provides an interdisciplinary view of different social, cultural, artistic, and environmental aspects of the regions of the Southwest.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

**Associate of Arts Degree**

**Recommended Track**

**Minimum Requirements**

**I. English/Speech**

ENG 121	English Composition I	3
ENG 122	English Composition II	3
SPE 115	Principles of Speech Communication	<u>3</u>
		9

**II. Computer Communication**

CSC 105	Computer Literacy	<u>3</u>
		3

**Recommended to satisfy area requirements**

**III. Mathematics and Science**

Choose 9 hours from the following courses:		
MAT 135	Introduction to Statistics (or MAT 121)	3
GEY 111	Physical Geology (or BIO 111 or AST 101)	4
GEY 121	Historical Geology (or BIO 112 or AST 102)	4
GEO 111	Physical Geography - Landforms	<u>3</u>
		9

**IV. Social and Behavioral Sciences\***

Choose 9 hours from the following courses:		
ANT 101	Cultural Anthropology	3
ANT 111	Physical Anthropology	3
HIS 101	Western Civilization I	3
HIS 102	Western Civilization II	3
HIS 201	U.S. History I	3
HIS 202	U.S. History II	3
GEO 105	World Regional Geography	<u>3</u>
		9

**V. Humanities\***

Choose 9 hours from the following courses:		
ART 110	Art Appreciation	3
HUM 122	Survey of Humanities II	(3)
HUM 123	Survey of Humanities III	(3)
SPA 111, 112	Spanish I, II	5/10
SPA 211, 212	Spanish III, IV	<u>3/6</u>
		9

**VI. Communication Studies or Fine Arts**

ART 121,122	Drawing I, II	3
ART 161,162, 261,262	Ceramics I, II, III, IV	3
DAN 121,122, 123	Jazz I, II, III or Ballet or Modern	1-3
THE 204	Voice and Articulation I	<u>2</u>
		3

**VII. Recommended Electives**

Choose 18 hours from the following courses:		
ANT 107	Introduction to Archeology	3
ANT 251	The Study of Folklore	3
ART 141	Jewelry and Metalwork I	3
ART 251	Navajo Weaving Techniques I	3
DAN 141	Regional Dances: Latino Folk	1
GEO 125	Geography of Colorado	3
HIS 116	Native American Experience	3
HIS 136	The Southwest United States	3
HIS 225	Colorado History	3
HUM 236	North American Indian Arts	3
HUM 237	Hispanic Arts of Southwest	3
HUM 238	Sacred Images, Sacred Spaces	3
PHI 115	Comparative Religions	3
SOC 218	Sociology of Minorities	3
SOC 250	Chicanos in a Changing Society	3
ANT, HUM, SPA 266	Culture Studies	<u>1-3</u>
		18

**Total Credit Hours**

\*See AA degree for sequence requirements.

**60**

## Space Science

Recommended basic skills standards are

- ENG 060
- MAT 066
- REA 090
- STS 060

As human activities expand further into the final frontier, an understanding of the sciences involved in space science will become an important part of education. Besides being a high tech endeavor, space is playing an ever increasing role in the world economy and in politics. Space science draws from all other sciences and those working on space related projects need a broad knowledge of many interrelated disciplines.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

## Associate of Science Degree

### Recommended Track

CSC 160	Computer Science I: C++	4
ENG 121	English Composition I	3
ENG 122	English Composition II	3
SPE 115	Principles of Speech Communication	<u>3</u>
		13

### Recommended to satisfy area requirements:

#### Mathematics and Science

AST 101	Astronomy I	4
AST 102	Astronomy II	4
CHE 111	General College Chemistry I	5
CSC 161	Computer Science II: C++	4
MAT 201	Calculus I	5
PHY 211	Physics: Calculus-Based I	5
PHY 212	Physics: Calculus-Based II	5
SPS 101	Spaceflight	<u>3</u>
		35

#### Social and Behavior Sciences

Electives*	6
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#### Humanities

Electives*	6
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**Total Credit Hours 60**

\*Electives must be from the approved elective course list for AA/AS degrees.

## Speech

Recommended basic skills standards are

- ENG 100
- MAT 036
- REA 090
- STS 060

(The speech program at PPCC is combined with communication. Although no classes carry a communication prefix, several transfer as communication courses.)

The speech program is focused on helping our students develop many different communication skills. Students take classes that guide them in developing effective verbal and nonverbal behaviors for public speaking, group participation, work-related projects and presentations, and interpersonal communication. Employment possibilities include the following areas: business management, government, social work, guidance and counseling, education, law, corporate communication/training, radio and television, speech correction, personnel, entertainment, and religious leadership.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

## Associate of Arts Degree

### Recommended Track

#### Minimum Requirements

##### I. English/Speech

ENG 121	English Composition I	3
ENG 122	English Composition II	3
SPE 115	Principles of Speech Communication	<u>3</u>
		9

##### II. Computer Communication

CSC 105	Computer Literacy (or CSC 116 or CSC 160)	<u>3</u>
		3

#### Suggested to Fulfill This Track

##### III. Mathematics and Science

BIO 105	Science of Biology	4
GEY 146	The Earth Revealed: Introductory Geology	3
MAT 135	Introduction to Statistics	<u>3</u>
		10

##### IV. Social and Behavioral Sciences\*

Choose 9 hours from the following courses:

ANT 111	Physical Anthropology	3
HIS 201	U.S. History I	3
HIS 202	U.S. History II	3
POS 111	American Government	3
PSY 101	General Psychology I	3
PSY 102	General Psychology II	3
SOC 101	Introduction to Sociology I	3
SOC 102	Introduction to Sociology II	<u>3</u>
		9

##### V. Humanities\*

Choose 9 hours from the following courses:

HUM 121	Survey of Humanities I (or HUM 122)	3
HUM 122	Survey of Humanities II (or HUM 123)	3
PHI 111	Introduction to Philosophy	3
PHI 112	Ethics	3
PHI 113	Logic	3
THE 211	Development of Theatre I	3
	or	
	Any CORE Foreign Language Course	<u>5</u>
		9

##### VI. Communication Studies or Fine Arts

Choose 3 hours from the following courses:

SPE 125	Interpersonal Communication	3
SPE 216	Advanced Public Speaking	3
SPE 217	Group Communication	3
SPE 225	Organizational Communication	3
ART 150	Fundamentals of Photography	3
ART 151	Photography I	3
ART 201	Film Studies	<u>3</u>
		3

##### VII. Recommended Electives

Choose 17 credit hours from the following to total 60 hours:

Any courses listed above which were not selected from the degree and/or  
Any JOU prefix courses  
and/or  
Any THE prefix courses

**Total Credit Hours 60**

(or more depending on course choices)

\*See AA degree for sequence requirements

# Supervision

Recommended basic skills standards are

- ENG 060
- MAT 066
- REA 090
- STS 060

The Supervision Certificate Program is designed for those students who are primarily interested in the supervisory or operational level of management in small business or a corporate entity. Skills, attitudes, and knowledge gained are based on effective first-level management needs. BUS 171 – Cooperative Work Experience I/ Internship I is an integral part of the certificate.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

For Associate of Applied Science Degree, see Business Administration – Supervision located on page 64 of this catalog.

## Certificate

MAN 104	Personal Time Management	1
MAN 105	Contemporary Business Ethics	3
MAN 106	Action Planning	1
MAN 107	Team Building	1
MAN 108	Personal Leadership Development	1
MAN 226	Principles of Management	3
MAN 251	Human Resource Management	3
BUS 171	Coop. Work Experience I/Internship I	3
CIS 112	Introduction to Windows: 98	1
CST 115	Introduction to Customer Service	3
		<u>20</u>

## Supervision Electives

Choose 9 hours from the following courses:

BUS 172	Coop. Work Experience II/Internship II	3
BUS 271	Advanced Coop. Work Experience I/Internship I	3
PSY 115	Psychology of Adjustment	3
EHS 131	Introduction to Industrial and Environmental Safety	3
SPE 125	Interpersonal Communications	3
SSE 100	Introduction to Human Services	3
		<u>9</u>

**Total Credit Hours** **29**

## Technical Writing\*

Recommended basic skills standards are

- ENG 060
- MAT 036
- REA 090
- STS 060

The technical writing program prepares students for the two major areas in the workforce that require technical writing skills, entry-level technical writing positions and technical positions that involve a substantial amount of writing as part of the duties of the position. In consultation with an advisor, students may select from a variety of courses that will enable them to tailor a program to their career needs and goals.

This flexible program allows students to develop technical writing skills across a broad spectrum of professional and technical competencies or to focus on writing matters pertaining to a particular field. The certificate in technical writing will develop students' proficiency in technical writing and speaking, tools and techniques commonly used in technical writing, and professional skills that will enhance their performance on the job.

Students desiring individualized program planning advice are encouraged to consult with program faculty. Please call (719) 540-7300 to schedule an appointment.

Student may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have faculty permission to enroll.

## Certificate

### Technical Writing

ENG 131	Technical Writing I	3
ENG 132	Technical Writing II	3
		<u>6</u>

Choose 9 hours from the following courses

ENG 115	Designing Online Documentation	3
ENG 116	Designing Print Documentation	3
ENG 117	Grammar, Usage, and Style for the Professional Writer	3
ENG 205	Technical Editing	3
		<u>9</u>

### Communication Tools and Techniques

Choose 9 hours from the following courses

CIS 130	Introduction to the Internet	2
CIS 131	Introduction to Web Authoring: HTML	1
CIS 133	Advanced Web Authoring: FrontPage	1
CIS 136	Presentation Graphics: PowerPoint	3
CIS 137	Desktop Publishing	3
CIS 168	Java Programming	3
CSC 105	Computer Literacy	3
JOU 109	Introduction to Desktop Publishing	4
JOU 215	Publications Production and Design	3
LEG 204	Legal Writing	2
MOT 181	Medical Terminology	2
MOT 185	Advanced Medical Terminology	2
TCM 123	Writing for Television and Radio	3
VIC 101	Introduction to Electronic Publishing	4
VIC 103	Introduction to Visual Communication	2
		<u>9</u>

### Professional Skills

Choose 6 credit hours from the following.

MAN 104	Personal Time Management	1
MAN 105	Contemporary Business Ethics	3
MAN 106	Action Planning	1
MAN 107	Team Building	1
MAN 108	Personal Leadership Development	1
MAN 109	Team Skills in the Business Environment	2
MAN 126	Management Decision Making	1
SPE 115	Principles of Speech Communication	3
SPE 125	Interpersonal Communication	3
SPE 215	Professional and Business Speaking	3
SPE 216	Advanced Public Speaking	3
SPE 217	Group Communication	3
SPE 225	Organizational Communication	3
		<u>6</u>

**Total Credit Hours** **30**

\*Pending State Approval

## Theatre

Recommended basic skills standards are

- ENG 100
- MAT 036
- REA 090
- STS 060

Along with music and dance, drama is one of the oldest forms of human expression. As Aristotle stated: "Imitation is natural to man;" so mankind, by means of creating staged productions, has expressed this desire to mirror the actions of others. Theatre courses introduce students to the theatre as an art form and provide basic training in acting and production activities.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

### Associate of Arts Degree

#### Recommended Track

#### Minimum Requirements

##### I. English/Speech

ENG 121	English Composition I	3
ENG 122	English Composition II	3
SPE 115	Principles of Speech Communication	<u>3</u>
		9

##### II. Computer Communication

CSC 105	Computer Literacy (or CSC 116 or CSC 160)	<u>3</u>
		3

#### Suggested to Fulfill This Track

##### III. Mathematics and Science

MAT 135	Introduction to Statistics (or MAT 121)	3
AST 101	Astronomy I (or BIO 111)	4
AST 102	Astronomy II (or BIO 112)	<u>4</u>
		11

##### IV. Social and Behavioral Sciences\*

Choose 9 hours from the following courses:

ANT 101	Cultural Anthropology	3
HIS 101	Western Civilization I	3
	or	
HIS 102	Western Civilization II	(3)
HIS 201	U.S. History I	3
	or	
HIS 202	U.S. History II	(3)
PSY 101	General Psychology I	3
	or	
PSY 102	General Psychology II	<u>(3)</u>
		9

##### V. Humanities\*

MUS 120	Music Appreciation	3
THE 211	Development of Theatre I	3
THE 212	Development of Theatre II	<u>3</u>
		9

##### VI. Communication Studies or Fine Arts

ART 121	Drawing I	<u>3</u>
		3

##### VII. Recommended Electives

Choose 16 hours from the following courses:

DAN 111-113	Modern Dance I-III	1 ea.
DAN 121-123	Jazz Dance I-III	1 ea.
DAN 131-133	Ballet I-III	1 ea.
HUM 121-123	Survey of Humanities I-III	3 ea.
LIT 121	Survey of Mythology	3
THE 111,112,241,242	Acting I-IV	3 ea.
MUS 121-122	Music History I-II	3 ea.

THE 121	Set Design: Film and Theatre	3
THE 131,132,231,232	Theatre Production I-IV	2 ea.
THE 135	Theatre Makeup	1-2
THE 116	Technical Theatre	3
THE 211	Theatre Lighting	<u>3</u>
		16

#### Total Credit Hours

60

\*See AA degree for sequence requirements.

## Upholstery

NOTE: This program is offered at Little Rock AFB only.

Recommended basic skills standards are

- ENG 030
- MAT 036
- REA 090
- STS 060

The three options in this program allow students to receive instruction in auto upholstery techniques, household upholstery techniques, or a combination of these two. Students completing the auto option may find employment in upholstering auto seats and trim as well as truck, boat, or camper seats and trim. Students completing the household option may find employment in upholstering household furniture.

Students may complete deficiencies concurrently with the beginning courses in the program. Students must arrange with advisors to remedy deficiencies in program requirements. Students are required to have their own small hand tools and are expected to furnish their own projects and all materials for these projects.

### Certificate

#### Auto Option

UPH 100	Basic Upholstery Techniques	3
UPH 101	Auto Upholstery I	3
UPH 102	Auto Upholstery II	3
UPH 103	Auto Upholstery III	<u>3</u>

#### Total Credit Hours

12

#### Household Option

UPH 100	Basic Upholstery Techniques	3
UPH 104	Furniture Upholstery I	3
UPH 105	Furniture Upholstery II	3
UPH 106	Furniture Upholstery III	3
UPH 107	Advanced Upholstery Techniques I	3
UPH 108	Advanced Upholstery Techniques II	<u>3</u>

#### Total Credit Hours

18

#### Combination Auto and Household Option

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 104	Furniture Upholstery I	3
UPH 105	Furniture Upholstery II	3
UPH 106	Furniture Upholstery III	3
UPH 107	Advanced Upholstery Techniques I	3
UPH 108	Advanced Upholstery Techniques II	<u>3</u>

#### Total Credit Hours

27

# Visual Communications

Recommended basic skills standards are

- ENG 060
- MAT 036
- REA 090
- STS 060

This program prepares the students for entry-level work in some of the following creative and exciting career areas: graphic design, special effects, photo enhancement, digital illustration, web design, animation, and production layout. The program provides substantial emphasis in one of four communication options: Electronic Image, Design, Illustration, and Multimedia. Skill development is refined in each of these specialties. Students receive a blend of knowledge in color, design, computer software, typography, and drawing.

Maximizing student success in the Visual Communications program is the department goal. The program faculty recommend the following desirable skill and knowledge foundations be developed to enhance student success:

- Developed college-level study skills
- Working knowledge of algebraic principles and basic measurement
- College-level reading, writing, comprehension and study skills
- Working knowledge and application of college-level English
- Demonstrated time management skills
- Keyboarding, mouse and computer experience (will be taught in VIC 101)

Students desiring individualized program planning suggestions are encouraged to call for program advising. Students may complete deficiencies concurrently with the beginning courses in the program. Students must arrange with advisors to remedy deficiencies in program requirements. Please call (719) 540-7367 for design option or (719) 540-7387 for multimedia option.

Detailed descriptions of each program course can be accessed under the VIC prefix listing, at the back of this catalog.

## Associate of Applied Science Degree

### Courses required for all options

VIC 101	Introduction to Electronic Publishing	4
VIC 102	Typography History and Design	2
VIC 103	Introduction to Visual Communication	2
VIC 201	Design to Publish	2
VIC 202	School to Work	2
		<u>12</u>

### General education courses

ECO 106	Consumer Economics	3
MAT 156	Problem Solving College Math	4
SPE 225	Organizational Communication	3
JOU 121	Introduction to Print Media Photography	3
	or	
ART 150	Fundamentals of Photography	(3)
		<u>15</u>

## Options

### Design Option

<b>First Year</b>		
VIC 101	Introduction to Electronic Publishing	4
VIC 102	Typography History and Design	2
VIC 103	Introduction to Visual Communications	2
VIC 108	Design Tools and Techniques	4
VIC 110	Layout and Typography	4
VIC 130	Design and Color	4
	General education courses (see list)	8
	Approved VIC Design electives (see list, next page)	<u>8</u>
		36

### Second Year

VIC 107	Electronic Image	4
VIC 201	Design to Publish	2
VIC 202	School to Work	2
VIC 203	Design Protocol and Ethics	2
VIC 208	Design and Color II	4
VIC 210	Advertising and Corporate Design	4
VIC 218	Point of Purchase and Package Design	4
VIC 245	Visual Communication Exit Portfolio & Career Development	1
	General education courses (see list)	7
	Approved VIC Design electives (see list, next page)	<u>9</u>
		39

**Total Credit Hours 75**

### Electronic Image Option

<b>First Year</b>		
VIC 101	Introduction to Electronic Publishing	4
VIC 102	Typography History and Design	2
VIC 103	Introduction to Visual Communications	2
VIC 108	Design Tools and Techniques	4
VIC 110	Layout and Typography	4
VIC 130	Design and Color	4
	General education courses (see list)	8
	Approved VIC Design electives (see list, next page)	<u>8</u>
		36

### Second Year

VIC 107	Electronic Image	4
VIC 125	Traditional and Electronic Art Production	4
VIC 201	Design to Publish	2
VIC 202	School to Work	2
VIC 203	Design Protocol and Ethics	2
VIC 205	Electronic Studio I	4
VIC 208	Design and Color II	4
VIC 245	Visual Communication Exit Portfolio & Career Development	1
	General education courses (see list)	7
	Approved VIC Design electives (see list, next page)	<u>9</u>
		39

**Total Credit Hours 75**

### Illustration Option

<b>First Year</b>		
VIC 101	Introduction to Electronic Publishing	4
VIC 102	Typography History and Design	2
VIC 103	Introduction to Visual Communications	2
VIC 108	Design Tools and Techniques	4
VIC 130	Design and Color	4
VIC 131	Drawing Skills I	4
VIC 132	Drawing Skills II	4
	General education courses (see list)	8
	Approved VIC Design electives (see list, next page)	<u>4</u>
		36

**Second Year**

VIC 107	Electronic Image	4
VIC 201	Design to Publish	2
VIC 202	School to Work	2
VIC 203	Design Protocol and Ethics	2
VIC 208	Design and Color II	4
VIC 209	Painting for Illustrators	4
VIC 226	Rendering and Illustration	4
VIC 245	Visual Communication Exit Portfolio & Career Development	1
General education courses (see list)		7
Approved VIC Design electives (see list below)		<u>9</u>
		39

**Total Credit Hours** **75**

**Approved VIC Design Electives**

Any VIC course not required in the selected option may be used as long as the prerequisites are met. Please see advisor for guidance on selection of electives.

VIC 131	Drawing Skills	4
VIC 141	Photoshop I	4
VIC 205	Electronic Studio	4
VIC 210	Advertising and Corporate Design	4

**Multimedia Option**

**Recommended Program Sequence**

**General education courses**

ART 150	Fundamentals of Photography	3
MAT 156	Problem Solving in College Math	4
JOU 102	Introduction to Editing	3
ECO 106	Consumer Economics	3
SPE 225	Organizational Communication	3
	Guided Electives	<u>2</u>
		18

**First Year**

VIC 101	Introduction to Electronic Publishing	4
VIC 102	Typography History and Design	2
VIC 103	Introduction to Visual Communication	2
VIC 109	Multimedia Presentations	3
VIC 130	Design and Color	4
VIC 141	Photoshop I	4
VIC 201	Design to Publish	<u>2</u>
		21

**Second Year**

VIC 202	School to Work	2
VIC 203	Design Protocol and Ethics	2
VIC 204	Digital Video Editing	4
VIC 216	Multimedia Authoring I	4
VIC 217	Multimedia Authoring II	4
VIC 225	Multimedia for the Internet	4
VIC 227	Multimedia: Expanded Applications	4
VIC 245	Visual Communication Exit Portfolio & Career Development	1
VIC 271	Multimedia Production/Work Experience	2
DRT 201	Computer Animation	<u>3</u>
		30

**Total Credit Hours** **69**

**Welding**

Recommended basic skills standards are

- ENG 060
- MAT 036
- REA 090
- STS 060

NOTE: This program is offered on an open-entry basis.

Training in welding is offered to those who wish to learn basic welding skills or to upgrade their knowledge in welding. All welding classes are offered on an open-entry, open-exit self-paced basis. Classes use course outlines, books, videos, and instructor-assisted instruction with practical hands-on training. Various types and thicknesses of material are welded in all positions with different welding processes. Courses in ornamental ironwork are also available. Three certificate options are available in pipe welding, structural welding, and combination pipe, structural, and advanced processes. The degree program provides students with additional competencies in welding which will enhance their upward mobility.

Students are required to purchase a welding helmet, leather gloves, leather shoes, chipping hammer, soapstone, oxy-acetylene goggles, safety glasses, pliers, and earplugs.

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll.

**Associate of Applied Science Degree**

**Courses required for all options**

WEL 101	Oxyacetylene Welding and Cutting	4
WEL 102	Introduction to Shielded Metal Arc Welding	4
WEL 103	Blueprint Reading for Welders and Fitters	4
WEL 104	Introduction to Gas Tungsten Arc Welding	4
WEL 105	Introduction to Gas Metal Arc Welding	4
WEL 106	Shielded Metal Arc Pipe Welding	4
WEL 107	Introduction to Ornamental Iron	4
WEL 200	Advanced CAD/CAM Cutting Processes	4
WEL 202	Intermediate Shielded Metal Arc Welding	4
WEL 203	Advanced Layout and Fabrication	4
WEL 204	Advanced Gas Tungsten Arc Welding	4
WEL 205	Advanced Gas Metal Arc Welding	4
WEL 206	Advanced Structural and Pipe Welding	4
MAG 215	CADCAM 2D	<u>3</u>
		55

**General education courses**

MAT 156	Problem Solving in College Mathematics	4
PSY 115	Psychology of Adjustment	3
SPE 225	Introduction to Organizational Communication	3
	Electives*	<u>5</u>
		15

**Total Credit Hours** **70**

\*Electives must meet general education requirements. See list of approved general education courses.



## Certificate

### Courses required for all options

WEL 101	Oxyacetylene Welding and Cutting	4
WEL 102	Introduction to Shielded Metal Arc Welding	4
WEL 103	Blueprint Reading for Welders and Fitters	4
WEL 202	Intermediate Shielded Metal Arc Welding	4
MAT 156	Problem Solving in College Mathematics	<u>4</u>
		20

### Pipe Option

WEL 106	Shielded Metal Arc Pipe Welding	4
WEL 206	Advanced Structural and Pipe Welding	4
	Courses required for all options	<u>20</u>
	<b>Total Credit Hours</b>	<b>28</b>

### Structural Option

WEL 104	Introduction to Gas Tungsten Arc Welding	4
WEL 105	Introduction to Gas Metal Arc Welding	4
	Courses required for all options	<u>20</u>
	<b>Total Credit Hours</b>	<b>28</b>

### Combination Pipe, Structural, and Advanced Processes Option

WEL 104	Introduction to Gas Tungsten Arc Welding	4
WEL 105	Introduction to Gas Metal Arc Welding	4
WEL 106	Shielded Metal Arc Pipe Welding	4
WEL 204	Advanced Gas Tungsten Arc Welding	4
WEL 205	Advanced Gas Metal Arc Welding	4
WEL 206	Advanced Structural and Pipe Welding	4
	Courses required for all options	<u>20</u>
	<b>Total Credit Hours</b>	<b>44</b>

## Certificate

### Basic General Job Entry Skill Level

WEL 101	Oxy-acetylene Welding and Cutting	4
WEL 102	Beginning Shielded Metal Arc Welding	4
WEL 103	Blueprint Reading for Welders	4
WEL 104	Introduction to Gas Tungsten Arc Welding	4
WEL 105	Introduction to Gas Metal Arc Welding	4
WEL 202	Intermediate Shielded Metal Arc Welding	<u>4</u>
	<b>Total Credit Hours</b>	<b>24</b>

## Basic Military Maintenance Welding\*

WEL 101	Oxy-acetylene Welding and Cutting	4
WEL 106	Shielded Metal Arc Welding	<u>4</u>
	<b>Total Credit Hours</b>	<b>8</b>

## Intermediate Military Maintenance Welding\*

WEL 101	Oxy-acetylene Welding and Cutting	4
WEL 104	Introduction to Gas Tungsten Arc Welding	4
WEL 105	Introduction to Gas Metal Arc Welding	4
WEL 106	Shielded Metal Arc Welding	<u>4</u>
	<b>Total Credit Hours</b>	<b>16</b>

\*Pending State Approval

# Check Us Out on the Web!

[www.ppcc.ccoes.edu](http://www.ppcc.ccoes.edu)

on the PPCC website, you can:

**register for** classes

**print your** schedule

**order** books

**find out about** campus events

**listen to** KEPC radio online

**watch** classes in session

**make** payments on your account

**change** your class schedule: add, drop, or waitlist classes  
mailing address • phone  
e-mail address and personal  
identification number (PIN)

**check** course availability • your grades •  
your email

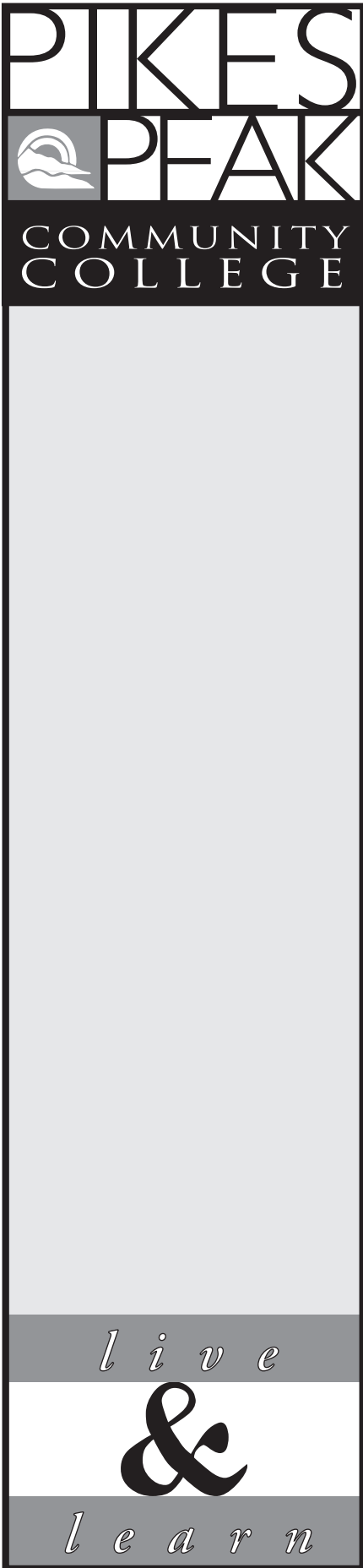
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department home pages

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and Pikes Peak Library's online  
library catalogs

**look up** office hours and lab schedules •  
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# Course Descriptions

## Core Curriculum

The Colorado Core Curriculum is a package of courses which will transfer to all public colleges and universities in Colorado (except School of Mines). The core package is part of our associate of arts and associate of science degrees. When transferred as a package, core courses will satisfy the lower division general education requirements for Bachelor of Arts and bachelor of sciences degrees provided they are completed with a grade of "C" or better. Courses which are part of the core curriculum are identified with a (□) in this section of the catalog.

## Course Descriptions

Courses offered by the college and their brief descriptions are listed on the following pages. These courses are not necessarily intended for use in one particular program and may be used in both degree and certificate programs. The college reserves the right at any time to modify content of courses, to substitute courses in any program, or to waive course prerequisites. Students are encouraged to contact the instructional divisions to request special course offerings.

## Course Numbering System

Each course has a letter and a numeral code. The letters are an abbreviation for the subject. For instance, MAT indicates a mathematics course and ENG an English course.

Courses numbered 100-199 are usually considered freshman level. Sophomore courses are generally numbered between 200 and 299. There are some exceptions to this rule. Courses numbered ENG 100 through ENG 105 and MAT 100 through MAT 105 are developmental and are not applicable to an AA, AS, or AGS degree.

Course numbers and descriptions are subject to change. "The Community Colleges of Colorado launched a common course numbering and curriculum quality across our system. The project is scheduled to be fully implemented in fall 2001. The project will not jeopardize student credit and transfer. The system will provide an electronic addendum at [www.rightchoice.com](http://www.rightchoice.com) and [www.cterc.ccoes.edu/ccns](http://www.cterc.ccoes.edu/ccns) as course numbers and course competencies are completed."

## Developmental Courses

Developmental courses are numbered from 001 to 100. These are courses that teach basic skills often required to complete other college work. Students may be referred to these courses if their placement test scores do not meet college minimum standards. Though developmental courses may be required to enter a program or enroll in other courses, they do not count toward a degree or certificate.

## Independent Study

PPCC offers two kinds of independent study classes. The first allows students to develop specialized course goals working independently with an instructor. In this type of class, students meet in person with an instructor and agree to an appropriate

course of study to conduct an independent investigation of a problem. One credit hour is awarded for each two hours of contracted special study per week per semester. Enrollment requires approval of the appropriate division director and the chief instructional officer.

The second type of class is a paper-based independent study designed by the Office of Distance Education. These classes are regularly cataloged courses presented in independent study packages developed by faculty. A limited number of courses are offered in this format. Working through the Office of Distance Education, students will work with an assigned faculty member throughout the term and complete requirements according to a specific syllabus and course calendar. For a list of specific courses and requirements, contact the Office of Distance Education at 540-7539.

## Off Campus Courses

Courses that originate at PPCC campuses and include travel to off-campus locations are considered by the institution to be resident courses.

## Selected Topics

These courses are available in all disciplines under the 280 series (281 for 1 credit, 282 for 2 credits, etc.). Developmental courses are 081 for 1 credit, 082 for 2 credits, etc. These courses meet temporary or special requirements for offerings not in the curriculum and explore the viability of adding the proposed course to the curriculum.

## Work Experience Courses

These courses are designed to improve employability and to expand the laboratory or shop capabilities of the institution through the use of community-based facilities. All work (field) experience courses include the following:

- an instructor credentialed in the program area to supervise the off-campus instruction
- activities designed by the instructor
- student attendance at a minimum of one class session per week with the instructor
- a training plan which includes assignments, required for completion of the course
- grading according to the established college grading policy
- the same types of assignments and preparation as for on-campus courses

## Statewide Common Course Descriptors

Beginning with the 1991-92 academic year, Pikes Peak Community College adopted the Colorado Community College and Occupational Education System's common course descriptors for AA and AS transferable courses. These courses were grouped and commonly described by statewide faculty discipline committees and are updated annually. Course content has not changed significantly; however, many course IDs, titles, and descriptions have changed.

# Accounting

## ACC 110 Business Records

3 Credit Hours • 45 Contact Hours (Lecture)

Basic bookkeeping with emphasis on small business records, handling cash, checking, receivables, payables, sales, and payroll.

## ACC 121 Principles of Accounting I

4 Credit Hours • 60 Contact Hours (Lecture)

Introduces the study of accounting principles to give the student an understanding of the theory and logic that underlies 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 asset and intangible asset accounting; depreciations methods and practices. It is recommended students complete BUS 105 before enrolling in ACC 121.

## ACC 122 Principles of Accounting II

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite: ACC 121 or faculty consent*

This course 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; cost and managerial accounting.

## ACC 125 Principles of Accounting II

3 Credit Hours • 45 Contact Hours (Lecture)

*Note: This course is offered on CCC-Online only.*

Introduces computerized accounting applications. Includes the study of accounting system design, chart of accounts design and creation, transaction processing, account analysis and evaluation accrual and deferral adjustments, and financial reporting. Students do not need to purchase the software for Computerized Accounting. A CDROM will come with the text that has the required software.

## ACC 131 Income Tax I

2 Credit Hours • 45 Contact Hours (Lecture)

*Note: This course is offered on CCC-Online only.*

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 individual taxation.

## ACC 138 Payroll Accounting

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite: ACC 110 or ACC 121, or faculty consent*

*Grading: S/U only*

This course acquaints students with payroll systems, record keeping rules for payroll, and the preparation of the required federal and state forms for reporting payroll taxes.

## ACC 150 Introduction to PC Spreadsheets: Excel

1 Credit Hour • 15 Contact Hours (Lecture)

This course introduces the student to concepts and applications of an electronic spreadsheet. Topics include calculations, built-in functions, spreadsheet design, and an introduction to graphics.

## ACC 151 Intermediate PC Spreadsheets: Excel

1 Credit Hour • 15 Contact Hours (Lecture)

*Prerequisite: ACC 150 or faculty consent*

This course continues to build on electronic spreadsheet skills.

## ACC 152 Advanced Electronic Spreadsheets: Excel

1 Credit Hour • 15 Contact Hours (Lecture)

*Prerequisite: ACC 151 or faculty consent*

This course continues to build on electronic spreadsheet skills.

## ACC 205 Computerized Accounting

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ACC 110 or 121, and CIS 115 or 118, or faculty consent*

*Grading: S/U only*

This course offers background for using a commercial computerized accounting system. Topics include general ledger, A/R, A/P, depreciation, and payroll using the microcomputer.

## ACC 211 Intermediate Accounting I

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite: ACC 122 or faculty consent*

This course is a study of the conceptual framework of financial accounting and advanced theory and practice applicable to the following major topics: time and value of money, current assets, current liabilities, and operation assets.

## ACC 212 Intermediate Accounting II

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite: ACC 211 or faculty consent*

This course continues from ACC 211 to include financial reporting of liabilities and investments, stockholder equity, and special topics.

## ACC 215 Accounting Information Systems and E-Business

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ACC 122*

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 system design, accounting software selection, acquisition and implementation of systems will be studied. Techniques and systems for electronic control systems, electronic data interchange, electronic funds transfer and web commerce will be explored.

## ACC 222 Federal Income Tax

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite: ACC 121 or faculty consent*

This course presents rules and regulations of the Federal Income Tax Law for both individual and business returns and the responsibilities of businesses to maintain records for income tax reporting.

## ACC 225 Accounting for Governmental and Nonprofit Organizations

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ACC 121 or faculty consent*

This course studies concepts of budgetary control as a matter of law and public administration theory and accounting principles and procedures necessary to implement budgetary controls for governmental units and other nonprofit institutions and organizations.

## ACC 226 Cost Accounting

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite: ACC 122 or faculty consent*

This course studies cost accumulation methods and reports. The concepts and procedures of job order, process, standard, and direct cost system as well as budgeting; planning and control of costs are included. Also includes computer applications.

## American Sign Language

### ASL 100 Introduction to American Sign Language

5 Credit Hours • 75 Contact Hours (Lecture)

This course will expose the student to American Sign Language. Readiness activities will be conducted focusing on visual/receptive skills and basic communication. The direct experience method, using ASL, is used to enhance the learning process. This course is a prerequisite for ASL 111.

### ASL 111 American Sign Language I

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite:* ASL 100, equivalent skill as determined by test, or faculty consent.

This course offers the student an opportunity to develop a basic syntactic knowledge of American Sign Language (ASL), basic vocabulary, and basic conversational skills. Vital aspects of Deaf culture and community will be incorporated. The direct experience method, using ASL, will be used to enhance the learning process. Students must successfully complete this course prior to being accepted into the Interpreter Preparation Program.

### ASL 112 American Sign Language II

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite:* ASL 111 with a grade of B or better

This is the third in a sequence of 5 ASL courses. This course provides the student an opportunity to develop a stronger grasp of American Sign Language (ASL) as well as the cultural features of the language. ASL vocabulary is also increased. The direct experience method (ASL only) is used to further enhance the learning process. This course continues from ASL 111 with more emphasis on expressive skills in signing.

### ASL 147 Survey of Deaf Culture

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* IPP 144

This course is a survey of factors that contributes to defining Deaf persons as members of a cultural minority. This course will look at the impact of language on the culture as well as the role of norms, values, traditions, and minority groups within Deaf culture. Attention will also be given to identity and membership in Deaf culture.

### ASL 211 American Sign Language III

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ASL 112 with a grade of B or better

This course continues from ASL 112 and provides a further study of American Sign Language (ASL) and its grammar, syntax, and cultural features to develop competency and fluency in the language. Variations in ASL will be addressed.

### ASL 212 American Sign Language IV

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ASL 211 with a grade of B or better

This course continues from ASL 211, focusing on assimilation of previously acquired skills and knowledge and increased proficiency in understanding and using American Sign Language (ASL). Debates in ASL will be addressed. Includes basic linguistics of ASL.

### ASL 214 American Sign Language Literature

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ASL 211 with a grade of B or better

This course continues from ASL 211. It provides students with an opportunity to learn additional ASL vocabulary and usage while recognizing the impact of Deaf Culture on emerging ASL literature.

## Anthropology

### ANT 101 Cultural Anthropology

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 115, ENG 100

Studies human cultural patterns and learned behavior. Includes linguistics, social and political organization, religion, culture and personality, culture change, and applied anthropology. Cultural Anthropology deals with issues of cultural diversity, pluralism, and relativism as a component of multi-cultural studies.

### ANT 105 Millennium Studies

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 115, ENG 121 or concurrent

This cross-disciplinary course will allow students to utilize their skills from three different disciplines in studying a subject of vital interest, the 21<sup>st</sup> Century. It will serve as a cross-disciplinary elective.

### ANT 107 Introduction to Archaeology

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 115, ENG 100

This course focuses upon the science of recovering the human prehistoric and historic past through the excavation, analysis, and interpretation of material remains. Also included are a survey of the archaeology and prehistory of several areas of the world, the work of archaeologists, and discussions of major theories and excavations.

### ANT 111 Physical Anthropology

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 115, ENG 100

Studies human biology and its effects on behavior. Includes principles of genetics and evolution, vertebrates and primates, human origins, human variation, and ecology.

### ANT 201 Anthropology for Business

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 115, ENG 100

As Americans conduct more business in the “borderless world” as it is described by Kenichi Ohmae, awareness of cultural differences becomes increasingly important. In this course, students will explore the relationship of foreign culture and international business. They will learn how cultural subsystems and institutions impact business operations in specific areas of the world.

### ANT 211 Cultural Resource Management

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 115, ENG 100

This course serves as an introduction to the field of cultural resource management in the federal government. The student will explore the history, purpose, and goals of historic preservation through a review of the culture, history, and archeological resources of central and southern Colorado.

### ANT 215 Indians of North America

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 115, ENG 100

The study of Indians of North America from pre-European contact times to the present, covering archaeology and languages, religions, technologies, other cultural developments, and major influences on the cultures by European peoples.

### ANT 221 Anthropology of Religion

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 115, ENG 100

This course provides a definition of religion in terms of cultural functions which is illustrated cross-culturally. Religions emphasized will vary with semesters and instructors.

### **ANT 250 What is Normal?**

1 Credit Hours • 15 Contact Hours (Lecture)

*Prerequisite:* REA 115, ENG 100

This course provides a cross-disciplinary approach to what different societies have considered normal behavior, mental health, and mental illness. From the perspectives of anthropology, literature, and psychology, the course will compare readings and interpretations of “normal” and “abnormal” behavior from the perspective of viewers and writers both inside and outside various cultures. Students will receive credit for either ANT 250, LIT 250, or PSY 250.

### **ANT 251 The Study of Folklore**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 115, ENG 100

This survey course introduces students to the field of folklore in general and more specifically to the folklore of Colorado and the Southwest. Lecture/discussions and readings will focus on the genres and groups studied by folklorists, various theoretical perspectives that enrich our understanding of human expressive behavior, and the methods folklorists employ to collect and analyze data. Students will be required to do a folklore-collecting project, the subject of the project to be determined in consultation with the instructor.

### **ANT 266 Ethnographic Field Study:**

1-3 Credit Hours • 22.5-67.5 Contact Hours (Lecture, Lab)

*Prerequisite:* REA 115, ENG 100, ANT 101 or faculty consent

This course provides a week-long interdisciplinary field study in cross-cultural comparative research. Students are required to design and conduct ethnographic research on site. The course emphasizes general concepts of culture and the associated environment. Student research requires visits to both ancient and present cultures and assimilated subcultures within them. To illustrate the evolutionary development of these cultures, the student will explore archaeological sites. May be repeated under a different subtitle for a maximum of 9 credits.

## **Architecture**

### **ARC 101 Architectural Drawing I**

5 Credit Hours • 150 Contact Hours (Lab)

Representations in architectural drafting: projection, sectioning, pictorial drawing, and architectural representations. Students must take ARC 104 before or at the same time as ARC 101.

### **ARC 102 Architectural Drawing II**

5 Credit Hours • 150 Contact Hours (Lab)

*Prerequisite:* ARC 101 and ARC 104.

Residential planning, wood frame construction, elements of working drawings, freehand sketching, building code requirements, detailing, and structural framing.

### **ARC 104 Architectural Drawing Theory**

4 Credit Hours • 60 Contact Hours (Lecture)

Print reading, construction assemblies, and isometric, orthographic, and oblique sketching.

### **ARC 105 Architectural Building Materials I**

2 Credit Hours • 30 Contact Hours (Lecture)

Building assemblies, soils, foundations, concrete, concrete forming, wood, plywood, and masonry.

### **ARC 108 Architectural CAD 1**

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

*Prerequisite:* faculty consent required.

Introductory course in the use of Computer Aided Drafting (CAD) with emphasis on architectural drawing. The latest version of AutoCAD software is used on DOS based computers.

### **ARC 111 Architectural Technology Theory**

2 Credit Hours • 30 Contact Hours (Lecture)

Architectural design, the architectural profession, and the building trade. History, ethics, and responsibilities of the technician as well as the technician's relationship to the architect and builder are components.

### **ARC 114 Building Service Systems I**

2 Credit Hours • 30 Contact Hours (Lecture)

This course covers materials and equipment used in the plumbing and electrical service systems of buildings. Electrical plan layout is also covered. This course is NOT a comprehensive design course.

### **ARC 117 Presentation Drawings and Models**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ARC 101, ARC 151 or faculty consent.

This course covers freehand and instrument rendering techniques with pencil and watercolor for good presentation drawings. Color theory and construction of scale models of buildings and terrain are also covered.

### **ARC 151 Architectural Drafting I**

3 Credit Hours • 90 Contact Hours (Lab)

*Corequisite:* ARC 104.

Architectural drawing including lettering, architectural scales, orthographic projection, pictorial drawings, and building details. Students must take ARC 104 before or at the same time as ARC 151.

### **ARC 152 Architectural Drafting II**

2 Credit Hours • 60 Contact Hours (Lab)

*Prerequisite:* ARC 151 or faculty consent.

This course covers basic drafting principles including perspectives, floor plans, wall sections, and foundation plans.

### **ARC 153 Architectural Drafting III**

3 Credit Hours • 90 Contact Hours (Lab)

*Prerequisite:* ARC 152 or faculty consent.

Continuation of ARC 152. Roof framing plans, building sections, elevations, and fireplace sections.

### **ARC 154 Architectural Drafting IV**

2 Credit Hours • 60 Contact Hours (Lab)

*Prerequisite:* ARC 153 or faculty consent.

Continuation of ARC 153. Building details, drawing schedules, building site plan, and stair construction.

### **ARC 201 Architectural Drawing III**

5 Credit Hours • 150 Contact Hours (Lab)

*Prerequisite:* Sophomore standing in program or faculty consent.

Advanced working drawings for custom heavy timber frame buildings. Typical details, connections, framing, related building materials and components, and other problems unique to this frame type.

### **ARC 202 Architectural Drawing IV**

5 Credit Hours • 150 Contact Hours (Lab)

*Prerequisite:* Sophomore standing in program or faculty consent.

Advanced working drawings for a variety of non-residential construction. Related materials and components, detailing, connections, and framing. Advanced drawing systems.

### **ARC 207 Level and Transit**

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

*Prerequisite:* Sophomore standing in program or faculty consent.

Use and care of a transit and level as used in the building industry.

### **ARC 208 Architectural Building Materials II**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* Sophomore standing in program or faculty consent.

Roofing materials, insulation, moisture protection, sound control, door and window assemblies, and light commercial and heavy construction materials and methods. New materials and building components with applications.

### **ARC 211 Building Service Systems II**

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite:* Sophomore standing in program or faculty consent.

Continuation of ARC 114. Additional aspects of heating, cooling, ventilating, fire protection, and conveying systems.

### **ARC 222 Estimating and Print Reading**

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite:* Sophomore standing in program or faculty consent.

Current methods of estimating cost of materials and labor for both residential and commercial construction. Print reading, specifications, and quantity takeoffs are an integral part.

### **ARC 223 Introduction to Building Codes**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* Sophomore standing in program or faculty consent.

Legal requirements imposed on construction by building codes specifically required by the Uniform Building Code and local modifications to it.

### **ARC 224 Construction Contracts and Management**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* Sophomore standing in program or faculty consent.

Construction scheduling methods, specifications, bonds and insurance, general conditions of the construction contract, construction contracts, and construction office business methods and labor-management issues.

### **ARC 226 Construction Scheduling and Supervision**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* Sophomore standing in program or faculty consent.

Critical Path Method of construction scheduling, supervision, leadership, motivation, communication, problem solving, and safety.

### **ARC 227 Architectural Structures**

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite:* MAT 152 or MAT 122, or faculty consent.

Moments of inertia, centroids, shear force and bending moment diagrams, beam and column design, combined stresses, walls, footings, and connections. Structural systems of wood, reinforced concrete, and steel. Numerous problems involving these concepts.

### **ARC 235 Contemporary Architectural Theory II**

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite:* Sophomore standing in program or faculty consent.

Architectural movements considered the beginning of modern architecture through contemporary architectural thought. Design, site planning, technological theories, labor-management relations, negotiation, and legislation are components.

### **ARC 262 Architectural CAD II**

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

This course continues from ARC 108. Additional topics will include 3D drawing, attributes, system variables, solid modeling, XREF, and paper space/model space.

## **Art**

### **ART 107 Art Education Methods:**

3 Credit Hours • 45 Contact Hours (Lecture)

A multi-media approach to teaching art. Emphasizes strong creative presence, philosophy, and techniques in drawing, painting, printmaking, and other media. ART or EDU credit available, but credit will be granted for only one option.

### **ART 110 Art Appreciation**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 100

Introduces the visual arts including language, concepts, process, and history.

### **ART 111 Art History I**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 100

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.

### **ART 112 Art History II**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 100

Provides the knowledge base to understand the visual arts, especially as related to Western Culture. Surveys from the Renaissance through the Modern periods.

### **ART 114 Folk Arts of Latin America**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 100

A study of folk art of Latin America including a geographic, an anthropological, and an historical overview of cultures creating the art. Materials, function, and influences—including religious and European—will be emphasized.

### **ART 115 Stained Glass I**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

This course emphasizes basic construction techniques and includes cutting glass, soldering, leading, and instruction in design.

### **ART 116 Lettering**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

This course is an introduction to the manipulation of materials, tools, and styles of lettering and their uses as fine art media.

### **ART 121 Drawing I**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

This course is an investigation of various approaches and media designed to develop drawing skills and visual awareness.

### **ART 122 Drawing II**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

*Prerequisite:* ART 121

This course is a study of expressive drawing techniques and development of individual expressive style.

### **ART 123 Landscape Drawing I**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

A drawing course designed to emphasize nature, particularly landscape. Drawing outside or in view of landscape using graphite, ink, prism color, pastel, and washes. Students concentrate on various approaches, viewpoints, and styles and acquire expertise and interpretation in a variety of media.



**ART 124 Landscape Drawing II**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

*Prerequisite:* ART 123

This course continues from Landscape Drawing I. Drawing outdoors or in view of landscape, both rural and inner city, using graphite, ink, washes, pencils, pastels, and watercolor. Students concentrate on various approaches, viewpoints and styles and acquire expertise in a variety of media. Each student will present finished pieces matted for critique.

**ART 131 Design I**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

This course is a study of basic design elements, visual perception, form, and composition.

**ART 132 Design II**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

*Prerequisite:* ART 131

This course covers the application of design elements and principles to both two and three-dimensional problems.

**ART 135 Computer Graphics I**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

This course is an introduction to the processes of generating computer design.

**ART 136 Drawing Animals**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

A course designed for concentration primarily at the Cheyenne Mountain Zoo which emphasizes bird, reptile, and mammal species. Students will use a variety of materials in order to achieve special characteristics of, for instance, fur, scales, feathers using inks, pencils, pastels, washes, watercolor.

**ART 137 Drawing from the Imagination**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

This course emphasizes writing and illustration using various media including inks, pencils, paints, etc. Elements of fantasy will be accompanied by exercises designed to provoke the imagination. The generation of ideas and the invention of corresponding images along with technique and experimentation will be explored.

**ART 138 Portraiture**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

*Prerequisite:* ART 121

Introduction to portrait drawing using various media such as pencil, charcoal, pastel, and watercolor. Head and hand structures and their individual features and composition (using art elements and principles) will be emphasized.

**ART 141 Jewelry and Metalwork I**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

This course is an introduction to the construction of jewelry designs in metals and small casting techniques.

**ART 142 Jewelry and Metalwork II**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

*Prerequisite:* ART 141

This course emphasizes conceptual design development using casting and specialized techniques.

**ART 143 Enameling on Metal**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

This course introduces the techniques, history, application and potentials of glass fused to metal at high heat. Individual studio projects explore the brilliance of glass and the versatility of metals in enameling. Formal critiques will accompany each project so that students will experience and profit from instructor comment and peer comment.

**ART 146 Needlecraft I**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

Students will explore techniques, materials, and basic design content. They will learn basic stitches, how to choose appropriate designs, and working methods for various types of fabrics. A working knowledge of fibers and threads for fabric piecing and surface embellishment is needed. *Stitchery:* Students will experience techniques and materials related to basic stitchery, including embroidery and applique, and patchwork.

**ART 147 Needlecraft II**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

*Prerequisite:* ART 146

An extension of Needlecraft I in which students hone their skills to develop designs and related projects knowledgeably, using techniques, skills, and chosen materials and their applications in exercising personal, creative expression. *Advanced Stitchery:* Students will apply techniques related to stitchery in completed applique, embroidered, or patchworked pieces.

**ART 150 Fundamentals of Photography**

3 Credit Hours • 45 Contact Hours (Lecture)

Fundamentals of photography designed for the student who has no previous experience in photography or the beginner who has some experience and knowledge but wishes to extend it to more advanced techniques in both black and white and color photography.

A manually adjustable (f/stop and shutter speed) 35mm camera is required.

**ART 151 Photography I**

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

*Prerequisite:* ART 150 or faculty consent

This course is an introduction to black and white photography as a communication and fine art medium. It includes the understanding and skills necessary for basic camera and lab operations.

**ART 153 Fiber Design I**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

The study of fiber design ranging in emphasis from dyeing, printing, and drawing on a variety of different materials. This study includes historical and cultural context along with technique. An overview of fiber design including "sampler" studies involving dyeing, printing, and drawing on fibers is offered. A variety of materials and techniques will be explored.

**ART 154 Fiber Design II**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

*Prerequisite:* ART 153

Extended work in the process of dyeing, printing, and drawing on fibers. A variety of materials and techniques will be explored.

**ART 155 Art Sampler:**

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

This course is intended to offer students an opportunity to examine a certain art media in a workshop setting. May be repeated under a different subtitle for a maximum of six credit hours.

**ART 156 Leathercraft**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

An introduction to the field of leatherwork, encompassing historical and cultural perspective and in-depth work exploring traditional and innovative expression. A variety of tools and materials will be used to design and fabricate leather projects.

**ART 157 Basketry**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

Basic skills of working with basketry will be covered as technique is explored through a variety of materials with personal and traditional expression.

**ART 158 Beading**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

Basic skills of working with beading will be covered as technique is explored through a variety of materials with personal and traditional expression.

**ART 160 Enameling on Metal II**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

Continuation of Enameling on Metal I with emphasis on individual designs and advanced techniques.

**ART 161 Ceramics I**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

This course is an introduction to traditional and contemporary ceramic forms and processes including hand building and throwing on the potter's wheel.

**ART 162 Ceramics II**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

*Prerequisite:* ART 161

This course continues from Ceramics I with emphasis on skills, techniques, and form.

**ART 163 Handbuilt Clay I**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

This course provides instruction in several methods of hand building and study of functional and decorative design elements.

**ART 164 Handbuilt Clay II**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

*Prerequisite:* ART 163

This course provides continued instruction in various methods of hand building. Surface treatment will be emphasized.

**ART 202 Stained Glass II**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

*Prerequisite:* ART 115

A comprehensive study of skills and knowledge relating to glass, its history, and properties including the study of leaded and grouted work from traditional to original contemporary work.

**ART 203 Stained Glass III**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

*Prerequisite:* ART 115, ART 202

An in-depth study of pattern and texture on a variety of surfaces. The adaptation of designs to several different projects requiring varying techniques and applications.

**ART 204 Stained Glass IV**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

*Prerequisite:* ART 115, ART 202, ART 203

Advanced and independent work in stained glass with emphasis on finished, professional work and on mixed-media projects.

**ART 205 Film Studies**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 100

Explores relationships between the visual components and the narrative of a film. Students will view and analyze several motion pictures from both aesthetic and production perspectives.

**ART 206 Art of Animation**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

History and basic techniques of film animation. Students will study the process of film animation and draw an animated film.

**ART 211 Painting I**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

*Prerequisite:* ART 121

This course covers color, composition, materials, and techniques of studio painting.

**ART 212 Painting II**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

*Prerequisite:* ART 211

This course emphasizes experimentation with materials, composition and color.

**ART 213 Painting III**

3 Credit Hours • 45 Contact Hours (15 Lecture, 30 Lab)

This course provides continuing investigation of subject, color, composition, and individual forms of expression.

**ART 214 Painting IV**

3 Credit Hours • 45 Contact Hours (15 Lecture, 30 Lab)

This course provides advanced work with theme development, sophisticated color relationships, experimentation in conceptual forms, and consistent progression of subject matter.

**ART 221 Drawing III**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

This course provides further exploration of expressive drawing techniques and style.

**ART 222 Drawing IV**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

This course covers advanced drawing problems with emphasis on individual style, subject, and content.

**ART 224 Sculpture I**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

The course is an introduction to the fundamentals of sculpture such as modeling, casting, carving, and assemblage processes.

**ART 225 Sculpture II**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

*Prerequisite:* ART 224

This course provides a development of the understanding and manipulation of three-dimensional form with greater concentration on individual creativity and style.

**ART 226 Papermaking**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

Papermaking introduces students to the background and process of papermaking from an academic studio perspective, using a variety of materials. Students will be involved in preparing their own papers and in making and/or acquiring their own collection of tools and equipment for making paper.

**ART 227 Marbling on Paper and Textile**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

This course introduces the basic marbling techniques that can be applied to paper or textile surfaces. Traditional and contemporary applications will be explored.

**ART 228 Printmaking I**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

This course is an introduction to the basic techniques and skills of printmaking as fine art media. Instruction will include an understanding of the visual concepts as they relate to print.

### **ART 230 Printmaking II**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

*Prerequisite:* ART 228

Elements of printmaking using the printing press. Included are monoprinting, monotypes, etching, woodcuts, and linocuts. Handmade and commercial paper will be used.

### **ART 231 Watercolor I**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

This course is an introduction to the basic techniques and unique aspects of materials involved with using transparent and/or opaque water media.

### **ART 232 Watercolor II**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

*Prerequisite:* ART 231

This course provides advanced study of subject development, form, color, and theme.

### **ART 241 Jewelry and Metalwork III**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

*Prerequisite:* ART 141, ART 142

This course focuses upon advanced work and emphasizes experimentation with materials and techniques, individual design, and superior craftsmanship.

### **ART 242 Jewelry and Metalwork IV**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

*Prerequisite:* ART 141, ART 142, ART 241

Continuing study of the properties of metal and stone in creating decorative work. Students will employ advanced design and techniques to explore original, personal expression. A variety of materials and approaches will be used in discovering new and independently achieved finished pieces.

### **ART 243 East Asian Painting I**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

This course emphasizes varied approaches to the basic elements of line, brush strokes, perspective, and media in Asian painting which have expressed nature's colors through shades of black ink monochrome with the use of oriental brushes, ink sticks, ink stone, rice paper, and watercolor.

### **ART 250 East Asian Painting II**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

*Prerequisite:* ART 243

An advanced continuation of East Asian Painting I, emphasizing varied approaches to the basic elements of line, brush strokes, perspective, and media in Asian painting. Advanced work will be expected.

### **ART 251 Navajo Weaving Techniques I**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

This course offers an overview of traditional Navajo weaving, including building a loom, carding raw wool, hand spinning, dye baths, and actual rug weaving. Navajo history and culture as related to weaving are also components.

### **ART 252 Navajo Weaving Techniques II**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

*Prerequisite:* ART 251

This course continues from Navajo Weaving Techniques I. It introduces the student to complexity in design and color in the weaving of a rug, employing Navajo weaving techniques. Students will weave larger rugs, perfecting techniques learned in Navajo Weaving Techniques I. They will also have the option of weaving a sampler, incorporating advanced techniques such as tufting, turned joint, Coal Mine raised edge, small diamond twill, pictorial, two-faced, or Crystal, with the instructor's approval. The class will further explore the importance of weaving in Navajo culture and belief systems.

### **ART 253 Fiber Design III**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

*Prerequisite:* ART 153, ART 154

Advanced work in the processes described in Fibers I and II. Finished pieces prepared professionally for display will be required, covering a range of expertise and materials.

### **ART 254 Fiber Design IV**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

*Prerequisite:* ART 153, ART 154, ART 253

A focus on one or two processes related to fiber design, defining student independent and technical excellence.

### **ART 260 Navajo Weaving Techniques III**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

Continuation of the study of Navajo weaving techniques with emphasis on the creation of a woven rug utilizing an original design based on the traditional artistic elements portrayed in Navajo history and culture.

### **ART 261 Ceramics III**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

*Prerequisite:* ART 161, ART 162, ART 163

This course encourages students to develop an individual style of wheel thrown and hand built ceramic forms with continuing involvement in surface treatment.

### **ART 262 Ceramics IV**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

*Prerequisite:* ART 261

This course continues advanced work with emphasis on various clay bodies, unique glazes and engobes, combining different textures and shapes, and development of personal forms.

### **ART 263 East Asian Painting III**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

*Prerequisite:* ART 250

Continues the study of East Asian Painting with advanced emphasis on the varied approaches to the basic elements of line, brush strokes, perspective, and media such as ink monochrome, ink sticks, ink stone, rice paper, and watercolor.

### **ART 264 East Asian Painting IV**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

*Prerequisite:* ART 263

Continues the study of East Asian Painting with the most advanced emphasis on the varied approaches to the basic elements of line, brush strokes, perspective and media, such as ink monochrome, ink sticks, ink stone, rice paper, and watercolor.

### **ART 266 Art and Culture Studies**

1-3 Credit Hours • 22.5-67.5 Contact Hours (Lecture/Lab Combination)

An on-site study of the visual arts of a particular culture at the location of that culture. Includes vocabulary, processes, aesthetics, symbols, and the influence of geography and history on that culture's art.

### **ART 270 Figure Drawing I**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

This course is an introduction to the basic techniques of drawing the human figure.

### **ART 271 Figure Drawing II**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

*Prerequisite:* ART 270

This course provides continuing study of the various methods of drawing the human figure with emphasis on the description of form and individual style.

### **ART 272 Navajo Weaving Techniques IV**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

Continuation of the study of Navajo weaving techniques with emphasis on advanced methods and specialized designs in the creation of a rug woven in the Navajo style and exemplifying lesser known aspects of tradition and culture.

### **ART 273 Figure Painting I**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

This course is an introduction to painting the human figure, and includes a brief survey of figure painting, instruction in the fundamental methods of composition and expression.

### **ART 274 Figure Painting II**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

*Prerequisite:* ART 273

This course offers a continued study of painting the human figure with advanced problem solving in composition and experimentation with materials and techniques.

## **Astronomy**

### **AST 101 Astronomy I**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

Studies the history of astronomy, the tools of the astronomer, and the contents of the solar system: the planets, moons, sun, asteroids, comets, and meteoroids. Includes laboratory experience.

### **AST 102 Astronomy II**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

Studies the structure and life cycle of the stars, the sun, galaxies, and the universe as a whole, including cosmology and relativity. Includes laboratory experience.

## **Auto Collision Repair**

### **ACR 110 Orientation and Safety**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

This course is designed as an orientation to the auto collision repair industry. Students will receive an overview of the numerous job possibilities within the industry as well as learn various types of automobile construction. The names, uses, and maintenance procedures for a variety of tools and equipment will also be covered. General shop safety and the proper handling and disposal procedures for hazardous materials will be emphasized.

### **ACR 116 Introduction to Refinishing**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

*Prerequisite:* ACR 110 or faculty consent.

This course introduces the student to the basics of automotive refinishing. After covering body and paint shop safety, tools and equipment used in the refinishing process are covered. Students will also learn the steps and procedures involved in preparing the surface of an automobile for refinishing. Removal and installation of trim as well as final clean up and detailing are also covered.

### **ACR 121 Introduction to Metal Repair**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

*Prerequisite:* ACR 110 or faculty consent.

Introduction to basic straightening procedures. Safety procedures, use of hammers, dollies and other hand tools, heat shrinking and metal finishing procedures, and practice of welding joints will be covered.

### **ACR 122 Non-Structural Metal Repair I**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

*Prerequisite:* ACR 121 or faculty consent.

Continuation of basic metal working procedures. Removal of minor sheet metal damage and use of plastic fillers. Use of pull rods and stud-weld gun.

### **ACR 123 Part Replacement and Alignment**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

*Prerequisite:* ACR 122 or faculty consent.

This course covers removal, replacement and adjustment of bolt-on body parts, both interior and exterior. Replacement of windshields and moveable auto glass is also covered.

### **ACR 124 Non-Structural Metal Repair II**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

*Prerequisite:* ACR 122 or faculty consent

Installation and adjustment or straightening of major body panels such as hoods, fenders, doors, deck lids, tailgates, tops, and quarter panels. Specialized tools, such as pull-doors are introduced.

### **ACR 125 Plastic Repair and Refinishing**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

*Prerequisite:* ACR 110 or faculty consent.

Repair of plastic and fiberglass. Safety, plastic welding, uses of fiberglass, and types of materials are covered.

### **ACR 127 Refinishing I**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

*Prerequisite:* ACR 116 or faculty consent

Continuation of skills learned in ACR 116. Surface preparation procedures and application of undercoats and topcoats are covered. Students learn proper masking techniques as well as develop paint problem solving skills.

### **ACR 128 Refinishing II**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

*Prerequisite:* ACR 127 or faculty consent

Continued development of skills learned in ACR 127. Spot repair and color match procedures, as well as advanced refinishing procedures will be covered.

### **ACR 130 Auto Glass Service**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

Methods and procedures involved in servicing various types of auto glass. Removal and installation procedures for windshields, back glasses, and side and door glasses are emphasized, as are structural strength requirements for installation of windshields in unibody cars. Removal and installation of all types of auto glass are covered.

**ACR 202 Spot Painting**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

*Prerequisite:* ACR 116

Techniques and procedures used in spot painting lacquer, enamel, and basecoat/clear coat finishes.

**ACR 204 Custom Painting**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

*Prerequisite:* ACR 128

Custom painting techniques and procedures.

**ACR 206 Production Refinishing**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

*Prerequisite:* ACR 128

Designed to simulate actual working procedures of the automotive refinishing technician. Refining techniques as well as increasing speed on a variety of refinishing projects are emphasized.

**ACR 207 Base/Clear and Tri-coat**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

*Prerequisite:* ACR 116

Basecoat/clear coat and tri-coat refinishing systems common to new cars. Emphasis on major similarities and differences of two- and three-stage refinishing systems available from paint manufacturers. Students practice application procedures of two- and/or three-stage refinishing systems.

**ACR 208 Flexible Parts Refinishing**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

*Prerequisite:* ACR 116

Systems and procedures for the refinishing of flexible parts. Emphasis on interior and exterior panels including the retexturing of repaired panels having a "grain" finish.

**ACR 218 Mechanical and Electrical Components**

4 Credit Hours • 82.5 Credit Hours (15 Lecture, 67.5 Vocational Lab)

*Prerequisite:* ACR 110

This course is designed to introduce students to the various mechanical, electrical, and suspension components they will be required to work with during structural repairs on unibody vehicles. Component identification, removal, handling, and re-installation procedures will be covered. Additionally, students will learn basic wheel alignment angles as well as diagnosis and service procedures for a variety of mechanical and electrical systems.

**ACR 219 Structural Repair I**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

*Prerequisite:* ACR 124 or faculty consent

Analysis and correction of various types of structural damage as related to automobiles with body over frame as well as unibody construction.

**ACR 220 Structural Repair II**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

*Prerequisite:* ACR 219 or faculty consent

Continued practice in structural damage analysis and measuring procedures. Proper methods for straightening as well as replacing structural components. Continued practice in removing and replacing various mechanical and electronic components that may suffer damage in a collision as well as principles of steering and suspension systems.

**ACR 225 Shop Management and Estimating**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

Shop management terminology, methods, and procedures of estimating collision damage. Preparation of complete estimates according to local standards and business and insurance practices.

**ACR 226 Production Metal Repair**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

*Prerequisite:* ACR 220 or faculty consent.

Designed to simulate actual working procedures of the auto collision repair/refinish technician. Refinement of technique as well as increasing production speed in all skill areas will be emphasized. Estimating and shop management procedures will also be covered.

## Automotive Technology

**AUT 100 Basic Auto Mechanics**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

This course is designed to give the student a basic understanding of general maintenance of the automobile. Instruction in reading the use of measuring tools, taps, and dies, and stud-removing tools is included. The course also includes accessory installation, tire services, wheel balancing, lubrication services, vehicle safety inspection, and an introduction to internal combustion engines. This class also includes cooling system services.

**AUT 103 Auto Electricity I**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

*Prerequisite:* AUT 100 or DPM 100 for students entering Diesel Option

This course is designed for beginning automotive students. The course will cover the principles of electricity; the mathematical calculations involved in Ohm's Law; the usage of meters, electrical schematics with symbols; and the theory and function of electrical components as they relate to the automobile. This course will also include the operational theory and service maintenance of batteries, starting systems, and charging systems. The theory of ignition systems operation will be covered.

**AUT 111 Power Trains**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

*Prerequisite:* AUT 100 or DPM 100 for students entering Diesel Option

A course covering the operation, diagnosis and repair of the power train, including clutch, standard and overdrive transmissions and transaxle, all wheel drive, drive shaft and half shaft, and differentials.

**AUT 113 Automotive Fuel Systems and Emission Control**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

*Prerequisite:* AUT 100 or DPM 100 for students entering Diesel Option

This course is designed for beginning students who have completed Basic Auto Mechanics or are taking it concurrently. Included in this course are the theory of operation, service, diagnosis, and repair of the automobile fuel system components. Fuel system components include fuel pumps, filters, lines, carburetors, fuel injection, turbo charging, and related emission control systems. This course also includes instruction and use of infrared exhaust analyzers in fuel system diagnosis and adjustment.

### **AUT 114 Automotive Brakes**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

This course covers the theory of operation, construction, application, diagnosis, service, repair, and overhaul of automotive braking systems. Also included is the operational theory, and service and repair of anti-skid brake systems.

### **AUT 115 Suspension and Alignment**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

*Prerequisite:* AUT 100 or DPM 100 for students entering Diesel Option

This course is designed to give the student an understanding of the construction principles and operation and repair of automotive suspension and steering systems. Included are diagnosis, testing, adjusting, and repair of vehicle suspension and steering systems with both two-wheel and four-wheel alignment procedures being covered.

### **AUT 123 Automotive Tune-Up Services**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

*Prerequisite:* AUT 100 or DPM 100 for students entering Diesel Option

This course includes instruction in the theory, diagnosis, and repair of ignition components and timing controls. Included in this course is the testing and maintenance services of the battery, charging system, engine mechanical condition, fuel system maintenance, and vehicle emission control system.

### **AUT 125 Engines I**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

*Prerequisite:* AUT 100 or DPM 100 for students entering Diesel Option

This course was developed on the Open-Entry, Open-Exit System which provides individual study, enabling self-paced instruction. Video and computer technology is used extensively. Operation and construction of the internal combustion engine are included. Inspection, measuring, parts identification, and vehicle ID are covered. The student confirms his video and computer knowledge by use of mock-up engines with instructor supervision.

### **AUT 126 Engines II**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

*Prerequisite:* AUT 125

This course provides students with the skills to develop procedures of diagnosis and testing from a knowledge of engine operation and to perform a complete engine rebuild process including the use of special equipment studied in AUT 125 and the use of video and computer-assisted instruction.

### **AUT 203 Auto Air Conditioning, Heat, and Vent Systems**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

*Prerequisite:* AUT 100 or DPM 100 for students entering Diesel Option

A study of types of air-conditioning, heating, and ventilating systems used in modern automobiles. Installation and servicing of automotive air conditioning systems, theory of operation and adjustment of operating controls, and diagnosis are stressed.

### **AUT 204 Auto Electricity II**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

*Prerequisite:* AUT 103, AUT 113, AUT 123

Students will demonstrate the ability to diagnose, service, and repair automotive electrical systems, using appropriate testing equipment. Electrical units included in this course are battery, starting system, charging system, lighting system, horn and warning buzzers, electrical instruments and gauges, and accessory motors and controls. Also included with the use of scanner tools are the diagnostic procedures used in troubleshooting automotive computer controls, including the electronic engine control system.

### **AUT 205 Advanced Automotive Engines**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

*Prerequisite:* AUT 126 or faculty consent

This is a continuation of Automotive Engines II with emphasis on updated diagnosis and engine rebuilding techniques.

### **AUT 206 High Performance Engines**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

*Prerequisite:* AUT 126 or faculty consent

The theory of design and development of high performance engines will be discussed. The student will also learn the use of specialty equipment and design for the development of high performance engines.

### **AUT 211 Engine Diagnosis and Tune Up**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

*Prerequisite:* AUT 100, AUT 103, AUT 113, AUT 123 (AUT 204 preferred, but not required)

This course covers advanced engine diagnosis and trouble-shooting techniques necessary in determining drivability problems in the modern automobile. Students are taught the correct diagnostic procedures and advanced methods of diagnosing electrical, fuel, emission control, and accessory systems directly related to engine performance. Instruction and testing will emphasize the use of engine oscilloscope analyzers and exhaust performance testers for diagnosis of drivability problems.

### **AUT 213 Production Mechanics**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

*Prerequisite:* Sophomore standing in program.

This course simulates actual working procedures of line mechanics including analysis, inspection, and repair procedures of components of the automobile. Students make repairs in compliance with flat-rate manuals. This course may be used for specialization purposes.

### **AUT 215 Automatic Transmission I**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

*Prerequisite or Corequisite:* AUT 100

This course includes instruction in the basic principles of operation and diagnosis of all automatic transmissions, especially the Ford automatic transmission, including principles of operation, troubleshooting, and overhaul procedures of hydraulically operated transmissions, torque converters, and fluid couplings used with automatic transmissions common to the automotive field.

### **AUT 216 Automatic Transmission II**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

*Prerequisite:* AUT 215

This course includes instruction in the operation and diagnosis of the common GM and Chrysler-built automatic transmission. It includes principles of operation, troubleshooting, and overhauling procedures on hydraulically operated transmissions, torque converters, and fluid couplings used with automatic transmissions common to the automotive field.

## **Biology**

### **BIO 105 Science of Biology** □

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

Designed for nonscience students. Examines the basis of biology in the modern world and surveys the current knowledge and conceptual framework of the discipline. Biology as a science, a process of gaining new knowledge, is explored, as is the impact of biological science on society. Includes laboratory experience.

### **BIO 110 Foundations of College Biology**

5 Credit Hours • 90 Contact Hours (60 Lecture, 30 Lab)

*Prerequisite:* MAT 066 or biology faculty consent

General concepts of biology as a science; basic chemistry, cell structure and function, genetics, and evolution. A preliminary course designed for students pursuing human anatomy and physiology. Includes laboratory experience.

### **BIO 111 General College Biology I** □

5 Credit Hours • 90 Contact Hours (60 Lecture, 30 Lab)

*Prerequisite:* MAT 100 or biology faculty consent

Examines the fundamental molecular, cellular, and genetic principles characterizing plants and animals. Includes cell structure and function, the metabolic processes of respiration, and photosynthesis, as well as cell reproduction and basic concepts of heredity. Includes laboratory experience.

### **BIO 112 General College Biology II** □

5 Credit Hours • 90 Contact Hours (60 Lecture, 30 Lab)

*Prerequisite:* BIO 111 or biology faculty consent

Continuation of BIO 111. Includes ecology, evolution, classification, structure, and function in plants and animals. Includes laboratory experience.

### **BIO 123 Foundations of Microbiology**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

*Prerequisite:* BIO 110 or BIO 111, or biology faculty consent

Survey of principles of the microbial world. Includes structure, metabolism, growth, and genetics of bacteria, fungi, and viruses as well as an overview of epidemiology and disease. Meets the requirements for the nursing program. Includes laboratory experiences.

### **BIO 130 Environmental Biology**

3 Credit Hours • 45 Contact Hours (Lecture)

The natural environment is currently affected by a variety of human actions. This course presents an overview of the world's environmental problems, provides a biological understanding of these problems, and analyzes the current thinking about possible solutions to the problems.

### **BIO 133 Ecology**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

A study of the interrelationships between organisms and their environment. Population dynamics and the diversity of ecosystems will be included. Laboratory will include field experience.

### **BIO 134 Plant Taxonomy**

4 Credit Hours • 90 Contact Hours (30 Lecture, 60 Lab)

Beginning biological and botanical terminologies, techniques, and experiments to give the student a strong background in plant relationships and identification of plants.

### **BIO 135 Biology of Plants**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

An introductory course which focuses on the diversity of plants, the structure and function of plants, the ecology of plants, and human use of plants. The course emphasizes seed-producing vascular plants, especially flowering plants. Laboratory and field experience is included.

### **BIO 137 Animal Biology**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

This course is a phylogenetic study of animals. It includes an introduction to the invertebrates and a concentrated study of the diverse vertebrate forms. Laboratory experiences will parallel lecture topics.

### **BIO 141 Applied Anatomy, Physiology and Disease Processes I**

5 Credit Hours • 90 Contact Hours (60 Lecture, 30 Lab)

This course is designed to provide the student with a basic knowledge of the normal structure and function of the body and an understanding of the major disorders of the integumentary, musculo-skeletal, nervous, sensory, endocrine, and cardiovascular systems. Includes laboratory exploration of these systems.

### **BIO 142 Applied Anatomy, Physiology and Disease Processes II**

5 Credit Hours • 90 Contact Hours (60 Lecture, 30 Lab)

*Prerequisite:* BIO 141

This course is designed as a continuation of BIO 141 and will further provide the student with a basic knowledge of the normal structure and function of the body and an understanding of the major disorders of the lymphatic, respiratory, digestive, urinary, and reproductive systems.

### **BIO 151 Introduction to Nutrition I**

3 Credit Hours • 45 Contact Hours (Lecture)

Energy components of foods, such as carbohydrates, fats, and proteins, and how the human body utilizes these in different metabolic pathways to produce an energy balance. Twenty-four hour diet analyses are used with computer assistance to study all current recommended daily allowances.

### **BIO 201 Human Anatomy and Physiology I**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

*Prerequisite:* BIO 110 or biology faculty consent

This course is an integrated study of the human body in which the histology, anatomy and physiology of each system is covered. The first part of this two semester course includes molecular, cellular and tissue levels of organization; integuments, skeletal, articulations, muscular, nervous, senses and endocrine (or digestive and respiratory) systems. This course has laboratory experience that includes experimentation, microscope work, observations, and dissection.

### **BIO 202 Human Anatomy and Physiology II**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

*Prerequisite:* BIO 201 or biology faculty consent

This course is an integrated study of the human body in which histology, anatomy and physiology of each system is covered. The second part of this two semester course (sequence) includes the study of the following systems: cardiovascular with hematology, lymphatic, immunological, urinary with fluid and electrolyte control, digestive with nutrition, respiratory (or nervous and endocrine), and the reproductive system with genetics and development. This course has laboratory experience that includes experimentation, microscope, observation, and dissection.

### **BIO 205 Microbiology**

5 Credit Hours • 105 Contact Hours (45 Lecture, 60 Lab)

*Prerequisite:* BIO 110 or BIO 111, or BIO 201, or biology faculty consent

This course is a study of microorganisms with an emphasis on their structure, development, physiology, classification and identification. Includes laboratory experience of culturing, identifying, and controlling microorganisms.

### **BIO 207 Genetics**

4 Credit Hours • 90 Contact Hours (45 Lecture, 45 Lab)

*Prerequisite:* BIO 111 or biology faculty consent

This course is a study of fundamental laws of heredity and their application to living organisms. The course will cover the basics of genetics. Topics include Hardy-Weinberg law. The course includes a laboratory experience.

## **Business**

### **BUS 100 Business Writing Fundamentals**

1 Credit Hour • 15 Contact Hours (Lecture)

*Prerequisite:* ENG 060 or faculty consent

This course will prepare students for BUS 217. Emphasis will be on developing the style for business writing; introducing methods for conducting research for business communications; and making effective use of computers and computer programs to improve business-writing skills.

### **BUS 105 Business Mathematics**

4 Credit Hours • 60 Contact Hours (Lecture)

Basic applications of mathematics to business problems such as pricing, inventory control, depreciation, fixed and variable costs, taxes, insurance, annuities, etc. Proficiency with the hand-held calculator is necessary. MAT 036 is recommended prior to enrolling in this course.

### **BUS 115 Introduction to Business**

3 Credit Hours • 45 Contact Hours (Lecture)

Survey of the operation of the American Business System: fundamentals of the economy, careers and opportunities, marketing, management, production, governmental regulations, tools of business, and social responsibilities.

### **BUS 158 Human Resource Management**

3 Credit Hours • 45 Contact Hours (Lecture)

Designed to assess the role, organization, and evaluation of one of an organization's most valued resources—personnel. Covers the skills and knowledge of human resource managers in making strategic plans and decision-making and their contributions toward the achievement of organizational objectives. Curriculum emphasizes the management of human resources in a country and culture that is highly dynamic.

### **BUS 171 Cooperative Work Experience I/Internship I**

3 Credit Hours • 105 Contact Hours (15 Lecture, 90 Work Experience)

*Prerequisite:* BUS 115 and MAN 225.

Students will work at an approved training station a minimum of six hours per week and/or complete an approved project. Program coordinator supervises work experience situation.

### **BUS 172 Cooperative Work Experience II/Internship II**

3 Credit Hours • 105 Contact Hours (15 Lecture, 90 Work Experience)

*Prerequisite:* BUS 171 or faculty consent

Continuation of BUS 171.

### **BUS 216 Legal Environment of Business**

3 Credit Hours • 45 Contact Hours (Lecture)

This is an activity course which emphasizes public law, regulation of business, ethical considerations, and various relationships which exist within society, government, and business. Specific attention will be devoted to economic regulation, social regulation, regulation and laws impacting labor-management issues, and environmental concerns. Students will develop an understanding of the role of law in social, political, and economic change.

### **BUS 217 Business Communication and Report Writing**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* BUS 100 or faculty consent

Emphasizes effective business writing: letters, memoranda, reports, application letters, and resumes. Includes the fundamentals of business communication and an introduction to international communication.

### **BUS 226 Business Statistics**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* BUS 105 and CIS 118 or faculty consent

Intended for the business major, and covers statistical study, descriptive statistics, probability and the binomial distribution, index numbers, time series, decision theory, confidence intervals, linear regression, and correlation.

### **BUS 260 Business Process Foundations**

3 Credit Hours • 45 Contact Hours (Lecture)

This is a lecture-based course that is designed to provide the student with thorough background of three industry business process models and how e-commerce solutions help streamline these processes. This course also examines the relationship of these business process transactions to business accounting and marketing and how to calculate the return on investment of an e-commerce system. The three industries studied are Financial Services, Telecommunications and Manufacturing.

### **BUS 261 E-Commerce Business Value**

3 Credit Hours • 45 Contact Hours (Lecture)

This course is designed to provide the student with thorough understanding and practical knowledge of calculating the return on investment of implementing e-commerce solutions. This course offers an in-depth look at gaining value out of each of the various types of e-commerce solutions including, online procurement, online sales, online marketing, online auctions, and online customer self-service.

### **BUS 265 Investments**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ACC 110 or ACC 121, and BUS 105, or faculty consent

Various kinds of securities, instruments, and theories about researching, analyzing, investing, and monitoring securities. Fundamental and technical analysis as a workable criterion for selection of a personal portfolio.



### **BUS 271 Advanced Cooperative Work Experience I/ Internship I**

3 Credit Hours • 105 Contact Hours (15 Lecture, 90 Work Experience)

*Prerequisite:* BUS 172

Continuation of BUS 172.

### **BUS 272 Advanced Cooperative Work Experience II/ Internship II**

3 Credit Hours • 105 Contact Hours (15 Lecture, 90 Work Experience)

*Prerequisite:* BUS 271

Continuation of BUS 271.

## **Chemistry**

### **CHE 101 Introduction to Chemistry I**

5 Credit Hours • 90 Contact Hours (60 Lecture, 30 Lab)

*Prerequisite:* MAT 066 or chemistry faculty consent

For nonscience majors, students in occupational and health programs, or students with no chemistry background. Includes measurements, atomic theory, chemical bondings, nomenclature, stoichiometry, solutions, acid and base, gas laws, and condensed states. Laboratory experiments demonstrate the above concepts qualitatively and quantitatively.

### **CHE 102 Introduction to Chemistry II**

5 Credit Hours • 90 Contact Hours (60 Lecture, 30 Lab)

*Prerequisite:* CHE 101 or chemistry faculty consent

Includes hybridization of atomic orbital for carbon; nomenclature of organic compounds; properties of different functional groups, nomenclature of various biological important compounds, their properties and their biological pathways. Laboratory experiments demonstrate the above topics qualitatively and quantitatively.

### **CHE 111 General College Chemistry I**

5 Credit Hours • 105 Contact Hours (60 Lecture, 45 Lab)

*Prerequisite:* MAT 121 or chemistry faculty consent

For science and engineering majors. Includes the study of measurements, atomic theory, chemical bonding, stoichiometry, gases, condensed states, solutions, and thermodynamics. Also includes the problem-solving skills and descriptive contents for these topics. Laboratory techniques used in the experiments demonstrate the above concepts as well as the qualitative and quantitative analytical techniques.

### **CHE 112 General College Chemistry II**

5 Credit Hours • 105 Contact Hours (60 Lecture, 45 Lab)

*Prerequisite:* CHE 111 or chemistry faculty consent

Includes thermodynamics, chemical kinetics, chemical equilibrium, acid-base equilibrium, ionic equilibrium, electrochemistry, nuclear chemistry, and organic chemistry. Also includes the problem-solving skills and descriptive contents for these topics. Organic chemistry may be included if time permits. Laboratory experiments demonstrate both the qualitative and quantitative analytical techniques.

### **CHE 211 Organic Chemistry I**

5 Credit Hours • 105 Contact Hours (45 Lecture, 60 Lab)

*Prerequisite:* CHE 112 or chemistry faculty consent

The topics of this course include structure and reactions of aliphatic hydrocarbons and selected functional group families. Nomenclature of organic compounds, stereochemistry, and reaction mechanisms will be covered. Laboratory will demonstrate the above concepts and laboratory techniques.

### **CHE 212 Organic Chemistry II**

5 Credit Hours • 105 Contact Hours (45 Lecture, 60 Lab)

*Prerequisite:* CHE 211 or chemistry faculty consent

The topics in this course include structure, reactions and reaction mechanisms of aromatic compounds and continuation of functional group families from CHE 211. Introduction to the chemistry of heterocycles and biologically related compounds will be covered if time permits. Laboratory will demonstrate the above concepts and laboratory techniques.

## **Computer Information Systems**

### **CIS 100 Computer Keyboarding**

1 Credit Hour • 30 Contact Hours (Lab)

*Grading:* S/U only

An introduction to touch keyboarding as well as basic operations and functions of equipment. Emphasizes learning the alphanumeric keyboard, proper technique, and speed and control. This course is designed for students who have minimal or no keyboarding skills.

### **CIS 101 Word Processing with Assistive Technology**

3 or 5 Credit Hours • 45 or 75 Contact Hours (Lab)

*Prerequisite:* faculty consent required.

This course utilizes assistive technology and alternative methods in the introduction of standard word processing features. Topics include create, edit, save, print, spell check, format, fonts, tables, macros, merge, and graphics.

### **CIS 104 Computer Assistive Technology**

3 Credit Hours • 45 Contact Hours (Lecture)

This course provides an introduction to assistive technology and alternative methods for utilization of computer systems. Dependent upon student need or interest, the student will select 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 106 Show Me The Computer**

1 Credit Hour • 15 Contact Hours (Lecture)

*Grading:* S/U only

This course focuses on the needs and interests of students entering the workforce in the 21<sup>st</sup> century. The student will learn some of the applications available in Microsoft Windows and how to use its features to create realistic business and personal documents.

### **CIS 110 Introduction to PC Operating Systems: DOS**

2 Credit Hours • 30 Contact Hours (Lecture)

This course introduces concepts, terminology, and skills in the use of an operating system. The emphasis will be on understanding and using an operating system in a practical way in order to complement students' use of application software on the microcomputer.

### **CIS 112 Introduction to Windows: 98**

1 Credit Hour • 15 Contact Hours (Lecture)

This course introduces the functions and capabilities of Microsoft Windows. Topics include configuring and modifying the operating environment.

### **CIS 115 Introduction to Computer Information Systems**

3 Credit Hours • 45 Contact Hours (Lecture)

This course is an overview of the needs for and roles of computer information systems. Emphasis is on computer requirements in organizations, history, hardware functions, programming, systems development, and computer operations. Introduces computer applications and programming.

**CIS 117 Introduction to Claris Word Processing**

.5 Credit Hours • 7.5 Contact Hours (Lecture)

Grading: *S/U only*

This course introduces the features of Claris Works Word Processing. Students will learn how to create, format, edit, save and print documents. Keyboarding skill is required.

**CIS 118 Introduction to PC Applications**

3 Credit Hours • 45 Contact Hours (Lecture)

This course reviews standard software packages available to support a microcomputer-based workstation. Included are descriptions of and hands-on work with word processors, spreadsheets, file and database management systems, and other common application packages.

**CIS 119 Introduction to Claris Spreadsheets**

.5 Credit Hours • 7.5 Contact Hours (Lecture)

Grading: *S/U only*

This course introduces the features of Claris Works Spreadsheets. Students will develop a working knowledge of electronic spreadsheets including calculations, built-in functions, and spreadsheet design.

**CIS 120 Word Processing I - WordPerfect (WIN) or Microsoft Word**

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: *Typing ability of 30 wpm or faculty consent.*

This course introduces the features of WordPerfect or Microsoft Word word processing software. Students learn to create, format, edit, save, and print various documents. Keyboarding skill is required.

**CIS 122 Word Processing II - WordPerfect (WIN) or Microsoft Word**

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: *CIS 120 or faculty consent.*

Continues to build on word processing skills learned in CIS 120. Topics include merge, sort, macros, tables, and graphics.

**CIS 125 Introduction to Windows '98**

.5 Credit Hours • 7.5 Contact Hours (Lecture)

Grading: *S/U only*

This course introduces concepts, terminology, and skills associated with the use of the Windows '98 operating system. Emphasis will be on understanding and using the operating system in a practical way in order to complement students' use of application software on the microcomputer.

**CIS 126 Introduction to Word (WIN)**

.5 Credit Hours • 7.5 Contact Hours (Lecture)

Grading: *S/U only*

This course introduces the features of MS Word for Windows. Students will learn how to create, format, edit, save, and print documents. Keyboarding skill is required.

**CIS 127 Introduction to Excel (WIN)**

.5 Credit Hours • 7.5 Contact Hours (Lecture)

Grading: *S/U only*

This course introduces the features of MS Excel for Windows. Students will develop a working knowledge of electronic spreadsheets including calculations, built-in functions, and spreadsheet design.

**CIS 128 Introduction to PowerPoint (WIN)**

.5 Credit Hours • 7.5 Contact Hours (Lecture)

Grading: *S/U only*

This course introduces the features of MS PowerPoint for Windows. Students will develop a basic working knowledge of how to create presentation graphics materials using MS PowerPoint.

**CIS 129 Introduction to Internet (PC)**

.5 Credit Hours • 7.5 Contact Hours (Lecture)

Grading: *S/U only*

This introductory class is designed to provide basic knowledge of the Internet. The class will explain the essential structure and differences between the Internet and the World Wide Web. Students will learn how to use different browsers, visit the Web sites worldwide, and search for specific information.

**CIS 130 Introduction to the Internet**

2 Credit Hours • 30 Contact Hours (Lecture)

This course introduces the Internet, the global network of computer networks. The Internet's resources and tools are explored. Topics include history, topology, e-mail, listserv, telnet, ftp, World Wide Web, and various search engines.

**CIS 131 Introduction to Web Authoring: HTML**

1/3\* Credit Hours • 15 Contact Hours (Lecture)

\*Variable (3 credit hours earned for CCC-Online)

Prerequisite: *CIS 130 or faculty consent*

This course introduces web-authoring software. Students will design and prepare simple documents for delivery on the World Wide Web.

**CIS 133 Advanced Web Authoring: Front Page**

1 Credit Hour • 15 Contact Hours (Lecture)

Prerequisite: *CIS 131 or faculty consent*

This course continues to build on the skills learned in the previous course, using advanced authoring techniques.

**CIS 134 Web Page Layout and Design - FrontPage**

3 Credit Hours • 45 Contact Hours (Lecture)

Note: *This course is offered on CCC-Online only.*

Introduces the development of Web pages using structured design to document layout. Includes concepts such as text manipulation, cross-platform calibration, graphics formats, data tables, and file downloading. Introduces synchronize and inmate media elements and objects into interactive Web pages.

**CIS 136 Presentation Graphics: PowerPoint**

3 Credit Hours • 45 Contact Hours (Lecture)

This course will focus on the development of presentation graphics materials including graphs, charts, illustrations, and diagrams. Emphasis will be on effective communication through computerized presentations.

**CIS 137 Desktop Publishing**

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: *CIS 122 or faculty consent.*

Introduction to basic concepts and office applications for desktop (electronic) publishing. Text entry, page design and layout, and graphics.

**CIS 139 Introduction to Access**

.5 Credit Hours • 7.5 Contact Hours (Lecture)

Grading: *S/U only*

This course will cover an introduction to database concepts, understanding basic Access terminology, opening and working with a table containing customer data, looking at other object tabs, and creating, modifying and updating a table.

**CIS 140 Introduction to PC Database: Access**

1 Credit Hour • 15 Contact Hours (Lecture)

This course introduces the functions of database. It includes skills such as file creation, searches, sorts, simple editing and indexing.

**CIS 141 Intermediate PC Database: Access**

1 Credit Hour • 15 Contact Hours (Lecture) May be repeated for a maximum of three credits.

*Prerequisite: CIS 140 or faculty consent*

This course continues to build on database application skills.

**CIS 142 Advanced PC Database: Access**

1 Credit Hour • 15 Contact Hours (Lecture)

*Prerequisite: CIS 141 or faculty consent*

This course continues to build on database application skills.

**CIS 145 PC Database Concepts: Access**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: CIS 115 or faculty consent*

This course introduces the operations of a PC database management system. Topics may include database design, table operations, searches, sorts, edits, queries, forms, and reports.

**CIS 147 Introduction to Homepage Development**

.5 Credit Hours • 7.5 Contact Hours (Lecture)

*Grading: S/U only*

This class will explain the essential structure of the World Wide Web and its reliance on hypertext. The student will learn the basic features necessary for creating World Wide Web documents.

**CIS 148 Introduction to PC Troubleshooting**

.5 Credit Hours • 7.5 Contact Hours (Lecture)

*Grading: S/U only*

This course introduces the concepts, terminology, and skills needed to identify and communicate basic troubleshooting techniques associated with the operation of a microcomputer. It will include the terminology, organization, and function of networking microcomputers.

**CIS 150 Introduction to PC Spreadsheets: Excel**

1 Credit Hour • 15 Contact Hours (Lecture)

This course introduces the student to concepts and applications of an electronic spreadsheet. Topics include calculations, built-in functions, spreadsheet design, and introduction to graphics. Additional topics may include tables and macros.

**CIS 151 Intermediate PC Spreadsheets: Excel**

1 Credit Hour • 15 Contact Hours (Lecture)

*Prerequisite: CIS 150 or faculty consent*

This course continues to build on electronic spreadsheet skills.

**CIS 152 Advanced PC Spreadsheets: Excel**

1 Credit Hour • 15 Contact Hours (Lecture)

*Prerequisite: CIS 151 or faculty consent*

This course continues to build on electronic spreadsheet skills.

**CIS 155 PC Spreadsheet Concepts: Excel**

3 Credit Hours • 45 Contact Hours (Lecture)

*Note: This course is offered on CCC-Online only.*

Exposes the student to a wide range of uses of the electronic spreadsheet with special emphasis placed on using them as a business tool. Topics include 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 157 Microsoft Office: Intermediate Excel**

.5 Credit Hours • 7.5 Contact Hours (Lecture)

*Grading: S/U only.*

This course is designed to build on electronic spreadsheet skills learned in CIS 127.

**CIS 159 Microsoft Office: Intermediate Word**

.5 Credit Hours • 7.5 Contact Hours (Lecture)

*Grading: S/U only.*

This course is designed to build on word processing skills learned in CIS 126.

**CIS 166 Visual Basic Programming**

3 Credit Hours • 45 Contact Hours (Lecture)

An introductory course using the Visual Basic Programming language. Topics may include program design, input/output, decisions, loops, arrays, functions, arithmetic, and VB topics such as form layout and design, control properties and methods, event and general procedures, and modules.

**CIS 167 C Language Programming: C++**

3 Credit Hours • 45 Contact Hours (Lecture)

This course introduces the C++ programming language. Topics may include data types, decision-making, input and output processes, and common programming and data structures, functions, and pointers.

**CIS 168 Java Programming**

3 Credit Hours • 45 Contact Hours (Lecture)

This course introduces students to Java programming basics such as threads, event handlers, procedures, user interfaces and multimedia. Multiple applets will be written and tested.

**CIS 175 Introduction to Telecommunications**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: CIS 115 or faculty consent*

This course introduces the student to the concepts of telecommunication/data communication. Topics include hardware devices, transmission characteristics, network configurations, codes and modes of transmission, software, and protocols.

**CIS 206 Cisco Network Associate, Level I**

5 Credit Hours • 75 Contact Hours (Lecture)

This course focuses on networking fundamentals including the OSI model and industry standards, network topologies, IP addressing, subnetting, and basic network design. A working knowledge of WIN 95/98, Netscape, and DOS is helpful although not required. Students will participate in hands-on activities involving cabling, LAN design, and construction. Includes extensive on-line curriculum study in addition to classroom lectures.

**CIS 207 Cisco Network Associate, Level II**

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite: CIS 206 or faculty consent*

This course focuses on router theory and router technologies including introductory configuration, routed and routing protocols, and an introduction to LAN switching. Includes hands-on activities in addition to on-line curriculum study and classroom lectures.

**CIS 208 Cisco Network Associate, Level III**

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite: CIS 207 or faculty consent*

This course introduces advanced routing and switching including advanced router configurations, LAN switching, network management, and advanced network design. Includes hands-on activities in addition to on-line curriculum study and classroom lectures.

**CIS 209 Cisco Network Associate, Level IV**

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite: CIS 208 or faculty consent*

This course focuses on project-based learning which includes advanced network design projects and advanced network management projects. Upon completion of this course and the previous three levels, the student will be qualified to take the Cisco Certified Network Associate examination.

## **CIS 215 Natural Resource Computer Analysis and Modeling**

2 Credit Hours • 45 Contact Hours (Lecture, Lab)

This advanced technical GIS course emphasizes the analyzing and modeling of GIS and GPS data. The students will use actual data from case studies to create maps, tables, charts, and models of the information. ARC INFO, ARC VIEW, and ARC CAD software packages will be stressed.

## **CIS 222 Applied Programming and Micro Projects**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* CIS 166 or CIS 167, or CIS 260 and CIS 145, or faculty consent

This is a capstone course for CIS majors. This course requires students to complete multiple programming projects and integrate them into a common system. Students will also develop and present a business project that will integrate various office applications.

## **CIS 260 COBOL Programming**

3 Credit Hours • 45 Contact Hours (Lecture)

This is a computer-programming course in which elements of the COBOL language are taught. Students will design, code, debug, and document solutions to a variety of business-oriented problems.

## **CIS 261 Advanced COBOL Programming**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* CIS 260 or faculty consent

This is a continuation of the study of COBOL programming language. Emphasis will be placed on teaching students the more sophisticated capabilities of COBOL.

## **CIS 266 Advanced Visual Basic Programming**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* CIS 166 or faculty consent

This course is a continuation of the study of Visual Basic Programming. Emphasis will be placed on developing more complex programs. Topics may include OLE, DDE, DLLs, custom controls, database, and telecommunications.

## **CIS 267 Advanced C Language Programming**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* CIS 167 or faculty consent

This course continues the study of C++ begun in CIS 167. Topics may include pointers, arrays, linked lists, stacks and queues, trees, and advanced user interfaces such as menus, windows, and cursor control.

## **CIS 276 Systems Analysis and Design**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* CIS 115 or one programming language

This course introduces the student to the materials, techniques, procedures, and human interrelations involved in developing computer information systems. Topics covered include 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 279 Computer Information Systems Management**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* CIS 115 or faculty consent

This course introduces the concepts and techniques of managing computer-based information resources. Topics include hardware, software, personnel, control techniques, and the placement and integration of information system resources within the organization.

# **Computer Networking**

## **CNT 200 Introduction to Networking**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* CIS 118

This course introduces the student to the underlying concepts of data communications, telecommunications, and networking. It focuses on the terminology and technologies in current networking environments and is meant to provide a general overview of the field of networking basis for continued study in the field.

## **CNT 201 Local Area Networking (LAN)**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* CNT 200

*Note:* This course is offered on CCC-Online only.

An introductory course in Local Area Networking. The student will participate in discussions and demonstrations of planning, installing, and supporting a Novell and Microsoft Networks.

## **CNT 202 Wide Area Networking (WAN)**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* CNT 200

*Note:* This course is offered on CCC-Online only

This course is designed to provide the Student with conceptual and working knowledge of how Local Area Networks communicate over a wide area. This course will introduce the student to telephony, the technology of switched voice communications. This course also provides students with an understanding of how communication channels of the public switched telephone network are used for data communications, and how voice and data communications have become integrated.

## **CNT 203 TCP/IP and Network Architectures**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* CNT 200

*Note:* This course is offered on CCC-Online only

This course outlines four important networking architectures in corporate environments today: TCP/IP, SNA, AppleTalk, and DNA. The major components and functions of each of these architectures are discussed as well as methods used to connect different architectures. This course provides the students with concepts that are important to the field of systems integration as well as a conceptual basis for understanding network architecture.

## **CNT 204 Introduction to Internet Technologies**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* CNT 200

*Note:* This course is offered on CCC-Online only

This course outlines the important Internet technologies in use today. The major components and functions of each of these technologies are discussed as well as methods used to connect different technologies. This course 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.

## **CNT 205 Internetworking**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* CNT 200

*Note:* This course is offered on CCC-Online only

This is an advanced course intended for networking professionals and students who already grasp the general concepts of data communications and networking, but would like a more detailed understanding of Internetworking. Techniques and components for managing network growth and connecting disparate network architectures will be presented and solutions to Internetworking problems will be developed.

### **CNT 206 Processes and Protocols**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* CNT 200

*Note:* This course is offered on CCC-Online only

This is an advanced course intended for networking professionals and students who already grasp the general concepts of data communications and networking, but would like a more detailed understanding of the processing and protocols of Internetworking. Techniques and components of processing and protocols for managing networks and connecting disparate network architectures will be presented and solutions to processing and protocols problems will be developed.

### **CNT 207 Network Analysis and Design**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* CNT 200

*Note:* This course is offered on CCC-Online only

This is an advanced course intended for networking professionals and students who grasp the basic concepts of networking but would like to understand methods used to analyze, design, and manage LANs and point-to-point networks. Exercises are geared toward learning techniques used to design and analyze networks.

### **CNT 209 Computer Networking Lab/Practicum**

3 Credit Hours • 90 Contact Hours (Lab)

*Prerequisite or Corequisite:* CNT 200, CNT 201, CNT 202, CNT 203, CNT 204, CNT 205, CNT 206

*Note:* This course is offered on CCC-Online only

This course work requires a practical demonstration of computer networking skills. Students will demonstrate working knowledge and problem-solving capabilities in data communications, telecommunications, and networking. Students will apply their networking skills to problems and procedures for workstation operations, wiring/cabling, constructing networks utilizing a variety of network/internetwork devices, and configuring and managing NT and Novell operations.

## **Computer Science**

### **CSC 105 Computer Literacy**

3 Credit Hours • 45 Contact Hours (Lecture)

This course is an introduction to computers. It includes the history of computers and their impact on society. Students will learn microcomputer terminology as well as criteria for evaluating software and hardware. Students will develop a working knowledge of an operating system and several microcomputer applications. The microcomputer applications will include word-processing, spreadsheet, database, and presentation software.

### **CSC 116 Problem Solving with Visual Basic for Applications**

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

This course introduces the student to problem solving using the Visual Basic for Applications (VBA) language found in the Microsoft Office software package. VBA is used by the Office software packages to write macros and other interactive applications. Instead of emphasizing a particular software package within MS Office, VBA will be used and can be applied to any of the software packages. There is no prerequisite for this course, but a working knowledge of Windows would be helpful.

### **CSC 125 Programming for the Internet**

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

*Prerequisite:* Student should have an understanding of Windows, a Browser, and the Internet

This course is intended to provide the student with a basic understanding of the Internet and web page development. Web page development will emphasize the interactive web page by using common Internet programming languages. Some of the Internet languages include HTML, VBscript, Java script, and CGI.

### **CSC 148 FORTRAN Programming**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* MAT 105 or computer science faculty consent

Students will acquire programming skills using the FORTRAN programming language. Topics include program design, data types, looping structures, formatted and unformatted input/output, array and matrix processing, character manipulations, functions and subroutines, and sequential and direct file applications.

### **CSC 150 Visual Basic Programming**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

*Prerequisite:* CSC 116 or faculty consent

Provides the student with the basic knowledge to develop Algorithms, write code, and debug windows applications using Visual BASIC.

### **CSC 160 Computer Science I: C++**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

*Prerequisite:* MAT 105 or computer science faculty consent

This course will introduce students to the discipline of computer science. Topics covered will include algorithm development, data representation, arithmetic and logical expressions, sub-programs, and input/output operations using a structured programming language.

### **CSC 161 Computer Science II: C++**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

*Prerequisite:* CSC 160

This course continues the structured algorithm development and problem solving techniques begun in Computer Science I. Students gain experience in the use of data structures and the design of larger software projects. Some common data structures covered are stacks, queues, trees, and linked list. Intensive computer laboratory experience required.

### **CSC 165 Discrete Structures**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* CSC 160, MAT 121

This course prepares student for a fundamental understanding of computing and computer science. Topics covered will include set theory, Boolean algebra, relations, functions, graph theory, and techniques for formal reasoning.

### **CSC 225 Computer Organization/Assembly Language Programming**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

*Prerequisite:* CSC 160

This course introduces the student to the organization of a computer at a logic level. Topics covered will include numbering systems, logic, digital systems, machine level representation of data, assembly level organization, and memory system organization.

### **CSC 230 C Programming: Unix**

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

*Prerequisite:* CIS 160

To introduce the student to the UNIX Operating System and to present a high level programming language within the UNIX environment.

### **CSC 240 Java Programming**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

*Pre-requisite: MAT 105 or equivalent or faculty consent*

This course introduces students to the computer programming language known as JAVA. Because of the popularity and accessibility of the Internet, JAVA is quickly becoming one of the most commonly used languages. Topics covered will include but are not limited to algorithm development, primitive type and strings, arithmetic and logical expressions, flow of control, functions, arrays, file processing, input/out operations, and object-oriented programming. A knowledge of C++ would be of great benefit.

## **Criminal Justice**

### **CRJ 110 Introduction to Criminal Justice**

3 Credit Hours • 45 Contact Hours (Lecture)

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. The course analyses of the roles of 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 Credit Hours • 45 Contact Hours (Lecture)

Legal definitions of crime, purposes and functions of the law, historical foundations of the limits of the criminal law.

### **CRJ 112 Procedural Criminal Law**

3 Credit Hours • 45 Contact Hours (Lecture)

Constitutional and procedural considerations affecting arrest, search and seizure, post-conviction treatment, origin, development, philosophy, and constitutional basis of evidence. Degrees of evidence and rules governing admissibility; judicial decisions interpreting individual rights and case studies.

### **CRJ 113 Criminal Justice Information Systems**

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

Designed to familiarize the student with state, federal, and county information systems and procedures and how they are interrelated in the criminal justice systems. Lab emphasis will incorporate a computer composite, crime scene diagramming, and traffic accident reconstruction programs. Additional emphasis will be placed on teletype entry and interpreting, including NCIC and CCIC as well as other computer-related systems.

### **CRJ 115 Law Enforcement Driving**

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

*Prerequisite: Valid motor vehicle operators license, CRJ Majors Only.*

Skills and knowledge necessary to operate a motor vehicle safely, efficiently, and effectively. Skills to simulate actual conditions normally encountered in routine driving function including E.V.O. and pursuit possibilities. This course meets P.O.S.T. certification requirements for mini-skills training.

### **CRJ 116 Civil Liability**

2 Credit Hours • 30 Contact Hours (Lecture)

This course covers aspects of civil liability to which law enforcers are likely to subject themselves. Constitutional torts, intentional torts, negligence, as well as defenses to these types of lawsuits are analyzed.

### **CRJ 117 Defensive Tactics**

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Vocational Lab)

*Prerequisite: CRJ Majors Only*

*Grading: S/U Only*

Hand-to-hand defense most commonly utilized by law enforcement personnel. Various holds, throws, breaking holds, blow parries, and counterattacks as well as use of the baton and other weapons are covered.

### **CRJ 118 Report Writing**

3 Credit Hours • 45 Contact Hours (Lecture)

This course is designed to teach the fundamentals for preparing criminal justice reports, who uses them, what information must be included, how to organize it, and how to write reports in clear, concise language that will communicate the maximum amount of factual information. Special emphasis will be placed on spelling, punctuation, and paragraphing.

### **CRJ 125 Law Enforcement Operations**

3 Credit Hours • 45 Contact Hours (Lecture)

An in-depth examination of the complexity and multi-dimensional aspects of the police role and career, police discretion, police values, and culture of modern America. This course studies role and functions of the police occupational, social, political, and organizational context.

### **CRJ 135 Judicial Function**

3 Credit Hours • 45 Contact Hours (Lecture)

Examines the criminal court system and criminal process with an analysis of the major judicial decision makers, i.e., prosecutors, defense attorneys, judges, and the discretionary aspects of adjudication.

### **CRJ 140 Introduction to Retail Security**

2 Credit Hours • 30 Contact Hours (Lecture)

This course covers essentials of retail store security, internal and external security factors in the prevention of pilferage, detection and suppression of shoplifting, and security devices and practices.

### **CRJ 141 Introduction to Industrial Security**

2 Credit Hours • 30 Contact Hours (Lecture)

This course covers private security practices and functions dealing with industrial oriented problems. Also included are criminal and civil law restrictions, total responsibilities, development and operation of security forces, and administration and management structures and policies.

### **CRJ 145 Correctional Process**

3 Credit Hours • 45 Contact Hours (Lecture)

Post-conviction corrections process; the development of a correctional philosophy, theory, and practice; a description of institutional operation, programming and management; community-based corrections, probation, and parole.

### **CRJ 146 Community Based Corrections**

3 Credit Hours • 45 Contact Hours (Lecture)

This course is designed to enlighten and inform students of alternative to formal incarceration for criminal offenders utilizing resources and facilities within the local community.

### **CRJ 160 Fingerprinting**

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Vocational Lab)

*Prerequisite: CRJ Majors Only*

Technical terms used in fingerprinting, pattern interpretation, classification of fingerprints, lifting and photographing of fingerprints, and searching and filing procedures. Use and nomenclature of the fingerprinting camera and various kits and allied equipment.

**CRJ 161 Police Pistol Training**

2 Credit Hours • 45 Contact Hours (15 Lecture, 30 Lab)

*Prerequisite: CRJ Majors Only*

Basics of the use of deadly force; civil and criminal liabilities for police personnel. F.A.T.S. (firearms training system) is used to assist "on the range" shooting. Practical shooting skills are practiced with live ammunition on range targets.

**CRJ 163 Advanced Firearms**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: CRJ 161, CRJ Majors Only*

Continuation of Police Pistol Training with emphasis on Police Combat/Tactical Shooting techniques using the police revolver, semi-automatic pistol, and shotgun. This course covers the additional hours and training required by P.O.S.T. that allows testing for Colorado Police Officers P.O.S.T. Certification. Also see CRJ-203.

**CRJ 201 Police Patrol Procedures**

3-4 Credit Hours\* • 45 Contact Hours (Lecture)

*\*Variable (3 credit hours on-campus/4 credit hours off-campus)*

Fundamentals of police patrol, personnel deployment, beat layouts, riot and crowd control, raids, mechanics of arrest; techniques of field interviewing and note taking. Disarming, searching, and handcuffing prisoners. Care of emergency equipment. Response techniques for high-risk situations.

**CRJ 203 F.A.T.S. Judgmental Shooting**

1 Credit Hour • 22.5 Contact Hours (Vocational Lab)

*Prerequisite: CRJ Majors Only*

Class focuses on P.O.S.T. pre-testing requirements for tactical mindset and decision-making involving the use of deadly force (along with CRJ 163). Opportunity to display skills learned in the use of deadly force by law enforcement officers. F.A.T.S. (Firearms Training System) is a laser pistol screen that puts "Shoot – Don't Shoot" scenarios into lifelike projections to permit judgmental shooting decisions. The system grades judgment, shooting skills, and time involved in the decision-making processes and permits in-depth discussion on improving skill levels.

**CRJ 209 Criminal Investigation I**

3 Credit Hours • 45 Contact Hours (Lecture)

This course covers the function of the preliminary investigation at a crime scene to include securing the scene, crime scene searches, police drawings, and recognition and collection of evidence.

**CRJ 210 Constitutional Law**

3 Credit Hours • 45 Contact Hours (Lecture)

A study of the powers of government as they are allocated and defined by the United States Constitution; intensive analysis of United States Supreme Court decisions.

**CRJ 211 Criminal Investigation II**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: CRJ 209*

Continuation of CRJ 209. Follow-up investigation including an examination of death in all its aspects.

**CRJ 212 Criminal Investigation III**

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite: CRJ 209*

An in-depth study of the principles of conducting a complete and systematic interview and/or interrogation. Examines the psychological dynamics of persons falsifying information. Confessions, undercover operations, surveillance techniques, and survival skills unique to undercover operants are also components.

**CRJ 213 Criminal Investigation IV**

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite: CRJ 209*

This course covers arson and incendiary, arson laws, and types of incendiary fires methods of determining fire cause, recognizing and preserving evidence, and interviewing and detaining witnesses; procedures in handling juveniles, court procedure, and giving court testimony.

**CRJ 215 Constitutional Rights of Inmates**

3 Credit Hours • 45 Contact Hours (Lecture)

An overview of the 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 Credit Hours • 45 Contact Hours (Lecture)

An in-depth analysis of the socio-legal operation of the Juvenile Court, focusing on the substantive and due process rights of minors. Analysis of legal reasoning underlying the juvenile law as it operates at all levels of government.

**CRJ 218 Vice and Narcotics**

2 Credit Hours • 30 Contact Hours (Lecture)

This course covers laws dealing with gambling, prostitution, sex crimes, and narcotics; special techniques employed in the detection, suppression, and apprehension of violators; effects of drugs and narcotics; identification of narcotics; and terminology.

**CRJ 219 Police Intelligence**

2 Credit Hours • 30 Contact Hours (Lecture)

This course covers how law enforcement agencies may apply intelligence in police operations and combat organized crime. Structure, training, staffing, security of intelligence units, and operating guidelines at a command level are also included.

**CRJ 220 Human Relations and Social Conflicts**

3 Credit Hours • 45 Contact Hours (Lecture)

Highlights of 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 230 Criminology**

3 Credit Hours • 45 Contact Hours (Lecture)

Examination of the question of crime causation from legal, social, political, psychological, and theoretical perspectives; history and development of criminology.

**CRJ 236 Crisis Intervention**

3 Credit Hours • 45 Contact Hours (Lecture)

Employees of criminal justice occupations are considered public servants. This course will demonstrate effective intervention skills in role-play situations and various aspects of crisis.

**CRJ 241 Security of Specialized Facilities**

2 Credit Hours • 30 Contact Hours (Lecture)

This course covers areas within the security field that require special knowledge, such as airport security, nuclear and atomic site control, clearance control, military and civilian integrated security systems, civil demonstrations, strikes, and riot control. Other areas included are specialized areas of accounting, computer control, foreign trade control, and industrial espionage.

### **CRJ 243 Security Administration**

2 Credit Hours • 30 Contact Hours (Lecture)

This course covers administrative responsibilities in the security field; goal selection; personnel selection and training; applicable law; office, form, and personnel management; financial budgeting; and computerization.

### **CRJ 246 Traffic Investigation and Management**

3 Credit Hours • 45 Contact Hours (Lecture)

An overview of the skills and concepts necessary to complete an accurate investigation of a traffic collision. Traffic management concepts, selective traffic enforcement, and safety issues are discussed.

### **CRJ 250 Penology**

3 Credit Hours • 45 Contact Hours (Lecture)

A historical and theoretical study of incarceration as punishment, deterrence, and incapacitation.

### **CRJ 251 Police Supervision Techniques**

2 Credit Hours • 30 Contact Hours (Lecture)

The course covers basic problems of police supervision: role and function of police supervisor at various levels, training needs, and effective application of supervisory techniques to accomplish objectives.

### **CRJ 255 Organizational Management of Correctional Institutions**

3 Credit Hours • 45 Contact Hours (Lecture)

This course consists of the history of penal and correctional management, organization of correctional institutions, management processes, leadership, control principles, and implications for the future.

### **CRJ 260 Police Photography**

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Vocational Lab)

This course consists of current methods and techniques of police photography. Use, nomenclature, and operation of 35mm and 4x4 cameras at simulated crime scenes and traffic accidents and the development, printing, and enlargement of photos are also components.

### **CRJ 262 Introduction to Crime Scene Technology**

3 Credit Hours • 45 Contact Hours (Lecture)

A study of techniques used for identifying, collecting, and preserving of physical evidence at a crime scene. Includes collection of shoe and tire impressions, tool marks, detection and development of latent fingerprints, examination of glass fractures, and ballistics.

### **CRJ 264 Practical Crime Scene Investigation**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: CRJ 160, CRJ 209, CRJ 211, CRJ 260, CRJ 262*

Students will process mock crime scenes from the preliminary through the follow-up investigation. Includes preparation and presentation of evidence for the criminal trial.

### **CRJ 268 Juvenile Caregiver**

1 Credit Hour • 15 Contact Hours (Lecture)

This course will examine topics such as understanding discipline and punishment, building relationships, communicating effectively, interacting with juvenile offenders, and creating a healthy environment.

### **CRJ 275 Correctional Field Experience**

2 Credit Hours • 90 Contact Hours (90 Work Experience)

*Prerequisite: CRJ 110, CRJ 145*

This course offers CRJ majors placement in an appropriate correctional area or facility. Required paper and log information provided at time of enrollment.

### **CRJ 276 Investigations Field Experience**

2 Credit Hours • 90 Contact Hours (Work Experience)

*Prerequisite: CRJ 209*

This course provides students an opportunity to participate in a structured or supervised work setting in a recognized law enforcement agency. Students will work under the supervision of experienced personnel at the agency involved with a college instructor providing coordination. Students will work a minimum of 90 hours. Also, students will turn in a daily log on the experience. This course is intended to assist the students in applying classroom theory to practice by requiring them to observe and participate in the investigative process.

### **CRJ 277 Patrol Field Experience**

2 Credit Hours • 90 Contact Hours (Work Experience)

*Prerequisite: CRJ 201*

This course provides students an opportunity to participate in a structured or supervised work setting in a recognized law enforcement agency. The student will work under the supervision of experienced personnel at the agency and with a college instructor providing coordination. Students will work a minimum of 90 hours. Also, students will turn in a daily log on the experience. This course is intended to assist the students in applying classroom theory to practice by requiring them to observe and participate in the law enforcement patrol setting.

## **Culinary Arts**

### **CUA 101 Introduction to Food Production and Cooking**

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

This course introduces the various cooking methods used in the food service industry. Students will prepare items by using the following: dairy, grains, vegetables, fruits, and starches. Students will also prepare pastas from scratch, salads, sandwiches, farinaceous food products, plate presentation, and non-alcoholic beverages. Other topics presented will include culinary terminology, recipe reading, and recipe converting.

### **CUA 105 Restaurant Management and Menu Planning**

4 Credit Hours • 90 Contact Hours (Vocational Lab)

This course will demonstrate the use of management skills training in the food service industry by use of student interaction and research, and also demonstrates the various styles of menu development. Students will research the history of food and food service, including important contributions of individuals and related historical moments. Other topics covered include basic responsibility for food service personnel in all kitchen positions; scientific and human relation approaches to management styles; advertising vs. publicity, job analysis, description specifications, and duty list as related to the recruiting and hiring process. Application, interview techniques training, supervision, morale, motivation, and discipline methods will also be examined. The menu card, its design, purpose, content, and construction will be presented to students in a hands-on construction approach. Menu pricing, customers' desires, and needs will be emphasized. Dishware, flatware, and table furnishings are examined. Current and future trends and developments in the industry will be discussed.

### **CUA 106 Applied Food Service Sanitation**

2 Credit Hours • 30 Contact Hours (Lecture)

This course will cover health and safety standards in the food service industry. Students will examine through the use of experimentation food spoilage, classifications of microorganisms, incidence of food borne illness, and infectious outbreaks. Responsibilities of food service establishments and protection agencies for the food service industry as well as HACCP analysis will also be researched.



### **CUA 116 Catering, Buffets, and Tableside Cooking**

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

This course will focus on how to get started in the catering business. Included are recruiting, types of events, contacts, kitchen set-up, equipment, pricing, and menu development. Students will present and plan various stations of buffet set-ups. Students will learn and demonstrate techniques of tableside service and flambé tableside cooking. Students will also participate in basic ice carving demonstrations.

### **CUA 120 Wine and Spirits**

2 Credit Hours • 45 Contact Hours (Vocational Lab)

In this course, students will examine types of beverages and equipment including wines, beers, spirits, bar equipment, and staffing. Profitability, marketing, federal and local laws, and service will be discussed. The history of making and processing wines, spirits, and beers will be studied.

### **CUA 125 Breakfast Line Cookery**

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

The objective of this course is for the students to learn about and prepare a la carte breakfast cookery and quantity breakfast cooker, for sit-down and buffet affairs. Students will study various common menu items, French-style egg cookery, ticket reading, quality control, plate presentation, and equipment used for breakfast cookery.

### **CUA 127 Soups, Sauces, and Consommés**

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

This course will cover the preparation of the five mother sauces and small-derived sauces. Students will also prepare stocks, consommés, emulsified sauces, clear soups, pureed soups, and chowders, national, and cream soups. Gravies and sauce garnishing will also be introduced.

### **CUA 128 Center of the Plate**

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

This course will cover the main entrée preparation and presentation. Students will demonstrate portion control, proper quality control, various cooking methods, and the use of beef, chicken, fish, shellfish, veal, pork, vegetarian items, and casserole recipes including basic butchery techniques. Entrée garnishing and temperature identification will also be examined.

### **CUA 141 Baking Principles and Yeast Products**

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

Students will prepare yeast raised bread dough, sweet dough, and Danish dough. Other items that students will prepare include puff pastry, pastry dough, quick breads, and cookie preparation. Bakeshop principles, ingredients, high altitude conversions, equipment, and applied cooking methods will also be introduced and used in lab.

### **CUA 150 Baking: Cake and Pastry Preparation**

*NOTE: Certificate only.*

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

*Corequisite: CUA 141 or faculty consent*

Students will examine the preparation and production of cakes and decorating. Items the students will prepare include high-fat or shortened cakes, low-fat foam, angel food, and chiffon cakes. Mixing methods, scaling, and make-up procedures will also be demonstrated. Students will also practice cake decorating and cake design presentation using various ingredients and methods.

### **CUA 151 Baking: Intermediate Bread Preparation**

*NOTE: Certificate only.*

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

*Corequisite: CUA 141 or faculty consent*

Students will prepare various types of bread products including French, rye, wheat, brioche, and croissants. The students will also demonstrate different styles of presentation including rolling, braiding, cloverleaf, parker-house, single knot, butter-flake, comb, and wreath shape. Other items that will be examined will include production steps, ingredients, and equipment that apply to course training.

### **CUA 152 Individual Fancy Dessert Production**

*NOTE: Certificate only.*

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

*Corequisite: CUA 141 or faculty consent*

This course will include the preparation and decoration of individual desserts. Students will prepare cream horns, napoleons, eclairs, cream puffs, marzipan fruits, marzipan sculptures, tarts, flambé desserts, international desserts, pastry shells, pulled sugar, blown sugar, spun sugar, and individual chocolate design decorations. Students will research and locate dessert menus/recipes to be used in lab production.

### **CUA 156 Nutrition for the Food Service Professional**

3 Credit Hours • 45 Contact Hours (Lecture)

This course will cover information regarding nutrition in the food service industry. Topic areas will include fats, carbohydrates, protein, vitamins, minerals, additives, and chemical pesticides. Students will use the food pyramid in relation to menu analysis. The digestive system for food intake will be examined through video presentation. Students will examine product labels, using information from the Food and Drug Administration.

### **CUA 162 Purchasing for the Food Service Industry**

4 Credit Hours • 60 Contact Hours (Lecture)

Students will examine the history of volume food service including food cost control, operational costs, purchasing procedures, operational controls, receiving, storage techniques, and storekeeping duties, purchase orders, food purveyor bidding procedures, and analysis of product quality versus cost relation.

### **CUA 201 Advanced Cuisine and Garde Manger**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

*Corequisite: CUA 101, CUA 106, CUA 127, or faculty consent*

This course will cover advanced menu writing including ethnic foods and specialty products. Students will demonstrate preparation of pates, terrines, galantines, balantines, mousses, forcemeats, and sausage preparation. Students will also examine and prepare cold decorative centerpieces and food show style display items.

### **CUA 233 Advanced Line Cooking and Preparation**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

*Corequisite: CUA 101, CUA 106, CUA 127, or faculty consent*

Students will demonstrate the preparation and proper cooking of advanced a la carte style items including chateaubriand of beef, deglazing sauce work, rib roast, Yorkshire pudding, and pre-tableside cooking preparation. Other areas that will be covered include ticket timing, duties of the saucier, broiler cook, fry cook, and line expeditor.

### **CUA 236 Advanced Baking**

*NOTE: Certificate only.*

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

*Corequisite: CUA 106, CUA 150, CUA 151, or faculty consent*

In this course, the students will demonstrate centerpiece production including salt dough sculptures, tray presentations, confections, parfais, mousses, baked custards, ice creams, frozen desserts, baked Alaska, and decorative fruit meringue molds. Students will also practice dessert sauce presentation and plate painting.

### **CUA 271 Food Service Internship I**

4 Credit Hours • 150 Contact Hours (15 Lecture, 135 Field Experience)

Supervised experience in a food service establishment. Students will need to demonstrate with the instructor that on-the-job training is being provided by utilizing the Colorado Core Competency Standards with the employer. Students must also fill out time sheets and employer evaluations for the on-the-job training.

### **CUA 272 Advanced Field Experience II**

4 Credit Hours • 150 Contact Hours (15 Lecture, 135 Field Experience)

*Prerequisite:* CUA 271

This course continues from CUA 271.

## **Customer Service Technology**

### **CST 115 Introduction to Customer Service**

3 Credit Hours • 45 Contact Hours (Lecture)

This survey course will prepare the student for advanced study in customer service technology. Students will have an opportunity to take personality tests to determine if they are suited for employment in this field. An extensive vocabulary of customer service terms will be developed, and students will understand the basics of customer service. Students will be exposed to such topics as developing customer rapport, telephone techniques, professional attitudes, communication models, and dealing with angry customers.

### **CST 221 Advanced Customer Service Concepts**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* CST 115 or faculty consent

Students will learn how to respond to complex customer requirements and to efficiently handle difficult and negative people through conflict resolution. Some customer service management concepts will be introduced including teams, empowerment, customer satisfaction measurement, and total quality management concepts as they relate to customer service, motivation, and employee recognition programs.

## **Dance**

### **DAN 111 Modern Dance I**

1 Credit Hour • 30 Contact Hours (Lab)

*Prerequisite:* ENG 060 or faculty consent

Basic techniques of modern dance emphasizing dance vocabulary, fundamental exercises, and the basic elements of dance. May be repeated for a maximum of three credits.

### **DAN 112 Modern Dance II**

1 Credit Hour • 30 Contact Hours (Lab)

*Prerequisite:* ENG 060 or faculty consent

Continuation of DAN 111.

### **DAN 113 Modern Dance III**

1 Credit Hour • 30 Contact Hours (Lab)

*Prerequisite:* ENG 060 or faculty consent

Continuation of DAN 112.

### **DAN 121 Jazz Dance I**

1 Credit Hour • 30 Contact Hours (Lab)

*Prerequisite:* ENG 060 or faculty consent

Jazz techniques concentrating on elementary rhythms and isolation of body parts. May be repeated for a maximum of three credits.

### **DAN 122 Jazz Dance II**

1 Credit Hour • 30 Contact Hours (Lab)

*Prerequisite:* ENG 060 or faculty consent

Continuation of DAN 121.

### **DAN 123 Jazz Dance III**

1 Credit Hour • 30 Contact Hours (Lab)

*Prerequisite:* ENG 060 or faculty consent

This course continues from DAN 122.

### **DAN 125 History of Dance I**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ENG 060 or faculty consent

Introduces the history of dance as an art form. Examines dance from classical Greece through the Renaissance, including court and classical ballet, to modern dance with African and Caribbean influences.

### **DAN 131 Ballet I**

1 Credit Hour • 30 Contact Hours (Lab)

*Prerequisite:* ENG 060 or faculty consent

Introduces the basic techniques of ballet which are built upon knowledge of ballet terminology, fundamental exercises, and the basic elements of dance. May be repeated for a maximum of three credits.

### **DAN 132 Ballet II**

1 Credit Hour • 30 Contact Hours (Lab)

*Prerequisite:* ENG 060 or faculty consent

Continuation of Ballet I with emphasis on intermediate skills level.

### **DAN 133 Ballet III**

1 Credit Hour • 30 Contact Hours (Lab)

*Prerequisite:* ENG 060 or faculty consent

Continuation of Ballet II with emphasis on advanced skills level.

### **DAN 141 Regional Dances**

.5-1 Credit Hour • 15-30 Contact Hours (Lab)

*Prerequisite:* ENG 060 or faculty consent

Introduces the basic terminology, techniques, and routines of several dances from a specific country or region. Students will become familiar with the music, costumes, and customs related to the dances they study.

### **DAN 142 Regional Dances II**

1 Credit Hour • 30 Contact Hours (Lab)

*Prerequisite:* DAN 141

Continuation of DAN 141. Partners are not required.

### **DAN 211 Dance Composition**

1 Credit Hour • 22.5 Contact Hours (Lecture, Lab Combination)

*Prerequisite:* REA 090, ENG 100

This course focuses on principles of choreography and the development of individual expressive style.

# Deaf Prep

## DEP 011 Deaf Prep - Sign Language I

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

This course allows students to expand and refine skill in expressing their thoughts and ideas by using ASL. ASL grammar principles are taught, and the history and originators of ASL are introduced along with the lives of successful people who are deaf or hard of hearing. Topics are bridged to other classes and to life experiences.

## DEP 012 Deaf Prep - Sign Language II

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

This course allows students to expand and refine skill in expressing their thoughts and ideas by using ASL. ASL grammar principles are taught, and the history and originators of ASL are introduced along with the lives of successful people who are deaf or hard of hearing. Topics are bridged to other classes and to life experiences.

## DEP 013 Deaf Prep - Sign Language III

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

This course allows students to expand and refine skill in expressing their thoughts and ideas by using ASL. ASL grammar principles are taught, and the history and originators of ASL are introduced along with the lives of successful people who are deaf or hard of hearing. Topics are bridged to other classes and to life experiences.

## DEP 014 Deaf Prep - Sign Language IV

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

This course allows students to expand and refine skill in expressing their thoughts and ideas by using ASL. ASL grammar principles are taught, and the history and originators of ASL are introduced along with the lives of successful people who are deaf or hard of hearing. Topics are bridged to other classes and to life experiences.

## DEP 021 Critical Thinking I

2 Credit Hours • 45 Contact Hours (Vocational Lab)

Taught in American Sign Language, this course follows the Feuerstein Instrumental Enrichment I program to develop students' critical thinking skills. Other activities involving decision-making, cooperation, and problem solving are included. Skills developed here are bridged to all other classes as well as to life situations.

## DEP 022 Critical Thinking II

2 Credit Hours • 45 Contact Hours (Vocational Lab)

Taught in American Sign Language, this course follows the Feuerstein Instrumental Enrichment I program to develop students' critical thinking skills. Other activities involving decision-making, cooperation, and problem solving are included. Skills developed here are bridged to all other classes as well as to life situations.

## DEP 023 Critical Thinking III

2 Credit Hours • 45 Contact Hours (Vocational Lab)

Taught in American Sign Language, this course follows the Feuerstein Instrumental Enrichment I program to develop students' critical thinking skills. Other activities involving decision-making, cooperation, and problem solving are included. Skills developed here are bridged to all other classes as well as to life situations.

## DEP 024 Critical Thinking IV

2 Credit Hours • 45 Contact Hours (Vocational Lab)

Taught in American Sign Language, this course follows the Feuerstein Instrumental Enrichment I program to develop students' critical thinking skills. Other activities involving decision-making, cooperation, and problem solving are included. Skills developed here are bridged to all other classes as well as to life situations.

## DEP 031 English I

5 Credit Hours • 112.5 Contact Hours (Vocational Lab)

Taught in American Sign Language, this course focuses on reading for understanding, writing with purpose, and translating ASL to standard English, with secondary emphasis on English grammar and academic writing, based on students' individual needs and goals. Cross-curricular reading and writing are required, and skills are bridged to life experience.

## DEP 032 English II

5 Credit Hours • 112.5 Contact Hours (Vocational Lab)

Taught in American Sign Language, this course focuses on reading for understanding, writing with purpose, and translating ASL to standard English, with secondary emphasis on English grammar and academic writing, based on students' individual needs and goals. Cross-curricular reading and writing are required, and skills are bridged to life experience.

## DEP 033 English III

5 Credit Hours • 112.5 Contact Hours (Vocational Lab)

Taught in American Sign Language, this course focuses on reading for understanding, writing with purpose, and translating ASL to standard English, with secondary emphasis on English grammar and academic writing, based on students' individual needs and goals. Cross-curricular reading and writing are required, and skills are bridged to life experience.

## DEP 034 English IV

5 Credit Hours • 112.5 Contact Hours (Vocational Lab)

Taught in American Sign Language, this course focuses on reading for understanding, writing with purpose, and translating ASL to standard English, with secondary emphasis on English grammar and academic writing, based on students' individual needs and goals. Cross-curricular reading and writing are required, and skills are bridged to life experience.

## DEP 041 Mathematics I

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

Taught in American Sign Language, this course focuses on deficits in basic mathematics that deaf students experience. The emphasis is on basic operations with whole numbers, fractions, and decimals with additional work in the areas of mathematics vocabulary, word problems, and estimating. Topics are bridges to other classes and to life experiences.

## DEP 042 Mathematics II

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

Taught in American Sign Language, this course focuses on deficits in basic mathematics that deaf students experience. The emphasis is on basic operations with whole numbers, fractions, and decimals with additional work in the areas of mathematics vocabulary, word problems, and estimating. Topics are bridges to other classes and to life experiences.

## DEP 043 Mathematics III

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

Taught in American Sign Language, this course focuses on deficits in basic mathematics that deaf students experience. The emphasis is on basic operations with whole numbers, fractions, and decimals with additional work in the areas of mathematics vocabulary, word problems, and estimating. Topics are bridges to other classes and to life experiences.

### **DEP 044 Mathematics IV**

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

Taught in American Sign Language, this course focuses on deficits in basic mathematics that deaf students experience. The emphasis is on basic operations with whole numbers, fractions, and decimals, with additional work in the areas of mathematics vocabulary, word problems, and estimating. Topics are bridges to other classes and to life experiences.

### **DEP 051 Resource Management I**

2 Credit Hours • 45 Contact Hours (Vocational Lab)

Taught in American Sign Language, this course encourages students to recognize, utilize, and manage resources within themselves, their families, peer groups, communities, and throughout their world. Career choices and readiness are explored and refined to give students a clearer picture of their options. Cross-curricular exercises are required, and topics are bridged to life experiences.

### **DEP 052 Resource Management II**

2 Credit Hours • 45 Contact Hours (Vocational Lab)

Taught in American Sign Language, this course encourages students to recognize, utilize, and manage resources within themselves, their families, peer groups, communities, and throughout their world. Career choices and readiness are explored and refined to give students a clearer picture of their options. Cross-curricular exercises are required, and topics are bridged to life experiences.

### **DEP 053 Resource Management III**

2 Credit Hours • 45 Contact Hours (Vocational Lab)

Taught in American Sign Language, this course encourages students to recognize, utilize, and manage resources within themselves, their families, peer groups, communities, and throughout their world. Career choices and readiness are explored and refined to give students a clearer picture of their options. Cross-curricular exercises are required, and topics are bridged to life experiences.

### **DEP 054 Resource Management IV**

2 Credit Hours • 45 Contact Hours (Vocational Lab)

Taught in American Sign Language, this course encourages students to recognize, utilize, and manage resources within themselves, their families, peer groups, communities, and throughout their world. Career choices and readiness are explored and refined to give students a clearer picture of their options. Cross-curricular exercises are required, and topics are bridged to life experiences.

### **DEP 062 Study Skills II**

2 Credit Hours • 45 Contact Hours (Vocational Lab)

Taught in American Sign Language, this course focuses on standard study skills as well as skills unique to deaf students, such as those necessary to work well with interpreters, note takers, and tutors. Topics are bridged to other classes and to life experiences.

## **Dental Assisting**

### **DEA 101 Dental Science**

5 Credit Hours • 75 Contact Hours (Lecture)

Introduces the history of the dental profession, dental terminology, head and neck anatomy and histology, dental ethics and jurisprudence, oral pathology, and current trends in dentistry.

### **DEA 102 Principles of Clinical Practice**

7 Credit Hours • 165 Contact Hours (45 Lecture, 120 Lab)

*Corequisite: DEA 101 or program coordinator consent*

Techniques used in fourhanded dentistry, instrument identification, and sterilization. Aseptic procedures are stressed. Armamentarium for specific tray setups to include all dental specialties with emphasis on applied psychology, special needs, and the geriatric population.

### **DEA 106 Preventive and Dental Emergency Procedures**

5 Credit Hours • 135 Contact Hours (15 Lecture, 120 Lab)

*Prerequisite: DEA 101, DEA 102 or program coordinator consent*

Techniques in preventive dentistry, therapeutics examining the oral cavity, taking proper health history, coronal polishing, and diet counseling. Emphasis in nutrition and pharmacology and recognition of and assistance in treatment of emergencies in the dental office. Includes CPR certification.

### **DEA 108 Dental Radiology I**

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Lecture, Lab Combination)

*Corequisite: DEA 101 or program coordinator consent*

Topics include radiographic history, darkroom procedures, and technical aspects of x-ray production, radiographic safety and infection control procedures. Laboratory experience includes exposing and processing radiographs aseptically. Students must be a minimum of 18 years of age to enroll.

### **DEA 109 Dental Radiology II**

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Lecture, Lab Combination)

*Prerequisite: DEA 101, DEA 108*

Topics include theory and technique of exposing intraoral and extraoral radiographs on adults, children, edentulous, and special needs patients. Dental anatomy, radiographic interpretation and aseptic techniques will be stressed. The student will expose radiographs on the x-ray mannequin and patients. Students must be a minimum of 18 years of age to enroll.

### **DEA 111 Dental Office Procedures**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

*Prerequisite: DEA 101, DEA 102, DEA 108, DEA 114*

*Corequisite: DEA 106, DEA 109, DEA 115*

This course covers office management and clerical practices. Scheduling appointments; completing daily records, insurance and tax forms; bookkeeping and recall systems; and ordering supplies. Opportunity for application in an office or clinical setting as part of the American Dental Association's requirement of 300 clinical internship hours.

### **DEA 114 Dental Materials I**

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)

*Corequisite: DEA 101 or program coordinator consent*

This course covers physical and chemical properties of dental lab and chair side materials; measuring, manipulation, and preparation of materials for use in taking impressions; pouring and trimming models; and proper use and care of laboratory equipment.

### **DEA 115 Dental Materials II**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lecture, Lab Combination)

*Prerequisite:* DEA 114

This course covers types, compositions, and uses of synthetic resins, dental waxes, dental abrasives, and elastomeric impression materials. Fabrication of custom impression trays and temporary crowns.

### **DEA 173 Clinical Work Experience and Certification Review**

7 Credit Hours • 285 Contact Hours (15 Lecture, 270 Work Experience)

*Prerequisite:* DEA 101, DEA 102, DEA 106, DEA 108, DEA 109, DEA 111, DEA 114, DEA 115

Clinical practice is arranged in private or public dental offices or clinics with clinical work experience in both general and specialty fields on a rotating basis. Review for the Dental Assisting National Board (DANB) Examination.

### **DEA 200 Introduction to Expanded Functions**

4 Credit Hours • 90 Contact Hours (30 Lecture, 60 Lab)

*Prerequisite:* Graduate of an American Dental Association accredited dental assisting program, Certified Dental Assistant, or two years of documented full-time dental assisting experience, with restorative dentistry or dental faculty consent.

Techniques and concepts of expanded functions dental assisting, including preventive dentistry, team management, placement and finishing of dental restorative materials, and adjunct procedures necessary to restorative dentistry.

### **DEA 205 Expanded Functions for the Dental Auxiliary**

4 Credit Hours • 90 Contact Hours (15 Lecture, 75 Lab)

*Prerequisite:* DEA 200

Clinical application of expanded functions dental assisting techniques.

## **Diesel**

### **DPM 100 Introduction to Diesel Mechanics**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

This course covers general maintenance procedures on trucks and trailers; duties and responsibilities of the diesel mechanic; use of shop tools, shop equipment, and flat-rate and service manuals; shop organization, types of facilities, vehicle and shop safety procedures, and tool requirements; preventive maintenance procedures.

### **DPM 103 Diesel Engines I**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

Theory of operation and repair of diesel engines with emphasis on smaller automotive and medium range diesel engines. Engines are disassembled, inspected, diagnosed, and reassembled.

### **DPM 106 Fuel Injection**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

This course will cover the theory of operation and repair of fuel injection systems. Disassembly, assembly, and service procedures on fuel system components are also covered.

### **DPM 107 Fundamentals of Four-Wheel and Front-Wheel Drive**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

Operation and repair of four-wheel and front-wheel drive systems.

### **DPM 203 Diesel Engines II**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

Continuation of DPM 103 with major emphasis on heavy-duty diesel engine, theory, diagnosis, and repair.

### **DPM 205 Heavy Duty Power Trains**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

*Prerequisite:* DPM 100 or faculty consent

This course is a study of the power train from the clutch to the final drive on heavy-duty equipment. It includes a study of clutch types, transmissions, and final drives. Diagnosis and servicing of the components are also covered.

### **DPM 206 Heavy Duty Brake Systems**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

*Prerequisite:* DPM 100 or faculty consent

This course is a study of the various braking systems incorporated in heavy-duty trucks and heavy equipment. It includes a study of hydraulic, air, and engine brake systems. The diagnosis and service of the components are included.

### **DPM 210 Air Induction and Engine Analysis**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

Theory of operation and repair of turbochargers, superchargers, aftercoolers, and various induction systems. Also included are factors regulating engine performance failure and procedures for reclaiming engine performance.

## **Drafting**

### **DRT 102 Blueprint Reading**

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

Freehand sketching and reading machine-working drawings. Tolerances, machine process callouts, positional tolerancing, symbols, drawing notes, and dimensions are also covered.

### **DRT 103 Introduction to AutoCAD**

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Vocational Lab)

*Corequisite:* DRT 102 or faculty consent.

The latest release of AutoCAD software is used in various drafting applications. Topics include MS-DOS, drawing setup, draw commands, edit commands, text commands, layers, basic dimensioning, display options, sectioning, inserting drawing blocks, isometrics, 3D, and plotting. Students entering this course should already possess manual drafting skills or be concurrently enrolled in a manual-drafting course. Keyboarding skills are recommended.

### **DRT 104 Advanced AutoCAD**

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Vocational Lab)

*Prerequisite:* DRT 103 or faculty consent.

This course will cover advanced applications using the latest release of AutoCAD software. Proficiency in all topics covered in the DRT 103 course will be required. Additional topics will include advanced dimensioning techniques, advanced 3D drawing, block attributes, system variables, custom menu generation, script files, slides, digitizing, and AutoLISP. Keyboarding skills are recommended.

### **DRT 105 AutoCAD Drafting Applications I**

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Vocational Lab)

*Prerequisite: DRT 104 or faculty consent.*

This is a course in applied CAD technology which will develop the CAD concepts taught in DRT 103 and 104. Students will be assigned mechanical drafting problems in the areas of geometric construction, orthographic projection, isometric drawing, dimensioning, and 3D.

### **DRT 106 AutoCAD Drafting Applications II**

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Vocational Lab)

*Prerequisite: DRT 105 or faculty consent.*

This is a course in applied CAD technology which will continue to develop the CAD concepts taught in DRT 103 and 104. Students will be assigned mechanical drafting problems in the areas of geometric construction, orthographic projections, isometric drawing, dimensioning, and 3D.

### **DRT 201 Introduction to Computer Animation**

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Vocational Lab)

*Corequisite: CIS 115 or faculty consent*

This is an introductory course using AutoDesk's current release of 3D Studio. Students will be presented the basics of 3D animation by working through a series of tutorials and projects.

### **DRT 205 Advanced Animation**

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

*Prerequisite: DRT 201*

Advanced Animation builds on the basic 3D Studio skills learned in DRT 201. Many new command structures and techniques are addressed as well as ways to refine the preparation, materials creation, rendering, and animating skills learned in DRT 201. In addition, the course also investigates the use of 3D studio on the Internet. Topics of study include external processes (special effects), force and inertia, importing and editing solid models, incorporating scanned images, materials morphing, file interchange formats, creating materials libraries, and project management. The course culminates in a final project incorporating most of the topics covered during the semester. Each project will be presented as a real-life task for a client. Students will be expected to integrate their own ideas with the demands of the client.

## **Early Childhood Professions**

### **ECP 101 Introduction to Early Childhood Professions**

3 Credit Hours • 45 Contact Hours (Lecture)

This course provides an introduction to Early Childhood Professions. Topics include the eight key areas of professional knowledge: Child Growth & Development; Health, Nutrition & Safety; Diversity; Professionalism; Administration & Supervision. Ages addressed: birth through age 8.

### **ECP 102 Introduction to Early Childhood Education Lab Techniques**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

*Prerequisite or Corequisite: ECP 148*

This course includes a classroom seminar and a placement in a childcare setting. The supervised placement provides the student with the opportunity to observe children, to practice appropriate interactions, and to develop effective guidance and management techniques. Ages addressed: birth through age 8.

### **ECP 110 Infant and Toddler Activities**

2 Credit Hours • 30 Contact Hours (Lecture)

This course covers infant and toddler group care, planning and evaluating activities to stimulate cognitive growth, language development, and motor skills. Techniques for fostering socialization processes and emotional security are also included.

### **ECP 111 Infant and Toddler Theory and Practice**

3 Credit Hours • 45 Contact Hours (Lecture)

This course presents an overview of theories, applications (including observations) and issues pertinent to infant and toddler development in-group and/or family settings. State requirements for licensing, health, safety and nutrition issues are included. Ages addressed: prenatal through age 2.

### **ECP 112 Introduction to Infant/Toddler Lab Techniques**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

*Prerequisite or Corequisite: ECP 111 and health screening, including TB tine and HiB tests.*

This course includes a classroom seminar and a 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. Ages addressed: prenatal through age 2.

### **ECP 120 Infant and Toddler Practicum II**

3 Credit Hours • 90 Contact Hours (Practicum)

*Prerequisite or Corequisite: ECP 112*

Continuation of ECP 112 with responsibility for planning daily activities. A grade of C or better must be earned in order to continue in the program.

### **ECP 148 Guidance Strategies for Children**

3 Credit Hours • 45 Contact Hours (Lecture)

This course explores guidance theories, applications, goals, techniques and factors that influence expectations, classroom management issues, and pro-social skills. Ages addressed: birth through age 8.

### **ECP 161 School Age Practicum**

3 Credit Hours • 135 Contact Hours (Work Experience)

*Prerequisite or Corequisite: ECP 251*

Placement in an after school program to carry out activities planned in ECP 251. Emphasis on assisting the teacher in all activities. A grade of C or better must be earned in order to continue in the program.

### **ECP 205 Health, Safety, and Nutrition**

3 Credit Hours • 45 Contact Hours (Lecture)

This course focuses on nutrition, health, and safety as a key factor for optimal growth and development of young children. Content includes nutrient knowledge, menu planning, food program participation, health practices, management and safety, appropriate activities and communication with families. Ages addressed: prenatal through age 8.

### **ECP 212 Family Health**

2 Credit Hours • 30 Contact Hours (Lecture)

This course emphasizes the value of maintaining good physical and mental health as related to both children and adults.

### **ECP 224 The Exceptional Child Practicum**

3 Credit Hours • 90 Contact Hours (Practicum)

*Prerequisite or Corequisite: ECP 287*

This course offers supervised experience in facilities providing services for exceptional children. A grade of C or better must be earned in order to continue in the program.

### **ECP 226 Administration of Early Childhood Care and Education Programs**

3 Credit Hours • 45 Contact Hours (Lecture)

This course examines Colorado's minimal licensing requirements, as well as optimal standards pertaining to the operation of programs for young children. It includes a focus on the human relations component of an early childhood professional's responsibilities. Course content focuses on new directors' administrative skills and administration from a teacher's perspective. Ages addressed: birth through age 12.

### **ECP 227 Methods/Techniques: Curriculum Development**

3 Credit Hours • 45 Contact Hours (Lecture)

Emphasis is on strategies to develop, implement, and evaluate activities to support a curriculum in an environment that encourages and supports creative self-expression and problem solving in children. Developmentally appropriate practices as they relate to music, movement, art, drama, literature, play and other avenues are integrated.

### **ECP 238 Child Development**

3 Credit Hours • 45 Contact Hours (Lecture)

This course covers the growth and development of the child from conception through the elementary school years. Physical, cognitive, emotional, psychosocial, and environmental factors are emphasized. The concept of the whole child and how adults can provide a supportive environment for children is also emphasized. Ages addressed: prenatal through age 12.

### **ECP 251 Recreational Activities**

3 Credit Hours • 45 Contact Hours (Lecture)

Covers elementary age activities, including individual and team skills for use in school and recreational settings. Playground, circle, and group games as well as participatory and plan-appropriate activities for school age children are also covered.

### **ECP 262 Administrative Practicum**

3 Credit Hours • 90 Contact Hours (Practicum)

*Prerequisite or Corequisite: ECP 226*

This course is designed to give the student the opportunity to observe and participate in the administrative duties necessary in the operation of a childcare center.

### **ECP 273 Early Childhood Education Internship**

5 Credit Hours • 195 Contact Hours (15 Lecture, 180 Work Experience)

*Prerequisite: faculty consent*

This course provides supervised experience in licensed children's centers. A grade of C or better must be earned in order to continue in the program.

### **ECP 287 The Exceptional Child**

3 Credit Hours • 45 Contact Hours (Lecture)

This course presents an overview of typical and atypical developmental progression. The content includes planning, learning strategies, legal requirement, accommodations and adaptations necessary to create an inclusive classroom environment for a wide range of exceptionalities. Ages addressed: birth through age 8.

## **Economics**

### **ECO 106 Consumer Economics**

3 Credit Hours • 45 Contact Hours (Lecture)

Develops consumer effectiveness based on consumer choice theory, maximizing income through informed decision-making, product utility, and customer satisfaction.

### **ECO 201 Principles of Macroeconomics**

3 Credit Hours • 45 Contact Hours (Lecture)

Studies the American economy, stressing the interrelationships among the household, business, and government sectors. Explores saving and investment decisions, unemployment, inflation, national income accounting, taxing and spending policies, the limits of the market and government, public choice theory, the Federal Reserve System, money and banking, and international trade.

### **ECO 202 Principles of Microeconomics**

3 Credit Hours • 45 Contact Hours (Lecture)

Studies firms in depth, the nature of cost, and how those relate to the economy as a whole. Analyzes economic models of the consumer, perfect competition, monopoly, oligopoly, and monopolistic competition. Explores economic issues including market power, population growth, positive and negative externalities, income distribution, poverty and welfare, discrimination, and international economic interdependence.

### **ECO 205 Contemporary Economics Issues**

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses upon major national and international economic problems of the current era. Topics include population explosion; rising expectations in the Third World, the evolution of post WW II political blocks.

### **ECO 225 Money and Banking**

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses upon the nature and functions of money and credit. Topics include the variety and growth of banking functions, the Federal Reserve System, the relationships among interest rates, business investments and borrowing. In addition, international financial markets, exchange rates, International Monetary Fund, and the World Bank are explored.

## **Education**

### **EDU 201 Introduction to Education**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: REA 090, ENG 060*

This introductory course is designed to explore the role of teachers, the history of the American public educational systems, and contemporary issues and trends in American public education through lectures, guest speakers, discussion, projects, and research.

### **EDU 202 Perspectives in Education**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: REA 090, ENG 060*

This course focuses on school and its relationship to society and social problems.

# Electronics Technology

## **ELE 110 Electronic Programming Applications**

3 Credit Hours • 45 Contact Hours (Lecture)  
Corequisite: ELE 111, ELE 112, ELE 113

Solution of electronic programs as they pertain to today's technological society by use of programmable calculators.

## **ELE 111 Data Acquisition and Applications**

2 Credit Hours • 45 Contact Hours (15 Lecture, 30 Lab)  
Corequisite: ELE 110, ELE 112, ELE 113

Includes structuring a program designed to act as a data acquisition, data manipulation, and data compilation vehicle. Emphasis on correct format for program development.

## **ELE 112 Passive Circuits**

4 Credit Hours • 60 Contact Hours (Lecture)  
Corequisite: ELE 110, ELE 111, ELE 113

This course covers analysis of dc circuitry by use of Ohm's and Kirchoff's laws and network theorems. Use of the j operator to determine the action of passive components in ac circuits.

## **ELE 113 Passive Circuits Lab**

4 Credit Hours • 120 Contact Hours (Lab)  
Corequisite: ELE 110, ELE 111, ELE 112

This course covers construction, measurements, and experimentation with circuits studied in ELE 112.

## **ELE 114 Semiconductor Active Devices**

4 Credit Hours • 60 Contact Hours (Lecture)  
Prerequisite: ELE 113  
Corequisite: ELE 115 or faculty consent

This course covers diode theory and circuits, basic transistors and circuits, active amplifiers and circuits, and JFET/MOSFET theory and circuits.

## **ELE 115 Semiconductor Active Devices Laboratory**

4 Credit Hours • 120 Contact Hours (Lab)  
Prerequisite: ELE 113  
Corequisite: ELE 114 or faculty consent

This course covers construction, measurement, analysis, and experimentation with circuits developed in ELE 114.

## **ELE 118 Digital Circuits**

4 Credit Hours • 60 Contact Hours (Lecture)  
Prerequisite: ELE 113 or faculty consent.  
Corequisite: ELE 119 or faculty consent

This course covers number systems, discrete logic, digital elements, integrated circuits, and a detailed study of the microprocessor systems and languages.

## **ELE 119 Digital Circuits Lab**

4 Credit Hours • 120 Contact Hours (Lab)  
Prerequisite: ELE 118 or faculty consent.

This course covers construction, measurement, analysis, and experimentation with circuits developed in ELE 118.

## **ELE 201 Microcomputer Component Integration**

3 Credit Hours • 45 Contact Hours (Lecture)

This course introduces the student to the concepts and application of microcomputer components as related to the integration of materials with software. Discussion will center on computer components including motherboards, i/o cards, memory (RAM and ROM), network cards, video cards, inter-connectivity, cables, serial and parallel connections, and quality considerations of each. The class will culminate with each student integrating the parts into a microcomputer.

## **ELE 210 Advanced Motorola Microcomputer Concepts**

8 Credit Hours • 120 Contact Hours (Lecture)  
Prerequisite: ELE 225 or faculty consent

This course covers theory and implementation of the Motorola M68000 family.

## **ELE 216 Semiconductor Active Devices and Mixed-Signal ICs**

6 Credit Hours • 90 Contact Hours (Lecture)  
Prerequisite: ELE 114, ELE 115, ELE 118, ELE 119  
Grading: S/U only.

This course delivers the knowledge and skills needed to use active devices, linear and nonlinear operational amplifier ICs, analog and digital mixed-signal ICs and the applications of diverse circuit types in automated process control and manufacturing environments. Students will receive credit for ELE 216 or ICF 106 but not for both.

## **ELE 217 Semiconductor Active Devices and Mixed-Signal ICs**

6 Credit Hours • 180 Contact Hours (Lab)  
Prerequisite: ELE 114, ELE 115, ELE 118, ELE 119  
Corequisite: ELE 216 or ICF 106  
Grading: S/U only.

This course delivers laboratory experiences, knowledge, and skills in using active devices, linear and nonlinear OP-AMP ICs, analog and digital mixed signal ICs, OP-AMP control system circuits, and circuits for automated process control applications. Students will receive credit for ELE 217 or ICF 107 but not for both.

## **ELE 222 Microprocessor Control Systems**

4 Credit Hours • 90 Contact Hours (30 Lecture, 60 Lab)  
Prerequisite: ELE 118, ELE 119

This course covers microprocessor internal architecture, instruction set, memory structure, bus functions, programming techniques, interfacing procedures, and system applications and troubleshooting.

## **ELE 223 Microprocessor Interfacing and Industry Applications**

3 Credit Hours • 90 Contact Hours (Lab)  
Prerequisite: ELE 222

This course covers construction, measurement, analysis, experimentation with special applications of microprocessor systems, advanced diagnostic software, emulation, digital/analog interfaces, testing instruments and standards, and troubleshooting. Job search preparations, resumes, and interviewing procedures are also included.

## **ELE 224 Enhanced Microprocessor Systems**

6 Credit Hours • 90 Contact Hours (Lecture)  
Prerequisite: ELE 118, ELE 119  
Corequisite: ELE 225

This course covers microprocessor interfacing, industry standard serial and parallel interface devices, support software development and implementation, system schematic orientation, logic analyzer, timing and measurement considerations, and troubleshooting techniques.

## **ELE 225 Enhanced Microprocessor Systems Lab**

6 Credit Hours • 180 Contact Hours (Lab)  
Prerequisite: ELE 118, ELE 119  
Corequisite: ELE 224

This course covers construction, measurement, analysis, application, and experimentation with systems developed in ELE 224.

## **ELE 227 Motorola Microprocessor Lab**

8 Credit Hours • 240 Contact Hours (Lab)  
Prerequisite: ELE 118

This course provides experimentation and application of the concepts taught in ELE 118.



### **ELE 228 Advanced INTEL Microprocessor Concepts**

8 Credit Hours • 120 Contact Hours (Lecture)

*Prerequisite: ELE 225 or faculty consent*

This course covers theory and implementation of the INTEL 8086/88, 80186, 286/386, 80486-microprocessor family.

### **ELE 229 INTEL Microprocessor Lab**

8 Credit Hours • 240 Contact Hours (Lab)

*Prerequisite: ELE 228*

Experimentation and application of the concepts taught in ELE 228.

### **ELE 235 Programming: Emphasis in Technology Automation, and Software Design**

4 Credit Hours • 90 Contact Hours (Vocational Lab)

Students will acquire programming skills using the C and C++ languages. Students will be able to code both C and C++ programs and recognize the difference between the two languages. Students will also be introduced to object-oriented programming. The programming problems will emphasize device handling, software design, and automation. Students will be introduced to a professional software development system for data acquisition and instrument control.

## **Emergency Medical Services**

Requirement: Students will be subject to a driver's license record check prior to being eligible for State Testing for EMT-Basic. Students entering EMT-Basic (EMS 125) must have American Heart Association CPR for Health Care Providers or American Red Cross CPR for the Professional Rescuer completed prior to the first night of class and must also show proof the first night of class that they have received at least the first of the Hepatitis B vaccine.

### **EMS 105 CPR**

.5 Credit Hours • 8 Contact Hours (Lecture)

This CPR course will be taught using the American Heart Association's standards and guidelines. Students successfully completing this course will be eligible for either Health Care Provider or Community CPR certification. Material presented in this course will include adult CPR, child and infant CPR, and airway obstruction.

Note: Health Care Provider certification is reserved for the professional rescuer. All non-professional persons will be eligible for Community CPR. American Heart Association charges for the card separate from the tuition.

### **EMS 107 Standard First Aid and CPR**

1 Credit Hour • 15 Contact Hours (Lecture)

This course provides standard first aid and adult, child, and infant CPR instruction through the use of demonstration videos, instructor-led practice sessions, and lecture. Topics included are rescue breathing, obstructed airway, CPR, wounds, shock, poisoning, burns, fractures, and sudden illness. National Safety Council standards and guidelines are used, and certificates of completion are available. See instructor.

### **EMS 115 First Responder**

3 Credit Hours • 45 Contact Hours (15 Lecture, 30 Lab)

*Prerequisite: CPR card at the professional level prior to taking this course.*

This course provides the student with core knowledge and skills to function in the capacity of a first responder arriving at the scene of a medical emergency and providing care until advanced EMS help arrives. Upon successful course completion, the student will be eligible to take a certification exam at the First Responder level.

Note: Students must have a current CPR card at the professional level prior to taking this course.

### **EMS 125 Emergency Medical Technician - Basic**

8 Credit Hours • 150 Contact Hours (Lecture, Lab)

*Prerequisite: Current CPR certification at the professional rescuer level and at least the first of the Hepatitis B vaccine. These must be presented to the instructor the first night of class.*

This course presents the first level of training in the career structure of the emergency medical technician. Upon successful completion of this program, including written and practical examinations and being at least 18 years of age, candidates are eligible to take the state EMT-Basic examination subject to requirements of the Colorado Department of Public Health and Environment, Pre-hospital Care Division.

### **EMS 126 Emergency Medical Technician - Basic Refresher**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: Current Colorado EMT-Basic Certification or special permission of State of Colorado Department of Public Health and Environment, Pre-hospital Care Division. Current CPR certification at the professional level.*

Provides necessary requirements for Colorado re-certification at the Emergency Medical Technician – Basic level. May be repeated every three years to maintain Colorado certification. Persons needing re-entry may use this course along with the clinical hours to satisfy the requirements of the Colorado Department of Public Health and Environment, Pre-hospital Care Division.

### **EMS 130 Pediatric Emergencies**

3 Credit Hours • 45 Contact Hours

*Prerequisite: EMS 125 or its equivalent, or program coordinator consent*

This course addresses the problems most common in the pediatric population and provides the emergency medical services responder the necessary information to help understand those problems and provide quality care in the pre-hospital setting.

### **EMS 131 Geriatric Emergencies**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: EMS 125 or its equivalent, or program coordinator consent*

This course addresses the problems most common in the elderly population and provides the emergency medical services responder the necessary information to help understand those problems and provide quality care in the pre-hospital setting.

### **EMS 136 Wellness for Emergency Services**

2 Credit Hours • 30 Contact Hours (Lecture)

This course offers the EMS provider helpful advice for coping with stress and educates pre-hospital providers on to finding more options and making wise choices in the midst of difficult situations.

### **EMS 137 Advanced Patient Assessment and History Taking**

2 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: EMS 115, or EMS 125 or its equivalent, or approval from the program coordinator*

This course teaches the pre-hospital health care provider techniques in assessing the patient, both medical and trauma. History taking, documentation, communication, and assessment techniques for the special patient will be covered.

### EMS 211 EMT-Paramedic I

10 Credit Hours • 195 Contact Hours (105 Lecture, 90 Lab)

*Prerequisites:* EMS 125

This is the first paramedic class of three in a series at the Advanced level of training in the career structure of the Emergency Medical Technician (Paramedic) program. There will be a strong emphasis on hands on participation in this course. Lab time in a wide variety of (pre) hospital setting will be required. Upon successful completion of this program, including written and practical examinations, and being at least 18 years of age, candidates are eligible to take the state EMT-Paramedic certification examination subject to the requirements of the Colorado Department of Public Health and Environment.

### EMS 212 EMT- Paramedic II

10 Credit Hours • 195 Contact Hours (105 Lecture, 90 Lab)

*Prerequisites:* EMT 211, BIO 141, MOT 185

This is the second paramedic class of three in a series at the Advanced level of training in the career structure of the Emergency Medical Technician (Paramedic) program. This course continues where EMS 211 leaves off and builds upon skills learned in that course. Hands-on participation is required, as is a significant amount of clinical time in a variety of hospital settings. Upon successful completion of this program, including written and practical examinations, and being at least 18 years of age, candidates are eligible to take the state EMT-Paramedic certification examination subject to the requirements of the Colorado Department of Public Health and Environment.

### EMS 213 EMT- Paramedic III

10 Credit Hours • 195 Contact Hours (105 Lecture, 90 Lab)

*Prerequisites:* EMT 212, BIO 142

This is the third paramedic class of three in a series at the Advanced level of training in the career structure of the Emergency Medical Technician (Paramedic) program. This course continues where EMS 212 leaves off and builds upon skills learned in that course. Hands-on participation is required, as is a significant amount of clinical time in a variety of hospital settings. Upon successful completion of this program, including written and practical examinations, and being at least 18 years of age, candidates are eligible to take the state EMT-Paramedic certification examination subject to the requirements of the Colorado Department of Public Health and Environment.

## English

### ENG 030 Basic Writing Skills

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite:* REA 060 or concurrent

This course will focus on sentence and basic paragraph structure and development. Students will review and improve grammar, usage, and punctuation skills while employing critical thinking strategies and using the writing process to respond to a wide variety of writing situations.

### ENG 060 Writing Fundamentals

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite:* REA 060, ENG 030

This course will focus on paragraph structure and development and will introduce the formal essay. Students will review and improve grammar, usage, and punctuation skills while employing critical thinking strategies and using the writing process to respond to a wide variety of writing situations.

### ENG 062 Grammar

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite:* ENG 030 or concurrent

Designed for students who have difficulty in English grammar, parts of speech, and how parts of speech function in sentences. Also designed for students who wish to learn formal English grammar. Supplemental computer-assisted instruction available.

### ENG 100 Composition Style and Technique

3/4\* Credit Hours • 60 Contact Hours (Lecture)

\*Variable (3 credit hours earned for CCC-Online)

*Prerequisite:* REA 090 or concurrent, ENG 060

This course will emphasize critical thinking as students explore writing for specific purposes and audiences. Students will develop skills required for college level writing while reviewing paragraph structure and focusing on essay development.

### ENG 105 Millenium Studies

3 Credit Hours • 45 Contact Hours (Lecture)

*Corequisite:* ENG 121

This cross-disciplinary course will allow students to utilize their skills from three disciplines in studying a subject of vital interest, the 21<sup>st</sup> Century. It will serve as a cross-disciplinary elective.

### ENG 115 Designing Online Documentation

3 Credit Hours • 45 Contact Hours (Lecture)

This course focuses on the development of technical documents that are delivered to users online, such as online manuals and online help information. Emphasizes content, organization, presentation, and style of online documentation. Introduces hypertext and web publishing concepts, project cycle management, working as part of a documentation team, and collaboration with technical experts.

### ENG 116 Designing Print Documentation

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ENG 131

This course focuses on the development of technical documents, such as product manuals and troubleshooting guides that are delivered to users in print form. Emphasizes content, organization, presentation, and style of print documentation. Introduces concepts of document preparation and printing, project cycle management, working as part of a documentation team, and collaboration with technical experts.

### ENG 117 Grammar, Usage, and Style for the Professional Writer

3 Credit Hours • 45 Contact Hours (Lecture)

This course focuses on Grammar, usage, and style issues facing one who writes on the job, either as a technical writer or a technical professional whose job involves a substantial writing component. Emphasizes knowledge and skills needed for clear, direct, competent communication. Introduces grammatical theory and practice and conventions of usage in English. It covers matters of style, particularly as they relate to clarity for a target audience.

### ENG 121 English Composition I

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 100

Emphasizes the planning, writing, and revising of compositions including the development of critical and logical thinking skills. Includes a minimum of five compositions which may include expressive, informative, analytical, evaluative, and persuasive writing.

### ENG 122 English Composition II

3 Credit Hours • 45 Contact hours (Lecture)

*Prerequisite:* Grade of C or better in ENG 121.

Expands and refines the objectives of ENG 121. Emphasizes critical and logical thinking, problem definition, research strategies, and writing analytical, evaluative, and/or persuasive papers that incorporate research.

### ENG 131 Technical Writing I

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 060

This course develops skills one can apply to a variety of technical documents. Students learn principles for organizing, writing, and revising clear, readable documents for industry, business, and government.

### **ENG 132 Technical Writing II**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 131 or faculty consent

This course expands and refines the objectives of ENG 131, emphasizing formal presentations, both written and oral.

### **ENG 205 Technical Editing**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ENG 131

This course focuses on editing of technical documents from memos to product manuals. Emphasizes consistency, readability, and conformity to an organization's style of technical documents. Introduces the development of a style manual, concepts of project cycle management, working as part of a documentation team, and collaboration with technical experts.

### **ENG 221 Creative Writing I**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ENG 121, sophomore standing recommended

This course teaches techniques for creative writing. Students explore imaginative uses of language through writing short stories, drama, poetry, and/or literacy nonfiction.

### **ENG 222 Creative Writing II**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ENG 221, sophomore standing recommended

This course continues development of written expression in such forms as poetry, fiction, and/or nonfiction writing.

### **ENG 226 Fiction Writing**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ENG 121, sophomore standing recommended

This course teaches techniques for creating fiction, including the study and appreciation of the language and forms of the short story.

### **ENG 227 Poetry Writing**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ENG 121, sophomore standing recommended

This course teaches techniques for creating poems, including study of figurative language, forms, and sound patterns of poetry.

## **English Language Institute**

All international students who plan to enroll in courses in the English Language Institute must take the ELI Placement Exam. The exam is offered at specific times before the beginning of each semester. Please call the ELI office at 527-6022 for information on dates, times, and location.

### **ELI 011 Basic Pronunciation**

3 Credit Hours • 45 Contact Hours (Lecture)

*Grading:* S/U only.

The goals of this course are to improve students' oral English and ability to comprehend spoken English with greater ease and accuracy. Emphasis is on sound production, word endings, and syllable stress. This course is open to all ELI students at any level of study.

### **ELI 012 Intermediate Pronunciation**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ELI 011 or faculty consent

*Grading:* S/U only.

The goals of this course are to improve students' oral production of spoken English and to improve their ability to comprehend spoken English. Emphasis is on rhythm, intonation, and accent reduction. This course is open to all ELI students at any level of study.

### **ELI 019 Introduction to English as a Second Language**

5 Credit Hours • 75 Contact Hours (Lecture)

*Grading:* S/U only.

Designed for students who have developed some communication skills but who have no foundation in reading or writing. This course will help to develop basic literacy and academic skills on which to build a strong foundation in the English language. Study skills will also be emphasized.

### **ELI 021 Basic Grammar/Writing**

5 Credit Hours • 75 Contact Hours (Lecture)

This course will assist the student in mastering basic structures in English grammar through oral and written practice.

### **ELI 022 Intermediate Grammar**

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite:* ELI 021

This course will review basic grammatical structures and introduce more complex structures. It will provide integrated practice of structures through a variety of oral and written exercises.

### **ELI 023 Advanced Grammar**

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite:* ELI 022

This course will review intermediate grammar structures and will present increasingly more complex grammatical structures and sentences.

### **ELI 031 Basic Conversation**

4 Credit Hours • 60 Contact Hours (Lecture)

This course will provide listening and speaking activities designed to help the student recognize and produce English sounds, stress and intonation patterns, and use basic grammatical patterns and vocabulary.

### **ELI 032 Intermediate Conversation**

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite:* ELI 031

This course will teach listening/pronunciation/conversation skills and will work toward an increase in speed and accuracy in speaking through free and guided conversations, pronunciation drills, role-playing, and speeches.

### **ELI 041 Basic Reading**

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite:* ELI 021 or faculty consent

This course will provide effective reading strategies. It will present techniques to develop and increase word attack skills, vocabulary use, and overall comprehension.

### **ELI 042 Intermediate Reading**

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite:* ELI 041, ELI 022 or faculty consent

This course will assist the student in reading more quickly and with greater comprehension a variety of more complex reading materials.

### **ELI 044 Advanced Reading and Research**

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite:* ELI 023, ELI 053 or faculty consent

This course is designed to allow advanced ESL students to cope with the demand of college-level courses. Its purpose is to bridge the gap between sheltered ESL courses and the broader mainstream of content instruction in the community college. It will focus on reading with application through writing, listening, and speaking. Students will receive instruction on research skills and accessing the computer.

### **ELI 052 Intermediate Composition**

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite:* ELI 022, ELI 041 or ELI 042

This course will introduce the fundamentals of paragraph organization and development. It will assist the student in using sentence variety within well-organized paragraphs.

### **ELI 053 Advanced Composition**

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite:* ELI 052, ELI 023 or faculty consent

This course will develop the skill of writing paragraphs using selected rhetorical modes. It will emphasize formal paragraph organization, sentence variety, editing, and re-writing. The course will introduce the rudiments of essay writing.

### **ELI 055 Computer Basics for ELI Students**

2 Credit Hours • 30 Contact Hours (Lecture)

*Grading:* S/U only

*Prerequisite:* Placement in Intermediate or Advanced Level ELI courses.

This course introduces the basic skills for computer use, including word processing, text entry, document appearance, editing, spelling, and printing.

### **ELI 056 Workplace ESL**

5 Credit Hours • 75 Contact Hours (Lecture)

*Grading:* S/U only

This course is designed to meet the needs of ESL students who are currently working and need specific job-related English skills not necessarily offered in the academic ELI program. It emphasizes interpersonal communication and social skills, workplace literacy, and cross-cultural sensitivity.

## **Environmental Health and Safety**

### **EHS 105 Management of Occupational Injuries**

2 Credit Hours • 30 Contact Hours (Lecture)

This course will offer a study of worker's compensation and other insurance programs. Topics will include requirements of insurance programs, administrative work involved, and limitations of the entrepreneur's liability. The course will also study the various methods used in the investigation of accidents, equipment used to determine causes, and the necessary documentation for claims.

### **EHS 131 Introduction to Industrial and Environmental Safety**

3 Credit Hours • 45 Contact Hours (Lecture)

Challenges and problems of the safety management industry and the federal Occupational Safety Health Act. Familiarization with general industry OSHA standards for noise, fire prevention, and personal protection equipment will be covered.

### **EHS 142 General Industry Construction and Mine Safety Standards**

4 Credit Hours • 60 Contact Hours (Lecture)

State and federal health and safety regulations and how they apply to various phases of construction and the mining industry. Safe working conditions and personal protection needed for categories of construction and mining industries.

### **EHS 165 Principles of Emergency Response (HAZWOPER-1910-120)**

3 Credit Hours • 45 Contact Hours (Lecture)

OSHA's CRF 1910.120 requires that employers shall develop and implement a written safety and health program involved in hazardous waste operations; that hazards be identified; that employees be notified of hazards prior to commencing work; that all employees be trained before they are permitted to work in hazardous waste operations; that employers develop a medical surveillance program for employees; that environmental controls and personal and protective equipment be required; that an information program be implemented for employees; and that a range of specific regulations governs operations and equipment regarding hazardous waste handling, as well as for emergency response plans, training, and handling.

Complies with OSHA's mandated 8 - 24 - and 40 hour requirements. Employees need to provide their own personal protective equipment as required by this law. A certificate of completion will be issued to each student upon successful completion of the course.

### **EHS 205 Air Pollution Control**

3 Credit Hours • 45 Contact Hours (Lecture)

Students will gain a working knowledge of the Clean Air Act and how it applies to today's industry.

### **EHS 206 Risk Assessment and Risk Management**

3 Credit Hours • 45 Contact Hours (Lecture)

This course will aid students in the preparation for a business or industrial position by bringing about awareness of fire and risk problems and methods of working effectively with such situations. Students will develop skills for managing risk assumption.

### **EHS 207 Waste Management**

3 Credit Hours • 45 Contact Hours (Lecture)

Students will be made aware of how to comply with requirements of the Resource Conservation and Recovery Act (RCRA) and OSHA guidelines.

### **EHS 208 Water Pollution Control**

3 Credit Hours • 45 Contact Hours (Lecture)

Students will gain a working knowledge of the Federal Water Pollution Control Act and how it applies to today's industry.

### **EHS 221 DOT and Fleet Safety Requirements**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* EHS 131 or faculty consent.

Problems and practices of motor fleet safety programming and planning; administration of safety programs for small fleets; and assistance in the administration of large fleet operations including requirements for DOT regulations. Assists students in completion of commercial driver's license.

### **EHS 223 Principles of Industrial Hygiene**

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite:* EHS 131 or faculty consent

Basic categories of instruments for detection of toxic substances with explanation of underlying theoretical principles. Selection and use of appropriate field equipment for monitoring toxic equipment under professional guidance.

### **EHS 239 Principles of Safety Engineering**

3 Credit Hours • 45 Contact Hours (Lecture)

This course covers integrated circuit processing and hazardous materials used in the manufacturing process and their respective safety requirements. Fire and electrical safety requirements for semiconductor processing are also included.

### **EHS 242 Introduction to Hazardous Materials Management**

3 Credit Hours • 45 Contact Hours (Lecture)

Relationship and issues presented by hazardous and toxic materials in the community and industry. Federal laws, clean air, clean water, and other regulations are covered. Students will develop a working knowledge of emergency management and basic remedies for the management of hazardous materials, substances, and wastes as outlined by OSHA, EPA, and other governmental agencies.

## **Facilities Maintenance Technology**

### **FMT 101 Facilities Maintenance - Custodial Techniques**

4 Credit Hours • 75 Contact Hours (30 Lecture, 45 Vocational Lab)

Products and techniques of maintaining commercial or industrial buildings.

### **FMT 102 Facilities Maintenance - Electricity**

4 Credit Hours • 75 Contact Hours (30 Lecture, 45 Vocational Lab)

Electricity fundamentals as applied to facilities maintenance. Repair of electrical systems, servicing practices, troubleshooting techniques, codes, and safety standards are covered.

### **FMT 103 Facilities Maintenance - Plumbing**

4 Credit Hours • 75 Contact Hours (30 Lecture, 45 Vocational Lab)

This course covers troubleshooting, servicing, and repairing of plumbing systems as found in a commercial or industrial building.

### **FMT 112 Swimming Pool Maintenance**

2 Credit Hours • 45 Contact Hours (15 Lecture, 30 Lab)

This course covers the fundamentals of pool operation and maintenance techniques for private and public swimming pools.

### **FMT 121 Refrigeration Fundamentals**

4 Credit Hours • 75 Contact Hours (30 Lecture, 45 Vocational Lab)

This course covers the basic refrigeration, theory of the hermetic system, and the tools and equipment used in refrigeration servicing. Laboratory experiences.

### **FMT 122 EPA Certification**

1 Credit Hour • 15 Contact Hours (Lecture)

*Corequisite: FMT 121 or faculty consent*

Student will prepare for certification to handle refrigerants in compliance with EPA regulations.

### **FMT 123 Domestic Refrigerator Service and Repair**

4 Credit Hours • 75 Contact Hours (30 Lecture, 45 Vocational Lab)

*Prerequisite: FMT 121, FMT 131, or faculty consent*

Repair, service, and diagnosis of domestic refrigeration systems.

### **FMT 131 Electrical Fundamentals**

4 Credit Hours • 75 Contact Hours (30 Lecture, 45 Vocational Lab)

Basic fundamentals of electricity, measuring instruments, electrical components, and a study of basic electric motors.

### **FMT 132 Residential HVAC Controls**

4 Credit Hours • 75 Contact Hours (30 Lecture, 45 Vocational Lab)

*Prerequisite: FMT 131 or faculty consent*

A study of electric motors and controls used in the air conditioning, heating, and refrigeration industry.

### **FMT 141 Residential Heating**

4 Credit Hours • 75 Contact Hours (30 Lecture, 45 Vocational Lab)

Residential heating, temperature control, humidity control, air movement, circulation, and basic hydronics.

### **FMT 142 Residential Air Conditioning**

4 Credit Hours • 75 Contact Hours (30 Lecture, 45 Vocational Lab)

Air-conditioning systems as they apply to humidifying, cooling, and dehumidifying. Basic load calculations.

### **FMT 143 Residential HVAC Service**

4 Credit Hours • 75 Contact Hours (30 Lecture, 45 Vocational Lab)

Troubleshooting of residential heating and air conditioning systems. Simulation software and "hands-on" lab experience will be used.

### **FMT 201 Appliance Technology I**

7 Credit Hours • 135 Contact Hours (45 Lecture, 90 Vocational Lab)

*Prerequisite: FMT 131, FMT 132, or faculty consent*

This course will cover mechanical systems, water distribution, and electrical and gas systems. Service and repair on washers and dryers will also be addressed.

### **FMT 202 Appliance Technology II**

7 Credit Hours • 135 Contact Hours (45 Lecture, 90 Vocational Lab)

*Prerequisite: FMT 201 or faculty consent*

Mechanical systems, water distribution, and electrical and gas components are covered in this course as well as service and repair on dishwashers, disposals, ranges, and microwave ovens.

### **FMT 203 Appliance Technology III**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

*Prerequisite: FMT 202 or faculty consent*

This course will instruct students in fundamentals of operation, theory, and troubleshooting of electronic controls found in modern household appliances.

### **FMT 204 Building Maintenance**

4 Credit Hours • 67.5 Contact Hours (45 Lecture, 22.5 Vocational Lab)

*Prerequisite: Sophomore standing in program; successful completion of FMT 121, FMT 123, FMT 131, FMT 132, FMT 141, FMT 142, FMT 143 with a grade of C or better, or faculty consent*

This course covers light construction, repair, and maintenance of buildings. Emphasis on preventative maintenance will be covered.

### **FMT 221 Advanced Refrigeration**

5 Credit Hours • 105 Contact Hours (15 Lecture, 90 Vocational Lab)

*Prerequisite: Sophomore standing in program; successful completion of FMT 121, FMT 123, FMT 131, FMT 132, FMT 141, FMT 142, FMT 143 with a grade of C or better, or faculty consent*

This course covers fundamentals of commercial refrigeration equipment with emphasis on service and installation of bulk storage systems and low or medium temperature systems such as walk-ins, display cases, and ice cream machines.

### **FMT 222 Heating, Ventilating, and Air Conditioning Systems Troubleshooting**

5 Credit Hours • 105 Contact Hours (15 Lecture, 90 Vocational Lab)

*Prerequisite:* Sophomore standing in program; successful completion of FMT 121, FMT 123, FMT 131, FMT 132, FMT 141, FMT 142, FMT 143 with a grade of C or better, or faculty consent

A study of industrial heating, ventilating, air conditioning, and troubleshooting systems.

### **FMT 231 Advanced Control Systems I**

4 Credit Hours • 75 Contact Hours (30 Lecture, 45 Vocational Lab)

*Prerequisite:* Sophomore standing in program; successful completion of FMT 121, FMT 123, FMT 131, FMT 132, FMT 141, FMT 142, FMT 143 with a grade of C or better, or faculty consent

This course covers electric and pneumatic controls used in commercial and industrial equipment.

### **FMT 232 Advanced Heating**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* Sophomore standing in program; successful completion of FMT 121, FMT 123, FMT 131, FMT 132, FMT 141, FMT 142, FMT 143 with a grade of C or better, or faculty consent

This course covers low-pressure steam and hot water boilers as they pertain to commercial and industrial building heating systems.

### **FMT 241 Advanced Air Conditioning**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* Sophomore standing in program; successful completion of FMT 121, FMT 123, FMT 131, FMT 132, FMT 141, FMT 142, FMT 143 with a grade of C or better, or faculty consent

A study of commercial air conditioning systems to include centrifugal water chillers.

### **FMT 242 Advanced Control Systems II**

4 Credit Hours • 75 Contact Hours (30 Lecture, 45 Vocational Lab)

*Prerequisite:* Sophomore standing in program; successful completion of FMT 121, FMT 123, FMT 131, FMT 132, FMT 141, FMT 142, FMT 143 with a grade of C or better, or faculty consent

Application and interaction of solid state and electromechanical controls as they pertain to HVAC facilities and equipment maintenance.

## **Farrier Science**

### **FAS 100 Farrier Science I**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

Introduction to horses from evolution to the present with emphasis on existing breeds and shoeing requirements. Course also covers behavior patterns of horses, proper handling and safety; need for and frequency of shoeing, anatomy and physiology of the lower leg, angles, hoof preparation, shoe selection, shaping, and basic techniques.

### **FAS 110 Farrier Science II**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

Corrective shoeing for pleasure and racehorses. Anatomy of horses, physiology of the lower leg, preliminary examination, natural angles of the legs, hoof preparation, and normal shoeing.

### **FAS 120 Farrier Science III**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

Special purpose shoeing for racehorses, trail horses, etc. Corrective shoeing, shoeing requirements for various breeds, special purpose plating, special equipment, and public relations for the farrier.

### **FAS 130 Master Farrier I**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

Continuation of the basic farrier course. Master students assist the instructor during both theory and laboratory sessions by evaluating basic course students in the process of shoe shaping, analysis of gaits, and proper horse handling.

### **FAS 140 Master Farrier II**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

Master students assist the instructor in teaching anatomy of horses, physiology of the lower leg, natural angle of the leg, and hoof preparation. Student's research and report on assigned subjects.

### **FAS 150 Master Farrier III**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

Students demonstrate skill in all phases of horseshoeing, especially in the area of corrective shoeing and unusual hoof repair.

## **Fire Science Technology**

NOTE: These courses are offered off campus only.

### **FST 100 Fire Fighter I**

7 Credit Hours • 150 Contact Hours (60 Lecture, 90 Lab)  
Grading: S/U only

This course will address the requirements necessary to perform at the first level of progression as identified in Chapter 3, NFPA 1001, Fire Fighter Professional Qualifications.

### **FST 101 Fire Fighter II**

6 Credit Hours • 120 Contact Hours (60 Lecture, 60 Lab)

This course will address the requirements necessary to perform at the second level of progression as identified in Chapter 4, NFPA 1001, Fire Fighter Professional Qualifications.

### **FST 102 Introduction to Fire Science/Suppression**

3 Credit Hours • 45 Contact Hours (Lecture)

This course is an introduction to fire service organization and operation from past to present operations. Operation and organization of federal state, local, and private forces, extinguishing methods and equipment, special extinguishing agents, special hazard considerations will be covered. This course is a prerequisite for those students having no previous fire suppression training or experience.

### **FST 103 Firefighter Occupational Health and Safety**

3 Credit Hours • 45 Contact Hours (Lecture)

Students will study the importance of on-scene and on-the-job firefighter health, safety and fitness, mental well-being, stress management, and standards related to health, safety, and fitness.

### **FST 104 Fire Protection Systems**

3 Credit Hours • 45 Contact Hours (Lecture)

Students will study portable fire extinguishing equipment requirements, sprinkler system installation, inspection, and maintenance, special protection systems, and residential sprinklers.

**FST 105 Building Plans and Construction**

3 Credit Hours • 45 Contact Hours (Lecture)

Students will study various types of building construction; principles of fire resistance; materials; flame spread; and smoke and fire containment. Students will also acquire a basic knowledge of plan review, blue prints, specifications, and schedules.

**FST 106 Fire Inspection Practices**

3 Credit Hours • 45 Contact Hours (Lecture)

Students will study fire prevention inspection practices and company inspections; surveying and mapping; recognition of fire hazards; engineering solutions to hazard enforcement; and public relations as affected by fire prevention.

**FST 107 Hazardous Materials I**

3 Credit Hours • 45 Contact Hours (Lecture)

Students will study and analyze 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 150 Introduction to Fire Prevention and Education**

3 Credit Hours • 45 Contact Hours (Lecture)

This course will focus on conducting prevention and education needs assessment, targeting audiences, and development of delivery of public fire education programs; methods of conducting fire prevention and safety inspections will be discussed.

**FST 151 Driver/Operator**

4 Credit Hours • 90 Contact Hours (Vocational Lab)

This course provides students with the basic knowledge and skills to safely operate fire apparatus according to the NFPA professional standard. The course enables students to display and demonstrate knowledge of apparatus, operation of apparatus, pumps and pumping, hydraulics calculations, maintenance, and testing.

**FST 201 Instructional Methodology**

3 Credit Hours • 45 Contact Hours (Lecture)

Students will study the role and responsibility of the fire service instructor. Competencies covered are 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.

**FST 202 Firefighting Strategy and Tactics**

3 Credit Hours • 45 Contact Hours (Lecture)

Students will study fire fighting strategy and tactics, methods of fire attack, fire behavior, building design, and pre-incident planning.

**FST 203 Fire Science Hydraulics**

3 Credit Hours • 45 Contact Hours (Lecture)

This course provides a working knowledge of hydraulic calculations necessary in water delivery and supply for fire suppression. Hydraulics laws and formulas as applied to fire protection requirements and fire apparatus UL testing and certification requirements are also covered.

**FST 204 Fire Codes and Ordinances**

3 Credit Hours • 45 Contact Hours (Lecture)

This course will provide the student with a familiarization and interpretation of national, state, and local codes; ordinances and laws which influence the field of fire prevention. Students will study the life safety code throughout the course.

**FST 205 Fire Cause and Determination**

3 Credit Hours • 45 Contact Hours (Lecture)

This course will introduce the student to the proper method(s) of conducting a basic fire investigation, determining the area and point of origin, cause and methods of fire spread, recognition and preservation of evidence, arson law, constitutional law, interviewing, court procedures and testimony.

**FST 206 Company Office Leadership/Supervision**

3 Credit Hours • 45 Contact Hours (Lecture)

Students will study fire department organization, management philosophies, leadership traits, time management, group dynamics, communications, motivation, counseling, conflict resolution, and employee disciplines.

**FST 207 Firefighting Strategy and Tactics II**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: FST 202*

Strategy and tactics associated with special types of incidents such as transportation emergencies and fires, high-rise fires, below-ground incidents, confined space emergencies, and special rescue situations.

**FST 250 Chemistry for Fire Protection**

3 Credit Hours • 45 Contact Hours (Lecture)

Students will study the actions and reactions of commonly encountered products and chemicals, chemical properties, and field applied chemistry.

**FST 252 Fire Arson Detection**

3 Credit Hours • 45 Contact Hours (Lecture)

Students will study cause and origin as related to arson fires, evidence preservation and chain of evidence, interviewing, giving testimony, laws associated with fire and arson investigation, records and reports.

**FST 253 Fire Ground Organization and Command**

3 Credit Hours • 45 Contact Hours (Lecture)

Students will take an in-depth look at fire ground management; resource availability, management and deployment; Integrated Management System and all related components; communications, problem solving, and table top exercises.

**FST 254 Hazardous Materials II**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: FST 107*

Students will study techniques associated with hazardous materials mitigation, the use of monitoring devices, components of mitigation teams, and command and control of hazardous materials incidents.

**FST 255 Fire Department Administration**

3 Credit Hours • 45 Contact Hours (Lecture)

Students will study fire department organization and operation; service evaluation and delivery; employment law; collective bargaining and personnel management; community relations; planning and budgeting; laws and legal considerations; and managing change.

**FST 256 Fire Service EMS Management**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: EMS 125 or department chair consent*

A look at budgeting, staffing, training, certification, and equipment issues; transportation, standard of care, and protocols; operations, communications, incident and disaster management; and legal issues associated with management of EMS operations.

### **FST 257 Volunteer Fire Department Administration**

3 Credit Hour • 45 Contact Hours (Lecture)

*Prerequisite:* FST 206 or department chair consent

Students will study the operations of volunteer and combination fire departments, compliance with standards, ordinances and statutes, recruiting, hiring and retaining employees, funding and budgeting, organizational planning, and public relations.

### **FST 259 Wildland Fires**

3 Credit Hours • 45 Contact Hours (Lecture)

Students will study management of uncontrolled fire burning, urban/wildland interface, strategy and tactics used in controlling wild land fires, prevention methods, and incident command practices.

## **Food Management** (See Culinary Arts)

## **French**

### **\*FRE 111 French I**

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 100

Begins a sequence dealing in the development of functional proficiency in listening, speaking, reading, and writing the language.

### **\*FRE 112 French II**

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 100, FRE 111 (grade C or better) or faculty consent

Continues FRE 111 in the development of functional proficiency in listening, speaking, reading, and writing the language.

### **\*FRE 201 Conversational French III**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 100, FRE 111 and FRE 112 (grade C or better) or faculty consent

This is the third course in a sequence for students who wish to continue their study of understanding and speaking French. The material will include intermediate level vocabulary, grammar, and expressions.

### **\*FRE 202 Conversational French IV**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 100, FRE 201 (grade C or better) or faculty consent

This is the fourth course in a sequence for students who wish to continue their study of understanding and speaking French. The material will continue to cover intermediate level conversational patterns, expressions, and grammar.

### **\*FRE 211 French III**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 100, FRE 112 (grade C or better) or faculty consent

Continues FRE 111 and 112 in the development of increased functional proficiency in listening, speaking, reading, and writing the language.

### **\*FRE 212 French IV**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 100, FRE 211 (grade C or better) or faculty consent

Continues FRE 111, FRE 112, and FRE 211 in the development of increased functional proficiency in listening, speaking, reading, and writing the language.

### **\*FRE 231 French for Communication I**

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 100, two years of college French, three years of high school French, or faculty consent

Emphasizes communication in French by use of realistic vocabulary relating to situations encountered on the transportation systems and at hotels, restaurants, banks, or the post office while traveling or living in a French-speaking country.

### **\*FRE 232 French for Communication II**

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 100, two years of college French, three years of high school French, or faculty consent

Emphasizes communication in French by use of realistic vocabulary relating to situations encountered in a French-speaking country. Topics of French conversation include points of interest, the market, department stores, and sports and recreation.

### **\*FRE 266 Culture Studies**

1-3 Credit Hours • 22.5-67.5 Contact Hours (Lecture, Lab)

*Prerequisite:* REA 090, ENG 100

Interdisciplinary studies of a specific culture within a country of that culture with references to historical context and cultural concerns and values. Emphasis may be on either the arts or language/linguistics. May be repeated under a different subtitle for a maximum of 9 credits.

**\*Note: All native speakers must have permission of full-time foreign language faculty to enter.**

## **Geography**

### **GEO 105 World Regional Geography**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* MAT 036, REA 090, ENG 100

An introductory course designed to facilitate an understanding of spatial relationships between and among the geographic regions of the world. Included are demographic and cultural (political, economic, and historic) forces related to the physical environments of selected regions. Methods of study include analysis of and interrelationships between developed and developing regions.

### **GEO 106 Human Geography**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* MAT 036, REA 090, ENG 100

This course is an introduction to geographic perspectives and methods with applications to the study of human activities, such as resource utilization, agricultural practices, settlement patterns, migrations, cultural activities, and industrialization. Special emphasis is placed on spatial distribution, map interpretation, and human impact on the environment.

### **GEO 111 Physical Geography: Landforms**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* MAT 036, REA 090, ENG 100

This course introduces the principles of landforms and soil as major elements in human natural environment. Topics covered include structure and materials of the earth's crust, agents and processes of landscape development, elements of soil science, distribution of landscapes and soil types, and the impact of different landscapes and soil types upon human activities.



### **GEO 112 Weather and Climate**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

*Prerequisite:* MAT 036, REA 090, ENG 100

This course introduces the principles of meteorology, climatology, world vegetation patterns, and world regional climatic classification. Topics include winds, precipitation, ocean currents, El Nino, and weather systems. This course may transfer to some institutions as a natural science.

### **GEO 113 Economic Geography**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* MAT 036, REA 090, ENG 100

Economic geography studies the use of human and natural resources and their relationship to economic and technological development. Locational and spatial patterns will be highlighted in the study of agricultural systems, manufacturing, transportation, and service activities, information networks and demographic patterns through case studies.

### **GEO 125 Geography of Colorado**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* MAT 036, REA 090, ENG 100

This course is a comprehensive survey of the geography of Colorado. Included are both physical and cultural aspects such as landforms, weather and climate, natural resources, economic activities, cultural migrations and trends. Regional differences and human impact upon the environment are also included.

### **GEO 206 Introduction to Cartography**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

*Prerequisite:* MAT 036, REA 090, ENG 100, GEO 111 (for transfer students only; this prerequisite does not apply to NRT students).

This course introduces students to map skills, map use, and map making. Spatial analysis and interpretation of the earth's surface will serve as the basis for the theory and fundamentals of the practice of maps and graphic representations. Methods of map creation and interpretation, gathering data, and solving geography problems will be emphasized. Both manual cartographic methods and computer-generated maps will be taught.

## **Geology**

### **GEY 105 Geology of the National Parks**

3 Credit Hours • 45 Contact Hours (Lecture)

This course is for nonmajors. It focuses upon American National Parks to introduce and exemplify the basic principles of physical and historical geology.

### **GEY 106 Principles of Geology**

3 Credit Hours • 45 Contact Hours (Lecture)

This course is a general study of the characteristics of the past and present physical environment and the geologic forces at work to sculpt the landscape.

### **GEY 111 Physical Geology**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

*Prerequisite:* MAT 066 or faculty consent

Studies the materials of the earth, its structure, surface features, and the geologic processes involved in its development. Includes laboratory experience.

### **GEY 121 Historical Geology**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

*Prerequisite:* MAT 066 or faculty consent

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 environment, fossil life forms, and physical events all within the framework of shifting crustal plates.

### **GEY 141 Landscapes of North America**

3 Credit Hours • 45 Contact Hours (Lecture)

This course covers general geology of the landscapes of the United States. Surface features of the country as examples of process geology at work in the past are included.

### **GEY 146 The Earth Revealed: Introductory Geology**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

*Prerequisite:* MAT 066 or faculty consent

This course examines basic concepts in geology, a study of the earth with emphasis on earth history, and an overview of all major geologic concepts. The origin of the ocean basins, continental evolution, and major landforms are studied. Lab experiments will be required.

## **German**

### **\*GER 111 German I**

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 100

Begins a sequence dealing in the development of functional proficiency in listening, speaking, reading, and writing the language.

### **\*GER 112 German II**

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 100, GER 111 (grade C or better) or faculty consent

Continues GER 111 in the development of functional proficiency in listening, speaking, reading, and writing the language.

### **\*GER 211 German III**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 100, GER 112 (grade C or better) or faculty consent

Continues GER 111 and GER 112 in the development of increased functional proficiency in listening, speaking, reading, and writing the language.

### **\*GER 212 German IV**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 100, GER 211 (grade C or better) or faculty consent

Continues GER 111, GER 112, and GER 211 in the development of increased functional proficiency in listening, speaking, reading, and writing the language.

### **\*GER 266 Culture Studies**

1-3 Credit Hours • 22.5-67.5 Contact Hours (Lecture, Lab)

*Prerequisite:* REA 090, ENG 100

Interdisciplinary studies of a specific culture within a country of that culture with references to historical context and cultural concerns and values. Emphasis may be on either the arts or language/linguistics. May be repeated under a different subtitle for a maximum of 9 credits.

**\*Note: All native speakers must have permission of full-time foreign language faculty to enter.**

# History

## HIS 101 Western Civilization I

3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite:* REA 090, ENG 100, STS 060

This course surveys a number of events, peoples, groups, ideas, institutions, and trends that have shaped Western Civilization from the prehistoric era to 1650. It reflects the multiple perspectives of gender, class, religion, and ethnic groups. A principle focus of this course is on developing, practicing, and strengthening the skills historians use while constructing knowledge in this discipline.

## HIS 102 Western Civilization II

3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite:* REA 090, ENG 100, STS 060

This course surveys a number of events, peoples, groups, ideas, institutions, and trends that have shaped Western Civilization from 1650 to the present. It reflects the multiple perspectives of gender, class, religion, and ethnic groups. A principle focus of this course is on developing, practicing, and strengthening the skills historians use while constructing knowledge in this discipline.

## HIS 116 The Native American Experience

3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite:* REA 090, ENG 100, STS 060

This course is an introduction to the Native American's historical and socio-cultural development with an emphasis upon those relations with non-Native Americans which have contributed to the current conditions.

## HIS 136 The Southwest United States

3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite:* REA 090, ENG 100, STS 060

This course traces the culture and historical development of what is now the Southwestern United States including the cultural contributions of the Native American and Hispanic peoples.

## HIS 137 Contemporary World History

3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite:* REA 090, ENG 100, STS 060

This course investigates the major historical and cultural developments of various global regions and nation-states from 1900 to the present.

## HIS 201 U.S. History I

3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite:* REA 090, ENG 100, STS 060

Examines the major political, economic, social, diplomatic/military, cultural, and intellectual events in American History from the first inhabitants through the Civil War/Reconstruction.

## HIS 202 U.S. History II

3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite:* REA 090, ENG 100, STS 060

Examines the major political, economic, social, diplomatic/military, cultural, and intellectual events in American History from Reconstruction to the present.

## HIS 206 U.S. Family History and Genealogy

3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite:* REA 090, ENG 100, STS 060

Introduces genealogical and historical methods, sources, and standards for creating a family history using the broader context of social history—ordinary people's everyday lives.

## HIS 207 American Environmental History

3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite:* REA 090, ENG 100, STS 060

This course traces and analyzes the relationships between Americans and their natural environments throughout the history of the United States. Environmental history interprets the changing ways diverse people have used and viewed their environments over time. The course also examines the development of conservation movements and environmental policies in modern America.

## HIS 215 Women in U.S. History

3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite:* REA 090, ENG 100, STS 060

This course surveys women's changing roles in American history from the colonial period to the present. Special emphases are placed upon the nature of women's work and the participation of women in the family, church, and reform movements.

## HIS 225 Colorado History

3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite:* REA 090, ENG 100, STS 060

This course 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 twentieth-century state.

## HIS 235 The American West

3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite:* REA 090, ENG 100, STS 060

This course traces the major political, economic, social, cultural, and environmental forces that have made the American West a distinct region.

## HIS 236 Contemporary U.S. History

3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite:* REA 090, ENG 100, STS 060

This course surveys the major political, economic, social, and cultural developments that have shaped twentieth-century America.

## HIS 241 History of the Pikes Peak Area

2 Credit Hours • 30 Contact Hours (Lecture)  
*Prerequisite:* REA 090, ENG 100, STS 060

This course interprets the history of the southern Front Range area, centering on Colorado Springs and the surrounding communities including the environmental and Native American background; the Spanish, Mexican, and Yankee exploration; Palmer and other developers; and the area's role as a mecca for miners, tourists, health seekers, athletes, military installations, and religious groups.

# Hospitality Management

## **HOM 103 Introduction to Hospitality Today**

3 Credit Hours • 45 Contact Hours (Lecture)

A survey of the operation of the hospitality industry; incorporating but not limited to guest services, hotel, club and restaurant operation, convention and tourism activities, human resources, ethics, and management.

## **HOM 132 Front Office Procedures**

3 Credit Hours • 45 Contact Hours (Lecture)

This course covers front office manager's responsibilities for keeping the front office profitable, guest safety and key control guidelines, staff management, and the impact of the latest technology.

## **HOM 139 Housekeeping Management**

3 Credit Hours • 45 Contact Hours (Lecture)

This course presents principles of housekeeping and the management of these activities at lodging properties. Efficient and systematic approaches to guestroom management to include labor and supplies.

## **HOM 151 Hospitality Supervision**

3 Credit Hours • 45 Contact Hours (Lecture)

This course is designed to explain the principles of supervision as they apply specifically to the hospitality industry. Students will be prepared to meet the expectations of management, guests, employees, and governmental agencies. Features creative strategies for managing change and conflict resolution.

## **HOM 186 Hotel/Motel Security Management**

3 Credit Hours • 45 Contact Hours (Lecture)

This course will provide the guidelines for developing a security program and the procedures to follow when a security incident occurs. Methods for helping employees become aware of security concerns will also be discussed.

## **HOM 221 Tourism and the Hospitality Industry**

3 Credit Hours • 45 Contact Hours (Lecture)

This course covers tourism from a social science perspective. Identifies the factors that influence tourism, the tools that help industry professionals manage tourism activities, and the ways in which business, government, and travelers shape global tourism.

## **HOM 255 Hospitality Industry Training**

3 Credit Hours • 45 Contact Hours (Lecture)

The course covers the relationship between training and the goals of a hospitality organization. Elements of an effective training program, principles of adult learning, and the role of coaching and counseling in ongoing training are included.

## **HOM 262 Financial Accounting of the Hospitality Industry**

3 Credit Hours • 45 Contact Hours (Lecture)

This course introduces the student to the fundamentals of accounting for the hospitality industry and producing an accurate picture of a property's revenue, expenses, and net income. Specific transactions include adjustments, balance sheet, income statement, specialized journals and ledgers, inventory, receivables and payables, cash flows, analysis, and interpretation of financial statements.

## **HOM 269 Hospitality Industry Computer Systems**

3 Credit Hours • 45 Contact Hours (Lecture)

This course examines the essentials of computer systems as they relate to the hospitality industry. Topics will include hardware, software applications, database management, and electronic communication.

## **HOM 271 Marketing of Hospitality Services**

3 Credit Hours • 45 Contact Hours (Lecture)

This course covers market segmentation of the hospitality industry, positioning in line with consumer preferences, data base marketing and research, application of the marketing mix in the hospitality industry, and marketing automation.

## **HOM 273 Hospitality Sales and Marketing**

3 Credit Hours • 45 Contact Hours (Lecture)

This course includes how to identify and reach the most appropriate sources of additional business. How to motivate your sales team, coordinate the sales effort, and boost internal and external sales by using more effective negotiation techniques are also discussed.

## **HOM 275 Convention Management and Services**

3 Credit Hours • 45 Contact Hours (Lecture)

This course is designed to introduce students to the convention, meetings, and trade show industries. Students will study how to develop a marketing plan, how to sell corporate and other meeting markets, and how to advertise to the meeting planner. Also included in this course will be how to prepare for the event, including meeting setups, food and beverage service, audiovisual requirements, convention billing, and post convention review.

# Humanities

## **HUM 121 Survey of Humanities I**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: REA 090, ENG 100*

Through a study of the visual arts, literature, music, and philosophy, this course introduces students to the history of ideas that have defined cultures. It emphasizes connections among the arts, values, and diverse cultures, including European and non-European, from the Ancient world to 1000 C.E. Any 2 of the 3 Survey of Humanities courses equal a sequence.

## **HUM 122 Survey of Humanities II**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: REA 090, ENG 100*

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 2 of the 3 Survey of Humanities courses equal a sequence.

## **HUM 123 Survey of Humanities III**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: REA 090, ENG 100*

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. Any 2 of the 3 Survey of Humanities courses equal a sequence.

## **HUM 137 The Arts and Cultures of Mexico**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: REA 090, ENG 100*

Through a study of works of visual art, music, and literature, the course introduces students 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 201 20th Century American Arts**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: REA 090, ENG 100*

Elements common to the arts of film, painting, architecture, literature, and music of 20th century America. Effects of the economy, business and industry, and traditional values and dreams on the arts.

### **HUM 235 Pre-Columbian Indian Arts**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 100

Effects of myth, ritual, religion, and geography on the arts and crafts of the Olmecs, Toltecs, Mayas, Aztecs, Incas, and North American Indians of pre-Columbian era.

### **HUM 236 North American Indian Arts**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 100

North American Indian music, dance, architecture, painting, sculpture, pottery, and fashions through the literature of Indian cultures in North America.

### **HUM 237 Hispanic Arts of the Southwest**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 100

Cultural values and history of Mexican-Americans in the southwest through their major art forms created since 1600. Spanish, Mexican, and Native-American influences on Mexican-American arts.

### **HUM 238 Sacred Images, Sacred Spaces**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 100

This course will examine the historical, social, and cultural forces that influenced the design and presentation of sacred images in several Latin American and Southwestern US cultures. Students will study stylistic features of images in various media in relation to their architectural contexts, their sacred spaces.

### **HUM 266 Culture Studies**

1-3 Credit Hours • 22.5-67.5 Contact Hours (Lecture, Lab)

*Prerequisite:* REA 090, ENG 100

Interdisciplinary studies of a specific culture within a country of that culture with references to historical context and cultural concerns and values. Emphasis may be on either the arts or language/linguistics. May be repeated under a different subtitle for a maximum of 9 credits.

## **Information Technology Education**

### **ITE 105 CIS for Tech Support**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* CIS 110 or faculty consent

This five-week course will introduce students to the basic components of computer information systems. This course will emphasize the following components of computer technology: hardware including I/O devices, storage devices, and motherboard components; operating systems including DOS, Windows 3.x, Windows 95/98, Windows NT, UNIX; computer applications including word processors, Internet browsers, e-mail and attachments, the applications environment, etc.; Local Area Networks; and telecommunication basics. It is recommended that the student have college level reading, English, and math skills.

### **ITE 106 Customer Service for Tech Support**

3 Credit Hours • 45 Contact Hours (Lecture)

This five-week course will prepare students for responding to complex customer requirements in a technical support environment. The course will emphasize the following skill areas: oral and written communication skills; telephone communication skills; utilizing resources effectively such as how to use the Internet, user manuals, on-line help indexes; effective problem solving with the customer; techniques for managing stress and dealing with burnout; conflict resolution/dealing with difficult calls; customer retention strategies; working in a team environment; and total quality concepts in customer service. It is recommended that the student have college level reading, English, and math skills.

## **Insurance and Risk Management**

### **IRM 121 Principles of Insurance**

3 Credit Hours • 45 Contact Hours (Lecture)

Basic principles of insurance; an overview of the nature and operation of the insurance business; and an introduction to insurance contracts.

### **IRM 122 Principles of Personal Insurance**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* IRM 121 or faculty consent

Analysis of personal loss exposures and personal insurance coverage including homeowners and other dwelling coverage, personal liability, inland marine, auto, life and health, flood, crime, and crop damage.

### **IRM 123 Principles of Commercial Insurance**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* IRM 121 or faculty consent.

Commercial coverage including property, business income, inland and ocean marine, crime, boiler and machinery, general liability, automobile, workers' compensation, farm and business owners as well as miscellaneous liability coverage, surety, and excess and surplus lines.

### **IRM 125 Group Insurance Benefits**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* IRM 121 or IRM 147, or faculty consent.

An examination of the field of group and employee benefits and life and health products presented from both risk management and financial management perspectives.

### **IRM 126 Introduction to Financial Planning**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* IRM 121 or IRM 147, or faculty consent.

A comprehensive introduction to the multidiscipline field of financial planning, explaining the planning process and how insurance, investments, and government entitlements affect estate, retirement, and other planning needs.

### **IRM 127 Principles of Insurance Production**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* IRM 122 and IRM 123, or faculty consent

Introduction to the unique requirements of insurance sales based upon the risk management process with emphasis on exposure identification. This course examines the legal environment of insurance sales and addresses the specific characteristics of selling life insurance, personal insurance, commercial insurance, packages, property and general liability. This course is an alternative to IRM 145 and IRM 150.

### **IRM 128 Multi-lines Insurance Protection**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* IRM 122 and IRM 123, or faculty consent.

This course is concerned with the highly specialized field of commercial lines insurance sales, emphasizing selling techniques and account development strategies for commercial packages; workers compensation; excess property and liability; ocean marine and aviation insurance; surety bonds and other commercial lines of insurance. This course is an alternative to IRM 145 and IRM 130.

### **IRM 129 Agency Operations and Sales Management**

3 Credit Hours • 45 Contact Hours (Lecture)

In-depth examination of agency operations in the areas of planning, organizing, staffing, directing, and controlling centered on the financial management approach as well as introduction to sales management focusing on individual sales plans for procedures, risk placement management, competition management, suspecting, and prospecting. This course also addresses insurance ethics and professional liability and is an alternative to IRM 145 and IRM 150.

### **IRM 130 Colorado Insurance Pre-Licensing**

4 Credit Hours • 60 Contact Hours (Lecture)

This course is a comprehensive review of insurance principles and practices. It entails an in-depth examination of property and casualty insurance with considerable emphasis placed on commercial insurance.

### **IRM 143 Ethics, Insurance Perspectives, and Insurance Contract Analysis (CPCU 1)**

3 Credit Hours • 45 Contact Hours (Lecture)

A foundation course for the CPCU curriculum, examining the American institute Code of Professional Ethics and analyzing insurance from the perspectives of its evolutionary roots, its role as a risk management tool, its function as a regulated social device, and its unique nature as a legal contract. In addition, it emphasizes the skills necessary to read, analyze, and interpret property and liability insurance contracts.

### **IRM 145 Personal Risk Management and Insurance (CPCU 2)**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* IRM 122 or faculty consent.

An advanced study of the use of insurance and non-insurance techniques to handle the loss exposures and financial planning needs of individuals and families; presented from the risk management perspective.

### **IRM 147 Principles of Life/Health Insurance**

3 Credit Hours • 45 Contact Hours (Lecture)

A foundation course for the CLU/CHFC curriculum introducing the student to life and health insurance fields from a financial management perspective. In addition, it explains how life and health insurance products fit into the broad framework of financial planning. This is a foundation course for the insurance emphasis area.

### **IRM 150 Insurance Operations (CPCU 5)**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* IRM 121 or IRM 123, or faculty consent

An in-depth examination of insurance company operations detailing the major insurance functions of marketing, underwriting, reinsurance, rate making, loss control, and claims handling and adjusting.

### **IRM 154 Essentials of Risk Management**

3 Credit Hours • 45 Contact Hours (Lecture)

An in-depth examination of the nature, purpose, and steps in risk management including the identification of an analysis of the loss exposures of individuals and organizations; the examination and application of alternative risk management techniques; and the development and justification of risk management decisions.

### **IRM 155 Essentials of Risk Control**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* IRM 154 or faculty consent

In-depth examination of the role of risk control in risk management with emphasis on developing specific applications to specific loss exposures, applying decision roles for choosing risk control techniques, and implementing and monitoring chosen risk control techniques studied in IRM 154.

### **IRM 156 Essentials of Risk Financing**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* IRM 154 or faculty consent

In-depth examination of the role and importance of risk financing in risk management with emphasis on developing specific applications of risk financing to specific loss exposure; applying decision roles for choosing risk financing techniques. Implementing chosen risk-financing techniques studied in IRM 154.

## **Integrated Circuit Fabrication**

### **ICF 101 Microelectronics Fabrication**

6 Credit Hours • 135 Contact Hours (Vocational Lab)

This course delivers the fundamental concepts used to create microelectronic semiconductor integrated circuits. This extensive course includes aspects of semiconductor manufacturing, materials, equipment, processes, contamination control, testing, measurements, and cleanroom environments.

### **ICF 102 Cleanroom Processes**

1 Credit Hour • 15 Contact Hours (Lecture)

*Corequisite:* ICF 101 or faculty consent.

This course delivers concepts of semiconductor manufacturing cleanroom protocols, contamination control, cleanroom air strategies, HEPA filtering systems cleanroom construction designs, process water, process gases, process chemicals, materials, supplies, and safety issues.

### **ICF 104 Vacuum Systems**

4 Credit Hours • 90 Contact Hours (Vocational Lab)

This extensive course delivers concepts of vacuum system principles, roughing pumps, pump design types, high vacuum pumps, high vacuum pump design types, system applications, gauges and measurement systems, vacuum materials and related hardware, system design and performance evaluations, vacuum system troubleshooting, and leak detection.

### **ICF 106 Semiconductor Active Devices and Mixed-Signal ICs**

6 Credit Hours • 90 Contact Hours (Lecture)

*Prerequisite:* ELE 112, ELE 113

*Corequisite:* ICF 107 or ELE 217

This course delivers the knowledge and skills needed to use active devices, linear and nonlinear operational amplifier ICs, analog and digital mixed-signal ICs, and the applications of diverse circuit types in automated process control and manufacturing environments. Students will receive credit for ICF 106 or ELE 216 but not for both.

### **ICF 107 Semiconductor Active Devices and Mixed-Signal ICs Lab**

3 Credit Hours • 90 Contact Hours (Lab)

*Prerequisite:* ELE 112, ELE 113

*Corequisite:* ICF 106 or ELE 216

This course delivers laboratory experiences, knowledge, and skills in using active devices, linear and nonlinear OP-AMP ICs, analog and digital mixed-signal ICs, OP-AMP control system circuits, and circuits for automated process control applications.

### **ICF 108 Control Systems**

5 Credit Hours • 112.5 Contact Hours (Vocational Lab)

*Corequisite:* ELE 112, ELE 113

This course delivers the fundamental concepts used in automated electronic control systems. The courseware provides knowledge and skills related to process control, input/output devices, control systems and characteristics, control mechanisms and valves, transfer functions, analog and digital control functions, and sensors controlling timing and microprocessor software and systems. SPC tools and control system safety issues are also emphasized.

### **ICF 212 Vacuum Systems**

4 Credit Hours • 90 Contact Hours (Vocational Lab)

*Prerequisite:* ICF 104

This course delivers semiconductor industry-specific knowledge and skills associated with RF energy and related vacuum systems and applications including concepts of electromagnetic radiation; RF power sources, impedance matching networks, transmission lines, plasmas and plasma physics, plasma applications and RF energy system safety issues.

### **ICF 214 RF Energy**

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

*Prerequisite:* ELE 112, ELE 113, ICF 104, ICF 108, CHE 101, PHY 133

This course identifies electronic principles used in RF systems within the IC manufacturing environment. Topics include radio frequency, transmission lines, amplifiers, RF subsystems and controls, RF plasma system reactors, instrumentation, measurement, plasma safety concerns, troubleshooting, and chamber loading.

### **ICF 216 Electromechanical and Pneumatic Systems**

5 Credit Hours • 112.5 Contact Hours (Vocational Lab)

*Prerequisite:* Completion of all ICF 100 level courses

This course delivers semiconductor industry-specific knowledge and skills associated with electromechanical and pneumatic systems, including control systems concepts, transducers and sensors, transmission systems, pneumatic controllers, microprocessor electronic controllers, control system designs, safety issues, and control systems limitations.

### **ICF 218 Automated Process Control Systems**

6 Credit Hours • 90 Contact Hours (Lecture)

*Prerequisite:* Completion of all ICF 100 level courses

*Corequisite:* ICF 219

This course delivers semiconductor industry-specific knowledge and skills associated with automated process control systems used in IC fabrication environments, including process control principles, analog signal conditioning, digital signal conditioning, thermal, mechanical and optical sensor systems, final control solutions, discrete state process control, controller principles, analog and digital controllers, control loop characteristics, control system configurations, process loop tuning and operational evaluations, and automated systems safety issues.

### **ICF 219 Automated Process Control Systems - Laboratory**

3 Credit Hours • 90 Contact Hours (Lab)

*Prerequisite:* Completion of all ICF 100 level courses

*Corequisite:* ICF 218

This course delivers practical laboratory experiences in the semiconductor industry and covers specific automated process control systems used in IC fabrication environments. Laboratory experimentation projects and activities are applications of concepts studied in the ICF 218 course.

### **ICF 230 Advanced Process: Thin Films, Dopants**

5 Credit Hours • 112.5 Contact Hours (Vocational Lab)

*Prerequisite:* Completion of all ICF 100 level courses

This course provides the advanced knowledge and skills required in semiconductor IC Fabrication for the growth and deposition of thin films and the introduction of dopants. This includes oxidation, chemical vapor deposition, physical deposition, dopant predeposition, ion implant, related equipment, metrology, and process control.

### **ICF 240 Advanced Process: Photolithography, Etch**

4 Credit Hours • 90 Contact Hours (Vocational Lab)

*Prerequisite:* Completion of all ICF 100 level courses

This course provides the advanced knowledge and skills required in semiconductor IC Fabrication for producing patterns in the various circuit layers. This includes applying, exposing, developing and removing photoresist, wet and dry etching of layers, and the related equipment, metrology, and process control.

## **Interior Design**

### **IDE 105 Introduction to Interior Design**

3 Credit Hours • 45 Contact Hours (Lecture)

Design awareness, color, and the elements of style are introduced in this overview of the interior design industry. Focus is on design awareness and creative problem solving while studying various facets related to interiors.

### **IDE 110 Interior Design I - Overview and Application**

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

*Corequisite:* ARC 101, ARC 104 and faculty consent

This course introduces the student to the interior design industry, interior architecture, and the relationships with other design disciplines. Focus will be on the application of the elements of design, presentation techniques, and creativity. Field trips will be made to commercial and residential design studios.

### **IDE 115 History of Interior Design**

3 Credit Hours • 45 Contact Hours (Lecture)

This course offers a study of interior furnishings from the medieval period to the Revival styles of the mid-eighteenth century to the contemporary classics used in modern interiors today. The characteristics of historical interiors, ornamental design, use of color, and architecture will be the primary emphases.

### **IDE 116 Estimating Interior Materials**

3 Credit Hours • 45 Contact Hours (Lecture)

*NOTE:* For IDE majors only.

This course is designed to develop skills when estimating materials and costs for interior finishes including paint, carpet, wall covering, and fabrics. Emphasis is on specification, documentation, and details.

### **IDE 117 Textiles and Resources**

2 Credit Hours • 45 Contact Hours (Vocational Lab)

*NOTE:* For IDE majors only.

This course emphasizes the study of fabrics, fibers, weaves, finishes, dyeing, and printing methods for residential and commercial fabrics and carpets. Resources are discussed, developed, and visited.

### **IDE 120 Interior Design II - Space Planning and Human Factors**

4 Credit Hours • 75 Contact Hours (30 Lecture, 45 Vocational Lab)

*NOTE:* For IDE majors only.

*Prerequisite:* IDE 110

This course is designed to develop awareness of human dimensions, spatial relationships, and the importance of the physical and psychological characteristics of people. Studies include residential and commercial spaces and ADA factors.

### **IDE 201 Local Market Tour**

3 Credit Hours • 45 Contact Hours (Lecture)

The focus of this course is on the regional market place as a resource for the practicing interior designer. Students will participate in tours of local shops, studios, showrooms, and fabrication facilities to become familiar with local trade sources.

### **IDE 205 Special Topics Studies**

2 Credit Hours • 45 Contact Hours (Vocational Lab)

*Prerequisite: faculty consent*

This course is designed for the advanced student to devote time to the development of a special project of creative interest. This could range from timely topics of concern to the design professional, historical preservation research, or any other approved topic for independent study. Department Chair will determine if requested area of study is approved.

### **IDE 210 Interior Design III - Materials, Details, Codes, and Specs**

4 Credit Hours • 75 Contact Hours (30 Lecture, 45 Vocational Lab)

*Prerequisite: IDE 120, ARC 101*

Coordination of interior building materials, interior details and section drawings, building codes and specifications for typical and custom projects, and the ability to communicate custom designed furnishings specifications.

### **IDE 215 Professional Practice for Interior Designers**

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite: IDE 110, IDE 120*

Students are introduced to many of the business procedures encountered in the commercial and residential practice of interior design. The student will generate a business plan and a marketing plan and learn how to establish accounts within the industry.

### **IDE 217 Window Treatments**

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite: faculty consent*

Discussion and demonstration of hard and soft window treatments used in today's market place. Measuring, installing, pricing, ordering, and resource development are investigated. Fabric weaves and weights, trims and linings are discussed, and creative treatments are designed and specified.

### **IDE 220 Interior Design IV – Specialty CAD Applications**

3 Credit Hours • 52.5 Contact Hours (30 Lecture, 22.5 Vocational Lab)

*Prerequisite: IDE 210, ARC 108*

This course is divided into three sections to allow the student exposure to various types of software used by major companies in the practice of design. A project will be completed for each of three different software programs.

### **IDE 230 Studio I - Residential**

3 Credit Hours • 52.5 Contact Hours (30 Lecture, 22.5 Vocational Lab)

*Concurrent: IDE 210, IDE 215, IDE 217*

The advanced interior design student will be challenged to study residential design components, generate working drawings, elevations, furnishing plans, specifications, budget sheets, and color boards. Grading includes a final formal presentation. Independent study in resource development is expected.

### **IDE 231 Studio II - Residential**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

*Prerequisite: IDE 230 or IDE 240*

The advanced interior design student will be given criteria to design a residence and will be expected to generate a completed project for final formal presentation. Independent research and study are expected.

### **IDE 240 Studio I - Commercial**

3 Credit Hours • 52.5 Contact Hours (30 Lecture, 22.5 Vocational Lab)

*Prerequisite: IDE 210, IDE 215, IDE 217*

The advanced interior design student will generate plans, specifications, elevations, and color boards for selected commercial spaces. Independent study is required for developing criteria for furnishing selections. Grading includes a final formal presentation.

### **IDE 241 Studio II - Commercial**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

*Prerequisite: IDE 230 or IDE 240*

The advanced interior design student will be given a specific area and will be expected to generate a completed project for final formal presentation. Independent research and study are expected.

### **IDE 270 Internship**

3 Credit Hours • 135 Contact Hours (Work Experience)

*Prerequisite: faculty consent*

Students will work at various design industry-related positions available in the community. First and last weeks of semester will be in-class lecture and discussion. Job supervisor is required to submit employee evaluation to instructor for last week evaluation. GPA 2.8 in IDE classes required for registration.

## **International Business**

### **INT 210 International Business Office Administration**

3 Credit Hours • 45 Contact Hours (Lecture)

Discusses the importance of proper office procedures in an international environment. Topics include how to interact with international visitors; manage international communications including FAXES, TELEX, international long distance; multi-cultural understanding and sensitivity; and how to make international travel arrangements.

### **INT 221 Principles of International Business**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: BUS 115 or faculty consent*

An introductory course that focuses on managing a business in a global environment. Topics covered include international business terminology, how international business is different from domestic business, international trade and foreign investment, economic theories on international trade, international monetary system, international organizations, country risk assessment, international marketing, and international careers.

### **INT 222 Principles of Exporting and Importing**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: BUS 115 or faculty consent*

Explores the fundamentals of exporting U.S. goods to foreign countries and the importing of foreign goods to the United States. Includes the discussion of the U.S. and foreign Department of Commerce, required documentation, including the Customs Modernization Act, currency risks, credit issues, letters of credit and trading groups (i.e. NAFTA).

### **INT 241 Doing Business in a Global Environment**

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Lecture, Lab Combination)

To expose the student, on an experiential level, to the realities of conducting business in a foreign country and the international environment. The course will focus on and reinforce topics such as economic globalization, cultural exchanges and sensitivities, the realities of conducting business in a foreign environment, and evaluation of business opportunities in a foreign country. This course requires travel to an instructor-selected foreign environment.

### **INT 243 Principles of International Marketing**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* INT 221 or faculty consent

Provides students with an understanding of the scope of international marketing and a background in international trade and commerce theory. Topics include the scope and challenge of global marketing, internationalization of U.S. business, the international marketing tasks of marketing controllables, domestic and foreign uncontrollables, self-reference criterion, development of a global awareness, cultural dynamics in assessing global markets, business customs and practices, multinational market regions and market groups, research of global markets, international distribution systems, and pricing for international markets.

## **Interpreter Preparation**

### **IPP 111 Text Analysis**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ASL 111

The purpose of this course is to introduce ASL and English textual analysis to students. Cultural implications in ASL and English texts will be discussed and identified. This information will provide a basis on which students can build communication and interpretation skills, in English and American Sign Language.

### **IPP 114 Theory of Oral Transliteration**

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite:* IPP 121

In this course, students will have the opportunity to develop basic oral transliteration skills. The course will allow students to learn the different techniques available in facilitating effective oral communication between consumers.

### **IPP 121 Aspects of Interpreting I**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ENG 121

The purpose of this course is to acquaint students with the basics of interpreting. This will enable students to understand what interpreting involves and the professional requirements of being an interpreter. In this course, students are introduced to the code of ethics, situation assessment required for effective interpreting, certification of interpreters, and the history of interpreting.

### **IPP 122 Aspects of Interpreting II**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* IPP 121

This course will provide a more in-depth study of the field of interpreting, expanding on the basics introduced in IPP 121. Lecture/discussion sessions will address ethical decision-making and cultural issues as well as work. Students will observe various professional interpreters throughout the semester.

### **IPP 134 Introduction to Interpreting**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ASL 112, IPP 111, IPP 121

The purpose of this course is to provide students with an analysis of interpretation theory and processing skills which will be applied to interpretation. Students will learn to analyze their own work.

### **IPP 144 Diversity Within the Deaf Community**

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite:* ASL 111 or faculty consent

The purpose of this course is to expand students' knowledge of the impact of deafness on the development of language and cognition and the socialization of deaf individuals in a hearing world.

### **IPP 203 Educational Interpreting**

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite:* ASL 112 or faculty consent

The focus of this course will be to gain insight into the roles of the interpreter/tutor in the mainstream environment, to recognize the implications of child development and classroom interaction patterns on interpreting; and to acquire a repertoire of tutoring strategies and specialized vocabulary encountered in the educational setting.

### **IPP 221 Voice to Sign Interpreting**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ASL 211, IPP 134

Exercises and discussion will focus on skills development and the interpreting process. Students will be exposed to a wide variety of speakers through videotapes and guest speakers.

### **IPP 222 Sign to Voice Interpreting**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ASL 211, IPP 134

The purpose of this course is to provide students an opportunity to build skills in interpreting and transliterating into spoken English from ASL and various contact varieties.

### **IPP 224 Transliterating**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ASL 211, IPP 134

The purpose of this course is to provide students with knowledge of transliterating techniques and allow them to develop skills in transliterating spoken English into signed English. The student is introduced to the concept of transliterating and the difference between transliterating and interpreting.

### **IPP 230 Advanced Interpreting**

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite:* ASL 212, IPP 221, IPP 222, IPP 224

This course provides students with an opportunity to further develop and refine skills in sign-to-voice and voice-to-sign interpretation and transliteration.

### **IPP 235 Sign Vocabulary Expansion**

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite:* ASL 212, ASL 214, or faculty consent

This course is designed to increase students' lexicon of technical ASL signs and the appropriate English translations for those signs related to various professions, sports and leisure, drug use/abuse, and sexual behavior.

### **IPP 240 Interpreter Seminar**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ASL 212, IPP 111, IPP 121, IPP 122, IPP 221.

*Corequisite:* IPP 244

The purpose of this course is to provide students with an open forum to discuss situations arising from interpreter assignments during internship and an opportunity to prepare to enter the interpreting field.



### IPP 244 Interpreter Internship

5 Credit Hours • 225 Contact Hours (Internship)

Grading: S/U only.

Prerequisite: ASL 212, IPP 111 - 124 and an average of "B" or higher with no more than 1 "C" in ASL 212, IPP 221, IPP 222, and IPP 224.

Corequisite: IPP 240

This course provides field experience interpreting in a supervised education, community, service agency, or other setting.

## Italian

### \*ITA 111 Italian I

5 Credit Hours • 75 Contact Hours (Lecture)

Prerequisite: REA 090, ENG 100

Begins a sequence dealing in the development of functional proficiency in listening, speaking, reading, and writing the language.

### \*ITA 112 Italian II

5 Credit Hours • 75 Contact Hours (Lecture)

Prerequisite: REA 090, ENG 100, ITA 111 (grade C or better) or faculty consent

Continues ITA 111 in the development of functional proficiency in listening, speaking, reading, and writing the language.

### \*ITA 211 Italian III

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: REA 090, ENG 100, ITA 112 (grade C or better) or faculty consent

Continues ITA 111 and 112 in the development of increased functional proficiency in listening, speaking, reading, and writing the language.

### \*ITA 212 Italian IV

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: REA 090, ENG 100, ITA 211 (grade C or better) or faculty consent

Continues ITA 111, 112, and 211 in the development of increased functional proficiency in listening, speaking, reading, and writing the language.

### \*ITA 266 Culture Studies

1-3 Credit Hours • 22.5-67.5 Contact Hours (Lecture, Lab)

Prerequisite: REA 090, ENG 100

Interdisciplinary studies of a specific culture within a country of that culture with references to historical context and cultural concerns and values. Emphasis may be on either the arts or language/linguistics. May be repeated under a different subtitle for a maximum of 9 credits.

**\*Note: All native speakers must have permission of full-time foreign language faculty to enter.**

## Japanese

### \*JPN 111 Japanese I

5 Credit Hours • 75 Contact Hours (Lecture)

Prerequisite: REA 090, ENG 100

Begins a sequence dealing in the development of functional proficiency in listening, speaking, reading, and writing the language.

### \*JPN 112 Japanese II

5 Credit Hours • 75 Contact Hours (Lecture)

Prerequisite: REA 090, ENG 100, JPN 111 (grade C or better) or faculty consent

Continues JPN 111 in the development of functional proficiency in listening, speaking, reading, and writing the language.

### \*JPN 201 Conversational Japanese III

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: JPN 112

This is the third course in a sequence for students who wish to continue their study of understanding and speaking Japanese. The material will include intermediate level vocabulary, grammar, and expressions.

### \*JPN 202 Conversational Japanese IV

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: JPN 201

This is the fourth course in a sequence for students who wish to continue their study of understanding and speaking Japanese. The material will continue to cover intermediate level conversational patterns, expressions, and grammar.

### \*JPN 211 Japanese III

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: REA 090, ENG 100, JPN 112 (grade C or better) or faculty consent

Continues JPN 111 and JPN 112 in the development of increased functional proficiency in listening, speaking, reading, and writing the language.

### \*JPN 212 Japanese IV

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: REA 090, ENG 100, JPN 211 (grade C or better) or faculty consent

Continues JPN 211 in the development of functional proficiency in listening, speaking, reading, and writing the language.

### \*JPN 266 Culture Studies

1-3 Credit Hours • 22.5-67.5 Contact Hours (Lecture, Lab)

Prerequisite: REA 090, ENG 100

Interdisciplinary studies of a specific culture within a country of that culture with references to historical context and cultural concerns and values. Emphasis may be on either the arts or language/linguistics. May be repeated under a different subtitle for a maximum of 9 credits.

**\*Note: All native speakers must have permission of full-time foreign language faculty to enter.**

# Journalism

## JOU 101 Broadcasting I

3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite:* MAT 036, REA 115, ENG 100  
*Corequisite:* TCM 106

This course covers radio-programming, formats and audience rating surveys, basic and sophisticated communication systems, history of broadcasting, broadcasting and production equipment, and program broadcast systems and propaganda.

Credit will be granted for JOU 101 or TCM 101 but not for both.

## JOU 102 Introduction to Editing

3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite:* MAT 036, REA 115, ENG 100

The process of editing articles for publication in newspapers, newsletters, and magazines. The Associated Press Style is emphasized.

## JOU 105 Introduction to Mass Media

3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite:* MAT 036, REA 115, ENG 100

This survey course places the mass media in a historical and cultural perspective to study the relationships between mass media and society. This course also introduces students to some of the ethical, legal, and economic issues that affect the mass media and their consumers.

## JOU 106 Fundamentals of Reporting

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)  
*Prerequisite:* MAT 036, REA 115, ENG 100

This is an introductory course in news writing, reporting and interviewing, with an emphasis on clarity, accuracy, timeliness, and fairness.

## JOU 109 Introduction to Desktop Publishing

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)  
*Prerequisite:* MAT 036, REA 090, ENG 100

Introduces fundamentals of desktop publishing with PageMaker, Microsoft Word, and other software applications. Students will study basic word processing, database files, and graphics as they design business cards, brochures, fliers, and newsletters. Typing of 25 WPM recommended.

## JOU 111 Introduction to Print Media Advertising

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)  
*Prerequisite:* MAT 036, REA 115, ENG 100

This course covers creative sales and design concepts for print media; market identification in relation to several print media; and development of appropriate messages for select media.

## JOU 121 Introduction to Print Media Photography

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)  
*Prerequisite:* MAT 036, REA 115, ENG 100

This is an introductory, hands-on course in black-and-white photography with an emphasis on photojournalistic techniques, processing, and printing. This course includes an investigation of word/picture relationships in creating photo essays for publications.

## JOU 201 TV Production

3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite:* MAT 036, REA 115, ENG 100  
*Corequisite:* TCM 106

This course covers principles and techniques of television production such as camera operation, basic lighting, operation of video recording equipment, video switcher, and audio. Production procedures, planning, and the role of the director/producer are also covered.

Credit will be granted for TCM 201 or JOU 201, but not for both.

## JOU 206 Intermediate Newswriting and Editing

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)  
*Prerequisite:* MAT 036, REA 115, ENG 100, JOU 106 or faculty consent

This course will sharpen students' skills in news writing and reporting with an emphasis on editing, ethics, and news judgment. Students may also develop skills in broadcast, public affairs, and investigative writing.

## JOU 215 Publications Production and Design

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)  
*Prerequisite:* MAT 036, REA 115, ENG 100

This intermediate course provides students with practical experience in the design, editing, and layout of special, non-newspaper publications. Students may be required to work on the college yearbook, literary magazine, student handbook, or other approved publications.

## JOU 221 Newspaper Design I

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)  
*Prerequisite:* MAT 036, REA 115, ENG 100, JOU 102, JOU 109

This introductory course provides students with practical experience in the areas of news writing, editing, design, layout and advertising for newspaper production. Students may be required to work on the college newspaper or other news-oriented publications.

## JOU 222 Newspaper Design II

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)  
*Prerequisite:* MAT 036, REA 115, ENG 100, JOU 221

This intermediate course allows students to build their practical newspaper production experience through highly focused work on the college newspaper or other approved news-oriented publications.

## JOU 231 Introduction to Public Relations

4 Credit Hours • 60 Contact Hours (Lecture)  
*Prerequisite:* MAT 036, REA 115, ENG 100

Concepts and basic understanding with emphasis on anticipatory problem recognition and solution in business, civic, social, public, and private agency development. An integrated approach is the focus of the course.

## JOU 241 Magazine Article Writing

3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite:* MAT 036, REA 115, ENG 100

In this course students will study magazine feature writing techniques with an emphasis on the freelance marketing and sale of articles. The course may also include practice in opinion writing, especially reviews and editorials.

## JOU 270 Journalism Internship

3 Credit Hours • 135 Contact Hours (Internship) or  
5 Credit Hours • 225 Contact Hours (Internship)  
*Prerequisite:* MAT 036, REA 115, ENG 100

Students serve as interns with local news media and agencies, applying skills and theory while working as reporters, editorial assistants, copywriters, art assistants, photojournalists, or public relations assistants.

## Korean

### **\*KOR 101 Conversational Korean I**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 100

This is the first course in a sequence for beginning students who wish to understand and speak Korean. The material will include basic vocabulary, grammar, and expressions that are used in daily situations and in travel.

### **\*KOR 107 Korean for Business**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 100

Language orientation in the context of business and financial activities. Focus will be on specialized business vocabulary and essential cultural information.

**\*Note: All native speakers must have permission of full-time foreign language faculty to enter.**

## Landscape Technician

### **LTE 105 Woody Landscape Plants**

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

This course introduces students to evergreen and deciduous shrubs and other woody landscape plant materials.

### **LTE 106 Green Industry Equipment**

2 Credit Hours • 45 Contact Hours (Vocational Lab)

This course introduces students to the basic equipment used in the green industry such as mowers, trimmers, chainsaws, tampers, walk-behind trenchers, and other gas powered hand tools. Students will also learn to service, overhaul, and troubleshoot two and four cycle engines.

### **LTE 112 Landscape Irrigation Design and Installation**

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

This course covers principles of residential and commercial irrigation design; shows students how to read, understand, and construct irrigation plans; and teaches standard, accepted techniques for installation of sprinkler systems. The course helps students prepare for the Certified Landscape Technician (CLT) exam and for exams offered by the Irrigation Association (IA).

### **LTE 113 Landscape Drafting and Design**

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

This course introduces students to the basic principles of landscape design, the tools necessary to complete the design, and the steps involved from conception to completion of a finished blueprint.

### **LTE 124 Landscape Installation**

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

This course covers the installation of a landscape from the plan to completion, including figuring materials and placing plants. Students will learn to make practical on-site adjustments and field changes. Additionally, the course will cover the demolition and removal renovation, and replanting of existing landscape.

### **LTE 127 Herbaceous Plants**

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

This course introduces students to perennials, annuals, and other non-woody landscape plant materials.

### **LTE 135 Weed Identification and Control**

2 Credit Hours • 45 Contact Hours (Vocational Lab)

This course covers the identification, prevention, and control of weeds in the landscape. Emphasis will be placed on preparing students for the Colorado State exam for turf and landscape certification.

### **LTE 137 Plant Propagation**

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

Teaches the theory and application of propagation by seeds, cuttings, budding, grafting, and layering. Proper usage of chemical root stimulators will also be covered.

### **LTE 202 Landscape Irrigation Maintenance and Repair**

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

This course covers principles for analyzing, operating, maintaining, and repairing residential and commercial irrigation systems, with special emphasis on proper practices for good water management. Gives considerable attention to techniques for adjusting, repairing, or replacing specific components made by major manufacturers like Rainbird, Hunter, Toro, Irritrol, Febco, Wilkins, and others. This course helps students prepare for the Certified Landscape Irrigation Auditor (CLIA) exam given by the Irrigation Association (IA).

### **LTE 203 Introduction to LanCAD**

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

*Prerequisite:* DRT 103 or faculty consent.

The latest release of the LanCAD software is used in various drafting applications. Students entering this course should already have manual drafting skills or be concurrently enrolled in a manual-drafting course. Keyboarding skills are recommended.

### **LTE 205 Landscape Insects and Disease**

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

This course covers the identification, prevention, and control of diseases and insect problems.

### **LTE 207 Landscape Maintenance**

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

This course covers the care and maintenance of both new and established landscapes and turf areas. Students will be instructed in the proper methods of pruning, thinning, and transplanting landscape plan materials. Emphasis will be placed on year-round service and all phases of maintenance on both hardscaping and landscaping.

### **LTE 208 Green Industry Large Equipment**

2 Credit Hours • 45 Contact Hours (Vocational Lab)

This course introduces students to the basic large equipment used in the green industry. Tractors, backhoes, skid loaders, ride-along trenchers, trackhoes, and other large equipment will be covered. Emphasis will be placed on transporting equipment on trailers to job sites, and proper loading and unloading as well as immediate action guidelines in emergency circumstances. Students will also learn basic preventive maintenance and troubleshooting of the equipment.

### **LTE 217 Hardscape Construction**

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

Covers the design and construction of retaining walls, steps, patios, ponds, walkways, fences, benches, and other permanent structures in the landscape. Addresses various edging materials as well as rock and mulch usage in the landscape.

### **LTE 218 Principles of Grading and Drainage**

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

*Prerequisite:* MAT 151 or faculty consent

Teaches the basics of establishing grade and handling drainage issues for landscape projects. Familiarizes students with surveying equipment and drainage supplies such as dry wells and pump systems.

**LTE 225 Landscape Pesticides and Fertilizers**

2 Credit Hours • 45 Contact Hours (Vocational Lab)

Covers the safe and proper use and application methods of pesticides and fertilizers.

**LTE 226 Green Industry Business Operation**

3 Credit Hours • 45 Contact Hours (Lecture)

This course covers the methods and problems involved in start-up operation of green industry business.

**LTE 227 Principles of Turf Grasses**

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

Covers the principles and methods of establishing and maintaining turf grasses for multi-purposes.

**LTE 228 Landscape Plant Usage**

2 Credit Hours • 45 Contact Hours (Vocational Lab)

Covers the proper height, spread, light, and water requirements, maintenance issues, and other related topics in the selection of the plants for the landscape.

**LTE 235 Introduction to Arboriculture**

4 Credit Hours • 90 Contact Hours (Vocational Lab)

This course covers selection, planting, pruning, and general care of shade and ornamental trees.

**LTE 236 Xeriscape Landscape**

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

Covers the principles of Xeriscaping. Addresses the proper site and soil preparation, proper watering, establishment, installation of xeric-friendly irrigation system, ground covers, and weed control in the xeric garden.

**LTE 237 Green Industry Bidding and Estimating**

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

This course covers the basics of bidding and estimating from plan to written estimate. Students will do take-offs from various landscape and sprinkler projects and calculate materials, time, and overall cost. Emphasis will be placed on presenting to and contracting with clients.

**LTE 270 Landscape Internship**

5 Credit Hours • 230 Contact Hours (Work Experience)

*Prerequisite:* LTE 106, LTE 124, LTE 127, BIO 135 or faculty consent  
*Grading:* S/U only.

This course includes 230 hours of related field experience in landscape technology. A coordinated program will be set up by the students, the program coordinator, and the green industry employer.

# Legal Assistant

**LEG 200 The Paralegal in the Legal System**

2 Credit Hours • 30 Contact Hours (Lecture)

This course covers nature, definition, and concept of law. Historical background, the legislative and the judicial systems, organization and substance, statutes, case law, secondary authority, legal education, legal profession, and the function of the paralegal are also covered.

**LEG 201 Legal Research I**

2 Credit Hours • 30 Contact Hours (Lecture)

In this course, students will develop familiarity with the law library, obtain a working knowledge of legal research and organization of materials, and acquire the ability to look up basic law. Emphasis is on Colorado law.

**LEG 202 Legal Research II**

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite:* LEG 201 or faculty consent

In this course, students will increase skills in researching advanced legal problems through the use of additional sources. Emphasis is on federal law.

**LEG 203 Corporation Law**

2 Credit Hours • 30 Contact Hours (Lecture)

This course covers state law provisions and common contractual arrangements governing the formation of corporations.

**LEG 204 Legal Writing**

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite:* LEG 200, LEG 201, ENG 121 or faculty consent

This course covers correct use of language skills as applied to legal correspondence and the arguments used in case briefs, client letters, memoranda, and briefs.

**LEG 211 Family Law**

2 Credit Hours • 30 Contact Hours (Lecture)

This course covers domestic law, common property, dissolutions, adoptions, legal separations, and others.

**LEG 212 Real Estate Law**

2 Credit Hours • 30 Contact Hours (Lecture)

This course covers real estate law, ownership sale, leasing, financing, and government regulation of land.

**LEG 213 Bankruptcy - Principles and Practices**

2 Credit Hours • 30 Contact Hours (Lecture)

This course covers bankruptcy from the viewpoint of both the creditor and debtor. Discussed from the standpoint of how the legal assistant can help the lawyer.

**LEG 221 The Court System - Pleading and Practice I**

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite:* LEG 200, LEG 201, or faculty consent

This course covers judicial institutions and the adversary system of judicial contest, including, the organization of courts.

**LEG 222 The Court System - Pleading and Practice II**

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite:* LEG 221 or faculty consent

Continuation of LEG 221.

**LEG 231 Commercial Law I**

2 Credit Hours • 30 Contact Hours (Lecture)

This course covers comprehensive study of the law of contracts, including creation of contracts, performance, discharge, and remedies for breach of contracts and defenses.

### **LEG 232 Commercial Law II**

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite: LEG 231 or faculty consent*

This course offers a comprehensive study of Article 9, Secured Transaction, of the Uniform Commercial Code in reference to, and as amended by, the State Code. Designed to regulate security interests in personal property.

### **LEG 243 Probate**

2 Credit Hours • 30 Contact Hours (Lecture)

This course covers testate and intestate laws with a notation of the parallel principles and procedures under the Uniform Probate Code.

### **LEG 245 Torts**

2 Credit Hours • 30 Contact Hours (Lecture)

This course covers nature and concepts of acts and omissions (other than breach of contracts) for which the remedy is an action for damages. Negligence, strict liability, nuisance, misrepresentation, defamation, and trespass are also covered.

### **LEG 247 Legal Ethics**

2 Credit Hours • 30 Contact Hours (Lecture)

This course offers an in depth examination of a paralegal's ethical obligations. Unauthorized practice of law, client confidences and secrets, conflicts of interest, and ABA canons of ethics are also covered.

### **LEG 250 Employment & Labor Law**

2 Credit Hours • 30 Contact Hours (Lecture)

This course is an introduction to employment and labor law. Emphasis is on the study of employment discrimination, EEOC practice and procedure, unfair labor practices, workers' compensation, and an overview of labor unions.

### **LEG 271 Cooperative Work Experience**

3 Credit Hours • 105 Contact Hours (15 Lecture, 90 Work Experience)

*Grading: S/U only*

In this course, students work at an approved training station a minimum of six hours per week. Work experience is supervised.

## **Literature**

### **LIT 115 Introduction to Literature** □

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: REA 115, ENG 121 or concurrent*

Introduces students to fiction, poetry, and drama. Emphasizes active and responsive reading.

### **LIT 121 Survey of Mythology**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: REA 115, ENG 121 or concurrent*

Myths and legends of Greece, Rome, Egypt, and India and their influence on Western literature, art, music, and on Western cultural attitudes in general.

### **LIT 125 Study of the Short Story**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: REA 115, ENG 121 or concurrent*

This course focuses on careful reading and interpretation of the short story as a distinct genre. It examines formal as well as thematic elements of the short story.

### **LIT 201 Masterpieces of Literature I** □

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: REA 115, ENG 121 or concurrent, sophomore standing recommended.*

Examines significant writings in world literature from the ancients through the Renaissance. Emphasizes careful reading and understanding of the works and their cultural backgrounds.

### **LIT 202 Masterpieces of Literature II** □

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: REA 115, ENG 121 or concurrent*

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.

### **LIT 211 Survey of American Literature I**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: REA 115, ENG 121 or concurrent*

This course is an overview of American literature from the Puritans through the nineteenth century Romantics. It explores ideas, historical and social contexts, themes, and literary characteristics of works in various genres by major writers.

### **LIT 212 Survey of American Literature II**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: REA 115, ENG 121 or concurrent*

This course is 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.

### **LIT 221 Survey of British Literature I**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: REA 115, ENG 121 or concurrent*

This course is an overview of British literature from the Anglo-Saxon period through the seventeenth century. It explores ideas, historical and social contexts, themes, and literary characteristics of works in various genres by major writers.

### **LIT 222 Survey of British Literature II**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: REA 115, ENG 121 or concurrent*

This course is an overview of British literature from the eighteenth century to the present. It explores ideas, historical and social contexts, themes, and literary characteristics of works in various genres by major writers.

### **LIT 235 Science Fiction**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: REA 115, ENG 121 or concurrent*

This course examines the techniques and themes of science fiction through careful reading and interpretation of works by a variety of writers in the genre.

### **LIT 246 The Literature of Women**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: Completion of ENG 121 with C grade or better.*

This course examines the techniques and themes in literature by and about women by examining women's issues from various genres.

### **LIT 250 What is Normal?**

1 Credit Hour • 15 Contact Hours (Lecture)

*Prerequisite: REA 115, ENG 121 or concurrent*

A cross-disciplinary approach to what different societies have considered normal behavior, mental health, and mental illness. From the perspectives of anthropology, literature, and psychology, the course will compare readings and interpretations of "normal" and "abnormal" behavior from the perspective of viewers and writers both inside and outside various cultures. Students will receive credit for either ANT 250, LIT 250, or PSY 250.

### **LIT 255 Children's Literature**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 115, ENG 121 or concurrent

This course examines the criteria for selecting appropriate literature for children. Discussion topics explore age levels, values taught through literature, and literary and artistic qualities.

### **LIT 265 Native American Literature**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 115, ENG 121 or concurrent

Introduction to oral and written literature created by Native American peoples. Emphasizes narrative and ceremonial literature from the oral tradition. Examines oratory, autobiography, essays, poetry, short stories, and novels as oral and written literatures.

### **LIT 270 Celtic Literature and Art**

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite:* REA 115, ENG 121 or concurrent

This course introduces the early origins of Scottish, Irish, and Welsh literature and art. The major focus of the course is to trace early Celtic themes through medieval literature and show how these typically Celtic themes continue to influence modern Irish and Scottish writers.

## **Machining**

### **MAG 101 Introduction to Machine Shop**

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

This course 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 a drill bit and a general purpose turning tool for the lathe and determining speeds and feeds for the lathe, and the milling machine.

### **MAG 102 Blueprint Reading**

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

*Prerequisite:* MAG 101

This course covers freehand sketching and reading machine-working drawings. Tolerances, machine process callouts, positional tolerancing, symbols, drawing notes, and dimensions are also covered.

### **MAG 110 Engine Lathe I**

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

*Prerequisite:* MAG 102

In this course, students will identify the major parts of the engine lathe; mount chucks and accessories on the lathe spindle; set a lathe bit, face, turn, bore, knurl, chamfer, center drill, groove, cut tapers; adjust feeds and speeds; and work with blueprints to make projects within tolerances specified on drawings from 1/64 to .001.

### **MAG 111 Engine Lathe II**

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

*Prerequisite:* MAG 110

In this course, students will single point external and internal unified screw threads to a class three fit; generate angles and tapers; drill and ream holes; determine cutting speeds and feeds; and perform facing and turning operations from blueprints to tolerances of .001.

### **MAG 112 Engine Lathe III**

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

*Prerequisite:* MAG 111

This course will cover how to form radii cuts, single-point isometric threads, turning and facing operations, and making projects from blueprints to tolerances of .0005.

### **MAG 114 Machining Processes**

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

A course especially designed to serve the creative needs of students enrolled in the Art for Artisans AGS degree program. This course includes shop safety, basic metals and their characteristics, understanding of basic precision measuring devices, types of machines and operations, development of visualizations into plans, and implementation of the plan from prototype to production. Skill and competence on machines are part of the objective of this course with grading procedures based solely on the successful completion of above objectives.

### **MAG 115 Machining Lab**

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

This is a course especially designed for those students enrolled in the Art for Artisans AGS degree program. It includes outcome-based creativity (LAB), creative set-ups and operations (LAB) and necessary procedures (LAB) Skillful, creative, and innovative projects will be the primary basis for grading procedures within this course.

### **MAG 120 Milling Machine I**

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

*Prerequisite:* MAG 102

In this course, students will identify the major parts of the vertical milling machine; align a vise; use an indicator, edge finder, and boring head; determine speeds and feeds for milling operations; sweep in a head; mill flat and square surfaces; drill, bore, and tap holes; and make projects from blueprints holding tolerances of plus or minus .002.

### **MAG 121 Milling Machine II**

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

*Prerequisite:* MAG 120

In this course, students will determine hole locations by coordinates and degrees, use angle plates, use sine plates, cut slots, use Hardinge head, and make projects from blueprints working within a tolerance of .001.

### **MAG 122 Milling Machine III**

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

*Prerequisite:* MAG 121

In this course, students will make projects that involve the use of the rotary table, indexing head, and boring head; drill and ream holes; and index heads while working from blueprints to tolerances of .001.

### **MAG 201 CNC Lathe Operations I**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* MAG 102, MAG 110, MAT 150, MAT 152, or faculty consent

This course covers computer numerical control (CNC) lathe operations, control functions, the letter address system, the program format, and machine setup and operations. This class is NOT offered on an open-entry, open-exit basis.

### **MAG 202 CNC Lathe Operations II**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* MAG 201

In this course, students will write basic computer numerical control (CNC) lathe part programs for speeds and feeds, straight turning, spherical turning, threading, chamfering, tapering, drilling, tapping, boring, and grooving. Students will also proof and edit the programs to make them valid. This class is NOT offered on an open-entry, open-exit basis.

### **MAG 203 CNC Lathe Lab**

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

*Prerequisite:* MAG 202

In this course, students will write programs and run parts from blueprints provided, proof and edit programs to make them valid, and run the parts. Programs and parts turned in for a grade. This class is NOT offered on an open-entry, open-exit basis.

### **MAG 204 CNC Milling Operations I**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* MAG 102, MAG 120, MAT 150, MAT152, or faculty consent.

This course covers computer numerical control (CNC) milling machine center operations, control functions, the letter address system, the program format, machine setup, and operations. This class is NOT offered on an open-entry, open-exit basis.

### **MAG 205 CNC Milling Operations II**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* MAG 204

In this course, students will write basic computer numerical control (CNC) machining center part programs for speeds and feeds, pocket milling, frame milling, contouring, drilling, tapping, boring, cutter compensation, and fixture offsets. Programs contain operator instructions, tooling sheets, and punched tapes. Students will also proof and edit programs to make them valid. This class is NOT offered on an open-entry, open-exit basis.

### **MAG 206 CNC Milling Lab**

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

*Prerequisite:* MAG 205

In this course, students will write programs and run parts from blueprints provided, proof and edit to make them valid, and run the parts. Programs and parts turned in for a grade. This class is NOT offered on an open-entry, open-exit basis.

### **MAG 215 CAD/CAM 2D**

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Vocational Lab)

This course covers geometric design and program generation using Mastercam software. This course is confined primarily to the development of 2D geometry manipulation with programs and lab exercises performed on laser and plasma arc machines. Students will be expected to possess basic computer skills and understand the processes related to computer-driven manufacturing machinery.

### **MAG 216 CAD/CAM 2D Lab**

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Vocational Lab)

This course is offered in conjunction with MAG 215 and requires students to produce a variety of lab exercises on robotic machinery. Coursework will primarily focus on 2D geometry projects.

### **MAG 225 CAD/CAM 3D**

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Vocational Lab)

This course covers computer aided machining as it relates to CNC and DNC programming. Three-dimensional CAD/CAM programs and lab projects will be produced with file management and execution at the machine as part of the process. Wire frames, production of surfaces, tool paths, parameter settings, post processing, and merging/editing of multiple tool programs will be covered. A familiarity with Mastercam, CNC programming techniques, and CNC operations is recommended.

### **MAG 226 CAD/CAM 3D Lab**

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Vocational Lab)

This course is offered in conjunction with MAG 225 and requires students to produce a variety of three dimensional lab exercises on robotic machinery. 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.

### **MAG 240 Practical Metallurgy**

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

This course offers a study of identify metallurgical terms and definitions; behavior of metals in their service to industry during heating, cooling, shaping, forming, and stress; mechanical properties; theory of alloys; and heat treatment of metals.

## **Management**

### **MAN 104 Personal Time Management**

1 Credit Hour • 15 Contact Hours (Lecture)

*Grading:* S/U only

This course covers the conceptual knowledge and tools to make productive use of the time applicable to business and organizational resources.

### **MAN 105 Contemporary Business Ethics**

3 Credit Hours • 45 Contact Hours (Lecture)

Explores specific ethical issues pertaining to business and their relationship to the consumer, society, family, and the environment. Case studies will be analyzed for practical application.

### **MAN 106 Action Planning**

1 Credit Hour • 15 Contact Hours (Lecture)

*Grading:* S/U only

This course is designed to analyze a specific problem or opportunity in an action plan format. Students will identify a problem/opportunity and develop a comprehensive model for implementation.

### **MAN 107 Team Building**

1 Credit Hour • 15 Contact Hours (Lecture)

*Grading:* S/U only

This course will focus on a number of team building exercises emphasizing specific topical applications of supervisory/ managerial concepts.

### **MAN 108 Personal Leadership Development**

1 Credit Hour • 15 Contact Hours (Lecture)

*Grading:* S/U only

This course will study the techniques employed by successful leaders in conjunction with the development and preparation of students' career plans. Students will analyze their own leadership styles, and through group discussion, come to understand how to adapt their styles to numerous business situations.

### **MAN 109 Team Skills in the Business Environment**

2 Credit Hours • 30 Contact Hours (Lecture)

This is an activity course that emphasizes how to make teams work in the business environment. Specific attention will be devoted to the principles of the team process, organizational benefits of teams, becoming a team, team communication, training the team, development of team trust, team empowerment, and building effective team performance. Students will develop an understanding of the team's role in the current business environment.

### **MAN 161 Business Management for Military and Associated Personnel**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: BUS 100 or faculty consent*

Applied business principles for the first line manager in the military and for the civilian associated primarily with the military. Application in direct relationship to the job being performed. Theory and application of management principles are also covered. Offered off campus only.

### **MAN 225 Management Skills for Supervisors**

3 Credit Hours • 45 Contact Hours (Lecture)

This course offers management training related to business and industry supervisors. Areas of emphasis include developing interrelationships of people within the work force and directing the work force to attain organizational goals. Group dynamics, motivation, decision-making, and human resource management are also covered.

### **MAN 226 Principles of Management**

3 Credit Hours • 45 Contact Hours (Lecture)

A survey of the principles of management. Emphasis will be on the primary functions of planning, organizing, staffing, directing, and controlling with a balance between the behavioral and operational approach.

### **MAN 227 Small Business Management**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ACC 110 or faculty consent*

*Note: This course is also offered on CCC-Online as MAN 216.*

Principles and methods of researching, managing, supervising, marketing, financing, controlling, and producing will be covered. Problems unique to small business and organizations will be covered. Small business plan is required.

### **MAN 251 Human Resource Management**

3 Credit Hours • 45 Contact Hours (Lecture)

This course covers the selection, development, and maintenance of a work force, employment law, fringe benefits, and wage and salary administration with an emphasis on job design and analysis.

### **MAN 258 Principles of Finance**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ACC 110 or ACC 121 and BUS 105, or faculty consent*

Financial manager's role in business. Investment of capital and assets, and financing the asset requirements of business firms.

### **MAN 264 Supervisory Training for Business and Industry I**

3 Credit Hours • 45 Contact Hours (Lecture)

This course is for current and aspiring supervisors who want to improve interpersonal and supervisory skills necessary for effective management. Emphasis is on behavior modeling - a method designed to instill learning by supervisory situations as well as specific supervisory skills related to areas of daily performance, mastered through role-playing general problems and job-specific situations.

### **MAN 265 Supervisory Training for Business and Industry II**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: MAN 264*

This course is a continuation of MAN 264. It covers areas of daily performance for supervisors and specific supervisory skills including implementing change, using positive discipline, and terminating an employee. A concluding exercise attempts to integrate all skill points.

## **Marketing**

### **MAR 102 Principles of Advertising**

3 Credit Hours • 45 Contact Hours (Lecture)

This course covers advertising and its relationship to business, all areas of media, development of an advertising plan, evaluation, and budget analysis. Field trips and speakers from industry are also included.

### **MAR 111 Principles of Sales**

3 Credit Hours • 45 Contact Hours (Lecture)

This course enables students to understand and develop ethical sales techniques and covers the role of selling the marketing process. Behavioral considerations in the buying and selling process and sales techniques are emphasized.

### **MAR 117 Principles of Retailing**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ACC 110 or ACC 121, or faculty consent*

This course is a 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 121 Sales or Advertising Techniques I**

1 Credit Hour • 15 Contact Hours (Lecture)

Attendance at weekly meetings of a Colorado Springs professional organization (Sales Professionals International or Pikes Peak Advertising Federation) dedicated to the development of quality and integrity in sales and/or advertising. Students are responsible for cost of own meal.

### **MAR 122 Sales or Advertising Techniques II**

1 Credit Hour • 15 Contact Hours (Lecture)

*Prerequisite: MAR 121 or faculty consent*

Continuation of MAR 121.

### **MAR 145 Merchandising**

3 Credit Hours • 45 Contact Hours (Lecture)

This course emphasizes facility/store organization and merchandising techniques. Topics include location, layout, product mix, and technique of display.

### **MAR 203 Marketing Problems**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: MAR 102, MAR 216, and CIS 118 or faculty consent*

This course covers marketing problems through a computerized approach, controllable and uncontrollable variables of marketing, and analysis of specific marketing problems.

### **MAR 216 Principles of Marketing**

3 Credit Hours • 45 Contact Hours (Lecture)

The analysis of theoretical marketing process and the strategies of product development, pricing, promotion and distribution, and their applications to businesses and the individual consumer. Development of a comprehensive marketing plan will also be covered.

### **MAR 221 Introduction to Electronic Commerce**

3 Credit Hours • 45 Contact Hours (Lecture)

This is a lecture-based survey course that is designed to provide the student with thorough knowledge of e-commerce concepts and terminology. This course also covers how e-commerce applications, methodologies, and services address business solutions needed for electronic procurement, supplier management, and customer relationship management. Real-life examples and case studies are examined to provide the student with working knowledge.



### **MAR 222 Implementing Electronic Commerce**

3 Credit Hours • 45 Contact Hours (Lecture)

This is a lecture-based course that is designed to provide the student with practical skills and knowledge of e-commerce implementation methodology. The course examines standards and practices used by businesses implementing e-commerce applications and solutions.

### **MAR 297 Business Internship**

1-2 credit hours • 45-90 Contact Hours (Internship)

The internship portion of the GCS E-Commerce Academy program gives students the opportunity to apply the knowledge and skills they have learned at the GCS Academy in a real-world environment. Students will spend time in companies that develop or use e-commerce solutions. A portion of the student's credit hours will be spent at the company with the remainder hours spent working on projects assigned by the company and approved by the GCS Academy.

### **MAR 233 Professional Selling**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: MAR 111 or faculty consent*

This course covers advanced selling methods for intangible, tangible, and technical sales; customer behavior; body communication; time management; territory management; and sales force management.

### **MAR 262 Purchasing and Materials**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: MAN 226 or faculty consent*

This course covers management of materials and control of material costs in a business enterprise, and purchasing as a primary activity with relation to engineering, production, marketing, and finance.

## **Mathematics**

### **MAT 036 General Skills in Mathematics**

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite: REA 060 or concurrent, STS 060 or concurrent*

This course includes addition, subtraction, multiplication, and division of whole numbers. Also included are fractions and decimals, ratios, proportions and percent, measurement, and plane geometric figures. Placement is determined by diagnostic testing.

### **MAT 041 Whole Numbers**

1 Credit Hour • 30 Contact Hours (Lab)

This module covers the vocabulary, basic arithmetic operations, and application of whole numbers with study skills.

### **MAT 042 Decimals**

1 Credit Hour • 30 Contact Hours (Lab)

*Prerequisite: MAT 041 or assessment scores*

This module covers the vocabulary, basic arithmetic operations, and application of decimal numbers with study skills.

### **MAT 043 Fractions and Mixed Numbers**

1 Credit Hour • 30 Contact Hours (Lab)

*Prerequisite: MAT 042 or assessment scores*

This module covers the vocabulary, basic arithmetic operations, and applications of fractions and mixed numbers with study skills.

### **MAT 044 Ratio, Proportion, Percent, and Rate**

1 Credit Hour • 30 Contact Hours (Lab)

*Prerequisite: MAT 043 or assessment scores*

This module covers the vocabulary, operations, and applications of ratios, proportions, and percent with study skills and may include charts and graphs.

### **MAT 045 Measurement**

1 Credit Hour • 30 Contact Hours (Lab)

*Prerequisite: MAT 044 or assessment scores*

This module covers vocabulary, English and metric measures (linear, weight, area, volume, and temperature) and unit conversions with study skills.

### **MAT 066 Basics of Algebra**

4 Credit Hours • 60 Contact Hours (Lecture)

*NOTE: This course is at the Algebra I level.*

*Prerequisite: MAT 036, REA 060*

This course approaches problem solving using integers, properties of real numbers, linear equations, polynomials, introduction to factoring, rational expressions.

### **MAT 100 Elementary Algebra**

4 Credit Hours • 60 Contact Hours (Lecture)

*NOTE: This course is at the Algebra II level.*

*Prerequisite: MAT 066, REA 090 or concurrent*

This course includes the study of linear equations, polynomials, factoring rational expressions, quadratic equations, linear systems, graphing, and applications.

### **MAT 101 Accelerated Elementary Algebra I and II**

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite: MAT 036 and faculty consent, REA 090 or concurrent, STS 060*

This course includes all of the content of MAT 066 and MAT 100 in a one semester accelerated format. The course content includes operations with signed numbers, polynomials, solutions of first degree equations, formulas, inequalities, factoring, algebraic fractions, graphing, coordinate geometry, linear systems, radicals, quadratic equations, complex numbers, relations, functions, and word problems.

### **MAT 105 Intermediate Algebra**

4/5\* Credit Hours • 75 Contact Hours (Lecture)

*\*Variable (4 credit hours earned for CCC-Online)*

*Prerequisite: MAT 100 or MAT 101, or math faculty consent*

Factoring, algebraic fractions, synthetic division, exponents, roots and radicals, linear and quadratic equations and inequalities, linear functions and graphs, exponential and logarithmic functions, and systems of equations. This course does not apply toward an AA, AS, or AGS degree.

### **MAT 110 Basic Finite Mathematics**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: MAT 036 or math faculty consent*

Problem solving with fractions, decimals, percentages, and algebra will be covered. Analysis of basic money management skills, interest operations, sets and logic, probability, and basic statistics will be covered. Also included are basic geometry and problem solving with measurements.

### **MAT 121 College Algebra**

4 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite: MAT 105, MAT 138, or concurrent enrollment of MAT 138, or math faculty consent*

*NOTE: A TI-86 Calculator is required.*

Includes a brief review of intermediate algebra, equations and inequalities, functions and their graphs, exponential and logarithmic functions, linear and nonlinear systems, graphing of the conic sections, introduction to sequences and series, permutations and combinations, the binomial theorem, and theory of equations.

### **MAT 122 College Trigonometry**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* MAT 121 or math faculty consent

This course is a traditional prerequisite course to the calculus sequence. Topics include trigonometric function (with graphs and inverse functions), identities and equations, solutions of triangles, complex numbers, and other topics as time permits.

### **MAT 123 Precalculus**

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite:* MAT 105, MAT 138, or concurrent enrollment of MAT 138, or math faculty consent

*NOTE:* A TI-86 calculator is required.

This course is an accelerated course combining college algebra and trigonometry which fulfills the prerequisite requirement for the calculus sequence. Topics include polynomial, rational, logarithmic, and exponential functions and their graphs, systems of equations, inequalities, the binomial theorem, sequences, series, trigonometric functions and their inverses, trigonometric identities, solutions of trigonometric equations, solutions of triangles, conics, vectors, complex numbers, polar coordinates, polar equations and their graphs, plane curves and parametric equations.

### **MAT 124 Finite Mathematics**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* MAT 105

Primarily intended for business, life science, or social science majors. Topics include functions; matrix algebra; linear programming; and an introduction to probability and counting techniques. Emphasis is on applications. The course may include other topics such as statistics when time permits.

### **MAT 125 Survey of Calculus**

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite:* MAT 105

For business, life science, and social science majors. Includes derivatives, integrals, and their applications, with attention restricted to algebraic, exponential, and logarithmic functions.

### **MAT 135 Introduction to Statistics**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* MAT 105 or math faculty consent

Data presentation and summarization, introduction to probability concepts and distributions, statistical inference-estimation, hypothesis testing, comparison of populations, correlation, and regression.

### **MAT 138 Introduction to the Graphics Calculator**

1 Credit Hour • 15 Contact Hours (Lecture)

*Prerequisite:* MAT 100 or MAT 101, or math faculty consent

*NOTE:* A TI-86 calculator is required.

This course is designed to introduce students to the TI-86 graphics calculator. It includes instruction on entering data, arithmetic calculations, solving polynomial equations, rational equations, systems of equations, graphing polynomial functions, rational functions, exponential and logarithmic functions, evaluating matrices and determinants, sequences and series, and solving systems of inequalities.

### **MAT 150 Basic Geometry**

3 Credit Hours • 45 Contact Hours (Lecture)

Basic geometric principles involving lines, angles, triangles, circles, polygons, and three-dimensional figures. Geometric constructions, review of algebra, and measurement in the metric and U.S. systems. Students not required to prove geometric theorems. Required materials: protractor, compass, metric ruler, and scientific calculator.

### **MAT 151 Technical Mathematics I**

4 Credit Hours • 60 Contact Hours (Lecture)

In this course, students will review basic algebraic operations; solve linear, fractional, and quadratic equations and formulas; use scientific notation and units of measurement; solve systems of linear equations; operate with algebraic fractions; simplify expressions involving exponents and radicals; graph functions; and apply technical problem solving. Required materials: scientific calculator.

### **MAT 152 Technical Mathematics II**

3 Credit Hours • 45 Contact Hours (Lecture)

Right-triangle trigonometry and technical applications; trigonometric functions of any angle and radian measure and their technical applications including linear and angular velocity; graphs of trigonometric (sine and cosine) functions; law of sines and cosines; vectors and their technical applications; and rectangular, polar, and exponential forms of complex numbers. There will be use of calculators rather than tables. Required materials: scientific calculator.

### **MAT 153 Statistical Techniques for Quality Control**

4 Credit Hours • 60 Contact Hours (Lecture)

Statistical techniques used for improving quality of services and products by analyzing, quantifying, and classifying the variation of processes to control and reduce variation.

### **MAT 156 Problem Solving in College Mathematics**

4 Credit Hours • 60 Contact Hours (Lecture)

Emphasizes the ability to understand and apply mathematics to solve problems in society and the work place. Arithmetic operations, problem-solving techniques, estimation, measurement skills, geometry, data handling, and simple algebra will be covered. Recommended for students electing a simple mathematics course beyond the developmental prerequisite.

### **MAT 201 Calculus I**

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite:* MAT 122 or MAT 123 or math faculty consent

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.

### **MAT 202 Calculus II**

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite:* MAT 201 or math faculty consent

Continuation of single variable calculus which includes techniques of integration, polar coordinates, analytic geometry, improper integrals, and infinite series.

### **MAT 203 Calculus III**

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite:* MAT 202 or math faculty consent

Completes the traditional subject matter of the Calculus. Topics include vectors, vector-valued functions, and multi-variable (including partial derivatives, multiple integrals, line integrals, and applications).

### **MAT 255 Linear Algebra**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* MAT 202 or math faculty consent

Topics include an introduction to the theory of vector spaces, linear transformations, matrix representation, eigenvalues, and eigenvectors.

### **MAT 265 Differential Equations**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* MAT 202 or math faculty consent

The primary emphases in this course are on techniques of problem solving and applications. Topics include first, second, and higher order differential equations; series methods; approximations; systems of differential equations; and Laplace transforms.

# Medical Office Technology

## **MOT 108 Medical Career Options and Readiness**

1 Credit Hour • 15 Contact Hours (Lecture)

This course is designed to teach students about resumes, letters of inquiry, and interviewing techniques. Details specific to the medical field will also be explored. Topics to be discussed include current market trends in the medical profession, professional opportunities, continuing education, and professional affiliations.

## **MOT 110 Medical Office Procedures I**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 100

This course exposes students to the administrative duties specifically used in medical offices. Students will gain experience with processing patients' charts, medical filing, patients' scheduling, superbills and insurance paperwork, and the standard office skills of telephone techniques, receptionist skills, purchasing and inventory control, and processing mail. Students are given opportunities to learn the management of the medical office, using both computerized and manual systems.

## **MOT 115 Phlebotomy/Specimen Collection/Specimen Procedures**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

This course is designed to prepare the student in theory and in practical skills in the field of phlebotomy. The course is designed for either the health care practitioner interested in updating skills or in the novice student developing career skills. The course includes a lecture/lab combination that teaches theory and direct application of theoretic content and includes a clinical where the student can master learned skills.

## **MOT 116 Pathology Laboratory Terminology**

1 Credit Hour • 15 Contact Hours (Lecture)

This course is designed to instruct students in clinical and anatomical laboratory vocabulary used in the pathology laboratory. The course is designed for the health care practitioner interested in updating vocabulary specific to the laboratory or for novice students developing career skills. The course includes a lecture/self-study combination.

## **MOT 120 Clinical Procedures I**

2 Credit Hours • 60 Contact Hours (Lab)

*Prerequisite or Corequisite:* BIO 141, MOT 181

This course is designed for students to gain hands-on experience in the communication techniques required in the client interview. The course will also address various physical examination procedures with appropriate materials and equipment, aseptic techniques, and administration of injections.

## **MOT 125 Customer Service in Healthcare**

2 Credit Hours • 30 Contact Hours (Lecture)

This course is designed to instruct students' customer service theory and techniques specifically in the health care arena. This will discuss therapeutic communication; conflict resolution and negotiation and employee/employer relations.

## **MOT 130 Basic Pharmacology for Medical Careers**

2 Credit Hours • 30 Contact Hours (Lecture)

This basic pharmacology course will address routine calculations, pharmacodynamics, classification, use, and administration of various drugs dispensed by medical service professionals.

## **MOT 140 Professional Household Health Assistant**

5 Credit Hours • 112.5 Contact Hours (Lecture, Lab)

This course provides skills through lecture and hands-on lab experiences in the classroom environment and at household sites. Topics include family dynamics, communication skills, boundaries, patient assistance skills in the home, nutrition, safety issues and body mechanics, environmental care, chronic illness care in the home, and self-marketing of skills. This course is designed to provide clients home care by providers who attend to basic needs in the home in support of the professional nurse and other healthcare providers. This healthcare assistant attends to need based on family requirements in support of patient comforts and safety, while providing companionship and assistance for patients and family. Included is 15 contact hours/3 (5 hour) days in a client home with family and clinical instructor to complete practicum.

## **MOT 141 Pharmacology for the Professional Household Assistant**

1 Credit Hour • 15 Contact Hours (Lecture)

This basic pharmacology course will address routine knowledge and information required by the Professional Household Health Assistant in attending the home-care patient. This course is designed to provide information in support of the family and healthcare provider's directions in patient-administered medications by the patient in the home setting. It is not designed to teach administration techniques, calculations, or dispensing of drugs to the patient in the home, but rather the support skills required in assisted facilitation of self-medication, storage of medications, and trained observation of the patient with monitoring/documentation of self-administered medications.

## **MOT 181 Medical Terminology I**

2 Credit Hours • 30 Contact Hours (Lecture)

Comprehensive study of medical terminology used in the science and health science fields.

## **MOT 185 Medical Terminology II**

2 Credit Hours • 30 Contact Hours (Lecture)

A continuation of Medical Terminology I.

## **MOT 210 Medical Office Procedures II**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 100

This course is an extension of MOT 110, Medical Office Procedures I. Students are exposed to a more detailed look into compliance with insurance procedures, an introduction into available community resources, techniques of patient education, and medical office financial management options.

## **MOT 215 Advanced Phlebotomy**

4 Credit Hours • 90 Contact Hours (Lecture, Lab)

This course is designed to instruct students in advanced phlebotomy techniques to include trauma patients, neonatal, pediatric, geriatric, and long-term acute patients. Additional laboratory procedures to include specimen processing and point-of-care instrumentation will be covered. The course is designed for the healthcare practitioner who is interested in renewing or updating phlebotomy skills or the novice student who is developing advanced skills in phlebotomy. The course uses a lecture/lab format that combines teaching and direct application of theoretic content and lab where the student can master learned skills.

### **MOT 220 Clinical Procedures II**

3 Credit Hours • 90 Contact Hours (Lab)  
*Prerequisite or Corequisite: MOT 181, BIO 141*

This course is an extension of MOT 120, Clinical Procedures I. The course is designed to provide students with the recognized standard techniques associated with collection, handling, and examination of laboratory specimens. Students will also gain experience in the protocol of basic tests that are routinely available in physicians' offices and clinics.

### **MOT 221 Beginning Medical Transcription**

4 Credit Hours • 60 Contact Hours (Lecture)  
*Prerequisite: BIO 142, MOT 185 or program coordinator consent*

This course will develop medical language skills and knowledge necessary to edit, revise, and correctly transcribe basic medical dictation using medical references. Students will proofread, edit, and transcribe medical correspondence and reports.

### **MOT 222 Advanced Medical Transcription**

4 Credit Hours • 60 Contact Hours (Lecture)  
*Prerequisite: MOT 221*

Using a simulation approach, this course builds students' medical vocabulary while providing for actual medical transcription of a variety of health care and medical records at progressively increasing accuracy and productivity standards.

### **MOT 223 Medical Transcription Practicum**

3 Credit Hours • 105 Contact Hours (15 Lecture, 90 Work Experience)  
*Prerequisite or Corequisite: MOT 222*

Students work at an approved training station a minimum of six hours per week. Work experience is supervised.

### **MOT 247 Medicolegal Concepts and Ethics**

3 Credit Hours • 45 Contact Hours (Lecture)

The study and application of medicolegal concepts and ethics in medical careers.

### **MOT 251 Medical Assistant Externship I**

3 Credit Hours • 90 Contact Hours (Practicum)  
*Prerequisite: MOT 110, MOT 120, MOT 130, MOT 210, MOT 220, or program coordinator consent*

This course provides practical experience in selected clinics and/or physicians' offices. Students will be assisted with the direct application of skills and knowledge acquired in the classroom. The focus of this externship will be on front office procedures; and receptionist, bookkeeping, filing, transcription and billing skills.

### **MOT 252 Medical Assistant Externship II**

3 Credit Hours • 90 Contact Hours (Practicum)  
*Prerequisite: MOT 251, NUR 101 or NUR 108, or program coordinator consent*

This course provides practical experience in selected clinics and/or physicians' offices. Students will be assisted with the direct application of skills and knowledge acquired in the classroom. The focus of this externship will be on back office procedures such as but not limited to initial interviews, vital signs, phlebotomy, EKGs, and assisting with special procedures. Prerequisite: Student must be in the final semester of an MOT degree or certificate program or have permission of the department chair.

### **MOT 255 Review for Medical Assistant National Examination**

1 Credit Hour • 15 Contact Hour (Lecture)

This course will prepare the candidate sitting for the National Registration/Certification examinations for Medical Assistants 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 256 Limited Scope Radiography**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)  
*Prerequisite: BIO 142, MOT 185*

This course will prepare the student for successful entry-level practice in limited scope radiography in the ambulatory care setting. It will also prepare the student for successful completion of the Limited Scope of Practice in Radiography examination which assesses the knowledge and cognitive skills required to perform radiography.

### **MOT 257 Medical Coding Specialist**

4 Credit Hours • 60 Contact Hours (Lecture)  
*Prerequisite: BIO 142, MOT 185*

This course is designed to prepare the student to become a trained and accurate health care coding professional. The student will gain theory and experience in basic as well as advanced ICD-9-CM, CPT, HCPCS, classification systems, and a variety of coding for reimbursement in regard to Medicare, Medicaid, and other third party payers.

## **Memory**

### **MEM 020 Memory Development and Study Techniques**

2 Credit Hours • 30 Contact Hours (Lecture)  
*Prerequisite: ENG 030, REA 060*

This course covers techniques of developing memory and overcoming forgetfulness. Techniques applied to readings, lists, material for speeches, English and foreign languages, test taking, etc. will also be covered.

## **Military Science\***

### **MIS 101 Introduction to Leadership and Management**

1 Credit Hour • 15 Contact Hours (Lecture)

This course covers leadership development and principles of leadership. Psychological, physiological, and sociological factors which affect human behavior will also be included.

### **MIS 102 Fundamentals of Leadership and Management**

1 Credit Hour • 15 Contact Hours (Lecture)

This course is the continuation of leadership principles and management techniques. Individual motivation and interpersonal relationships are also covered.

### **MIS 201 Applied Leadership and Counseling**

1 Credit Hour • 15 Contact Hours (Lecture)

This course covers counseling and motivation of subordinates, how to evaluate subordinates' performances, and practical application during field training exercise in November.

### **MIS 202 Map Reading and Navigation**

1 Credit Hour • 15 Contact Hours (Lecture)

This course covers the basic skill of reading a topographic map, how to understand the military grid reference system, and how to navigate by the use of a map and lensatic compass. Practical application during field training in March and April.

\*No new student enrollments effective Spring 2001.

# Music

## MUS 100 Fundamentals of Music Theory

3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite:* MAT 036, REA 090, ENG 100

This course is designed to help beginning music students, or those students with limited background in music theory. The course focuses upon the basic elements of music, including notation, rhythm, scales, key signatures, intervals, and chords.

## MUS 101 Music Theory I

4 Credit Hours • 60 Contact Hours (Lecture)  
*Prerequisite:* MAT 036, REA 090, ENG 100, MUS 100.

This course reviews music fundamentals and emphasizes diatonic four-part harmony, analysis, ear training, and keyboard harmony.

## MUS 102 Music Theory II

4 Credit Hours • 60 Contact Hours (Lecture)  
*Prerequisite:* MAT 036, REA 090, ENG 100, MUS 101 or faculty consent.

This course emphasizes chromatic four-part harmony, analysis, ear training, and keyboard harmony.

## MUS 120 Music Appreciation

3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite:* MAT 036, REA 090, ENG 100

This course covers the basic material of music, musical forms, media, genres, and musical periods. Emphasizes the development of tools for intelligent listening and appreciation.

## MUS 121 Introduction to Music History I

3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite:* MAT 036, REA 090, ENG 100

Studies the various periods of music history with regard to the composers, aesthetics, forms, and genres of each period. Considers music from the Middle Ages through the Classical period.

## MUS 122 Introduction to Music History II

3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite:* MAT 036, REA 090, ENG 100

Continues MUS 121 with a review of the elements of music and a study of music from the early Romantic period to the present.

## MUS 123 American Music: Ragtime Through Rock

3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite:* MAT 036, REA 090, ENG 060.

From West Africa to the Mississippi Delta, from New Orleans to Chicago, and from New York to Los Angeles came the blues, jazz, and ragtime. America's unique contribution to music is explored through an examination of its musicians and the society they reflected. Listening experiences include rare recordings from these unique musical eras.

## MUS 131 Performance Class I-V

1 Credit Hour • 30 Contact Hours (Lab)  
*Prerequisite:* MAT 036, REA 090, ENG 100.

This course is an application of the fundamentals of music to the specific performance, plus introduction of basic technique, repertoire, and sight-reading. Evaluation will be on both written and practical skills.

## MUS 141 Private Instruction I: Voice or Instrumental

1 Credit Hour • 30 Contact Hours (Lab)  
*Prerequisite:* MAT 036, REA 090, ENG 060.

Private instruction consists of one 30-minute lesson per week. Participation in a student performance is required at least once each term. Faculty permission required.

## MUS 142 Private Instruction II: Voice or Instrumental

1 Credit Hour • 30 Contact Hours (Lab)  
*Prerequisite:* MAT 036, REA 090, ENG 060.

Private instruction consists of one 30-minute lesson per week. Participation in a student performance is required at least once each term. Faculty permission required.

## MUS 143 Private Instruction III: Voice or Instrumental

1 Credit Hour • 30 Contact Hours (Lab)  
*Prerequisite:* MAT 036, REA 090, ENG 060.

Private instruction consists of one 30-minute lesson per week. Participation in a student performance is required at least once each term. Faculty permission required.

## MUS 144 Private Instruction IV: Voice or Instrumental

1 Credit Hour • 30 Contact Hours (Lab)  
*Prerequisite:* MAT 036, REA 090, ENG 060.

Private instruction consists of one 30-minute lesson per week. Participation in a student performance is required at least once each term. Faculty permission required.

## MUS 145 Private Instruction V: Voice or Instrumental

1 Credit Hour • 30 Contact Hours (Lab)  
*Prerequisite:* MAT 036, REA 090, ENG 060.

Private instruction consists of one 30-minute lesson per week. Participation in a student performance is required at least once each term. Faculty permission required.

## MUS 151 Ensemble Groups I:

Bass Ensemble  
Concert Band  
Jazz Improvisation  
Jazz Ensemble

1 Credit Hour • 30 Contact Hours (Lab)  
*Prerequisite:* MAT 036, REA 090, ENG 060.

This course includes the rehearsal and performance of respective ensembles repertoire. Audition required.

## MUS 152 Ensemble Groups II:

Bass Ensemble  
Concert Band  
Jazz Improvisation  
Jazz Ensemble

1 Credit Hour • 30 Contact Hours (Lab)  
*Prerequisite:* MAT 036, REA 090, ENG 060

Continuation of MUS 151.

## MUS 153 Ensemble Groups III:

Bass Ensemble  
Concert Band  
Jazz Improvisation  
Jazz Ensemble

1 Credit Hour • 30 Contact Hours (Lab)  
*Prerequisite:* MAT 036, REA 090, ENG 060

Continuation of MUS 152.

## MUS 154 Ensemble Groups IV:

Bass Ensemble  
Concert Band  
Jazz Improvisation  
Jazz Ensemble

1 Credit Hour • 30 Contact Hours (Lab)  
*Prerequisite:* MAT 036, REA 090, ENG 060

Continuation of MUS 153.

# Natural Resource Technology

## **NRT 101 Introduction to Soils**

4 Credit Hours • 90 Contact Hours (Vocational Lab)

Training in planning, conservation, and management of soil and water resources. Chemical, physical, and biological aspects will be covered as well as classification of normal and disturbed soils and water resources. Emphasis on field experiences, actually surveying and evaluating local soil resources.

## **NRT 102 Natural Resources Conservation**

4 Credit Hours • 90 Contact Hours (Vocational Lab)

Taking advantage of the front-range ecosystem and natural outdoor laboratory, students will study basic ecology, natural resources and the broader human condition. The tools, techniques, policies, and philosophies needed to restore, replace, regenerate, and recycle natural resources will be discussed.

## **NRT 103 Equipment Use and Maintenance**

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

Introduction to the resource technician's tools and equipment. Proper use and maintenance are covered. The S-130 and 190 Wildland Fire Training and S-212 Powersaws will be covered.

## **NRT 104 Wilderness Skills and First-Aid**

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

This course provides certification in Red Cross Standard First Aid and adult, child, and infant CPR instruction. Wilderness emergency protocol will also be addressed. Students will have the opportunity to practice and demonstrate Leave No Trace (LNT) principles in a hands-on setting. Upon completion, students will be officially certified as an LNT Trainer by LNT, Inc. Other areas of study will be wilderness theory, wilderness food preparation, map and compass, GPS, and backcountry skills.

## **NRT 106 Career Development for Zookeepers**

.5 Credit Hours • 7.5 Contact Hours (Lecture)

Provides zookeeping students with the tools necessary to be competitive in the job market and make realistic decisions concerning educational occupational objectives. Topics include cover letter and resume writing, network and marketing skills, interview techniques, and developing a resource database.

## **NRT 109 Leave No Trace Certification Course**

1 Credit Hour • 22.5 Contact Hours (Vocational Lab)

This overnighter (two days and one night) is a certification course in the low-impact guidelines of Leave No Trace (LNT). Participants will have the opportunity to practice and demonstrate the LNT principles in a hands-on setting. This training is a must for guides, outfitters, outdoor educators, scout/youth group leaders, or anyone who cares about minimizing impact on the Colorado backcountry. Upon completion, participants will be officially certified as an "LNT Trainer" by Leave No Trace, Inc., and awarded a trainer certificate. This certification is recognized by many outdoor and government agencies.

## **NRT 111 Arc View Technical GIS in Natural Resources**

4 Credit Hours • 90 Contact Hours (Vocational Lab)

This six-module course provides the foundation for becoming a successful ArcView GIS software user. Learn how to create, display, and manipulate spatial and tabular data. This is an Internet course through an outside agency, and an additional \$60.00 fee will be required.

## **NRT 113 Reptile and Amphibian Husbandry**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

This course is designed to teach the student herpetology and herpetological husbandry. This intensive course will provide the student with a working knowledge of the care and management of captive reptiles.

## **NRT 114 Bird Husbandry**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

*Prerequisite: BIO 137*

This course is designed to teach the student bird husbandry. This intensive course will provide the student with a working knowledge of the captive care and management of birds.

## **NRT 115 Mammal Husbandry**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

*Prerequisite: BIO 137*

This course is designed to teach the student mammal biology and husbandry. This intensive course will provide the student with a working knowledge of the care and management of captive mammals.

## **NRT 116 Fish and Invertebrate Husbandry**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

This course is designed to teach the student fish and aquatic invertebrate biology and husbandry. This intensive course will provide the student with a working knowledge of the care of aquatic life, including management of closed systems.

## **NRT 117 Introduction to Natural Resource GIS**

1 Credit Hour • 22.5 Contact Hours (Vocational Lab)

Students will learn the fundamentals of spatial data handling and computer-assisted map analysis. The capabilities and uses of GIS in natural resources management and planning will be covered. ArcView software will be introduced.

## **NRT 120 The Adventure Guide Industry**

3 Credit Hours • 45 Contact Hours (Lecture)

This course will give an overview of the guide's role in the adventure travel industry. Its origins, current trends, future considerations, the outfitter's role, literature review, terminology, and definitions will also be covered.

## **NRT 121 Characterizing Forests Using ArcView GIS**

2 Credit Hours • 67.5 Contact Hours (Vocational Lab)

*Prerequisite: NRT 111*

This six-module course emphasizes learning GIS through forestry applications. Each module offers hands-on exercises in which you use data from a forest inventory. This is an Internet course through an outside agency, and additional \$60 fee will be required. Please call the TISO division office for more information, 540-7346.

## **NRT 122 Conservation GIS Using ArcView**

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

*Prerequisite: NRT 111*

This six-module course uses actual applications and conservation data to teach ArcView GIS and solve common conservation problems. This is an Internet course through an outside agency and an additional \$60 fee will be required. Please call the TISO division office for more information, 540-7346.

## **NRT 123 Introduction to ArcView 3D Analyst**

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

*Prerequisite: NRT 111*

This six-module course shows you how to use ArcView 3D Analyst to display, create, and analyze spatial data in three dimensions. This is an Internet course through an outside agency and an additional \$60 fee will be required. Please call the TISO division office for more information, 540-7346.

## **NRT 124 Introduction to ArcView Network Analyst**

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

*Prerequisite: NRT 111*

This six-module course teaches how to prepare your data for network analysis, create routes and directions, find the closest facility, and define service areas. This is an Internet course through an outside agency and an additional \$60 fee will be required. Please call the TISO division office for more information, 540-7346.

### **NRT 132 Outdoor Skills Level I**

2 Credit Hours • 45 Contact Hours (Vocational Lab)

Grading: *S/U only*

This is an introductory course in the student's Adventure Guide skill track (e.g., mountaineering, river rafting, skiing, etc.) and provides students with basic instruction and opportunity to learn and practice skills required for this level. The students will learn proper use of equipment, environmental terrain appropriate to the particular skill, and safety skills.

### **NRT 133 Outdoor Skills Level II**

2 Credit Hours • 45 Contact Hours (Vocational Lab)

Prerequisite: *NRT 132 or program coordinator consent*

Grading: *S/U only*

This is an intermediate course in students' Adventure Guide skill track (e.g., mountaineering, river rafting, skiing, etc.), providing students with more advanced training than in the Level I course. Additional training in field leadership skills and safety techniques will be covered.

### **NRT 134 Outdoor Skills Level III**

2 Credit Hours • 45 Contact Hours (Vocational Lab)

Prerequisite: *NRT 133 or program coordinator consent*

Grading: *S/U only*

This course is an advanced level course in students' Adventure Guide skill track (e.g., mountaineering, river rafting, skiing, etc.) and provides students the opportunity to master the skills for that track. Students will be able to function independently and begin to apprentice an instructor, resulting in ability to teach and direct students safely through skills and satisfactory results.

### **NRT 135 Horticulture for the Zookeeper**

1 Credit Hour • 30 Contact Hours (Lab)

Prerequisite: *BIO 134*

This course will explore the role of plants and animal exhibits. Students will learn to care for a variety of plants while learning about the relationship between the living beings in a quality exhibit.

### **NRT 137 Outdoor Leadership**

2 Credit Hours • 45 Contact Hours (Vocational Lab)

This course explores the role of leadership as it applies to guiding in the adventure travel industry. Topics to be discussed include philosophic approaches, qualification profile, roles and responsibilities, group dynamics, interpersonal communication, professionalism, and various leadership styles.

### **NRT 140 Introduction to ArcView Spatial Analyst**

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

Prerequisite: *NRT 111*

This six-module course explores how this ArcView GIS software extension allows you to use raster and vector data in an integrated environment. This is an Internet course through an outside agency and an additional \$60 fee will be required. Please call the TISO division office for more information, 540-7346.

### **NRT 141 Introduction to ArcView Tracking Analyst**

2 Credit Hours • 45 Contact Hours (Vocational Lab)

Prerequisite: *NRT 111*

This four-module course teaches you how to display data from a real-time feed, replay historical tracking data, and customize how time is represented in a view. This is an Internet course through an outside agency and an additional \$60 fee will be required. Please call the TISO division office for more information, 540-7346.

### **NRT 142 Safety, Zoo noses, and Hazardous Materials**

.5 Credit Hour • 15 Contact Hours (Lab)

Zoo keeping requires the use of a wide variety of cleaning agents and other potentially hazardous materials. This course will prepare students to deal in a safe and effective manner with hazardous materials involved in zoo keeping.

### **NRT 150 Introduction to Arc Info Using Arc Map, Arc Catalog and Arc Toolbox**

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

Prerequisite: *NRT 111*

This six-module course teaches, at basic level, how use these three Windows-based components of Arc Info to perform GIS task and analysis. This is an Internet course through an outside agency and an additional \$60 fee will be required. Please call the TISO division office for more information, 540-7346.

### **NRT 151 Introduction to Visual Basic for ESRI Software**

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

Prerequisite: *NRT 111*

This six-module course introduces you to the fundamental concepts of the Microsoft Visual Basic programming language and prepares you to take courses on customizing and using Arc Info and Map Objects to create mapping applications. This is an Internet course through an outside agency and an additional \$60 fee will be required. Please call the TISO division office for more information, 540-7346.

### **NRT 152 Programming with Avenue**

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

Prerequisite: *NRT 111*

This six-module course teaches the basics of object oriented programming and how to create Simple Avenue scripts. This is an Internet course through an outside agency and an additional \$60 fee will be required. Please call the TISO division office for more information, 540-7346.

### **NRT 155 Wilderness Theory**

1 Credit Hour • 22.5 Contact Hours (Vocational Lab)

This course is an introduction to the theoretical aspects of wilderness travel.

### **NRT 156 Wilderness Food Prep**

2 Credit Hours • 45 Contact Hours (15 Lecture, 30 Lab)

Food preparation for adventure travel groups. This course includes sections on nutrition, menu planning, menu lists, special needs, caloric needs, trail food preparation, kitchen preparation and storage, expedition planning, packaging, presentation, and sanitation.

### **NRT 161 Spatial Analysis in Agriculture: A GIS Approach**

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

Prerequisite: *NRT 111*

This six-module course demonstrates the use of spatial analysis to assist agriculturists in the decision-making system also known as precision farming. This is an Internet course through an outside agency and an additional \$60 fee will be required. Please call the TISO division office for more information, 540-7346.

### **NRT 162 Spatial Hydrology Using ArcView GIS**

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

Prerequisite: *NRT 111*

This six-module course provides an introduction to the synthesis of GIS and hydrology, a subject called spatial hydrology. This is an Internet course through an outside agency and an additional \$60 fee will be required. Please call the TISO division office for more information, 540-7346.

### **NRT 163 What's New in ArcInfo 8**

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

Prerequisite: *NRT 111*

This six-module course teaches you all about the new components, data models, and customization options for the eagerly anticipated ArcInfo 8. This is an Internet course through an outside agency and an additional \$60 fee will be required. Please call the TISO division office for more information, 540-7346.

### **NRT 200 Animal Behavior**

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

The objectives of this course are to look at a brief history of ethology, forms of animal communication, the sensory world of animals, programmed vs. learned behavior, navigation, and mating behaviors. Classes will be held at the college twice a week, and labs will take place at the Cheyenne Mountain Zoo and the Denver Zoo. Through this course, students will be given a much more in-depth look at how animal behavior is affected by a zoo environment and how to correct stereotypic behaviors that are often seen in captive animals.

### **NRT 202 Surveying and Measurement**

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

*Prerequisite:* MAT 156

Skills in map and compass, utilization of aerial photos, surveying, and basic measurements techniques of natural resource environments.

### **NRT 203 Introduction to Forestry**

4 Credit Hours • 90 Contact Hours (Vocational Lab)

Principles of forest science, dendrology, forest fire behavior, and silviculture.

### **NRT 204 Range Management and Restoration**

4 Credit Hours • 90 Contact Hours (Vocational Lab)

*Prerequisite:* NRT 101 and BIO 134, or faculty consent.

This course will cover management of rangelands, important plants, rangeland communities, and restoration practices to restore disturbed ecosystems. Students will learn field measurement techniques of ecosystem components.

### **NRT 205 Wildlife and Fisheries Management Principles**

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

*Prerequisite:* NRT 102, BIO 133

This course covers theory, philosophy, and applications for study and management of wildlife and fisheries resources. Field and laboratory methods used in wildlife management area also covered.

### **NRT 206 Exhibit Design**

2 Credit Hours • 45 Contact Hours (Vocational Lab)

The world of exhibit design and construction is constantly changing. This course will discuss the exhibit design and renovation process through the conceptual, architectural rendering, and construction phases. The course will discuss small, keeper-supervised projects as well as new multimillion-dollar projects.

### **NRT 207 Adventure Outfitter Internship**

5 Credit Hours • 230 Contact Hours (Work Experience)

*Prerequisite:* NRT 102, NRT 109, NRT 120, NRT 132, NRT 137, BIO 133 or faculty consent

*Grading:* S/U only

Students in the adventure guide option will gain practical experience as interns to public or private adventure outfitters or programs. Individual goals, objectives, and bi-weekly progress reports will be required.

### **NRT 208 Internship in Natural Resource Interpretation**

5 Credit Hours • 230 Contact Hours (Internship)

*Prerequisite:* faculty consent

*Grading:* S/U only

Students in the Natural Resource Interpretation track will gain practical experience as interns to public or private interpretive agencies, programs, or centers. Individual goals, objectives, and weekly progress reports will be required.

### **NRT 209 Zookeeping Internship**

5 Credit Hours • 230 Contact Hours (Work Experience)

*Prerequisite:* NRT 142, BIO 137 or department chair consent.

Students will work at the Cheyenne Mountain Zoo 230 hours over a fifteen-week period. Weeks will be divided among animal areas specified in the course subtitle. The student will become competent in the care of all species in each of the following internship areas: hoofstock, primates and carnivores, birds, and reptiles.

### **NRT 210 Natural Resource Technology Internship**

5 Credit Hours • 230 Contact Hours (Work Experience)

*Grading:* S/U only

*Prerequisite:* NRT 101, NRT 102, NRT 103, NRT 104, NRT 202, NRT 203, BIO 133, or faculty consent

This course includes 230 hours of related field experience in resource technology. A coordinated program will be set up by the student, the program coordinator, and the resource manager.

### **NRT 211 Environmental Policies and Economics**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* NRT 102, BUS 217, BIO 133

This course covers interactions, resources, economics, and politics; government and environmental policy; evaluation of alternative resource use patterns and land use plans; discussion and analysis of current environmental issues and the impact of economic growth.

### **NRT 212 Ecosystem Management**

2 Credit Hours • 45 Contact Hours (Vocational Lab)

*Prerequisite:* BIO 133

Ecosystem management approach focuses on the larger environment in order to integrate the human, biological, and physical dimensions of natural resource management.

### **NRT 214 Environmental Issues and Ethics**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* NRT 102 or faculty consent

A focus on special environmental problems, current issues, or trends.

### **NRT 215 Veterinary Zookeeping**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

*Prerequisite:* NRT 142, BIO 137 or faculty consent.

Zookeepers are often required to work with veterinary staff in the medical management of zoo animals. This course will explore a wide variety of topics including but not limited to quarantine procedures, immobilization, zoonotic disease, and other important aspects of veterinary animal management.

### **NRT 216 Elephant Management**

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

*Prerequisite:* NRT 142, BIO 137

This course will cover a variety of topics in elephant management. Included will be the natural history of the two current living genera of elephants, status in the wild, status in captivity, and basic husbandry needs. The course will include lab experience at both the Cheyenne Mountain Zoo and Denver Zoo. The course will focus on current training theory as well as an introduction to the four currently recognized elephant management systems.

### **NRT 220 The Business of Adventure Travel**

3 Credit Hours • 45 Contact Hours (Lecture)

An in-depth study of adventure tourism as a business. The aspects of administration, budgeting, accounting, marketing, human resources, legal liability, insurance, and management will be addressed.



### **NRT 225 Adventure Guide Seminar**

1 Credit Hour • 22.5 Contact Hours (Vocational Lab)

*Prerequisite:* NRT 120, NRT 220

This course is designed to bring in numerous guest lectures and area professionals to present information based on their professional experiences in the area of adventure travel and outfitting. This final course in the NRT-Outfitter option is designed to bring together all of the information provided over the past year-and-a-half and focus on current issues and trends in the guiding industry.

### **NRT 230 Desert Field Studies**

2 Credit Hours • 45 Contact Hours (Vocational Lab)

Students will study the desert ecosystem, flora, fauna, geology, safety and medical emergencies, travel and navigation, current issues, ethics, food planning and preparation, and camping. Leadership and guiding skills will also be covered. Students will participate in a camping field experience at a desert location.

### **NRT 236 Public Relations of Natural Resources**

2 Credit Hours • 30 Contact Hours (Lecture)

This course will provide students with appropriate skills in dealing effectively with customers and co-workers at all levels, including difficult situations. It will teach the skills necessary for working directly or indirectly with the media and give a broad understanding of the importance of customer service and public relations.

### **NRT 239 GIS Internship**

5 Credit Hours • 225 Contact hours (Work Experience)

*Prerequisite:* NRT 111, NRT 202, DRT 103

*Grading:* S/U only

Students will perform 225 hours of work experience in a technical GIS position. Students will learn first-hand hardware and software used in the industry, GIS applications, and the work environment of a GIS technician.

### **NRT 240 ArcInfo and Natural Resources**

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

This six-module course introduces the student to ArcInfo, the premier GIS software on the market today. This is an Internet course through an outside agency; an additional \$60.00 fee will be required.

### **NRT 245 Mountain Field Studies**

2 Credit Hours • 45 Contact Hours (Vocational Lab)

Student will study mountain ecosystems, flora, fauna, geology, safety and medical emergencies, travel and navigation, current issues, ethics, food planning and preparation, and camping. Leadership and guiding skills will also be covered. Students will participate in a camping field experience at a mountain location.

### **NRT 249 Technical GPS and Remote Sensing**

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

*Prerequisite:* MAT 151

This course is an introduction to remote sensing and the use of photographic and non-photographic systems to acquire information about the environment. Students will use aerial photos, satellite imagery, infrared, and radar to interpret and analyze the environment.

### **NRT 255 Adventure Guide Expedition**

5 Credit Hours • 187.5 Contact Hours (Field Instruction)

*Prerequisite:* NRT 109

This course requires students to complete a total of 187.5 hours of expedition-based skills instruction, methods of guiding and instruction, group dynamics, leadership skills, and field proficiency testing for various certifications. At least 14 consecutive days in the field are required. The expeditions vary in discipline, and students select one Adventure Guide Expedition track (e.g., mountaineering, river rafting, skiing, etc). Students' physical fitness is considered for acceptance into the expedition class.

### **NRT 257 Avalanche Safety**

1 Credit Hour • 22.5 Contact Hours (Vocational Lab)

This comprehensive course covers the details of avalanche formation and their hazards. Students will learn what causes instability in the snow pack and what triggers an avalanche. This class teaches avalanche hazard recognition and avoidance and a variety of other topics including types of snow metamorphism, snow pit analysis, and search and rescue techniques. This is a must class for anyone wanting to venture into the winter backcountry environment of the Rocky Mountains and a prerequisite for the aspiring backcountry ski and mountain guide.

## **Networking Technology**

### **NET 115 Introduction to Computer Networking**

3 Credit Hours • 45 Contact Hours (Lecture)

This course introduces the student to the underlying concepts of data communications, telecommunications, and networking. It focuses on the terminology and technologies in current networking environments and is meant to provide a general overview of the field of networking as a basis for continued study in the field.

### **NET 120 Local Area Networks**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* NET 115 or faculty consent

This course is an introductory course in Local Area Networking (LAN). Students will participate in discussions and demonstrations of planning, installing, and supporting Novell and Microsoft Networks.

### **NET 150 MCP Test Preparation**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* NET 115 or faculty consent

*Corequisite:* NET 155, NET 201

This course is designed to prepare students to experience and pass the certification test for the Microsoft Certified Professional Certificate. Certification to be chosen by the student.

### **NET 151 CNA Test Preparation**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* NET 115 or faculty consent

*Corequisite:* NET 155, NET 201

This course is designed to prepare students to take and pass the Novell Corporation certification test in order to be awarded the Certified Novell Administrator Certificate.

### **NET 155 Wide Area Networks**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* NET 115 or faculty consent

This course is designed to provide students with conceptual and working knowledge of how Local Area Networks (LAN) communicate over a wide area. This course will introduce the student to telephony, the technology of switched voice communications. This course also provides students with an understanding of how communication channels of the public switched telephone networks are used for data communications and how voice and data communications have become integrated.

### **NET 201 Network Architectures and TCP/IP**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* NET 115 or faculty consent

This course outlines four important networking architectures in corporate environments today: TCP/IP, SNA, AppleTalk, and DNA. The major components and functions of each of these architectures are discussed as well as methods used to connect different architectures. This course provides students with concepts that are important to the field of systems integration as well as a conceptual basis for understanding network architecture.

### **NET 230 Network Design and Installation**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* NET 115 or faculty consent

This is an advanced course intended 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 and point-to-point networks. Exercises are geared toward learning techniques used to design and analyze networks.

### **NET 270 MCSE Test Preparation**

3 Credit Hours • 45 Contact Hours (Lecture)

This course is designed to prepare the student to take and pass the six examinations required by Microsoft to be awarded the Microsoft Certified Systems Engineer Certificate.

### **NET 272 CNE Test Preparation**

3 Credit Hours • 45 Contact Hours (Lecture)

This course is designed to prepare the student to experience and pass the six examinations required by The Novell Corporation to be awarded Novell Certified Engineer Certificate.

## **Nursing**

Admission to the college does not assure admission to the nursing program. Admission to the nursing program is accomplished through a selection process. Students entering this program must have academic preparation in biology equivalent to BIO 110.

### **NUR 101 Certified Nurse Aide**

6 Credit Hours • 120 Contact Hours (45 Lecture, 30 Lab, 45 Clinical)

Basic theory and nursing practice principles utilizing lecture, laboratory practice, and a clinical. Prepares students to take the nurse aide certification examination.

### **NUR 105 Medic/Nurses Aide Refresher**

1 Credit Hour • 24 Contact Hours (Lecture/Lab Combination)

This course is designed for the Army medic who wants to apply for the State Certification Exam for Nursing Assistants. It will discuss and provide practical application of the comparison and contrast between the nursing assistant role and the Army medic role. This course will prepare students for the State Certification Written and Manual Skill exam.

### **NUR 106 Rehabilitation Aide/Rehabilitative Technician**

2 Credit Hours • 48 Contact Hours (24 Lecture/Lab Combination, 24 Clinical)

*Prerequisite:* NUR 101 or NUR 108 or program coordinator consent

This course is designed for certified nursing assistants who have a desire to improve their ability to work with chronic/long term care clients in a restorative/rehabilitative setting. The course will teach nursing assistants how to assist the physical therapist, occupational therapist, and speech therapist in the rehabilitative phase of treatment. Successful students will be eligible to work in a number of health care areas as part of a rehabilitation team.

### **NUR 108 Accelerated Nurse Aide**

3 Credit Hours • 80 Contact Hours (18 Lecture, 30 Lab, 32 Clinical)

*Prerequisite:* BIO 202 or BIO 142 or program coordinator consent

Basic theory and nursing practice principles utilizing lecture, laboratory practice, and a clinical. The accelerated version of the nurse aide course is designed for students with a strong background in anatomy and physiology. Prepares students to take the nurse aide certification examination.

### **NUR 109 Introduction to Nursing**

1 Credit Hour • 15 Contact Hours (Lecture)

*Prerequisite:* NUR 108 and acceptance into the nursing program or program coordinator consent

This course is designed to assist the incoming nursing students with the CNA prerequisite to make the transition from CNA to the LPN/RN program. This course focuses on the philosophy and theoretical framework of the PPCC nursing program. Additionally the course is designed to instruct students in the performance of a basic physical assessment.

### **NUR 130 Introduction to Practical Nursing**

3 Credit Hours • 52.5 Contact Hours (30 Lecture, 22.5 Clinical Lab)

*Prerequisite:* NUR 108 and acceptance into the nursing program or program coordinator consent

Provides introduction to practical nursing and health care delivery with focus on behavioral concepts and communication. Presents theoretical information related to bio-psychosocial, spiritual, and cultural needs of the individual. Provides introduction to nursing process, values, and concepts of ethical and legal issues. Discusses stress and adaptation mechanisms. Describes issues related to grief, death, and dying. Reviews basic nutrition and introduces fluid and electrolyte concepts.

### **NUR 131 Fundamental Concepts of Practical Nursing**

3 Credit Hours • 73 Contact Hours (25 Lecture, 48 Clinical Lab)

*Corequisite:* NUR 108, NUR 130

Provides theory base for surgical asepsis and medication administration. Instruction and practice in care of perioperative patient and application of concepts and principles through supervised experience in campus laboratory and clinical settings are also covered.

### **NUR 132 Practical Nursing I**

5 Credit Hours • 100.5 Contact Hours (30 Lecture, 48 Clinical Lab, 22.5 Technical Lab)

*Prerequisite:* NUR 131 or program coordinator consent

Application of theory and use of nursing process in caring for adults with uncomplicated medical/surgical disorders. Supervised experience in campus and clinical laboratories.

### **NUR 133 Practical Nursing II**

6 Credit Hours • 123 Contact Hours (30 Lecture, 48 Clinical Lab, 45 Technical Lab)

*Prerequisite:* NUR 131 or program coordinator consent

*Corequisite:* NUR 134, NUR 140, NUR 173

A continuation of NUR 132. This course covers care of the adult patient with medical surgical problems including incorporated drug and diet therapy. Includes application of knowledge and skills through supervised campus and clinical practice.

### **NUR 134 Clinical Synthesis**

1 Credit Hour • 24 Contact Hours (Clinical Lab)

*Prerequisite:* NUR 132 or program coordinator consent

*Corequisite:* NUR 133, NUR 140, NUR 173

This course synthesizes knowledge from all other previous courses in applying concepts related to role transition, critical thinking, and first level management. Organization skills are gained in the clinical setting through the care of a group of patients, including medication administration and treatment.

### **NUR 140 Personal and Vocational Adjustment**

1 Credit Hour • 15 Contact Hours (Lecture)

*Prerequisite:* NUR 132 or program coordinator consent

*Corequisite:* NUR 133, NUR 134, NUR 173

Introductory concepts for first time management. Examines legal and ethical responsibilities of the practical nurse. Emphasis is given to the Colorado Nurse Practice Act. Job seeking skills are discussed.

**NUR 151 Dynamics of Psychiatric Nursing I**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* NUR 132 or program coordinator consent

*Corequisite:* NUR 152, NUR 153, NUR 154

This course explores the role of the “psychiatric technician” as defined by Colorado law. Through the study of therapeutic communication, personality development, and treatment modalities for the mentally ill, students will develop interpersonal and technical skills required to practice as a Licensed Psychiatric Technician (L.P.T.).

**NUR 152 Dynamics of Psychiatric Nursing Lab I**

4 Credit Hours • 90 Contact Hours (Clinical Lab)

*Prerequisite:* NUR 132 or program coordinator consent

*Corequisite:* NUR 151, NUR 153, NUR 154

*Grading:* S/U only

This course provides clinical application of theory and principles presented in NUR 151 through supervised clinical practice utilizing the nursing process. Includes administration of medication.

**NUR 153 Dynamics of Psychiatric Nursing II**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* NUR 132 or program coordinator consent

*Corequisite:* NUR 151, NUR 152, NUR 154

The purpose of this course is to develop knowledge of psychiatric disorders identified in the DSM-IV. Building on the concepts presented in NUR 151, the role of the Licensed Psychiatric Technician (LPT) in the care of the mentally ill will be explored in depth.

**NUR 154 Dynamics of Psychiatric Nursing Lab II**

4 Credit Hours • 90 Contact Hours (Clinical Lab)

*Prerequisite:* NUR 132 or program coordinator consent

*Corequisite:* NUR 151, NUR 152, NUR 153

*Grading:* S/U only

Through supervised clinical lab and practice, nursing process is utilized to apply the theoretical concepts presented in NUR 153. Administration and management of medication are included.

**NUR 164 Nutrition for Health Occupations**

1 Credit Hour • 15 Contact Hours (Lecture)

This course is designed for students enrolled in a health occupations program. The course discusses general concepts of nutrition and further explores therapeutic dietary treatments.

**NUR 171 Fundamental Concepts of Nursing Practice**

5 Credit Hours • 100.5 Contact Hours (30 Lecture, 22.5 Lecture/Lab Combination, 48 Clinical)

*Prerequisite:* NUR 109 or program coordinator consent

*Corequisite:* NUR 172 and NUR 173

Introduction to the basic concepts of nursing, including critical thinking, nursing process, communication, teaching/learning theory, stress/adaptation, grief, death and dying, documentation, infectious process, and pharmacology.

**NUR 172 Basic Concepts of Medical Nursing**

4 Credit Hours • 85.5 Contact Hours (15 Lecture, 22.5 Lecture/Lab Combination, 48 Clinical)

*Prerequisite:* NUR 109 or program coordinator consent

*Corequisite:* NUR 171 and NUR 173

Introduction to the care of the medical client. Includes instruction in the expected normals, and assessment of abnormal findings, and evaluation of basic interventions in the following areas: nutrition, fluid and electrolyte, cardio-pulmonary system, gastrointestinal system, and genitourinary system.

**NUR 173 Family Centered Nursing I**

5 Credit Hours • 100.5 Contact Hours (30 Lecture, 22.5 Lecture/Lab Combination, 48 Clinical)

*Prerequisite:* NUR 109 or program coordinator consent

*Corequisite:* NUR 171 and NUR 172

This course addresses nursing care of the uncomplicated obstetrical client/family and newborn. It also addresses health promotion of the pediatric client within the community. In addition, basic concepts and directed application of pediatric nursing care of acute and chronic illnesses are introduced.

**NUR 174 Medical/Surgical Nursing I**

13 Credit Hours • 251.5 Contact Hours (75 Lecture, 22.5 Lecture/Lab Combination, 154 Clinical)

*Prerequisite:* NUR 173

Utilizes the nursing process and basic medical-surgical principles as applied to clients with common stressors in the following systems: peripheral/vascular, sensory/neurological, reproductive/sexual, muscular/skeletal, endocrine, cardio-pulmonary, integumentary, gastrointestinal, and genito-urinary. The course also addresses the perioperative experience and basic management skills.

**NUR 186 LPN Advanced Placement for ADN**

2 Credit Hours • 37.5 Contact Hours (15 Lecture, 22.5 Lecture/Lab Combination)

*Prerequisite:* BIO 202 and acceptance into the Advanced Placement Nursing Program

*Corequisite:* NUR 187

This course is designed for licensed practical nurses to advance their education to the level of the second year associate degree registered nursing student. This course will introduce students to Pikes Peak Community College’s philosophy and conceptual framework of nursing. It will emphasize critical thinking and therapeutic communication. It also prepares students to utilize the nursing process and develop professional nursing care plans.

**NUR 187 Medical/Surgical Bridge Course for LPN’s**

2 Credit Hours • 37.6 Contact Hours (15 Lecture, 22.5 Lecture/Lab Combination)

*Corequisite:* NUR 186

This is a bridge course for LPNs returning to school to complete their associate degree in nursing in medical/surgical nursing.

**NUR 201 Pharmacology for Nurses**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* BIO 202, NUR 171 or program coordinator consent

The action, uses, side effects, and nursing implications for selected drug classifications: cardiovascular drugs, diuretics, analgesics, antimicrobials, pancreatic hormones, and pharmacodynamics.

**NUR 221 Medical/Surgical Nursing II**

15 Credit Hours • 308.5 Contact Hours (90 Lecture, 22.5 Lecture/Lab Combination, 196 Clinical)

*Prerequisite:* NUR 174 or NUR 187 or program coordinator consent

Use of the nursing process and advanced medical/surgical principles as applied to clients with stressors in the following systems: sensory/neurological, muscular/skeletal, endocrine, cardio-pulmonary, integumentary, gastrointestinal, and genito-urinary. This course also addresses health care trends and issues and advanced management concepts.

**NUR 222 Mental Health Nursing I**

4 Credit Hours • 103.5 Contact Hours (25 Lecture, 22.5 Lecture/Lab Combination, 56 Clinical)

*Prerequisite:* NUR 221 or NUR 187 or program coordinator consent

*Corequisite:* NUR 223 and NUR 224

Introduction to the concepts of mental health nursing, including therapeutic relationship, principles of mental health nursing, theoretical models, therapeutic environment, stress/adaptation, and application of nursing process to clients with thought and mood disorders.

### **NUR 223 Mental Health Nursing II**

4 Credit Hours • 103.5 Contact Hours (25 Lecture, 22.5 Lecture/  
Lab Combination, 56 Clinical)

*Prerequisite:* NUR 221 or NUR 187 or program coordinator consent  
*Corequisite:* NUR 222 and NUR 224

Application of nursing process to clients with personality disorders, sexual disorders, anxiety-related disorders, chemical dependency, and childhood/adolescent disorders. This course addresses special therapies in mental health nursing, including psychopharmacology, family therapy, group therapy, milieu therapy, psychotherapy, crisis intervention, and behavioral therapy.

### **NUR 224 Family Centered Nursing II**

4 Credit Hours • 103.5 Contact Hours (25 Lecture, 22.5 Lecture/  
Lab Combination, 56 Clinical)

*Prerequisite:* NUR 221 or NUR 187, or program coordinator consent  
*Corequisite:* NUR 222 and NUR 223

Advanced principles of pediatric nursing applied to the pediatric and obstetrical client with acute and chronic disease processes. Advanced principles of obstetrical nursing applied to the client with acute and chronic disease processes.

## **Nutrition**

### **NUT 100 Nutrition**

3 Credit Hours • 45 Contact Hours (Lab)

*Note:* This course is offered on CCC-Online only.

This course will enhance students' knowledge regarding the role of food and nutrition and application of therapeutic diets. Course units will coincide with the textbook to allow students with a limited background in nutrition-related sciences the opportunity to assimilate new information. Content is organized around basic human needs, normal physiology, population trends, and cultural patterns. Students will have the opportunity to analyze their own dietary habits and identify dietary deficiencies/excesses. This information will be organized using a nursing process format which may empower individuals toward dietary change. Health promotion and disease prevention are key issues in this basic nutrition course. We will study nutrition across the life span as well as clinical nutrition.

## **Office Administration**

### **BTE 101 Keyboard Skill Building**

1 Credit Hour • 30 Contact Hours (Lab)

*Grading:* S/U only

Intensive individualized course designed to meet skill development needs and goals using Cortez Peters' championship typing method. *Prerequisite:* CIS 100 or ability to type 20 words per minute.

### **BTE 102 Keyboarding Applications**

2 Credit Hours • 30 Contact Hours (Lecture)

This course is designed for students with minimal keyboarding skills. Letters, tables, memos, and reports are introduced. Speed and accuracy is also emphasized.

### **BTE 108 Ten-Key by Touch**

1 Credit Hour • 30 Contact Hours (Lab)

An introduction to touch control of the ten-key pad. This class emphasizes the development of speed and accuracy using proper technique.

### **BTE 110 Business Language Skills**

3 Credit Hours • 45 Contact Hours (Lecture)

Introduction to correct business language skills as they apply to written and oral communication in the business and technical field. Comprehensive practice in the correct use of English grammar, including proficiency in punctuation, capitalization, possessives, and number usage.

### **BTE 116 Files Management**

1 Credit Hour • 15 Contact Hours (Lecture)

Students will learn and apply accepted rules of filing through practical application. A filing practice set is used to give hands-on experience with filing and finding records.

## **Philosophy**

### **PHI 105 Millennium Studies**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 115, ENG 121 or concurrent

This cross-disciplinary course will allow students to utilize their skills from three different disciplines in studying a subject of vital interest, the 21<sup>st</sup> Century. It will serve as a cross-disciplinary elective.

### **PHI 111 Introduction to Philosophy**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 115, ENG 121, STS 060

Introduces significant human questions and emphasizes understanding the meaning and methods of philosophy. Includes the human condition, knowledge, freedom, history, ethics, the future, and religion.

### **PHI 112 Ethics**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 115, ENG 121, STS 060

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.

### **PHI 113 Logic**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 115, ENG 121, STS 060

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 skills.

### **PHI 114 Philosophy of Religion**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 115, ENG 121, STS 060

Philosophical introduction to the basic topics in philosophy of religion. Explores related topics of western religions, including the problem of evil, arguments for and against the existence of God, the nature of faith, immortality, problems of religious language, and conflicting truth claims in the various religions.

### **PHI 115 Comparative Religions**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 115, ENG 121, STS 060

This course introduces the student to the common and different concepts predominant in the major world religions. Included in this study will be the sociological and philosophical similarities and differences that each major world faith has in comparison to the other world faiths.

### **PHI 116 Beliefs and Believers**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 100

Explores the nature and function of belief structures such as religions and personal and political ideologies. Included are studies of major world religions and the new age religions, neo-paganism, and “civil religion.”

### **PHI 118 Personal Decision Making**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 100

This course acquaints students with the essential steps in creative and critical decision-making. Topics include recognizing and defining problems, proposing and testing solutions to these problems, and acting on information gathered. Patterns will be identified in ineffective thinking, and students will be presented with an effective model for decision-making and problem solving.

### **PHI 155 Philosophy East and West**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 100

This course will serve as an elective for those who do not wish to study Western themes alone. Through lecture, exercises, film, and discussion, students will be able to contrast Eastern and Western methods of philosophy.

### **PHI 205 Environmental Ethics**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ENG 121, REA 115, and PHI course

This course is designed for the student interested in a transfer elective. It introduces the basic concepts and theories about the environment as well as their situational application.

### **PHI 215 Philosophy and Contemporary Issues**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ENG 121

This course will allow students to use their first year skills as they pursue second year studies. It serves as a humanities elective.

### **PHI 255 Eastern Wisdom**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 115, ENG 121, STS 060

This course will serve as an elective for those students who wish to establish a firm foundation in Eastern philosophy. Although PHI 155 is not required, it is recommended.

## **Physical Education and Recreation**

### **PED 101 Body Toning**

1 Credit Hour • 30 Contact Hours (PED)

A class designed to meet the needs of students interested in the shaping and toning aspects of weight training while allowing full access to the PPCC Fitness Center.

### **PED 102 Conditioning and Weight Control**

1 Credit Hour • 30 Contact Hours (PED)

A program designed for each individual to aid in any desired weight loss and/or conditioning of the body while allowing full access to the PPCC Fitness Center.

### **PED 103 Strength Training**

1 Credit Hour • 30 Contact Hours (PED)

A class designed for students interested in building muscular strength while allowing full access to the PPCC Fitness Center.

### **PED 110 Physical Education Activities**

1 Credit Hour • 30 Contact Hours (PE D)

Various physical education activities are available as follows:

#### **Aerobic Dance I**

Techniques to develop and strengthen the cardiovascular system while toning the muscles of the entire body.

#### **Aerobic Dance II**

*Prerequisite:* Aerobic Dance I or faculty consent

Overall body conditioning, coordination, flexibility, weight control, and cardiovascular development using dance and exercise movements set to music. Students choreograph their own routine.

#### **Ballet I**

Introduces the basic techniques of ballet which are built upon knowledge of ballet terminology, fundamental exercises, and the basic elements of dance. May be repeated for a maximum of three credits.

#### **Ballet II**

*Prerequisite:* Ballet I

Continuation of Ballet I with emphasis on intermediate skills level.

#### **Ballet III**

*Prerequisite:* Ballet II

Continuation of Ballet II with emphasis on advanced skills level.

#### **Basketball**

Fundamental skills and rules of play. Basic shooting and ball control skills as well as offensive and defensive team strategy.

#### **Jazz Dance I**

Jazz techniques concentrating on elementary rhythms and isolation of body parts.

#### **Jazz Dance II**

Continuation of Jazz Dance I.

#### **Jazz Dance III**

This course is a continuation of Jazz Dance II.

### **Karate/Self Defense I**

Introduction to karate, its history, its philosophy, its benefits to individuals and society, and its role today and in the future.

### **Karate/Self Defense II**

*Prerequisite: Karate/Self Defense I or faculty consent.*

Designed for those with previous experience in self-defense and in any style of karate. The Sho To Kan style of self-defense is taught.

### **Karate/Self Defense III**

*Prerequisite: Karate/Self Defense II or faculty consent.*

Continuation of Karate/Self Defense II

### **Karate/Self Defense IV**

*Prerequisite: Karate/Self Defense III or faculty consent.*

Continuation of Karate/Self Defense III

### **Modern Dance I**

Basic techniques of modern dance emphasizing dance vocabulary, fundamental exercises, and the basic elements of dance.

### **Modern Dance II**

Continuation of Modern Dance I.

### **Modern Dance III**

Continuation of Modern Dance II.

### **Tai Chi Chuan I**

Students will learn the first section of the long, Yang Style Tai Chi Chuan form. They will also learn appropriate warm-up exercises including various Chi Kung exercises and "standing meditation" postures, as well as some history and philosophy of Tai Chi Chuan.

### **Tai Chi Chuan II**

Continuation of Tai Chi Chuan I.

### **Tennis I**

Fundamentals including tennis strokes, strategy, and proper use of equipment.

### **Tennis II**

*Prerequisite: Tennis I or faculty consent.*

Progressive study of tennis. Perfecting basic skills.

### **Volleyball I**

Basic motor skills, strategies, and rules of volleyball. Emphasis on gaining proficiency in the sport.

### **Volleyball II**

*Prerequisite: Volleyball I or faculty consent.*

Designed for those with basic skills and understanding of the game. Emphasis on offensive and defensive strategies, team play, and advanced volleyball skills.

### **Walking and Weight Control**

Exercise and dietary modifications. An exercise program is designed for each individual to aid in any desired weight loss and/or toning.

### **Yoga I**

Principles of physical yoga. Provides an opportunity to experience major positive changes in physical well-being. Flexibility, weight control, slimming, firming, and the relief of tension and stiffness.

### **Yoga II**

*Prerequisite: Yoga I or faculty consent.*

Concepts of basic yoga are carried into additional areas. Increases awareness of yoga and its physical and mental benefits.

### **PED 150 Fitness Center I, II, III, and IV**

1 Credit Hour • 30 Contact Hours (PED)

Designed for individuals interested in improving total fitness through cardiovascular conditioning program. Includes an individual fitness evaluation, computerized analysis of results, and an exercise prescription. State-of-the-art weight training equipment, bicycle ergometers, rowing machines, a treadmill, and other aerobic equipment will be available to help elicit improvement in physical fitness.

### **PED 175 Fitness Concepts and Testing**

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

Education and physical performance evaluations based on tests designed by various law enforcement agencies. Designed for the Pikes Peak Regional Law Enforcement Academy only.

### **PED 204 Introduction to Athletic Training**

2 Credit Hours • 45 Contact Hours (15 Lecture, 30 Lab)

Care, treatment, and prevention of athletic injury. Students will work with PPCC team sport members during their competitive seasons. At conclusion, students will be able to provide initial care and proper treatment of common athletic injuries.

### **PED 207 Sports Injuries**

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

An overview of fitness principles and biomechanics of sensible training for beginning and advanced athletes. Students will learn how to take an active and informed role in planning their fitness programs to recognize and prevent common sport-related injuries.

### **PED 275 Competitive Team Sports**

2 Credit Hours • 60 Contact Hours (PED)

*Prerequisite: faculty consent required.*

This series of courses is reserved for those students who demonstrate advanced skills and capabilities in soccer, volleyball, and karate. Enrollment in the course is through selection by the instructor/coach. Students selected for participation will learn advanced strategies, tactics and individual skills, specific training and conditioning techniques, and team building skills. Competitive events may include local and out-of-town matches against intercollegiate and adult amateur opponents.

## Physics

### PHY 111 Physics: Algebra-Based I

5 Credit Hours • 105 Contact Hours (60 Lecture, 45 Lab)  
*Prerequisite: MAT 121 or physics faculty consent*

Studies mechanics and heat. Includes laboratory experience.

### PHY 112 Physics: Algebra-Based II

5 Credit Hours • 105 Contact Hours (60 Lecture, 45 Lab)  
*Prerequisite: PHY 111 or physics faculty consent*

Studies electricity and magnetism, light, and modern physics. Includes laboratory experience.

### PHY 121 Applied Physics I

8 Credit Hours • 150 Contact Hours (60 Lecture, 90 Lecture/Lab)

*Prerequisite: MAT 066*

This course covers force, work, rate, resistance, energy, power, and force transformers as related to electrical, mechanical, hydraulics, pneumatics, thermal, and electromechanical systems. Includes laboratory experience.

### PHY 122 Applied Physics II

8 Credit Hours • 150 Contact Hours (60 Lecture, 90 Lecture/Lab)

*Prerequisite: PHY 121*

A continuation of PHY121. Topics include momentum, waves and vibrations, energy converters, transducers, radiation, optical systems, and time constants as related to electrical, mechanical, hydraulics, pneumatics, thermal, and electromechanical systems. Includes laboratory experience.

### PHY 131 Technology Principles I

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)  
*Prerequisite: MAT 066 or faculty consent*

Energy systems as they pertain to mechanical, fluid, thermal, and electrical that make up both simple and complex technology devices and equipment.

### PHY 132 Technology Principles II

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)  
*Prerequisite: PHY 131 or faculty consent*

Momentum, waves and vibrations, energy converters, transducers, and radiation as they pertain to electrical, mechanical, fluidic, and thermal devices and equipment.

### PHY 133 Technical Physics

5 Credit Hours • 105 Contact Hours (60 Lecture, 45 Lab)  
*Prerequisite: MAT 105 or faculty consent*

This is a one semester physics course designed to support a variety of occupational training programs. The contents can be adapted to whatever program it supports.

### PHY 211 Physics: Calculus-Based I

5 Credit Hours • 105 Contact Hours (60 Lecture, 45 Lab)  
*Prerequisite: MAT 201 or physics faculty consent*

Studies mechanics and heat. Includes laboratory experience.

### PHY 212 Physics: Calculus-Based II

5 Credit Hours • 105 Contact Hours (60 Lecture, 45 Lab)  
*Prerequisite: PHY 211 or physics faculty consent*

Studies wave motion, electricity and magnetism, and light. Includes laboratory experience.

## Political Science

### POS 105 Introduction to Political Science

3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite: REA 115, ENG 100*

This course is a survey of the discipline of political science, including political philosophy and ideology, democratic and nondemocratic governments and processes, and international relations.

### POS 111 American Government

3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite: REA 115, ENG 100*

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.

### POS 121 Introduction to Public Administration

3 Credit Hours • 45 Contact Hours (Lecture)  
*Note: This course is offered on CCC-Online only.*

This course introduces the student to the basic concepts of public administration. Topics covered include the basic functions of local governments and typical governmental organizational structures.

### POS 125 American State and Local Government

3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite: REA 115, ENG 100*

This course is a study of structure and function of state, county, and municipal governments including their relations with each other and with national government. Colorado government and politics are emphasized.

### POS 205 International Relations

3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite: REA 115, ENG 100*

This course examines the relationships among modern nation-states. Topics include diplomacy, nationalism, ideologies, power and influence, conflict and cooperation, the role of non-state actors, and theoretical attempts to influence international behavior.

### POS 206 Environmental Policy

3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite: ENG 121, POS 111*

This course serves as a general overview of the issues and policy decisions involved in making environmental policy. Students will examine environmental policy from a historical, cultural, political, and economic point of view.

### POS 207 The United States in Current World Affairs

3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite: REA 115, ENG 100*

Problems and issues of the United States as they relate to the nations of the world. American foreign policy, regional alliances, and world trade are covered.

### POS 211 Public Finance

3 Credit Hours • 45 Contact Hours (Lecture)  
*Note: This course is offered on CCC-Online only.*

An analysis of the effects of taxation, government expenditures, fiscal policy, and public debt of resource allocation and income distribution. Topics include taxation, pricing of public services, intergovernmental fiscal relations, and other financial issues in public finance.

### **POS 212 Comparative Politics of Developing Nations**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 115, ENG 100

Comparative analysis of the political systems and cultures of developing states. Ideological, institutional, economic, sociological, religious, military, participatory, and other factors and development strategies in selected countries are covered.

### **POS 215 Current Political Issues**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 115, ENG 100

This course is an in-depth analysis of critical issues in political science. Topics will be determined each term.

### **POS 216 Comparative Government**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 115, ENG 100

This course is a comparison of the basic features of selected developed and developing countries. Topics include ideologies, political parties, interest groups, and governmental institutions.

### **POS 221 Community Development and Planning**

3 Credit Hours • 45 Contact Hours (Lecture)

*Note:* This course is offered on CCC-Online only.

This course identifies and analyzes major issues facing governmental entities such as growth, economic development, education, public security and safety, utilities, recreation, etc., with examination of how these can be addressed.

## **Psychology**

### **PSY 101 General Psychology I**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 100

Scientific study of behavior including motivation, emotion, sexuality, physiological psychology, stress and coping, research methods, consciousness, sensation, perception, learning, and memory.

### **PSY 102 General Psychology II**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 100

Scientific study of behavior including cognition, language, intelligence, psychological assessment, personality, abnormal psychology, therapy, life span development, and social psychology.

### **PSY 106 Human Relations**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 100

This course emphasizes the development and practice of effective interpersonal communication skills on and off the job.

### **PSY 109 Career Development**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 100

This course assists students in recognizing their career potential, and provides tools for making realistic decisions concerning educational and occupational objectives.

### **PSY 111 Human Potential Seminar**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 100

This course is a personal growth workshop based on the self-actualization principles of psychologists Abraham Maslow and Herbert Otto. Course activities of this course are designed to help students realize their potential for becoming more self-determined, self-motivating, and understanding of others.

### **PSY 115 Psychology of Adjustment**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 100

This course emphasizes personal growth and the development of interpersonal skills. Focus is on practical application of psychological principles and theories in achieving self-understanding and personal growth.

### **PSY 205 Psychology of Women**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 100

This course covers emotional, cognitive, interpersonal, and cultural contributions to female identity and gender role.

### **PSY 215 The Criminal Mind**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 100

Explores the psychology of the criminal mind. Criminal behavior will be examined from three separate psychological perspectives. Other topics to be discussed will include personality disorders, sexual offenders, serial murderers, domestic violence perpetrators, drug/alcohol issues, adolescent crime, rising female violent behavior, and police suicide.

### **PSY 217 Human Sexuality**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 100

This course is a survey of physiological, psychological, and psychosocial aspects of human sexuality. Topics include relationships, sexual identity, and sexual health.

### **PSY 226 Social Psychology**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 100

This course covers behavior of humans in social settings including attitudes, aggression, conformity, cooperation and competition, prejudice, and interpersonal attraction.

### **PSY 227 Death and Dying**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 100, 3 hours of general psychology or faculty consent

This course covers philosophies of life and death, emphasizing dying, death, mourning, and the consideration of one's own death.

### **PSY 235 Human Growth and Development**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 100, 3 hours of general psychology or faculty consent

This course is a survey of human development from conception to death emphasizing physical, cognitive, emotional, and psychosocial factors.

### **PSY 237 Assertiveness Training**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 100

This course teaches the awareness and expression of individual rights and needs in interpersonal relationships.

### **PSY 243 Behavior Modification**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 100, PSY 101 or PSY 115, or faculty consent

B.F. Skinner's Theory of Operant Conditioning will be discussed. Technical understanding of the theory and practical application will be covered.



**PSY 246 Psychology of Women and Men**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: REA 090, ENG 100*

This course examines gender differences in work, courtship, family life, and sexual behavior throughout the life span.

**PSY 247 Child Abuse and Neglect**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: REA 090, ENG 100*

This course examines the causes and effects of physical, sexual, and psychological abuse and neglect. Intervention and prevention strategies are emphasized.

**PSY 250 What is Normal?**

1 Credit Hours • 15 Contact Hours (Lecture)

*Prerequisite: REA 115, ENG 100*

A cross-disciplinary approach to what different societies have considered normal behavior, mental health, and mental illness. From the perspectives of anthropology, literature, and psychology, the course will compare readings and interpretations of “normal” and “abnormal” behavior from the perspective of viewers and writers both inside and outside various cultures. Students will receive credit for either ANT 250, or LIT 250, or PSY 250.

**PSY 255 Psychology of the Exceptional Child**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: REA 090, ENG 100, 3 hours of general psychology or faculty consent*

This course covers giftedness and physical, mental, and emotional handicaps with emphasis on appropriate intervention.

**PSY 260 Psychology of Aging**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: REA 090, ENG 100*

Behavioral and emotional patterns of the aging person in the American culture will be covered.

**PSY 265 Psychology of Personality**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: REA 090, ENG 100, 3 hours of general psychology or faculty consent*

This course examines structure, function, and development of personality. Major theories of personality are considered. The impact of family, culture, and stress is viewed in relationship to personality.

## Radio, Television, Telecommunications

**TCM 101 Radio Programming and Production I**

3 Credit Hours • 45 Contact Hours (Lecture)

*Corequisite: TCM 106*

This course covers radio-programming, formats and audience rating surveys, basic and sophisticated communication systems, history of broadcasting, broadcasting and production equipment, and program broadcast systems and propaganda.

Credit will be granted for TCM 101 or JOU 101 but not for both.

**TCM 102 Radio Programming and Production II**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: TCM 101, TCM 106**Corequisite: TCM 107*

This course covers styles of writing and reporting news, editorials, interviews, and commentaries; station logs and announcing styles and techniques; the Federal Communication Commission with emphasis on politics and serving the public interest; job finding and advancing in broadcasting; women in broadcasting; drama; and specialized production. Sportscasting and weathercasting.

**TCM 106 Radio Programming and Production Lab I**

3 Credit Hours • 90 Contact Hours (Lab)

*Corequisite: TCM 101*

This course covers the use of basic radio station equipment, programming, and formats. Simulated broadcasting using production studio facilities.

**TCM 107 Radio Programming and Production Lab II**

3 Credit Hours • 90 Contact Hours (Lab)

*Prerequisite: TCM 101, TCM 106**Corequisite: TCM 102*

Operation of technical equipment of a radio-broadcasting studio with emphasis on news, special news features, commercials, audition tapes, sports, and weather.

**TCM 123 Writing for Television and Radio**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite or Corequisite: CIS 100*

Writing techniques for radio and television emphasizing professional techniques, format, and style. Commercials, public service announcements, and promotional writing will be emphasized.

**TCM 130 Principles of Satellite Communications**

2 Credit Hours • 30 Contact Hours (Lecture)

This course covers the basics of satellite communication to include broadcasting and education. Students will 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.

**TCM 131 Broadcast Technical Operations**

2 Credit Hours • 30 Contact Hours (Lecture)

Technical operation of radio transmitting systems including FCC rules and regulations.

**TCM 132 Introduction to Telecommunications**

2 Credit Hours • 30 Contact Hours (Lecture)

An overview of modern communication technologies, including various forms of communication systems and how they impact society with an emphasis on education and industry. Televised interactive video, audiographics, two-way audio/one-way video, Internet, and other computer-based technologies relating to distance education will be emphasized.

### **TCM 133 Fundamentals of Teleconferencing**

2 Credit Hours • 45 Contact Hours (15 Lecture, 30 Lab)

*Grading: S/U only.*

An overview of C-band and Ku-band technology with an emphasis on producing and organizing a teleconference. Student lab participation will include assisting in the set-up and facilitation of a teleconference. Students will attend and participate in the production of at least two teleconferences hosted by the Division of Telecommunications at PPCC. Federal Communications Commission guidelines will also be studied.

### **TCM 201 Television Production**

3 Credit Hours • 45 Contact Hours (Lecture)

*Corequisite: TCM 206*

This course covers the principles and techniques of television production such as camera operation, basic lighting, operation of video recording equipment, video switcher, and audio. Production procedures, planning, and the role of the director/producer are also included.

Credit will be granted for TCM 201 or JOU 201, but not for both.

### **TCM 202 Advanced Television Production**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: TCM 201, TCM 206*

*Corequisite: TCM 207*

This course covers the principles and techniques of television production in theory and the approach of studio and field production. Includes emphasis on producing a television program beginning with a concept through script to actual studio production, production preplanning, role of the director/producer, and other broadcast-related fields of video production.

### **TCM 206 TV Studio Production**

3 Credit Hours • 90 Contact Hours (Lab)

*Corequisite: TCM 201*

This course will cover the operation of cameras, videotape recorders, audio, and video switching equipment doing multicamera studio production. Students produce and direct TV productions and serve on crews as camera operators, switchers, audio controllers, etc.

### **TCM 207 Advanced TV Studio Production**

3 Credit Hours • 90 Contact Hours (Lab)

*Prerequisite: TCM 201, TCM 206*

*Corequisite: TCM 202*

This course covers studio television production. Students produce and direct multicamera studio productions. Projects include a newscast, instructional/industrial, interviews, free-form, and a final production.

### **TCM 213 News Writing and Reporting**

3 Credit Hours • 45 Contact Hours (Lecture)

*Corequisite: CIS 100*

This course covers gathering, writing, and reporting radio and television news; development of communications medium style; legal system in relation to news reporting ethics; professional news-sorting and writing software for IBM compatible computer.

### **TCM 214 Principles of Audio**

3 Credit Hours • 45 Contact Hours (Lecture)

An in-depth look at principles of sound design, acoustics, and sound studios. Use of consoles, microphones, magnetic recording, signal processing, and loudspeaker equipment to produce audio tracks for multi- and single-camera TV production.

### **TCM 215 Broadcast Sales and Management**

3 Credit Hours • 45 Contact Hours (Lecture)

Contemporary issues affecting the broadcasting industry, government regulations, labor, consumer influences, internal and external forces on news, entertainment, and advertising. Fundamentals in developing various sales and advertising strategies are also covered.

### **TCM 216 Corporate Scriptwriting**

3 Credit Hours • 45 Contact Hours (Lecture)

Scriptwriting formats and techniques as they apply to corporate, industrial video, and other broadcast and non-broadcast television productions.

### **TCM 221 Basic Video Production**

4 Credit Hours • 90 Contact Hours (Vocational Lab)

*Prerequisite: faculty consent*

This course will cover the basics in single camera video production for non-broadcast personnel to gain an appreciation of the basics of "in studio" and "on location" video production. Basic lighting, camera operation, script construction, videotape editing, and problem solving are covered. Opportunity to work in teams in the production of videotape programs designed as an informational program or a training tool for a particular target audience.

### **TCM 222 Advanced Videotape Editing**

4 Credit Hours • 90 Contact Hours (Vocational Lab)

*Prerequisite: faculty consent*

Elements of space and time examined through videotape editing. "Assemble and insert" editing techniques are covered as they pertain to standards commonly used in the video production industry. A non-linear video editing on Casablanca software will be explored.

### **TCM 270 Internship in News – KEPC Radio**

4 Credit Hours • 150 Contact Hours (15 Lecture, 135 Work Experience)

*Prerequisite: TCM 101, TCM 106, TCM 131, and faculty consent*

In this course, students will cover news events and actualities and report several regular newscasts on KEPC and in the radio labs.

### **TCM 271 Internship – Television Station/Video Production Company**

4 Credit Hours • 150 Contact Hours (15 Lecture, 135 Work Experience)

*Prerequisite: TCM 201, TCM 206, and faculty consent*

This course provides experience in a commercial television station or an allied industry.

### **TCM 272 Internship – Radio Station/Audio Production Company**

4 Credit Hours • 150 Contact Hours (15 Lecture, 135 Work Experience)

*Prerequisite: TCM 101, TCM 106, and faculty consent*

This course provides experience in a commercial radio station or an allied industry.

### **TCM 273 Internship – KEPC Radio**

4 Credit Hours • 150 Contact Hours (15 Lecture, 135 Work Experience)

*Prerequisite: TCM 101, TCM 106, TCM 131, and faculty consent*

This course provides experience at the college FM radio station, KEPC. All work experience is in the KEPC labs and studios.

### **TCM 274 Internship – College/Interactive TV Studio**

3 Credit Hours • 105 Contact Hours (15 Lecture, 90 Work Experience)

*Prerequisite: TCM 201, TCM 206, and faculty consent*

This course provides lab experience in the college television studio or interactive television studio.

### **TCM 275 Internship – KEPC II**

3 Credit Hours • 105 Contact Hours (15 Lecture, 90 Work Experience)

*Prerequisite: TCM 101, TCM 106, TCM 131, and faculty consent*

This course provides advanced lab experience at the college FM radio station, KEPC.

### **TCM 276 Internship – Radio Station/Audio Production Company II**

3 Credit Hours • 105 Contact Hours (15 Lecture, 90 Lab)

*Prerequisite: TCM 272 and faculty consent*

This course provides advanced experience in a commercial radio station or allied industry.

### **TCM 277 Internship – Television Station/Video Production Company II**

3 Credit Hours • 105 Contact Hours (15 Lecture, 90 Lab)

*Prerequisite: TCM 271 and faculty consent*

This course provides advanced experience in a commercial television station or allied industry.

### **TCM 278 Internship in Telecommunications**

4 Credit Hours • 150 Contact Hours (15 Lecture, 135 Work Experience)

Students will produce one project during the semester which can be a research paper, an actual program produced on videotape, audiotape, or CD-ROM, or any other computer-based project related to this particular area of emphasis.

## **Reading**

### **REA 060 Foundations of Reading**

4 Credit Hours • 60 Contact Hours (Lecture)

Students will be taught strategies for vocabulary development, improved reading comprehension, and enrichment.

### **REA 090 College Preparatory Reading**

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite: REA 060*

Students will be taught reading strategies for improving comprehension, vocabulary, and rate for reading college textbooks.

### **REA 115 College Reading**

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite: REA 090*

Continuation of REA 090, building upon basic silent reading skills. Analytical reading and reasoning, and intensive vocabulary training at a more advanced level. Includes computer-assisted instruction and speed training.

## **Real Estate**

### **RES 140 Comprehensive Real Estate Training**

12 Credit Hours • 180 Contact Hours (Lecture)

This course incorporates all the materials covered in RES 141, 142, 143, and 144. This course is designed to prepare the students to take the Colorado State Real Estate licensing exam on successful completion. This course encompasses multi-state and federal laws, Colorado real estate contracts and regulations, current legal issues, practical applications, record keeping, trust accounts, and closings.

### **RES 141 Real Estate Practice and Law**

3 Credit Hours • 50 Contact Hours (Lecture)

This course is designed to introduce students to the practice of real estate through the study of multi-state and federal laws. This course incorporates the use of key terms and concepts as practiced in a majority of the states.

### **RES 142 Colorado Real Estate Contracts and Regulations**

3 Credit Hours • 50 Contact Hours (Lecture)

*Prerequisite: RES 141 or faculty consent*

This course is designed to help students prepare and understand Colorado Real Estate Commission Approved contracts and the Colorado real estate regulations regarding these contracts.

### **RES 143 Current Legal Issues and Practical Applications**

3 Credit Hours • 50 Contact Hours (Lecture)

*Prerequisite: RES 142 or faculty consent*

This course is designed to instruct students in the proper record keeping procedures required by the Real Estate Commission in order to maintain and account for funds belonging to others and to exhibit skills necessary to properly close a real estate transaction, including responsibilities from the contract through after the closing.

### **RES 144 Record Keeping, Trust Accounts and Closings**

3 Credit Hours • 50 Contact Hours (Lecture)

*Prerequisite: RES 143 or faculty consent*

This course is designed to instruct students in the proper record keeping procedures required by the Real Estate Commission in order to maintain and account for funds belonging to others and to exhibit skills necessary to properly close a real estate transaction, including responsibilities from the contract through after the closing.

### **RES 250 Colorado Broker Transition**

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite: Student must possess a valid Colorado sales license.*

This course is designed to prepare students for the transition from a Colorado salesperson's license to a broker associate license. The relationship among listing contracts, sales contracts, and closing will be discussed.

## Russian

### \*RUS 111 Russian I

5 Credit Hours • 75 Contact Hours (Lecture)  
*Prerequisite:* REA 090, ENG 100

Begins a sequence dealing in the development of functional proficiency in listening, speaking, reading, and writing the language.

### \*RUS 112 Russian II

5 Credit Hours • 75 Contact Hours (Lecture)  
*Prerequisite:* REA 090, ENG 100, RUS 111 (grade C or better) or faculty consent

Continues RUS 111 in the development of functional proficiency in listening, speaking, reading, and writing the language.

### \*RUS 266 Culture Studies

1-3 Credit Hours • 22.5-67.5 Contact Hours (Lecture, Lab)  
*Prerequisite:* REA 090, ENG 100

Interdisciplinary studies of a specific culture within a country of that culture with references to historical context and cultural concerns and values. Emphasis may be on either the arts or language/linguistics. May be repeated under a different subtitle for a maximum of 9 credits.

**\*Note: All native speakers must have permission of full-time foreign language faculty to enter.**

## Risk and Safety (See Environmental Health and Safety)

## Social Services Technician

### SSE 100 Introduction to Human Services

3 Credit Hours • 45 Contact Hours (Lecture)

This course covers human services and the challenges and problems of working with people. Human service systems, the role of the human service worker, and attitudinal and ethical issues are covered.

### SSE 101 The Foundation for Meeting the Developmental Needs of Children at Risk

.5 Credit Hours • 12 Contact Hours (Lecture)

This course provides caregivers with foundations for communicating, understanding, and encouraging positive self-esteem in children at risk. Adopted from the PRIDE (Parent Resources for Information, Development and Education) module series.

### SSE 102 Using Discipline to Protect, Nurture, and Meet Developmental Needs

.5 Credit Hours • 9 Contact Hours (Lecture)

This course provides caregivers with foundations for promoting positive behavior and self-responsibility, and responding to unacceptable behaviors and challenges from children at risk. Adopted from the PRIDE (Parent Resources for Information, Development and Education) module series.

### SSE 115 Social Welfare and Community Agencies

3 Credit Hours • 45 Contact Hours (Lecture)

History of the social welfare system and how it was formed, developed, and presently functions. Representatives from various community agencies visit the class to discuss the purposes and functions of their agencies.

### SSE 122 Intervention Techniques

3 Credit Hours • 45 Contact Hours (Lecture)

This course covers basic communication skills essential in working with people with problems. Attending and listening techniques and empathic response skills at a minimal level of application are covered.

### SSE 133 Application of Group Counseling

3 Credit Hours • 45 Contact Hours (Lecture)

This course covers basic problem solving through group counseling techniques. The orderly, systematic, and planned way of working with people in groups as well as basic philosophy, purpose, and principles of group work are covered.

### SSE 141 Introduction to Alcohol and Drugs

3 Credit Hours • 45 Contact Hours (Lecture)

This course is designed for the social services technician and covers composition of alcohol and related drugs, their interactions with the body, and their long- and short-term effects on the individual. Treatment and rehabilitation methods are also covered.

### SSE 192 Community Field Experience I

6 Credit Hours • 240 Contact Hours (15 Lecture, 225 Work Experience)

*Prerequisite:* SSE 122

Assignments to a variety of social service agencies in the community to obtain practical experience. Supervision by college personnel with cooperation of the community agency.

### SSE 193 Community Field Experience II

6 Credit Hours • 240 Contact Hours (15 Lecture, 225 Work Experience)

*Prerequisite:* SSE 192

Continuation of SSE 192.

### SSE 211 Human Behavior in the Social Environment

3 Credit Hours • 45 Contact Hours (Lecture)

Family functioning and the influence of the social environment will be examined through the perspectives of social systems theory, general systems theory, and ecological theory. Practical applications for intervention with systems will be developed in class.

### SSE 212 Client Development

3 Credit Hours • 45 Contact Hours (Lecture)

This course covers different stages of development of people. Stresses and strains occurring in individual stages as they relate to the therapeutic intervention of the paraprofessional are also covered.

### SSE 213 Differential Approaches in Social Services

3 Credit Hours • 45 Contact Hours (Lecture)

This course covers some currently popular forms of treatment, including reality therapy, behavior modification, and transactional analysis.

### SSE 271 Community Field Experience III

6 Credit Hours • 240 Contact Hours (15 Lecture, 225 Work Experience)

*Prerequisite:* SSE 193

Continuation of SSE 193.

# Sociology

## SOC 101 Introduction to Sociology I

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 100

Examines the basic concepts, theories, and principles of sociology as well as human cultures, social groups, and the social issues of age, gender, class, and race.

## SOC 102 Introduction to Sociology II

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 100, SOC 101 or faculty consent

Examines social institutions and organizations from the macroperspective. Emphasizes issues of social change, demography, social movements, and conflicts and trends within education, religion, family, political, and economic structures.

## SOC 205 Marriage and Family

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 100, 3 hours of general sociology or faculty consent

This course helps develop 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.

## SOC 206 Single Life: Divorce and Widowhood

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 100

This course covers varieties of single lifestyles, including divorce, custody, widowhood, and bereavement processes.

## SOC 215 Contemporary Social Problems

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 100

This course 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.

## SOC 218 Sociology of Minorities

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 100, 3 hours of general sociology or faculty consent

This course explores the variety of intergroup relations: race, nationality, ethnicity, income, and other minority classifications. Patterns of prejudice, discrimination, and possible solutions to these issues will be examined.

## SOC 231 Deviant Behavior

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 100, SOC 101 or faculty consent

This course covers nature, identification, and explanation of deviant categories, including attempts to control, change and institutionalize society's unacceptables.

## SOC 232 Juvenile Delinquency

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 100, SOC 101 or faculty consent

This course covers juvenile behavior and causes, treatment, and prevention of delinquency, including legal processing of juveniles.

## SOC 236 Aging and the Aged

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 100

This course examines the present and future roles of the aged in the family, the community, and the work place. Economic, political, health, and retirement systems will be studied.

## SOC 237 Sociology of Death and Dying

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 100

This course examines the event of death and the process of dying. It will explore the cause of death, and the experience of dying in nursing homes, emergency rooms, and hospices. A review of the ethical and political issues of death and dying will be studied.

## SOC 250 Chicanos in a Changing Society

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 100

This course explores the lives and roles of Chicanos and Chicanas (Americans of Mexican descent). It introduces students to the Chicano community, its historical/social development, how it interrelates with Anglo and multicultural societies, and its future prospects.

# Space Science

## SPS 101 Spaceflight

3 Credit Hours • 45 Contact Hours (Lecture)

Nonmathematical introduction to the principles of launching and operating manned spacecraft, unmanned satellites, and permanent space stations. Students with proper MAT prerequisite are encouraged to take SPS 205 concurrently.

## SPS 201 Principles of Astronautics

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* MAT 121

A mathematical study of spaceflight at the algebra-trigonometry level, examining the physical laws of motion, gravitation, momentum, and energy as applied to rocket propulsion and orbital mechanics. Rocket design, thrust computations, earth orbits, orbital maneuvering, rendezvous, interplanetary trajectories, orbital decay, and reentry are covered. Students are encouraged to take SPS 205 concurrently.

## SPS 205 Space Science Laboratory

1 Credit Hour • 30 Contact Hours (Lab)

*Prerequisite or Corequisite:* SPS 101 or SPS 201

This course provides laboratory experience to accompany SPS 101 and SPS 201.

# Spanish

## \*SPA 101 Conversational Spanish I

3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite:* REA 090, ENG 100

This is the first course in a sequence for beginning students who wish to understand and speak Spanish. The material will include basic vocabulary, grammar, and expressions that are used in daily situations and in travel.

## \*SPA 102 Conversational Spanish II

3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite:* REA 090, ENG 100, SPA 101 (grade C or better) or faculty consent

This is the second course in a sequence for beginning students who wish to understand and speak Spanish. The material will continue to cover basic conversational patterns, expressions, and grammar.

## \*SPA 109 Spanish for Travel

2 Credit Hours • 30 Contact Hours (Lecture)  
*Prerequisite:* REA 090, ENG 100  
*Grading:* S/U only

Introduces basic vocabulary and expressions useful to travelers in Spanish-speaking countries, as well as customs, traditions, and cultural attitudes to be discovered by a visitor to a Spanish-speaking country. Does not fulfill humanities area requirements. Not intended for transfer.

## \*SPA 111 Spanish I

5 Credit Hours • 75 Contact Hours (Lecture)  
*Prerequisite:* REA 090, ENG 100

Begins a sequence in the development of functional proficiency in listening, speaking, reading, and writing the language.

## \*SPA 112 Spanish II

5 Credit Hours • 75 Contact Hours (Lecture)  
*Prerequisite:* REA 090, ENG 100, SPA 111 (grade C or better) or faculty consent

Continues SPA 111 in the development of functional proficiency in listening, speaking, reading, and writing the language.

## \*SPA 201 Conversational Spanish III

3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite:* REA 090, ENG 100, SPA 102 (grade C or better) or faculty consent

This is the third course in a sequence for students who wish to continue their study of understanding and speaking Spanish. The material will include intermediate level vocabulary, grammar, and expressions.

## \*SPA 202 Conversational Spanish IV

3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite:* REA 090, ENG 100, SPA 201 (grade C or better) or faculty consent

This is the fourth course in a sequence for students who wish to continue their study of understanding and speaking Spanish. The material will continue to cover intermediate level conversational patterns, expressions, and grammar.

## \*SPA 211 Spanish III

3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite:* REA 090, ENG 100, SPA 112 (grade C or better) or faculty consent

Continues SPA 111 and SPA 112 in the development of increased functional proficiency in listening, speaking, reading, and writing the language.

## \*SPA 212 Spanish IV

3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite:* REA 090, ENG 100, SPA 211 (grade C or better) or faculty consent

Continues SPA 111, SPA 112, and SPA 211 in the development of increased functional proficiency in listening, speaking, reading, and writing the language.

## \*SPA 266 Culture Studies

1-3 Credit Hours • 22.5-67.5 Contact Hours (Lecture, Lab)  
*Prerequisite:* REA 090, ENG 100

Interdisciplinary studies of a specific culture through travel to a country of that culture with references to historical context and cultural concerns and values. Emphasis may be on either the arts or language/linguistics. May be repeated under a different subtitle for a maximum of 9 credits.

**\*Note: All native speakers must have permission of full-time foreign language faculty to enter.**

# Speech

## SPE 115 Principles of Speech Communication

3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite:* REA 090, ENG 060

This course combines theory of speech communication with public speech performance skills. Emphasizes speech delivery, preparation, organization, support, and audience analysis.

## SPE 125 Interpersonal Communication

3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite:* REA 090, ENG 060

This course is an examination of communication involved in interpersonal relationships occurring in family, social, and career situations. Relevant concepts include self-concept, perception, listening, nonverbal communication, and conflict negotiation.

## SPE 214 Natural Resource Interpretation and Communication

3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite:* REA 090 or faculty consent, ENG 060 or faculty consent

This course provides human communication and interpretation training for those required to interpret natural resource data and/or present information about historical characters and times for the public. Focuses on experiential skill development in areas of interpersonal relations, group problem solving, team building, leadership, conflict management, negotiation, presentation techniques, and environmental/historical education.

## SPE 216 Advanced Public Speaking

3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite:* REA 090, ENG 060, SPE 115 or faculty consent

This course is a continuation of SPE 115 with special emphasis on informative and persuasive public speaking skills and techniques using longer, in-depth speeches. Work in other speech formats may include extemporaneous, impromptu, manuscript, special occasion speeches, and group decision-making.

## SPE 217 Group Communication

3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite:* REA 090, ENG 060

This course examines theory and communication involved in effective group problem solving and decision-making. Emphasis on the function of group leadership, structure, goals, roles, norms, and agendas.

### **SPE 225 Organizational Communication**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 060, SPE 115 or faculty consent

This course is a study of human communication systems and patterns in business and organizational settings. Topics include exploration of leadership strategies; effective managerial communication skills with peers, superiors, and subordinates; and organizational communication environments, networks, and goals.

## **Study Skills**

### **STS 030 Math Success Strategies**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* MAT 036 or concurrent, REA 090, ENG 060

Techniques to improve success in mathematics. Anxiety reduction, study techniques, memory, and test-taking skills are learned and applied to a brief math unit.

### **STS 050 Semester Survival**

2 Credit Hours • 30 Contact Hours (Lecture)

Students enrolling in this course will be exposed to basic study skills in order to bolster their chances of completing the current semester successfully.

### **STS 060 Learning Success Strategies**

4 Credit Hour • 60 Contact Hours (Lecture)

This is an introductory study skills course designed to promote and develop increased independent and adaptive learning strategies, and self-confidence within the college environment. The course offers opportunities to learn and practice a variety of in-class and out-of-class techniques to help meet the challenges of academic and interpersonal situations.

### **STS 100 Advanced Learning Strategies**

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite:* REA 115 or concurrent, ENG 100 or concurrent

This course will focus on critical thinking and problem solving skills. It will provide a practical approach to learning methods and success in the college environment.

## **Systems**

### **SYS 200 Logic Control Systems**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ELE 224, ELE 225, or faculty consent.

*Corequisite:* SYS 201

This course covers electronic systems that perform specific control functions.

### **SYS 201 Logic Control Systems Lab**

4 Credit Hours • 120 Contact Hours (Lab)

*Prerequisite:* ELE 224, ELE 225, or faculty consent.

*Corequisite:* SYS 200

Construction, measurement, and experimentation of the circuits studied in SYS 200.

### **SYS 202 Servomechanisms**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* SYS 200, SYS 201, or faculty consent.

*Corequisite:* SYS 203

This course covers the application of the synchrogenerator and motor systems. Servomotor, servoamplifier, and other positioning servomechanisms are also covered.

### **SYS 203 Servomechanisms Lab**

3 Credit Hours • 90 Contact Hours (Lab)

*Prerequisite:* SYS 200, SYS 201, or faculty consent.

*Corequisite:* SYS 202.

Construction, measurement, and experimentation of the circuits studied in SYS 202.

### **SYS 232 Industrial Motors and Controls**

4 Credit Hours • 67.5 Contact Hours (45 Lecture, 22.5

Lecture/Lab Combination)

*Prerequisite:* Sophomore standing in program or faculty consent.

Electric motors and controls used in industry.

## **Theatre**

### **THE 105 Introduction to the Theatre Arts**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 060

This course 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. □

### **THE 111 Acting I**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 060

This course covers basic acting techniques and approaches including scene study, improvisation, and script analysis. It includes practical application through classroom performance.

### **THE 112 Acting II**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 060, THE 111 or faculty consent

This course continues to explore basic acting techniques and approaches, including scene study, improvisation, and script analysis. Practical application through classroom performance.

### **THE 116 Technical Theatre**

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces the technical aspects of theatre production. Topics include set design and construction, costuming, makeup, and stage lighting.

### **THE 121 Set Design: Film and Theatre**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

*Prerequisite:* REA 090, ENG 060

Emphasizes two- and three-dimensional drawing and designs and color theory. Students construct 3-D models and a theatrical stage set.

### **THE 131 Theatre Production**

2 Credit Hours • 60 Contact Hours (Lab)

*Prerequisite:* REA 090, ENG 060, THE 111 and/or THE 112 or faculty consent

This course allows students to put into practice theories of theatre production. Participation in set construction, scenic artistry, costuming, lighting, sound, acting, stage managing, and administration are available.

### **THE 132 Theatre Production**

2 Credit Hours • 60 Contact Hours (Lab)

*Prerequisite:* REA 090, ENG 060

This course allows students to put into practice theories of theatre production. Participation in set construction, scenic artistry, costuming, lighting, sound, acting, stage managing, and administration are available.

### **THE 135 Theatre Makeup**

1-2 Credit Hours • 22.5 Contact Hours (Lecture, Lab)

*Prerequisite:* REA 090, ENG 060

This course emphasizes the fundamentals of theatre makeup design and application techniques. Techniques include basic corrective, character, old age, and fantasy application.

### **THE 204 Voice and Articulation I**

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 060

Emphasis on vocal development including diction, enunciation, projection, dialects, and vocal interpretation of written materials. Students strive to eliminate regionalisms and tonal faults, e.g., nasality, stridency, sibilance, breathiness.

### **THE 205 Voice and Articulation II**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 060, THE 204

Continuation of THE 204.

### **THE 211 Development of Theatre I**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 115, ENG 100, *sophomore standing recommended.*

Surveys the history and evolution of the theatre from Ancient Greece to the Renaissance emphasizing all aspects of the art form from period values to analysis of dramatic literature and performance.

### **THE 212 Development of Theatre II**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 115, ENG 100, *sophomore standing recommended.*

Surveys the history and evolution of drama from the Renaissance to the present, emphasizing all aspects of the art form from period values to the analysis of dramatic literature and performance.

### **THE 215 Play Writing**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 121 or concurrent, or faculty consent

This course 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 216 Theatre Lighting**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 060, THE 116, THE 131 or THE 231, or faculty consent

This course focuses upon the theory and practice of stage lighting. Topics include basic electrical theory, color theories, rigging, and design of lighting for the performing arts.

### **THE 218 Readers Theatre**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 060

This course trains students to select, cut, produce, and direct small scale Readers Theatre productions. Oral interpretation skills are emphasized and developed.

### **THE 231 Theatre Production**

2 Credit Hours • 60 Contact Hours (Lab)

*Prerequisite:* REA 090, ENG 060

This course allows students to put into practice theories of theatre production. Participation in set construction, scenic artistry, costuming, lighting, sound, acting, state managing, and administration is available.

### **THE 232 Theatre Production**

2 Credit Hours • 60 Contact Hours (Lab)

*Prerequisite:* REA 090, ENG 060

This course 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 241 Intermediate Acting I**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 060

Emphasis on artistic concentration of voice and movement. Detailed character biography required.

### **THE 242 Intermediate Acting II**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 060

Continuation of THE 241. Emphasis on artistic concentration of voice and movement. Detailed character biography required.

### **THE 243 Rehearsal and Performance I**

1 Credit Hour • 30 Contact Hours (Lab)

*Prerequisite:* REA 090, ENG 060, and faculty consent

This course is designed to give the student actor practical experience in a real acting environment. Through the audition and rehearsal process, students will have their imaginations and creative potential stimulated. Special attention will be given to characterization, stage movement, speech techniques, dramatic form, and the rehearsal/production/performance. Experience not needed.

### **THE 244 Rehearsal and Performance II**

2 Credit Hours • 60 Contact Hours (Lab)

*Prerequisite:* REA 090, ENG 060, and faculty consent

This course is designed to give the student actor practical experience in a real acting environment. Through the audition and rehearsal process, students will have their imaginations and creative potential stimulated. Special attention will be given to characterization, stage movement, speech techniques, dramatic form, and the rehearsal/production/performance process. The successful rehearsal and presentation of the current Masquers production to the public will be the focal point of the activities. Previous acting experience is helpful but not required.

### **THE 245 Rehearsal and Performance III**

3 Credit Hours • 90 Contact Hours (Lab)

*Prerequisite:* REA 090, ENG 060, and faculty consent

This course is designed to give the student actor practical experience in a real acting environment. Through the audition and rehearsal process, students will have their imaginations and creative potential stimulated. Special attention will be given to characterization, stage movement, speech techniques, dramatic form, and the rehearsal/production/performance process. The successful rehearsal and presentation of the current Masquers production to the public will be the focal point of the activities. Previous acting experience is helpful but not required.

### **THE 261 Production Stage Manager I**

3 Credit Hours • 90 Contact Hours (Lab)

*Prerequisite:* REA 090, ENG 060, and faculty consent

This course covers an examination of the practical and creative side of production stage management from a participatory stance by serving as the production stage manager for the current PPCC production. Participation in this course is subject to an interviewing process with the show's director/producer and is limited to just one student per semester. Interviews will be conducted three months before through the first week of the semester.



### **THE 262 Production Stage Manager II**

3 Credit Hours • 90 Contact Hours (Lab)

*Prerequisite:* REA 090, ENG 060, and faculty consent

This course covers an examination of the practical and creative side of production stage management from a participatory stance by serving as the production stage manager for the current PCCC production. Participation in this course is subject to an interviewing process with the show's director/producer and is limited to just one student per semester. Interviews will be conducted three months before through the first week of the semester.

### **THE 266 Theatre Studies I**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 060, and faculty consent

Emphasis on specific theories of theatre production. May be repeated under a different subtitle for a maximum of 9 credits.

### **THE 267 Theatre Studies II**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 090, ENG 060, and faculty consent

Emphasis on specific theories of theatre production. May be repeated under a different subtitle for a maximum of 9 credits.

## **Travel**

### **TVL 208 Travel Automation Systems I**

4 Credit Hours • 60 Contact Hours (Lecture)

Industry orientations and overview. Computer training on live Apollo Reservation System incorporates U.S. geography and industry terminology. Tariff (airfares and rules) provides students with the ability to access and read tariff displays as well as understand a "fare basis." Reservations, availability and itinerary pricing, ticketing PRN, MCOs, refunds, and exchanges are covered.

### **TVL 210 Travel Automation Systems II**

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite:* TVL 208 or faculty consent

A continuation of TVL 208 on the Apollo System incorporating world geography and travel orientation. Non-air sales to include cars/hotels, tours/cruises, and rail/international as well as professional development in customer service, sales, and account management will be covered.

## **Upholstery**

NOTE: These courses are offered at Little Rock Air Force Base only.

### **UPH 100 Basic Upholstery Techniques**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

This course covers the upholstery industry: safety, familiarization with tools and materials, sewing, tacking, layout, and pattern work.

### **UPH 101 Auto Upholstery I**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

*Prerequisite:* UPH 100 or faculty consent.

This course covers auto seat upholstery, including removal and replacement, teardown, correct use of materials, cutting, and stretching.

### **UPH 102 Auto Upholstery II**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

*Prerequisite:* UPH 101 or faculty consent.

Continuation of UPH 101, emphasizing skill development. Carpet, trim, convertible tops, tonneau covers, and convertible boots are course components.

### **UPH 103 Auto Upholstery III**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

*Prerequisite:* UPH 102 or faculty consent.

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 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

*Prerequisite:* UPH 100 or faculty consent.

Mechanics and upholstering of reclining household furniture. Completion of upholstery of a reclining chair is required.

### **UPH 105 Furniture Upholstery II**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

*Prerequisite:* UPH 104 or faculty consent.

Layout, cutting, 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 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

*Prerequisite:* UPH 105 or faculty consent.

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 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

*Prerequisite:* UPH 106 or faculty consent.

Advanced upholstery techniques dealing with tufting. Layout, cutting, sewing, padding, and application of channels. Completion of upholstery of a channel-back chair is required.

### **UPH 108 Advanced Upholstery Techniques II**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

*Prerequisite:* UPH 107 or faculty consent.

Continuation of UPH 107; methods of button tufting. Completion of upholstery of a tufted chair is required.

### **UPH 109 Renovation of Antique Furniture**

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

*Prerequisite:* UPH 108 or faculty consent.

Repairing, recovering, and refinishing of an antique chair.

# Visual Communications

## VIC 101 Introduction to Electronic Publishing

4 Credit Hours • 90 Contact Hours (Vocational Lab)

An introduction to the MacIntosh computer hardware and software with application emphasis on beginning PageMaker and Quark XPress.

## VIC 102 Typography History and Design

2 Credit Hours • 45 Contact Hours (Vocational Lab)

An introduction to typography, its history, type families, letter form, and face design. An overview of layout and lettering design as well as the dynamics of proportion, spacing and sizing of type.

## VIC 103 Introduction to Visual Communication

2 Credit Hours • 45 Contact Hours (Vocational Lab)

This course will provide students with an initial overview of careers, processes, and tools within the visual communication field. Class time will be divided equally so that all students experience lecture and lab in print, multimedia, and design on rotation. Emphasis will be on commonalities of color, design, type, and process.

## VIC 107 Electronic Image

4 Credit Hours • 90 Contact Hours (Vocational Lab)

*Prerequisite:* VIC 101

Advanced level and continuation of MacIntosh computer skills and theory for application to layout and design, prepress, and illustration. Continuation of PageMaker, Quark, and introduction to Freehand.

## VIC 108 Design Tools and Techniques

4 Credit Hours • 90 Contact Hours (Vocational Lab)

Introductory level course in the use and application of design theory and devices for the creative process in the developmental layout phases. Students will also develop board technical skills with the use and application of art tools, instruments, equipment, and materials.

## VIC 109 Multimedia Presentations

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

*Prerequisite:* VIC 101

Students will learn Microsoft PowerPoint and Gold Disk Astound to combine video, clip art, animation, and text into multimedia presentations.

## VIC 110 Layout and Typography

4 Credit Hours • 90 Contact Hours (Vocational Lab)

*Prerequisite:* VIC 103 or faculty consent

This course covers principles of the creative process in layout phases of thumbnails, roughs, and comprehensives. The interaction of typography and its related visual dynamics and design elements will be covered.

## VIC 125 Traditional and Electronic Art Production

4 Credit Hours • 90 Contact Hours (Vocational Lab)

*Prerequisite:* VIC 101, VIC 108 or faculty consent

Students will develop layout and camera-ready production theory and the skills to produce one and two color mechanical art that includes type, clip art, and/or half tones for presentation or promotional materials. The theory and preparation for publishing will define methods, materials, and software to create results for the print/publishing stages.

## VIC 130 Design and Color

4 Credit Hours • 90 Contact Hours (Vocational Lab)

The design process and creative problem solving is the core of this class. Design and color theories, fundamentals, styles, and stages are applied to workups, finished art, and presentations. Emphasis will be on line, form, composition, and continuity.

## VIC 131 Drawing Skills I

4 Credit Hours • 90 Contact Hours (Vocational Lab)

This course covers fundamental skills and theories of drawing and rendering line structure, form, value, texture, and composition. Application of drawing skills with various media for line quality as well as value, and texture interpretations are also covered.

## VIC 132 Drawing Skills II

4 Credit Hours • 90 Contact Hours (Vocational Lab)

*Prerequisite:* VIC 131 or faculty consent

A continuation of VIC 131, Drawing Skills I, with advanced exploration of line, structure, contour, form, value, and composition. Course will include advanced projects in drawing skill applications and working stages. Analysis of action, stages of movement, gesture, and imagery will be used to develop drawings, layouts, storyboards, and related illustration preparations.

## VIC 141 Photoshop I

4 Credit Hours • 90 Contact Hours (Vocational Lab)

Photo enhancement and manipulation techniques using Photoshop or current industry standard. Scanning, gray scale and color retouching, layers, filtering effects, making, channels, and problems solving for digital photography.

## VIC 201 Design to Publish

2 Credit Hours • 45 Contact Hours (Vocational Lab)

*Prerequisite:* Sophomore standing in VIC program or faculty consent.

An overview of the creative development, design, production, and preparation for the printing and multimedia steps involved in promotional and presentation printed materials. It will include projects that incorporate all phases.

## VIC 202 School to Work

2 Credit Hours • 60 Contact Hours (15 Lecture, 45 Work Experience)

*Prerequisite:* Sophomore standing in VIC program

In coordination with a faculty advisor, students will obtain a practicum to apply coursework to work place reality. Weekly seminar sessions will assist students with concerns or questions arising from practicum experience.

## VIC 203 Design Protocol and Ethics

2 Credit Hours • 45 Contact Hours (Vocational Lab)

*Prerequisite:* Sophomore standing in VIC program or faculty consent

This course will cover the design business procedures and related studio environment, schedules and deadlines, professional attitudes and responsibilities. Emphasis on the creative atmosphere and nature of the design work and procedures with discussions on fees, cost effectiveness, plagiarism, and copyright issues.

## VIC 204 Digital Video Editing

4 Credit Hours • 90 Contact Hours (Vocational Lab)

*Prerequisite:* VIC 101 or faculty consent.

Digital video converges video and computer technology. Using Adobe Premier or current industry standard, students will capture, edit, and manipulate video images on a personal computer. Assembly techniques including media management, editing tools, titles, and motion control; transitions and filters; and special effects are included.

## VIC 205 Electronic Studio I

4 Credit Hours • 90 Contact Hours (Vocational Lab)

*Prerequisite:* Sophomore standing in VIC program with successful completion of VIC 107 or faculty consent

This advanced course is designed to give students an environment to continue with computer skills and applications from Electronic Image II. The students will expand and build on skills and techniques in familiar areas and explore additional directions with other software through a series of tutorials and projects. Students will develop comparative reasoning and decision-making skills for creative choices and/or practical results.

**VIC 206 Advanced Traditional and Electronic Production**

4 Credit Hours • 90 Contact Hours (Vocational Lab)

*Prerequisite: VIC 125 or faculty consent*

Studio atmosphere and environment for students' exploration and further traditional and electronic pre-press theories and skills are addressed. Students will expand and build on skills and techniques from VIC 125 to develop comparative reasoning and decision-making skills for creative choices and practical results. More emphasis on 4 color pre-press solutions is offered.

**VIC 207 Animation for Macintosh**

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

*Prerequisite: Sophomore standing in VIC program or faculty consent*

Students will learn techniques to create and incorporate animation into multimedia presentations.

**VIC 208 Design and Color II**

4 Credit Hours • 90 Contact Hours (Vocational Lab)

*Prerequisite: VIC 130*

Continuation of VIC 130 and the creative problem solving techniques for effective design and advertising continuity are covered in this course. Advanced exploration with design devices, theories, and applications will be discussed. Students will continue skills as well as design process development for ideas and concepts through all the layout stages to the finished presentation.

**VIC 209 Painting for Illustrators**

4 Credit Hours • 90 Contact Hours (Vocational Lab)

*Prerequisite: VIC 131, VIC 226 or faculty consent*

Students work on projects designed to develop a more refined visual vocabulary, concentrating only on wet media both monochromatic and full color. Projects are more self-directed with emphasis on research, content composition, and professional expectation of the illustration in the graphic area. Working from both life and photographic subjects, the student will develop skills to achieve control of the painterly illustration media.

**VIC 210 Advertising and Corporate Design**

4 Credit Hours • 90 Contact Hours (Vocational Lab)

*Prerequisite: VIC 110, VIC 130, VIC 208 or faculty consent*

Design principles are applied to the concepts of advertising and visual communication dynamics of the client and corporate needs. Conceptual and visual problem solving with design of typography and graphic elements through the creative layout steps and various presentation stages are emphasized.

**VIC 216 Multimedia Authoring I**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

*Prerequisite: VIC 101, VIC 109, VIC 141 or faculty consent*

Using Macromedia Director of Authorware or current industry standard, students will learn fundamentals of authoring for multimedia programs. Covers basic functions including buttons, menus, branching, variables and navigation structures, and creating simple sequences and interactions. Students will create an interactive computer-based presentation.

**VIC 217 Multimedia Authoring II**

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

*Prerequisite: VIC 101, VIC 109, VIC 141, sophomore standing in VIC program or faculty consent*

Using Macromedia Director of Authorware or current industry standard, students will learn advanced techniques for authoring multimedia presentations. Advanced functions including complex branching and navigational structures, scaled animations, reading and writing to external files, building subroutines, libraries, and models are emphasized.

**VIC 218 Point of Purchasing/Packaging Design**

4 Credit Hours • 90 Contact Hours (Vocational Lab)

*Prerequisite: VIC 110, VIC 130, VIC 208, or faculty consent*

Introduction to 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.

**VIC 225 Multimedia for the Internet**

4 Credit Hours • 90 Contact Hours (Vocational Lab)

*Prerequisite: Sophomore standing in VIC program*

The Internet is an extensive network of information resources and is quickly being identified as an invaluable tool for business. This course examines the opportunities and applications of Internet for multimedia applications. Design limitations, implementing multimedia programs, current interfaces, and on-line distribution are covered.

**VIC 226 Rendering and Illustration**

4 Credit Hours • 90 Contact Hours (Vocational Lab)

*Prerequisite: VIC 130, VIC 131 or faculty consent*

An introduction to the various stages of preparation for illustration that will include advanced drawing skills, rendering, and workups such as thumbnails, roughs and media/technique explorations.

**VIC 227 Multimedia: Expanded Applications**

4 Credit Hours • 90 Contact Hours (Vocational Lab)

*Prerequisite: Sophomore standing in VIC program or faculty consent*

Multimedia authoring using Macromedia Director or the current industry standard. Introduction to Lingo, the programming language for Macromedia Director. Components of scripting, digital video and audio, interactivity, and shortcuts to multimedia authoring for entertainment, business communications, education, and marketing presentations.

**VIC 245 Visual Communication Exit Portfolio and Career Development**

1 Credit Hour • 22.5 Contact Hours (Vocational Lab)

*Prerequisite: Sophomore standing in VIC program or faculty consent*

This course will cover portfolio development, job preparations, personal assessment, and promotional topics to prepare the designer for the transition to career options. It will also highlight the wide selection of career areas, creative strategies and concepts for interviews, and promotional preparations for career options.

**VIC 271 Multimedia Production/Work Experience**

2 Credit Hours • 90 Contact Hours (Work Experience)

*Prerequisite: Sophomore standing in VIC program or faculty consent*

Students will complete multimedia assignments from concept to product to reflect work experiences in multimedia design.

## Web – Technology

### **CWB 221 Technology Foundations**

3 Credit Hours • 135 Contact Hours (Work Experience)

This is a lecture/lab-based course that is designed to provide the student with thorough knowledge of e-commerce architecture, relational database management systems, and HTML and Network fundamentals.

### **CWB 222 Java Technologies for Electronic Commerce**

3 Credit Hours • 45 Contact Hours (Lecture)

This course offers lectures and lab designed to provide the student with thorough understanding and practical knowledge of JAVA and its use in an e-commerce environment.

### **CWB 223 Advanced E-Commerce Technologies**

3 Credit Hours • 45 Contact Hours (Lecture)

This course is designed to provide the student with an in-depth functional and technical overview of e-commerce architecture, practical skills and knowledge of networks and their technologies, and an overview of an Oracle database. This course specifies how network technologies and architecture integrate in the design of e-commerce applications, and how the database and its tools are utilized to support these applications.

### **CWB 297 Technology Internship**

1-2\* Credit Hours • 45-90 Contact Hours (Internship)

\*Variable

The internship portion of the GCS E-Commerce Academy program gives students the opportunity to apply the knowledge and skills they have learned at the GCS Academy in a real-world environment. Students will spend time in companies that develop or use e-commerce solutions. A portion of the student's credit hours will be spent at the company with the remainder hours spent working on projects assigned by the company and approved by the GCS Academy.

## Welding

### **WEL 101 Oxyacetylene Welding and Cutting**

4 Credit Hours • 90 Contact Hours (Vocational Lab)

Preparation and welding of various joints encountered in the welding field. Basic metallurgy, care and use of equipment, and safety in the welding industry are covered.

### **WEL 102 Introduction to Shielded Metal Arc Welding**

4 Credit Hours • 90 Contact Hours (Vocational Lab)

Welding in all positions using different types of electrodes. Covers basic metallurgy pertaining to the weldability of metals, structural joints, and safety in the welding industry.

### **WEL 103 Blueprint Reading for Welders and Fitters**

4 Credit Hours • 90 Contact Hours (30 Lecture, 60 Lab)

Blueprint reading, layout methods, and proper joint design necessary for various welding processes. Welding symbols and safety in the welding industry are covered.

### **WEL 104 Introduction to Gas Tungsten Arc Welding-TIG**

4 Credit Hours • 90 Contact Hours (Vocational Lab)

Preparation and welding of various joints encountered in the welding field. Electrode preparation, equipment maintenance, filler metal identification, basic metallurgy, and safety in the welding industry are covered.

### **WEL 105 Introduction to Gas Metal Arc Welding-MIG**

4 Credit Hours • 90 Contact Hours (Vocational Lab)

Short circuiting arc ferrous welding globular and spray transfer, ferrous and nonferrous welding, and flux core arc welding. Care and use of equipment, basic metallurgy, and safety in the welding industry are covered.

### **WEL 106 Shielded Metal Arc Pipe Welding**

4 Credit Hours • 90 Contact Hours (Vocational Lab)

*Prerequisite: WEL 102*

Cutting, leveling, tacking, and welding pipe in all positions. Basic metallurgy, testing of welding joints, and safety in the welding industry are covered.

### **WEL 107 Introduction to Ornamental Iron**

4 Credit Hours • 90 Contact Hours (Vocational Lab)

*Prerequisite: WEL 106*

Forming, shaping, and fabrication of patio posts, staircase railings, patio railings, gates, and safety in the welding trade.

### **WEL 108 Auto Body Welding and Cutting**

4 Credit Hours • 90 Contact Hours (30 Lecture, 60 Lab)

Preparation, cutting, and welding of various joints. Covers basic welding metallurgy, gas metal arc welding, oxyacetylene welding and cutting, and plasma arc cutting.

### **WEL 200 Advanced CAD/CAM Cutting Processes**

4 Credit Hours • 90 Contact Hours (30 Lecture, 60 Lab)

Oxy-fuel and plasma arc cutting utilizing CAD/CAM. Mastercam will be used to create 2D designs, generate toolpaths, and write NC programs that the Koike Monograph CNC cutting machine can use to produce a part.

### **WEL 202 Intermediate Shielded Metal Arc Welding**

4 Credit Hours • 90 Contact Hours (Vocational Lab)

*Prerequisite: WEL 106*

In this course, students will develop a high level of proficiency necessary to weld in all positions on a variety of different structural joints using E-6010 and E-7018 electrodes.

### **WEL 203 Advanced Layout and Fabrication**

4 Credit Hours • 90 Contact Hours (30 Lecture, 60 Lab)

*Prerequisite: WEL 103*

Proper joint design, layout techniques, and fabrication methods required of a welder. Care and use of equipment, safety in the welding industry, qualification, and certification procedure of a welder or welding operator by code are covered.

### **WEL 204 Advanced Gas Tungsten Arc Welding-TIG**

4 Credit Hours • 90 Contact Hours (Vocational Lab)

*Prerequisite: WEL 104*

In this course, students will develop a high level of proficiency necessary to weld carbon steel pipe, light gauge stainless steel, and aluminum in all positions. Follows the code requirements of the American Welding Society AWS B2.1 current edition.

### **WEL 205 Advanced Gas Metal Arc Welding-MIG**

4 Credit Hours • 90 Contact Hours (Vocational Lab)

Gas metal arc and flux core arc welding of carbon steel plate and pipe in all positions to reach a proficiency level of the code requirements of the American Welding Society AWS D1.1 current edition.

### **WEL 206 Advanced Structural and Pipe Welding**

4 Credit Hours • 90 Contact Hours (Vocational Lab)

*Prerequisite: WEL 107*

Welding of carbon steel plates in all positions according to the American Welding Society AWS D1.1 current edition standards. Emphasis on carbon steel pipe welding in all positions using the American Petroleum Institute API Standard 1104 current edition.

# Course Changes Since our last catalog

## Grading

### Grade Changes

**Old Course Grading**  
ART 155 Art Sampler

S/U **New Course Grading**  
Normal

### Course Number, Course Title Changes

#### OLD Course Number & Title

#### NEW Course Number & Title

CSC 116 Problem Solving w/Excel .....	CSC 116 Problem Solving w/ Visual Basic for Applications
CSC 160 Computer Science .....	CSC 160 Computer Science I:C++
CSC 161 Computer Science .....	CSC 161 Computer Science II:C++
CSC 225 Computer Organization .....	CSC 225 Computer Organization/Assembly Language Programming
ECP 205 Nutrition for Young Children .....	ECP 205 Health, Safety and Nutrition
EMS 131 Geriatrics .....	EMS 131 Geriatrics Emergencies
ENG 030 Basic Language Skills .....	ENG 030 Basic Writing Skills
ENG 060 Language Fundamentals .....	ENG 060 Writing Fundamentals
ENG 100 Composition Styles & Techniques .....	ENG 100 Basic Composition
IPP 114 Oral Communications Facilitation .....	IPP 114 Theory of Oral Transliteration
SAF 134 Workman's Comp and	
SAF 224 Legal Aspects of Safety & Environ. Health .....	EHS 105 Management of Occupational Injuries
SAF 131 Introduction to Industrial Safety Practice and	
SAF 136 Investigation of Accidents .....	EHS 131 Introduction to Industrial & Environ. Safety
SAF 142 General Industry Construction & Mine Safety Standards.....	EHS 142 General Industry Construction & Mine Safety Standards
.....	EHS 165 Principles of Emergency Response
SAF 226 Noise Abatement Techniques .....	EHS 205 Air Pollution Control
SAF 222 Principles of Fire Protection and	
SAF 257 Property & Risk Liability Management .....	EHS 206 Risk Management
.....	EHS 207 Waste Mangement
.....	EHS 208 Water Pollution Control
SAF 221 DOT & Fleet Safety Requirements .....	EHS 221 DOT & Fleet Safety Requirements
SAF 223 Principles of Industrial Hygiene .....	EHS 223 Principles of Industrial Hygiene
SAF 239 Principles of Semiconductor Safety I and	
SAF 240 Principles of Semiconductor Safety II .....	EHS 239 Principles of Semiconductor Safety
SAF 165 HAZWOPER .....	EHS 242 Introduction to Hazardous Materials Management
SAF 242 Introduction to Hazardous Materials; Substances; Waste & Environ. Stds	
TCM 270 Supervised Work Experience in News .....	TCM 270 Internship in News-KEPC Radio
TCM 271 Supervised Work Experience I .....	TCM 271 Internship-Television Station/Video Production Company
TCM 272 Supervised Work Experience II .....	TCM 272 Internship-Radio Station/Audio Production Company
TCM 273 Supervised Work Experience III .....	TCM 273 Internship-KEPC Radio
TCM 274 Supervised Work Experience IV .....	TCM 274 Internship-College/Interactive TV Studio
TCM 275 Supervised Work Experience V .....	TCM 275 Internship- KEPC II
TCM 276 Supervised Work Experience VI .....	TCM 276 Internship-Radio Station/Audio Production Company II
TCM 277 Supervised Work Experience VII .....	TCM 277 Internship-Television Station/Video II

### Contact Hours and/or Credit Hours Changes

#### Old Contact Hours/Credit Hours

EMS 136 Wellness for Emergency Services 1  
MOT 115 Phlebotomy/ Specimen Collection/ Specimen Procedures  
Contact Hours: 67.5 Lecture/Lab

#### New Contact Hours/Credit Hours

EMS 136 Wellness for Emergency Services 2  
Contact Hours: 15 Lecture/ 60 Lab Total 75

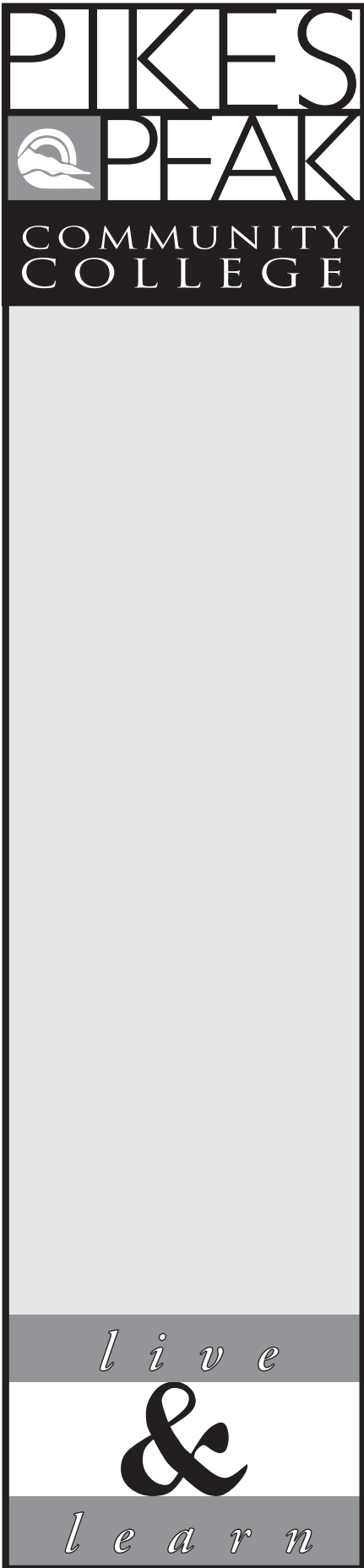
## Course Changes Since our last catalog

### Courses Deleted

ART 105	Art for Artisans
ART 139	Drawing on Wood
ART 148	Needlecraft III
ART 149	Needlecraft IV
ART 171	Woodworking I
ART 172	Woodworking I
ART 173	Woodworking III
ART 174	Woodworking IV
AUT 106	Colorado Emissions Initial
AUT 107	Colorado Emissions Renewal
CHK	Cherokee-All Courses
CHN	Chinese-All Courses
CSC 147	Programming for the Internet
CSC 166	C Programming in Unix
CSC 168	Java Programming
CSC 175	Programming Visual Basic
DEP 061	Independent Study I
EDU 205	Introduction to Guidance and Counseling
ENG 061	College Spelling Skills
FRE 101	French
FRE 102	French
FRE 107	French
FRE 109	French
GER 107	German
GER 109	German
ITA 107	Italian
JPN 107	Japanese
JGN 109	Japanese
LAT 111	Latin
LAT 112	Latin
MAT 165	Discreet Structures
MOT 257	Medical Coding Specialist
NAV 101	Navajo
NAV 102	Navajo
RUS 107	Russian
RUS 109	Russian
SPA 107	Spanish
NRT 131	Interpreting our Environment
NRT 235	Programming for Outdoor Education and Recreation
NRT 241	Natural Resources GIS Computer Application
NRT 242	Advanced Natural Resouce, GIS Planning Project Management & Output Products
PED 104	Ski Conditioning
PED 110	Bowling
PED 110	Country Western Line Dancing
PED 110	Physical Fitness
PED 170	Fit 'n' Healthy
PED 173	Personal and Community Health
PED 201	Introduction to Health, Physical Education, and Recreation
PED 202	Community Recreation and Leadership
PED 206	Sports and the Law
PED 213	Sports Officiating
PED 223	Soccer Officiating
PED 231	Western Survival
STS 010	Academic Enrichment Program

### Courses Added

	Credits	
EHS 105	Management of Occupation Injuries	2
EHS 205	Air Pollution Control	3
EHS 206	Risk Assessment and Risk Management	3
EHS 207	Waste Management	3
EHS 208	Water Pollution Control	3
ELI 019	Introduction to English as a Second Language	5
EMS 211	Paramedic I	10
EMS 212	Paramedic II	10
EMS 213	Paramedic III	10
ENG 115	Designing Online Documentation	3
ENG 116	Designing Print Documents	3
ENG 117	Grammar, Usage, and Style for the Professional Writer	3
ENG 205	Technical Writing	3
MAT 042	Decimals	1
MAT 043	Fractions and Mixed Numbers	1
MAT 044	Ratio, Proportion, Percent and Rate	1
MAT 045	Measurement	1
MOT 140	Professional Household Health Assistant	5
MOT 141	Pharmacology for the Professional Household Health Assistant	1
MOT 215	Advanced Plebotomy	4
NRT 121	Characterizing Forests using ArcView GIS	3
NRT 122	Conservation GIS using ArcView	3
NRT 123	Introduction to ArcView 3D Analyst	3
NRT 124	Introduction to ArcView Network Analyst	3
NRT 140	Introduction to ArcView Spatial Analyst	3
NRT 141	Introduction to ArcView Tracking Analyst	3
NRT 150	Introduction to ArcInfo using ArcMap, ArcCatalog	3
NRT 151	Introduction to Visual Basic for ESRI Software	3
NRT 152	Programming with Avenue	3
NRT 161	Spatial Analysis In Argriculture: A GIS Approach	3
NRT 162	Spatial Hydrology using ArcView GIS	3
NRT 163	What's New in ArcInfo 8	3
SSE 101	The Foundation for Meeting the Developmental Needs of Children at Risk	3
SSE 102	Using Discipline to Protect, Nurture and Meet Developmental Needs	.5



CCC Online

## CCC-Online Programs

Colorado Community College Online (CCC Online) gives PPCC students the opportunity to complete full degrees or just a few classes on line. All classes meet the same state-approved course objectives as on-campus sections, and they are recorded as regular PPCC classes on student transcripts. New students can apply for admission to the college on line or on campus; once admitted to PPCC, students can register for classes on line, on the telephone, or on campus. Tuition is \$115 per credit hour for both in-state and out-of-state residency. Listed below are the degrees and certificates that are currently available or will be available by Fall 2000. Please go to the web site ([www.cconline.org](http://www.cconline.org)) for course descriptions and more information.

### Associate of Arts Degree

To earn the associate of arts degree, students must complete the following course requirements for a total of 60 semester credits.

#### I. English/Speech

Nine (9) semester credits required.  
ENG 121, ENG 122, SPE 115

#### II. Mathematics

Three (3) semester credits required.  
Choose from MAT 121, MAT 125, MAT 135, MAT 201, MAT 202

#### III. Science

Four (4) semester credits required.  
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

#### IV. Social and Behavioral Sciences

Choose 9 semester credits from two different disciplines.  
Choose from 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, SOC 101, SOC 102

#### V. Humanities

Choose 9 semester credits from two different disciplines.  
Choose 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, THE 105, THE 211, THE 212, PHI 111, PHI 112, PHI 113  
Foreign Language courses are numbered 111, 112, 211, 212.

#### VI. Electives

Choose from all categories on the approved elective course list.

## Public Administration Emphasis

### Associate of Arts Degree

To earn the Associate of Arts Public Administration Emphasis degree, students must complete the following course requirements for a total of 62 semester credits.

#### I. English/Speech

Nine (9) semester credits required.  
ENG 121, ENG 122, SPE 115

#### II. Mathematics

Three (3) semester credits required.  
MAT 121

#### III. Science

Four (4) semester credits required.  
AST 101, AST 102, BIO 105, BIO 111, BIO 112, CHE 101, CHE 111, CHE 112, PHY 105, PHY 111, PHY 112, PHY 211, PHY 212, GEY 111, GEY 121

#### IV. Social and Behavioral Sciences

Nine (9) semester credits from two disciplines.  
POS 105, POS 111, SOC 101

#### V. Humanities

Nine (9) semester credits from two disciplines.  
PHI 112 Ethics  
Choose two (2) additional courses 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, THE 105, THE 211, THE 212, PHI 111, PHI 113, \*FOL 111, FOL 112, FOL 211, FOL 212.

#### Public Administration Courses

ACC 121	Principles of Accounting I	4
BUS 158	Human Resource Management	3
CIS 118	Introduction to Microcomputer Applications	3
MAN 226	Principles of Management	3
POS 121	Introduction to Public Administration	3
POS 125	State and Local Government	3
POS 211	Introduction to Public Finance	3
POS 215	Current Political Issues in Government	3
POS 221	Community Development and Planning	3
		<u>28</u>

**Total Credit Hours** **62**

## Accounting

### Associate of Applied Science Degree

#### General education requirements

ECO 201	Macroeconomics	3
ENG 121	English Composition I	3
	or	
SPE 115	Principles of Speech Communication	(3)
MAT 121	College Algebra	4
	Physical and Biological Sciences	3-5
	Art and Humanities	3
		<u>16-18</u>

#### Major course requirements

ACC 121	Principles of Accounting I	4
ACC 122	Principles of Accounting II	4
ACC 131	Income Tax I	3
ACC 211	Intermediate Financial Accounting I	4
ACC 215	Accounting Information Systems and Business	3
ACC 226	Cost Accounting I	3
BUS 115	Introduction to Business	3
BUS 216	Legal Environment of Business	3
BUS 217	Business Communications and Report Writing	3
CIS 155	Spreadsheets Applications	3
		<u>33</u>

#### Elective course requirements

	Choose 12 credit hours	
ACC 110	Business Mathematics	3
ACC 115	Payroll Accounting	2
ACC 212	Intermediate Financial Accounting II	4
ACC 216	Governmental and Not-for-profit Accounting	3
ACC 227	Cost Accounting II	3
ACC 132	Income Tax II	3
BUS 226	Business Statistics	3
MAR 226	Principles of Marketing	3
		<u>12</u>

**Total Credit Hours** **61-63**



## Business

### Associate of Applied Science Degree

#### General education requirements

ECO 201	Principles of Microeconomics	3
ECO 202	Principles of Macroeconomics	3
ENG 121	English Composition I	3
ENG 122	English Composition II	3
MAT 121	College Algebra	4
SPE 115	Principles of Speech Communication	3
		<u>19</u>

#### Major course requirements

ACC 121	Principles of Accounting I	4
ACC 122	Principles of Accounting II	4
BUS 115	Introduction to Business	3
BUS 158	Human Resource Management	3
BUS 216	Legal Environment of Business	3
BUS 217	Business Communication and Report Writing	3
BUS 226	Business Statistics	3
MAN 216	Small Business Management	3
MAN 226	Principles of Management	3
MAR 111	Principles of Sales	3
MAR 216	Principles of Marketing	3
		<u>35</u>

#### Information Technology Requirements

CIS 115	Introduction to Computer Information Systems	3
CIS 118	Introduction to PC Applications	3
CIS 155	Spreadsheets Applications	3
		<u>9</u>

**Total Credit Hours**

**63**

## Computer Networking\*

### Associate of Applied Science Degree

\*Proposed

#### General education requirements

ENG 121	English Composition I	3
	or	
ENG 122	English Composition II	(3)
	or	
ENG 131	Technical Writing I	(3)
SPE 115	Principles of Speech Communication	3
MAT 121	College Algebra	4
	or	
MAT 135	Introduction to Statistics	(3)
ECO 201	Principles of Macroeconomics	3
	Physical Sciences or Behavioral Sciences	<u>3-5</u>
		16-18

#### Major core requirements

CIS 115	Introduction to Computers	3
CNT 200	Introduction to Computer Networking	3
CNT 201	Local Area Networks	3
CNT 202	Wide Area Networks	3
CNT 203	Network Architectures and TCP/IP	3
CNT 204	Introduction to Internet Technologies	3
CNT 205	Internetworking	3
CNT 206	Process and Protocols	3
CNT 207	Network Analysis and Design	3
CNT 209	Computer Networking Lab/Practicum	3
		<u>30</u>

#### Elective course requirements

Choose 15 credit hours

ACC 121	Principles of Accounting I	4
BUS 115	Introduction to Business	3
BUS 217	Business Communication and Report Writing	3
CIS 118	Introduction to Microcomputer Applications	<u>3</u>

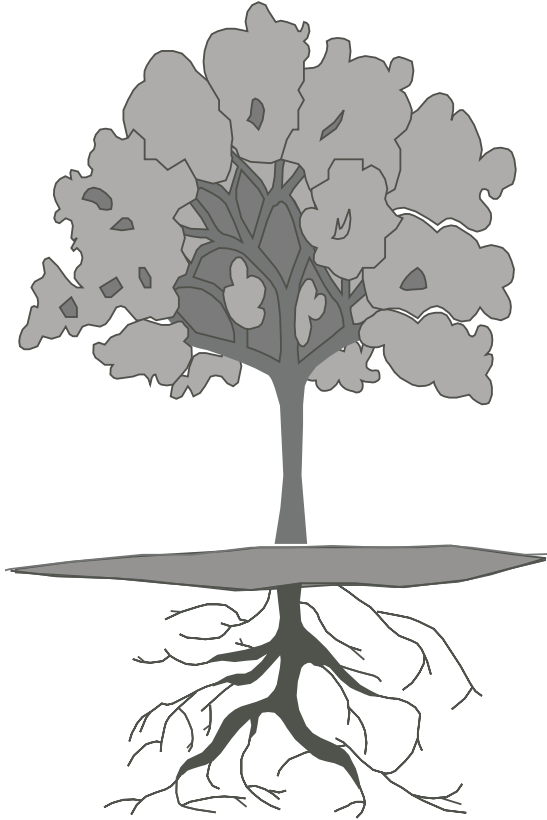
CIS, CNT, CWB, CSC prefixed college level courses

15

**Total Credit Hours**

**61-63**

# Get Your Bachelor's Degree through Pikes Peak Community College & Franklin University



By forming an alliance with Franklin University, Pikes Peak Community College is miles ahead, so your bachelor of science degree doesn't have to be miles away.

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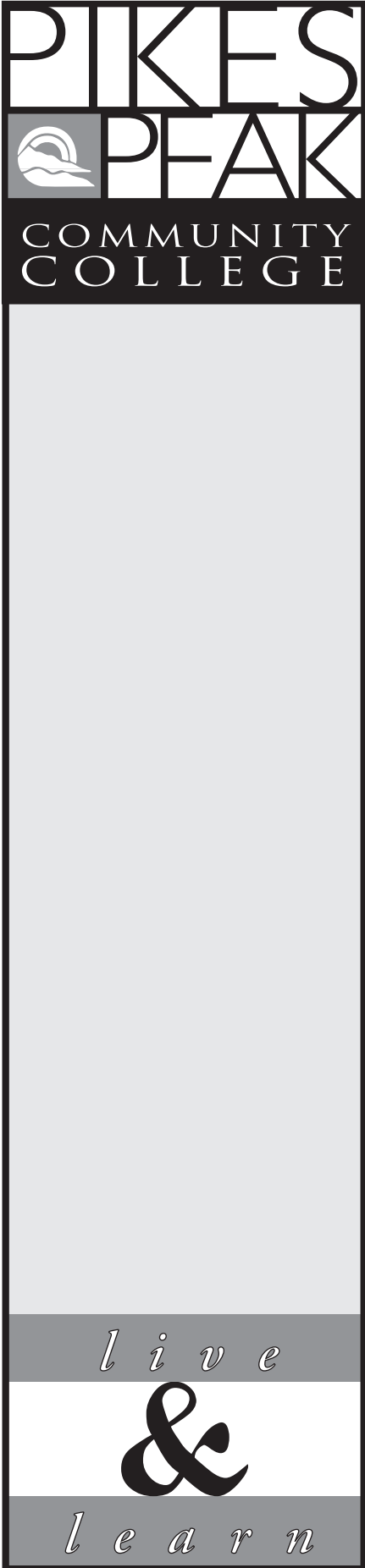
This alliance between Pikes Peak Community College and Franklin University allows you to continue receiving the services and benefits you enjoy as a Pikes Peak Community College student. The college's library, computer labs and advising staff will be available to support your efforts in earning a bachelor's degree. From Franklin University, you will find quality advising, tutoring and library services that can be accessed from your home. Serving the adult learner is what Franklin University does best. For more information contact Pikes Peak Community College at 719-540-7094, 719-538-5228 or [www.ppcc.cccoes.edu](http://www.ppcc.cccoes.edu) or contact Franklin University at 1-888-341-6237 ext. 6288 [www.alliance.franklin.edu](http://www.alliance.franklin.edu), or [alliance@franklin.edu](mailto:alliance@franklin.edu)

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**Pikes Peak  
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## Faculty and Staff

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# College Administrative Staff

## Officers of the College

Interim President ..... Jack Lundberg  
 Vice President for Educational Services ..... Edwin Ray, Ph.D.  
 Vice President for Administrative Services ..... Richard Allen

## President's Staff

Human Resource Services  
 Executive Director/AA/EEO/ADA ..... Jeff Olson  
 Executive Director of Marketing  
 and Communications ..... George Sanchez  
 Executive Director of Learning Enterprises ..... Debbie Sagen  
 Director of Foundation and Development ..... Vacant  
 Director of Institutional Grants ..... Vacant

## Educational Services

Associate Vice President for Educational  
 Services ..... Kathryn G. Lehner  
 Assistant to the VPES for Advising,  
 Articulation and Transfer ..... Beth Lebsock  
 Assistant to the VPES for Occupational  
 Education ..... Robert Jager, Ph.D.  
 Assistant to the VPES for Technology ..... Roman Hidrogo

### Educational Services Division Deans:

Business ..... Kathryn G. Lehner  
 Assistant Deans, Business ..... Karla Rodie  
 Carl Sonntag  
 Communications and Humanities ..... Jane Abbott, Ph.D.  
 Assistant Dean, Communications and  
 Humanities ..... Lois Kline, Ph.D.  
 Developmental Studies ..... Mary Jo Berger, Ed.D.  
 Assistant Dean, Developmental Studies ..... Richard Harms  
 Mathematics, Sciences, and Health  
 Sciences ..... Judy Baros  
 Assistant Dean, Mathematics, Sciences  
 and Health Sciences ..... Robert McMullen, Ph.D.  
 Social and Behavioral Sciences ..... Wayne Artis (Interim)  
 Student Services ..... Beth Lebsock  
 Technical, Industrial and Service  
 Occupations ..... Margarett Goodwin Dahl  
 Assistant Dean, Technical, Industrial,  
 and Service Occupations ..... Ed Golding

### Directors:

Centennial Campus and Woodland Park  
 Center ..... John di Stasio  
 Corporate, Workforce, & Economic  
 Development ..... Nancy Meiklejohn (Interim)  
 Distance Education ..... Julie Witherow  
 Downtown Studio Campus  
 Operations ..... Malcolm McCollum  
 Programs ..... Nancy McCollum  
 Enrollment Services ..... Rick Lee  
 Assistant Director of ES-Admissions ..... Troy Nelson  
 Assistant Director of ES-Financial Aid... Sherri McCullough  
 Assistant Director of ES-Records/Registrar ..... John Haines  
 Assistant Director of ES-Veterans Affairs ..... George Carnes

Instructional Support Services ..... Mary Jo Berger, Ed.D.  
 Integrated Circuit Fabrication ..... Phil Myers  
 International Education ..... Wally Astor, Ph.D.  
 Learning Resource Center ..... Mary Jo Berger, Ed.D.  
 Multimedia Production ..... Roman Hidrogo  
 Military Programs ..... Barton Guthrie  
 Rampart Range Campus ..... Wally Astor, Ph.D.  
 School Partnership Program ..... Robert Jager, Ph.D.  
 Assistant Director, School  
 Partnership Program ..... Dave Potts  
 Student Life ..... Colette Berge

### Program Administrators:

English Language Institute ..... Jean Echevarria  
 Pikes Peak Regional Law Enforcement  
 Academy ..... Ken Jones

### Coordinators:

Career Services ..... Jennifer Sengenberger  
 Child Development Center ..... Cindy Neale-Downing  
 Disabled Students Programs ..... Sandra Johannsen  
 Financial Aid Client Services ..... Stacy Holtorf  
 Student Activities/Student Development ..... Joseph Maurer  
 Recreation/Sports Programs and  
 Student Life at Rampart Range Campus ..... Vacant  
 Testing ..... Betty Armstrong

## Administrative Services

Associate Vice President for Administrative  
 Services ..... Dirk Howard  
 Assistant to the VPAS ..... Lia Howard

### Directors:

Auxiliary Services ..... Lia Howard  
 Business Manager ..... Dirk Howard  
 Institutional Research ..... Dale Baxter  
 Facilities and Procurement ..... Eva Reynolds  
 Assistant Director of Facilities and Operations,  
 Rampart Range Campus ..... Earl Lindsey  
 Assistant Director of Facilities and Operations,  
 Centennial Campus ..... John Smith  
 Information Technology Support Services ..... J. Michael Young  
 Public Safety ..... John Fisher  
 Assistant Director of Public Safety ..... Wes Walter

### Coordinators:

Student Information Systems ..... Jinny Cavin

### Managers:

Bookstore ..... Marlene Graham  
 Financial Services/Controller ..... Marianne Berdon  
 Publications and Printing ..... Mark Day  
 Purchasing ..... Eva Reynolds

## Faculty and Staff

- ABBOTT, Jane, Ph.D. (Colorado State University, 1995)  
Dean of Communications and Humanities
- ALINSUNURIN, Jinn  
General Labor I, Facilities and Operations
- ALIRE, Arlene Ann  
Administrative Assistant II, Enrollment Services
- ALLEN, Richard, M.P.P. (University of Michigan, 1972)  
Vice President for Administrative Services
- ALLISON, Mark, B.A. (Western State College, 1996)  
Police Intern, Public Safety
- ALVARAN, Reginald  
LTC Trainee II, Facilities and Operations
- ANDRADE, John, M.A. (University of Colorado, 1984)  
Certified in Domestic Violence & Prevention, Sr. Level III Drug and Alcohol  
Faculty of Psychology
- ANTHONY, David B., A.A.S. (Pikes Peak Community College, 1984)  
IT Professional I, IT Support Services
- ARCHULETA, Pamela, B.S. (Regis University, 1995).  
General Professional II, Enrollment Services
- ARFSTEN, Cheri, A.A. (Pikes Peak Community College, 1998)  
Administrative Assistant II, Downtown Studio
- ARMINTOR, Robert P., M.Ed. (East Texas State University, 1965)  
Media Specialist IV, Learning Resources Center
- ARMSTRONG, Betty, M.A. (University of Colorado, 1982)  
Vocational Credentials: Specialist - Special Programs, Licensed Professional  
Counselor  
Testing Center Coordinator, Women's Re-Entry Coordinator.
- ARMSTRONG, Mami, M.S. (Johns Hopkins University, 1977)  
School to Career Technology Coordinator
- ARTIS, W. Wayne, M.A. (University of Delaware, 1977)  
Interim Dean, Social and Behavior Sciences Division  
Faculty of History
- ASKVIG, Cynthia S., M.S.N. (Northern Illinois University, 1981)  
Vocational Credentials: Faculty, Registered Nurse  
Professor of Nursing
- ASTOR, Jane, M.S.W. (University of Denver, 1993)  
Faculty of Social Services
- ASTOR, Wally, Ph.D. (Georgetown University, 1977)  
Director of the Rampart Range Campus and  
Assistant Director for International Education
- BALSIGER, Connie S.  
Police Communication Technician, Public Safety
- BANEY, Eileen  
Administrative Assistant II, Enrollment Services
- BARNETT, Kimberly R., A.G.S. (Pikes Peak Community College, 1991)  
Program Assistant II, Presidents Office
- BARTA, Tim  
Custodian II, Facilities and Operations
- BARTA, Vicki  
Accounting Technician III, Financial Services
- BAROS, Judy, M.A. (Western State College of Colorado, 1967)  
Dean, Mathematics, Sciences and Health Sciences Division
- BATES, Cheryl, A.A.S. (Pikes Peak Community College, 1998)  
Administrative Assistant II, Human Resource Services
- BAXTER, Dale, M.S. (University of Missouri, 1971)  
Director of Institutional Research
- BEARDSLEY, Ruth, Ph.D. (University of Colorado, 1985)  
Professor of Philosophy
- BECICKA-JACOBSON, Dawn M., B.A. (University of Northern Iowa, 1983)  
Fitness Center Coordinator, Student Life
- BEEN, Laurin A.  
Administrative Assistant III, Financial Aid/Veterans Affairs
- BEGGS, Kathleen, M.Ed (Drury College, 1973)  
Faculty of Developmental Reading
- BELEW, Karla, Ph.D. (Texas Tech, 1983)  
Professor of Biology and Chemistry
- BELL, Stefanie, M.A. (Goddard Graduate Programs, 1976)  
Faculty of Psychology
- BENDER, Michelle, B.S. (University of Wisconsin, LaCrosse, 1990)  
Faculty of Early Childhood Education
- BENNINGTON, Shelly, B.A. (University of Colorado, 1995)  
Administrative Assistant III, Directors Office-Rampart Range Campus
- BERDON, Marianne, B.S. (Regis University, 1998)  
Controller II, Financial Services
- BERGE, Colette, M.S. (University of Colorado, 1978)  
Director of Student Life
- BERGER, Mary Jo, Ed.D. (College of William and Mary, 1994)  
Dean of the Division of Developmental Studies; Director of Learning Resource  
Center
- BERGESON, Hal, Ph.D. (Ohio University, 1985)  
Faculty of Speech and Photography
- BERRY, William C., M.A. (Webster College, 1979)  
Developmental Studies Laboratory Faculty
- BIEKER, Sheila, A.A. (Pikes Peak Community College, 1996)  
Office Manager I, Facilities and Operations
- BIRKHEAD, Kathryn, M.A. (University of Arkansas, Fayetteville, 1977)  
Faculty of Spanish
- BLACKSON, Michael, M.A. (Embry-Riddle Aeronautical University, 1996)  
Faculty of Computer Information Systems
- BOLLING, Linda  
Library Technician II, Learning Resources Center
- BOLTE, Carol  
Laboratory Coordinator I, Computer Access Center
- BOURGEOIS, Linda  
Corporate Info Specialist, Learning Resource Center
- BOWEN, Karen S., M.Ed. (University of Pittsburgh, 1970)  
Faculty of English and Study Skills
- BOWERS, William  
Custodian II, Facilities and Operations
- BOWLES, Charles F., M.B.A. (Pacific Lutheran University, 1977)  
Faculty of Business Management
- BRICKER, Robert R., M.A. (University of Northern Colorado, 1973)  
Vocational Credentials: Faculty  
Professor of Marketing Management
- BRYAN, Austin, M.A. (Colorado College, 1990)  
Faculty of Computer Aided Drafting
- BRYAN, Connie  
Sales Manager III, Bookstore
- BRYAN, Larry R., A.A.S. (Pikes Peak Community College, 1993)  
Accounting Technician I, Military Programs - Peterson Air Force Base
- BURKE, Barbara, MSN. AHL. R.M.A. (University of Phoenix, 1999)  
Faculty of Medical Assisting
- BURKHART-NERO, Gloria  
Library Technician II, Communication and Humanities Division; Social and  
Behavioral Sciences Division
- BURKHART, Ronda A., M.B.S. (University of Colorado, 1985)  
Faculty of Anthropology
- BURTON, Robert W., A.A.S. (Pikes Peak Community College, 1998)  
Co-coordinator of Fire Science Technology
- BUTLER, Sharon, M.S.Ed. (Butler University, 1976)  
Assistant Professor of Mathematics
- CAINE, Daren, B.S.B.A. (University of Southern Colorado, 1999)  
Accounting Technician I, Financial Services
- CARNE, Glenda L., M.A. (University of Colorado, 1997)  
Vocational Credentials: Faculty  
Program Assistant II, Downtown Studio
- CARNES, George, A.S. (Pikes Peak Community College, 1981)  
General Professional III, Veterans Affairs Office
- CARRICK, Steven A., A.G.S. (Pikes Peak Community College, 1998)  
Telecommunications/Electronics Specialist II, IT Support Services
- CASIAS, Helen  
Library Technician II, Learning Resources Center
- CAVIN, Jinny, M.A. (Western Kentucky University, 1982)  
SIS Coordinator, Enrollment Services
- CELESTINE, Halimah, A.A. (Richmond College, 1992)  
Administrative Assistant II, Office of the Vice President for Educational Services
- CHASE, Richard, B.S. (Regis College, 1987)  
Faculty of Broadcasting

CLEMENT, Lee, B.S. (Regis University, 1983)  
Faculty of Networking Technology, Business Division

CLENDENIN, Chris L., M.A. (Louisiana State University, 1976)  
Faculty of English

COLLINS, Stephen  
Faculty of Speech

CONWAY, Daniella, A.A.S. (Pikes Peak Community College, 2000)  
Administrative Assistant I, Military Programs

CORNELIUS, Belenda, M.A. (University of Colorado, Colorado Springs, 1992)  
Counseling and Human Services Certification  
Recruitment Officer, Enrollment Services

CUMMINGS, Anne M., M.A. (American Graduate School of International Management, 1987)  
Vocational Credentials: Faculty  
Faculty of Natural Resource Technology

DAVENPORT, Deric, M.S.Ed. (University of Arkansas, 1987)  
Faculty of Mathematics

DAVIS, Timothy, M.A. (Ohio University, 1971)  
Faculty of Spanish

DAY, Kimberly G.  
Customer Support Coordinator I, IT Support Services

DAY, Mark, B.A. (Rockmont College, 1974)  
General Professional III, Publications and Printing

DECH, Debra  
Administrative Assistant III, Corporate, Workforce, and Economic Development

DEHERRERA, Laurel, M.S. (Northern Illinois University, 1994)  
Faculty of Computer Science

DELGESSO, Frank, A.A.S. (Community College of the Air Force, 1989)  
Vocational Credentials: Faculty  
Faculty of Dental Assisting

DIERDORF, Alfred S., A.A.S. (Pikes Peak Community College, 1980)  
Coordinator of Little Rock AFB Programs

di STASIO, John, M.B.A. (St. Mary's University, 1972)  
Vocational Credentials: Administrator/Faculty, Local Director, Supervisor  
Director of Centennial Campus and Woodland Park Center

DiTULLIO, Regina (Gina)  
IT Professional I, IT Support Services

DODSON, Susan, A.A. (Pikes Peak Community College, 1996)  
Library Technician III, Learning Resources Center

DOLAWAY, Theresa L., (Vocational Credential in Business Education)  
Office Manager I, School Partnership Program

DONALDSON, Lisa, M.A. (University of New Mexico, 1995)  
Faculty of Sociology

DOUGAN, Paul, M.A., (University of Iowa, 1987)  
Faculty of English

DREW, Alysa, B.A. (University of Colorado at Boulder, 1992)  
Interpreter Coordinator, Instructional Support Services

DUCKHORN, Kathryn, A.G.S. (Pikes Peak Community College, 2000)  
Administrative Assistant I, Military Programs

ECHEVARRIA, Jean, M.A. (Colorado State University, 1989)  
Faculty of English Language Institute

EDMONDSON, Debra, A.A.S. (Blair College, 1999)  
Administrative Assistant, Student Life

ELTHORP, Michele A.  
Early Childhood Educator I, Child Development Center

EMENHEISER, Clarence S., A.S.E.T. (Electronics Institutes, Inc., 1969)  
Vocational Credentials: Faculty/Coordinator, 1st Class FCC Communications License  
Assistant Professor of Electronics Technology

EMERY, Eura C.  
Administrative Assistant III, Education and Developmental Studies

ENSMINGER, Michael, B.S. (Colorado Christian University, 1996)  
Vocational Credentials: Faculty, Colorado Type C Certificate  
Assistant Professor of Criminal Justice

ESKER, David, M.S. (Southern Illinois University, 1994)  
Faculty of Physics

ESQUIBEL, Trisha, B.S. (University of Colorado at Boulder, 1997)  
Office Manager I, Technical, Industrial and Service Occupations

EUREK, Diana  
Faculty of American Sign Language

EVANS, Sharron, A.S. (El Paso Community College, 1974)  
General Professional II, Purchasing

FARRINGTON, Deidre, M.A. (University of Northern Colorado, 1992)  
Faculty of English

FISHER, John C.  
Police Administrator I, Public Safety

FLAATTEN, Gail A., A.A.S. (Pikes Peak Community College, 1988)  
Administrative Assistant II, Student Life, Fitness Center

FLETCHER, Barbara  
Accounting Technician I, Military Programs - Fort Carson

FLORA, Russell L., M.A. (Rutgers University, 1972)  
Professor of Economics

FONTES, Benjamin L.  
Materials Handler II, Bookstore

FORSYTHE, Yvette, A.A. (Pikes Peak Community College, 1997)  
Program Assistant I, Office of the Vice President for Educational Services

FOYE, Laura, B.S. (Murray State University, 1988)  
Early Childhood Educator I, Child Development Center

FRANK, Patricia, B.S.W. (University of Wyoming, 1989)  
Child Welfare Training Institute Coordinator

FURAU, Vicki M.  
Administrative Assistant III, Prior Learning Services

GADPAILLE, Delnita M.  
Administrative Assistant III, Technical, Industrial and Services Occupations

GARRETT, Susan  
Administrative Assistant II, Public Safety

GARRETT-GRAUL, Ruth, B.A. (Georgia State University, 1976)  
Faculty of Interior Design

GENSCHORCK, Laura A., A.G.S. (Pikes Peak Community College, 1995)  
Administrative Assistant III, Financial Services

GEORGE, Paula, B.A. (University of Kansas, 1971)  
General Professional III, Deaf Prep Program

GERVELL, Patricia, B.S.-Accounting (Regis University, 1997)  
Accounting Technician III, Financial Services

GETZ, Christine M., M.S. (Indiana State University, 1969)  
Associate Professor, Developmental Studies English Lab

GIDDINGS, Larry A., M.A. (Humboldt State University, 1988)  
EDS English Faculty, Education and Developmental Studies

GOLDING, Ed, M.A. (Colorado State University, 1993)  
Vocational Credentials: Type A Teaching Certificate, Colorado Vocational Credential  
Faculty of Welding

GOMEZ, Andrew  
LTC Trainee II, Facilities and Operations

GONZALES, Julie A., A.G.S. (Pikes Peak Community College, 1991)  
Program Assistant II, Office of the Vice President for Educational Services

GOODWIN DAHL, Margarette, M.Ed. (Colorado State University, 1976)  
Colorado Vocational Credential - Local Director  
Dean of Technical, Industrial and Service Occupations Division

GRAHAM, Marlene  
Bookstore Director

GREENE, Mary  
Administrative Assistant I, Facilities and Operations

GREY, Joanna C., M.A. (Humboldt State University, 1992)  
Faculty of Sociology

GROW, Kurt M., M.Ed. (Colorado State University, 1978)  
Vocational Credentials: Faculty  
Professor of Radio, Television, and Telecommunications

GRUSING, Barbara, A.A. (Pikes Peak Community College, 1992)  
Administrative Assistant II, Financial Services

GUTHRIE, Barton, M.A. (Webster University, 1989)  
Vocational Credentials: Business  
Director for Military Programs

GUTIERREZ, Cynthia L., A.A.S. (Pueblo Community College, 1992)  
Administrative Assistant II, Financial Aid

HAINES, John, M.Ed. (Campbell University, 1982)  
Registrar, Records

HALLAM, Amy  
Accounting Technician I, Financial Services

HAMILTON, Will  
Police Intern, Public Safety

HANENBERGER, Deborah  
Library Technician I, Learning Resource Center

HANES, Raenelle S., Ph.D. (Colorado State University, 1983)  
Vocational Credentials: Administrator/Faculty, Local Director, Teacher-Coordinator, Colorado Type D Certificate  
Professor of Business Administration

HARMS, Richard L., M.S. (Kansas State University, 1968)  
Faculty of Mathematics

HARRIS, Gloria, B.A. (University of Colorado, 1996)  
General Professional II, Enrollment Services

HARTMAN, Tamara, A.A.S. (Pikes Peak Community College, 1984)  
General Professional III, Human Resource Services

HASTINGS, Rudy  
General Labor I, Facilities and Operations

HAYDEN, Mary, M.A. (University of Colorado, Boulder, 1992)  
Faculty of Geography

HEATH, Leonard L., M.S. (University of Oregon, 1969)  
Professor of Mathematics

HEFLIN, Nanette  
General Professional II, Public Information

HEGG, Carole  
Administrative Assistant II, Enrollment Services

HEINDL DIETZEN, Kim, B.S. (University of Wisconsin, 1982)  
Vocational Credentials: Faculty  
Faculty/Coordinator Computer Access Center

HEMESATH, Michael, A.G.S. (Pikes Peak Community College, 1999)  
IT Technician I, IT Support Services

HENDERSON, Robert, M.A. (University of California at Los Angeles, 1970)  
Professor of Biology

HENRICH, Cathy, M.A. (University of Connecticut, 1980)  
Faculty of English and Humanities

HERRAEZ, Juan-Carlos, M.S. (University of Southern Colorado, 1995)  
Assistant Professor of Chemistry

HETZLER, Carol, B.S. (Colorado State University, 1981)  
Program Assistant I, Vice President for Administrative Services

HICKS, Rebecca, Masters (Marymount University, 1995)  
Faculty of English Language Institute

HIDROGO, Roman T., A.A.S. (Pikes Peak Community College, 1980)  
Vocational Credentials: Faculty, Colorado Type P Certificate, Certified Assistant to the Vice President for Educational Services for Technology and Director of Multimedia Production

HILL, Edith A., A.A.S. (Cameron University, 1992)  
Administrative Assistant, Military Programs - Fort Sill, OK

HILTBRAND, Mary Piering, (Colorado State University, 1976)  
Faculty of English

HOGUE, Eileen, A.S. (Pikes Peak Community College, 1994)  
IT Professional I, Business Services

HOLLER, Richard  
Telecommunications/Electronics Specialist II, Technical, Industrial & Service Occupations

HOLTORF, Stacy A.  
General Professional III, Financial Aid

HORNER, Jeffrey, M.A. (New School University, 1974)  
Administrative Assistant II, Financial Aid

HOUGHTON, Carl  
LTC Custodial Intern, Facilities and Operations

HOWARD, Dirk, M.B.A. (University of Denver, 1981)  
Director of Business Services, Administrative Services

HOWARD, Lia P., M.B.A. (University of Colorado, Colorado Springs, 1994)  
Assistant to the VPAS, Vice President for Administrative Services

HUDSON, Robert, A.A.S. (Pikes Peak Community College, 1990)  
Director of Culinary Program, Technical, Industrial and Service Occupations

HUGHES, Anthony T.  
Administrative Assistant II, Bookstore

HUGHES, Ernest  
Computer Assisted Instruction Lab Coordinator, IT Support Services

HULSEY, Michelle, B.A. (Colorado University the Springs, 1997)  
Administrative Assistant II, Corporate, Workforce, and Economic Development

HURRELL, Dennis  
Materials Handler I, Bookstore

HURRELL, Rockie  
General Professional II, Purchasing

HUTHER, Twila  
Administrative Assistant II, Enrollment Services

INZER, Lonnie D., B.S. (Colorado State, 1981)  
Co-coordinator of Fire Science Technology

IRSIK- WAGNON, Christine, A.A.S. (Pikes Peak Community College, 1998)  
Administrative Assistant II, Administrative Services

IVERSON, Larry W., M.E. (Colorado State University, 1987)  
Vocational Credentials: Faculty, Colorado Type C Certificate  
Faculty of Criminal Justice

JAGER, Judith, M.B.A. (University of Colorado at Colorado Springs, 1986)  
Faculty of Accounting

JAGER, Robert J., Ph.D. (University of North Dakota, 1985)  
Vocational Credentials: Administrator/Faculty, Local Director  
Assistant to the Vice President of Educational Services for Occupational Education  
Director of the School Partnership Program

JARAMILLO, Jose (Dave)  
Sales Manager I, Bookstore

JENKINS, Ronald, A.A.S. (Pikes Peak Community College, 1982)  
General Professional II, Non-Traditional Programs.

JENT, Tom  
Production III, Publications and Printing

JIROUS, Jennifer, B.S. (University of Wisconsin-Stevens Point, 1991)  
Faculty of Computer Information Systems

JOHANSEN, Sandra, M.Ed (University of Virginia, 1971)  
Coordinator of Disabled Students Adaptive Center

JOHNSON, Janele, M.A. (Oklahoma State University, 1988)  
Faculty of English

JOHNSON, William, A.A.S. (Pikes Peak Community College, 1980)  
Vocational Credentials: State of Colorado Vocational Teaching Credential  
Faculty of Welding

JONES, Floyd  
Pipe/Mechanic Trades I, Facilities and Operations

JONES, Kenneth, A.S. (Pikes Peak Community College, 1986)  
Faculty of Criminal Justice

JORGENSEN, Maureen, B.S. (Florida State University, 1977)  
Supplemental Services Assistant, School Partnership Program

KAMILAR, Cindy, Ph.D. (University of Miami, 1993)  
Faculty of Psychology

KEATING, William R., M.A. (University of Northern Colorado, 1980)  
Faculty of Mathematics

KELLY, Thomas E., B.A. (Boston College, 1966)  
Vocational Credentials: Faculty  
Associate Professor of Architecture

KENNINGTON, Kathleen N. B.S. (University of Phoenix, 1999)  
Program Assistant II, Corporate Workforce and Economic Development

KILGORE, Doyle  
Police Intern, Public Safety

KING, Mark, M.A. (New Mexico State University, 1998)  
Faculty of English

KLATASKA, Rickey K.  
Police Officer I, Public Safety

KLINE, Lois E., Ph.D. (University of Denver, 1986)  
Professor of Communications  
Assistant Dean, Communications and Humanities Division

KLINGER, Mark D., M.P.A. (University of Colorado, 1982)  
Statistical Analyst I, Institutional Research

KLOCKO, Jean, M.S., (State University of New York at Buffalo, 1972)  
LTD Faculty of Nursing

KNIGHT, Wade C.  
Vocational Credentials: Faculty, Colorado Type C Certificate  
Faculty of Automotive Collision Repair

KRAUS, Marilyn A.A.S. (Central Community College, 1994)  
Custodial Intern, Facilities and Operations

KRAUSE, Steven  
Auto Service Technician I, Facilities and Operations

KROUGH, Cynthia D.  
Administrative Assistant I, Facilities and Operations

KRUGER, Charles E., A.G.S. (Pikes Peak Community College, 1993)  
Laboratory Coordinator I, Technical, Industrial and Service Occupations

KRZEMIEN, Gayle, M.Ed. (National College of Education, 1983)  
Faculty of Mathematics Laboratory

LA MONT, Robert, M.A. (University of Texas at Austin, 1976)  
Faculty of Mathematics

LAIRD, Robert P., Jr.  
Pipe/Mechanic Trades II, Facilities and Operations

LANGAN, Lynn  
Accounting Technician III, Financial Services

LARISH, Ruth-Ann, B.A. (University of Puget Sound – Washington, 1982)  
Faculty of Natural Resource Technology

LARROQUETTE, Linda S., A.G.S. (Pikes Peak Community College, 1995)  
Administrative Assistant II, Child Development Center

LARSON, Janice A., M.A. (University of Northern Colorado, 1970)  
Vocational Credentials: Teacher-Coordinator.  
Professor of Computer Information Systems

LASKOWSKI, Mark, M.A. (University of Colorado at Colorado Springs, 1997)  
Faculty of AVP and Computer Information Systems

LAXSON, Sandra K., Cert. - 2 yr. (Colorado Institute of Art, 1967)  
Vocational Credentials: Faculty, Colorado Type C Certificate  
Faculty of Visual Communications

LEBSOCK, Beth, M.Ed. (Colorado State University, 1988)  
Assistant to the Vice President for Educational Services for Advising,  
Articulation and Transfer and Dean of Student Services

LEE, Rick, B.S. (Metropolitan State College, 1983)  
Director of Enrollment Services

LEHNER, Kathryn, M.B.A. (University of New Mexico, 1981)  
Vocational Credentials: Business Education  
Dean of the Business Education Division

LICHTY, Patricia A., M.A. (University of Colorado, 1970)  
Professor of Reading

LINDSEY, Earl, A.S. (Pikes Peak Community College, 1984)  
LTC Operations II, Facilities and Operations

LIONEL, Jonathan, B.A. (University of California at San Diego, 1992)  
Supplemental Services Assistant, School Partnership Program

LOBDELL, Deborah A.A.S. (Pikes Peak Community College, 1986)  
Administrative Assistant II, Enrollment Services

LOEBER, Kay, M.L.S. (Emporia State University, 1993)  
Reference Librarian, Learning Resource Center

LONG, Stephanie, A.A.S. (Pueblo Community College, 1993)  
Accounting Technician III, Financial Services

LOPEZ, Arthur  
Grounds and Nursery I, Facilities and Operations

LOPEZ, Robin M., B.S.B.A. (University of Southern Colorado, 1993)  
General Professional II, Financial Aid

LUCKENBAUGH, Carolyn, B.S. (Regis University, 1991).  
Accountant II, Financial Services.

LUCKENBAUGH, James  
Structural Trades II, Facilities and Operations

LYLE, Nanette  
Administrative Assistant II, Facilities and Operations

LYONS, Geraldine  
Accounting Technician III, Financial Services

LYTTLE, Annette B., M.A. (University of Michigan, 1988)  
Faculty of English

MAESTAS, Anne M., B.A. (University of Colorado, 1972)  
Vocational Credentials: Faculty  
Faculty of Dental Assisting

MACOUBRIE, Katharine  
Early Childhood Educator I, Child Development Center

MAGILL, Carole M.A. (University of Colorado, 1984)  
Career Counselor, Career Services Center

MAGNUSON, Joseph, A.A.S. (Pikes Peak Community College, 1983)  
Vocational Credentials: Faculty, Colorado Type C Certificate  
Faculty of Automotive Technology

MAHAN, Billie  
Office Manager I, Enrollment Services

MALUIA, Vaalele  
Police Intern, Public Safety

MARTINEZ, Nancy  
Office Manager, Student Life

MAURER, Joseph F., M.A. (University of Denver, 1996)  
Coordinator of Student Activities, Student Life

MCADAMS, Rieko, M.A., (University of Colorado at Colorado Springs, 1997)  
Program Manager, Office of International Education

MCCARTY, Deborah  
Administrative Assistant III, Institutional Advancement and Development Office

MCCARTY, James I., A.A.S. (Southern Colorado State College, 1972)  
Vocational Credentials: Faculty  
Faculty of Automotive Technology

MCCLUNG, Lariisa, M.Ed. (University of Arkansas, 1991)  
Faculty of Interpreter Preparation Program

MCCOLLUM, Malcolm, M.A. (Claremont Graduate School, 1970)  
Co-Director, Downtown Studio - Operations  
Professor of English

MCCOLLUM, Nancy, M.A. (University of Denver)  
Co-Director, Downtown Studio - Programs

MCCRAY, Brenda F., B.S. (Troy University, 1991)  
Site Coordinator, Ft. Sill, Oklahoma, Military Programs

MCCULLOUGH, Michael, B.A. (Regis University, 2000)  
Sales Manager II, Bookstore

MCCULLOUGH, Sherri, B.A. (University of Wyoming, 1983)  
General Professional IV, Financial Aid

MCDONNELL, Alicia  
Administrative Assistant II, School Partnership Program

MCGOVERN, William  
IT Technician I, IT Support Services

MCHUGH, Evan, M.S. (University of Southern Colorado, 1994)  
Assistant Professor of Chemistry

MCLEAN, Colins G., J.D. (Washburn University School of Law, 1980)  
Vocational Credentials: Faculty, Colorado Type C Certificate  
Faculty of Criminal Justice

MCMULLEN, Robert W., Ph.D. (Utah State University, 1983)  
Professor of Biology

MCMURRAY, Lisa  
Administrative Assistant II, Communications and Humanities Division; Social  
and Behavioral Sciences Division

MCPHERSON, Fred W., A.S. (Pikes Peak Community College, 1981)  
Pipe/Mechanic Trades III, Facilities and Operations

MCUNE, Matthew, B.A., (San Jose State University, 1997)  
Multimedia Designer, Multimedia Center

MEIKLEJOHN, Nancy, B.S. (University of Southern Colorado, 1980)  
Interim Director of Pikes Peak Training and Consulting

MEYER, Sharon, M.B.A. (University of Colorado, 1989)  
Faculty of Business Management

MIELKE, Patricia  
Accounting Technician III, Financial Services

MILLER, Betty  
Administrative Assistant III, Division of Business Education

MILLER, Mark S., Ph.D. (University of Texas at Austin, 1994)  
Faculty of English

MILLER, Sandra, M.A. (University of Northern Colorado, 1971).  
Developmental Studies English Instructor

MILLIGAN, Steve, M.A. (University of Denver, 1976)  
Reference Librarian, Learning Resource Center

MISKELL, Ronald  
Police Officer I, Public Safety

MOLINA, Doris  
Administrative Assistant II, Testing Center

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Administrative Assistant II, Military Programs

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Administrative Assistant II, Enrollment Services

MOYER, Junior  
LTC Trainee II, Facilities and Operations

MULLEN, Judy  
Administrative Assistant III, Communication, Humanities, and Social Sciences



MULLEN, Paul  
Materials Handler I, Technical, Industrial, and Service Occupations

MULLIKEN, Taffy H., M.A.T. (Colorado College, 1995)  
Faculty of Art

MUNIZ, Alice  
Administrative Assistant II, Math Sciences, and Health Sciences Division

MYERS, Philip R., M.S. (Washington State University, 1975)  
Director of Integrated Circuit Fabrication

NEALE-DOWNING, Cynthia, B.S. (Colorado Christian University, 1998)  
Vocational Credential: Faculty, Licensed Child Care Center Director  
Coordinator of Child Development Center

NELSON, Troy, B.A. (Colorado College, 1989)  
Assistant Director of Enrollment Services for Admissions

NEWMAN, Forrest  
Pipe/Mechanic Trades I, Facilities and Operations

OFFERDAHL, Judene, M.A., (George Washington University, 1981)  
Project Manager, Corporate, Workforce and Economic Development

OLGUIN, Anthony  
Custodian I, Facilities and Operations

OLGUIN, Danny  
Custodian I, Facilities and Operations

OLSEN, Richard J., A.A.S. (Pikes Peak Community College, 1986)  
Pipe/Mechanic Trades I, Facilities and Operations

OLSON, Dennis J., B.S. (University of Wyoming, 1970)  
Vocational Credentials: Faculty  
Faculty of Computer Information Systems

OLSON, Jeff, M.A. (University of Oklahoma, 1993)  
Executive Director of Human Resources and Planning, AA/EEO/ADA

OLSON, Robert, B.F.A. (Kansas City Art Institute, 1975)  
Vocational Credentials: Faculty  
Faculty of Visual Communications

OMDAHL, Deborah, B.S., (University of Southern Colorado, 1996)  
Administrative Assistant III, Instructional Support Services

ORNDORFF, John A., Jr.  
Police Officer I, Public Safety

ORNDORFF, Laura  
Administrative Assistant III, Career Services Center

ORTH, Christian  
IT Professional I, IT Support Services

OSTROWSKI, Sheryl  
Field Registrar, Little Rock Air Force Base Programs

PARCHA, Michael, M.A. (Eastern Michigan University, 1990)  
Faculty of Developmental Mathematics

PARENT, Cyrille, M.A. (University of Paris VII, 1985)  
Assistant Director, IT Support Services

PATTERSON, Donnette, M.A. (Hyles-Anderson, 1997)  
Assistant Coordinator/Deaf Prep, Instructional Support Services

PAULEY, Stephanie, B.S. (University of Southern Colorado, 1997)  
Laboratory Coordinator I, Math, Sciences, and Health Sciences Division

PETERSON, Lois, M.A. (University of Colorado, 1988).  
Vocational Credential: Secondary Counselor Certificate  
Supplemental Services Coordinator, School Partnership Program

POTTS, David A., A.S. (Pikes Peak Community College, 1978)  
Vocational Credentials: Faculty, Colorado Type C Certificate  
Assistant Director, School Partnership Program

POWELL, Keith  
General Labor I, Facilities and Operations

PRESHUN, Jennifer R. BA. (University of Wisconsin – Eau Claire, 1992)  
General Professional II, Financial Aid

PRINGLE, Susan E., B.S. (Morningside College, 1980)  
Supplemental Services Assistant, School Partnership Program

QUESADA, Edmond D., M.A. (University of Colorado, Colorado Springs, 1986)  
Tutoring Coordinator, Instructional Support Services

RAY, Edwin, Ph.D. (University of Washington, 1974)  
Vice President for Educational Services

RAYBORN, Richard, M.S. (Columbia Pacific University, 1992)  
Military Academic Advisor, Military Programs

RAYMOND, Joseph P., A.A.S. (Colorado Technical College, 1976)  
Police Officer I, Public Safety

REDFERN, Mary, A.S. (Pikes Peak Community College, 1992)  
Accounting Technician III, Financial Services

REED, Brad  
Electrical Trades Assistant, Facilities and Operations

RESZEL, Mary  
Administrative Assistant II, Records Office

REYNOLDS, Eva, B.S. (Regis University, 1993)  
General Professional V, Purchasing

REYNOLDS, Richard, B.S. (City College of NY, 1974)  
Faculty of Computer Information Systems

RICHARDS, Ron, B.S. (Metropolitan State College of Denver, 1996)  
IT Technician II, IT Support Services

RILEY II, Leonard, M.P.A. (University of Colorado, 1991)  
Faculty of Political Science

ROBINSON, Constance  
Administrative Assistant III, Math, Sciences, and Health Sciences Division

RODIE, Karla J., B.S.B.A. (Colorado State University, 1977)  
Vocational Credentials: Faculty/Teacher-Coordinator, Colorado Type A Certificate  
Faculty of Office Information Technology  
Assistant to the Dean, Business Education Division

RODWICK, John R., Ph.D. (University of Northern Colorado, 1966)  
Vocational Credentials: Faculty  
Professor of Business Management

ROHAN, Janet, M.S. (University, Northern Colorado, 1985)  
Faculty of Journalism

ROLLINS, Diane  
Program Assistant I, Military Programs – Fort Carson

ROSS, Paul O.  
Pipe/Mechanical Trades I, Facilities and Operations

RUBEL, Kenneth W., B.A. (University of Colorado, 1992)  
IT Professional I, IT Support Services

RUSH, Chad E., A.A. (York College, 1990)  
Structural Trades I, Facilities and Operations

RUSSELL, Judith, B.A., (University of Northern Colorado, 1986)  
Early Childhood Educator I, Child Development Center

RUYBALID, Andrew  
Custodian I, Facilities and Operations

SAGEN, Deborah A., M.P.A. (University of Texas at Austin, 1984)  
Executive Director of Learning Enterprises

SALTER, William  
Custodial Intern, Facilities and Operations

SANCHEZ, George, B.A. (University of Southern Colorado, 2000)  
Executive Director of Marketing and Communications

SANDERS, Myong S.  
Administrative Assistant I, Facilities and Operations

SANDOVAL, Virginia  
Administrative Assistant II, Facilities and Operations

SCHMIDT, Nick  
Administrative Assistant II, Bookstore

SCHNEIDER, Larry L., A.A.S. (Southern Colorado State College, 1966)  
Vocational Credentials: Faculty, Colorado Type A Certificate  
Faculty of Diesel Power Mechanics

SCHREIBER, Donna  
Administrative Assistant II, Financial Aid

SEEHAFER, Kathleen, M.S. (University of Oklahoma, 1984)  
Vocational Credentials: Registered Nurse  
Assistant Professor of Nursing

SENGENBERGER, Jennifer M., B.A. (Colorado State University, 1982)  
Career Services Center Coordinator

SHAIFFER, George W., B.S. (Colorado State University, 1981)  
Vocational Credentials: Faculty, 1st Class FCC Communication License with Radar Endorsement, Certified Electronic Technician, General Radiotelephone Operator License  
Assistant Professor of Electronics Technology

SHEARN, Jenna, B.A., (Cornell College, 1989)  
Faculty of Visual Communications

SHIELDS, Ron, M.S., (University of Northern Colorado, 1997)  
Peterson Air Force Base Program Coordinator, Military Programs

SHELSTAD, Don  
Structural Trades II, Facilities and Operations

SHINN, Evelyn, M.A. (The Colorado College, 1981)  
Vocational Credentials: Type A Teaching Certificate  
Area Vocational Program, Health-Related Occupations Instructor

SHOGREN, Sharron, M.A. (University of Colorado, 1983)  
Secondary School Counselor Endorsement  
Recruitment Officer, Enrollment Services

SIMCO, Cheryl, A.A. (Pikes Peak Community College, 1987)  
Administrative Assistant III, Learning Resources Center

SIMPSON, Michael A., M.S. (University of Colorado at Colorado Springs, 1988)  
Faculty of Computer Science

SINGELS, Michael G.  
Administrative Assistant II, Office of the Assistant to the VPES for Technology

SLATTERY, Michelle, M.A. (Wright State University, 1992)  
Incumbent Worker Grant Coordinator, Corporate, Workforce, and Economic Development

SMITH, Claudia  
Arts Professional I, Publications and Printing

SMITH, Georgia, M.A. (University of Missouri, 1981)  
Laboratory Coordinator II, Mathematics, Sciences, & Health Sciences

SMITH, Joann  
Administrative Assistant II, Financial Aid

SMITH, John W., B.A. (Oklahoma State University, 1970)  
LTC Operations II, Facilities & Operations

SMITH, Robert, B.S. (Colorado State University, 1991)  
Vocational Credentials: Faculty  
Assistant Professor of Air Conditioning, Heating, and Refrigeration Technology

SONNTAG, Carl J., M.A. (Webster College, 1982)  
Vocational Credentials: Teacher-Coordinator  
Professor of Business Management  
Assistant to Dean, Business Education Division

STANDRIDGE, Karen, Ph.D. (University of Denver, 1993)  
Professor of English

STANSBERRY, Michael, B.F.A. Theatre-Directing & Design (Ohio University, 1972).  
Department Chair of Performing Arts

STOCKWELL, Patricia  
Library Technician III, Learning Resources Center

STURDEVANT, Katherine, M.A. (San Francisco State University, 1981)  
Faculty of History

SUE, Nadia, A.A.S., (Pikes Peak Community College, 1990)  
Administrative Assistant II, Education and Developmental Studies

SUMNER, Molly E., M.Ed. (Colorado State University, 1979)  
Faculty of Mathematics

TABOR, Mary Ann, A.A.S. (Pikes Peak Community College, 1985)  
Office Manager I, Communications and Humanities Division; Social and Behavioral Sciences Division

TALACTAC, Marlet C.  
General Professional I, Purchasing

TAMBLYN, Jeffrey D., A.G.S. (Pikes Peak Community College, 1995)  
Administrative Assistant III, Bookstore

TATUM, Mary, B.F.A. (Southwest Texas State University, 1987)  
Program Assistant I, Student Services

TAYLOR, Alice W.  
Custodian II, Facilities and Operations

TEAL, Jeanette, M.A. (Southern Illinois University of Carbondale, 1987)  
English Language Institute Assistant

TEMPLETON, Dorsey D., B.S. (Northwest Missouri State University, 1961)  
Faculty of Mathematics

TERRELL, Kendra  
Early Childhood Educator I, Child Development Center

TESSIER, David R., A.A.S. (Pikes Peak Community College, 1991)  
Production III, Publications and Printing

TESSIER, Sandra E.  
Library Technician I, Learning Resource Center

THEARD, Cynthia  
Administrative Assistant II, Testing Center

THORSON, Kathleen M.  
Administrative Assistant II, Technical, Industrial and Service Occupations

THRELFALL, Albert L., M.S. (University of Alabama at Birmingham, 1991)  
Associate Professor of Biology

TODD, Michael, A.S. (Pikes Peak Community College, 1985)  
Multimedia Technical Design Specialist, Division of IT Support Services

TOLLE, Audrey, M.S. (University of North Texas, 1993)  
Head of Reference Librarian, Learning Resources Center

TOLLIVER, Gary  
Pipe Mechanic Trades I, Facilities and Operations

TONER, Cici  
Accounting Technician I, Financial Services

TOOMBS, Calvin, M.A. (Oklahoma University, 1978)  
LPC License, CAA III  
Faculty of Psychology

TOTAKHAIL, Soraiya E., B.A. (University of Kubul, Afghanistan, 1977)  
General Professional II, Communications and Humanities Division; Social and Behavior Sciences Division

TRIPLETT, Jennifer, A.A. (Pikes Peak Community College, 1999)  
Administrative Assistant II, Student Services/Career Services Center

TRUJILLO, Cynthia  
LTC Trainee II, Facilities and Operations

TRUJILLO, Raymond  
Custodian I, Facilities and Operations

TRUMBULL, Michael, Ph.D. (The Union Institute Graduate School, 1993)  
Faculty of Psychology

TRUSSELL, Richard, M.Div. (Pacific Lutheran Theological Seminary, 1982)  
Faculty of Philosophy

TURNER, Fred, A.S. (Community College of the Air Force, 1976)  
Pipe/Mechanic Trades III, Facilities and Operations

VETTER, Karla, B.S. (Eastern Kentucky University, 1980)  
Production Manager, Corporate, Workforce, and Economic Development

VIGIL, Alfred  
General Labor I, Facilities and Operations

VIGIL, Gary  
General Labor I, Facilities and Operations

VIGIL, Glenda J.  
Administrative Assistant II, School Partnership Program

VREDEVELD, Robert  
LTC Custodian Intern, Facilities and Operations

WAKEMAN, Kathy, B.A. (University of Northern Colorado, 1992)  
Administrative Assistant III, Downtown Studio

WALGREN, Jeanette, M.A. (Colorado State University, 1982)  
Vocational Credentials: Faculty  
Faculty of Office Information Systems

WALLACE, Carol, B.S.N. (Wichita State University, 1973)  
Faculty of Nursing

WALTER, Wesly, A.G.S. (Columbia College, 1990)  
Police Officer I, Public Safety

WALTERS, Angela  
Police Intern, Public Safety

WALTERS, David, A.A.S. (Pikes Peak Community College, 1996)  
Faculty of Networking Technology

WALTH, Stephen, B.A. (University of Colorado, 1977)  
Faculty of Computer Information Systems

WATSON, Basil  
Custodian III, Facilities and Operations

WATSON, Michael, A.A.S. (Pikes Peak Community College, 2000)  
IT Technician I, IT Support Services

WEBSTER-BUCKLEY, Cynthia, B.A. (California State University, 1980)  
Vocational Credentials: Early Childhood Education  
Faculty of Early Childhood Education

WEITZEL, Roger S., B.S., (New Mexico State, 1984)  
Faculty of Machining/CAM

WEIXELMAN, Susan, M.A. (University of Colorado, 1975)  
Vocational Credential: Faculty  
Faculty of Early Childhood Education

WELLESLEY, Fay  
Accounting Technician II, Financial Services

WELLS, David, B.S. (University of Colorado, 1999)  
Emergency Medical Services Coordinator, Division of Math, Sciences, and Health Sciences

WHITEMAN, Sylvia, A.A.S. (Pikes Peak Community College, 1993)  
Administrative Assistant III, Division of Business Education

WIDNER, Bryan  
Police Intern, Public Safety

WIEBKE, Thelma, M.A. (Colorado State University, 1984)  
Vocational Credentials: Faculty  
Faculty of Office Information Technology

WILEY, Gwen, M.A. (Pennsylvania State University, 1979)  
Faculty of Mathematics

WILKINSON, Dixie  
Data Specialist I, Financial Services

WILSON, Janet, A.A.S. (Pikes Peak Community College, 1991)  
Faculty of Computer Aided Drafting

WINCHELL, Martha, B.A.ED. (University of Central Arkansas, 1956)  
Site Coordinator, Little Rock AFB Programs

WITHEROW, Julie F., M.A. (Ball State University, 1978)  
Director of Distance Education  
Faculty of English

WITT-AGNEW, Sheila  
Administrative Assistant II, Distance Education

WOODWARD, Nina J.  
Administrative Assistant II, Enrollment Services

WRIGHT, William H.  
Credentials: FCC Communication License with Radio/Telephone  
Endorsement.  
Telecom/Electronic Specialist III, Telecommunications

WULF, Gina  
Early Childhood Educator I, Child Development Center

WYSONG, William H., Jr., M.A. (University of Northern Colorado, 1980)  
Vocational Credentials: Faculty, Colorado Architectural License  
Professor of Architectural and Construction Technology

YOUNG, J. Michael, B.S. (University of Southern Colorado, 1992)  
IT Professional IV, IT Support Services

ZETTEL-CLARK, Sandra M., M.S.N. (University of Hawaii, 1988)  
Vocational Credentials: Faculty  
Faculty of Nursing, Mathematics, Sciences, and Health Sciences

## State Board for Community Colleges and Occupational Education

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Verne Ingram - SFAC, Lakewood  
Mark Pitcher – SSAC, Denver

## Community Colleges of Colorado

Dr. Joe May, Interim President

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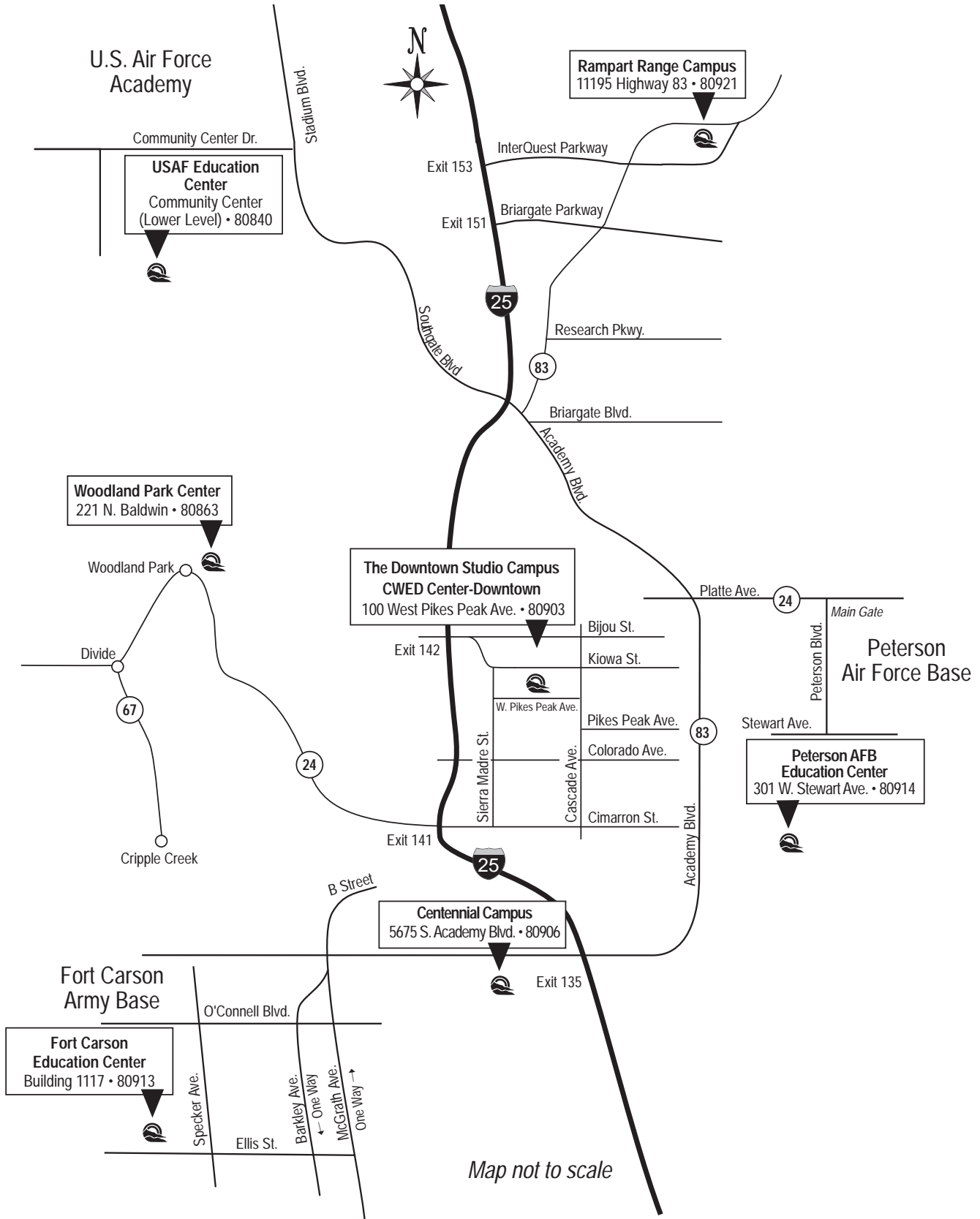
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# Campus Map



# Campus Directory

**Centennial  
576-7711**

A = Aspen Bldg.  
B = Breckenridge Bldg.  
C = Student Center  
F = Faculty Bldg.

**Downtown Studio  
527-6000**

**Rampart Range  
538-5000**

N = North  
S = South  
E = East  
W = West

	Room • Phone:	Room • Phone:	Room • Phone:
Administrative Services, Vice President's Office	A-216 • 540-7566		S-202 • 538-5551
Admissions	540-7112 540-7113	Front Desk 527-6000	S-102 • 538-5113
Advising Center	A-115 • 540-7216	121 • 527-6026	S-101 • 538-5510
Area Vocational Program (AVP)	A-220 • 540-7240		
Art Gallery		123a • 527-6000	
Bookstore	B-205d • 540-7569		N-101 • 538-5569
Business Education Division	F-200 • 540-7258		E-213 • 538-5200
Cafeteria			W-103
Campus Director	A-229 • 540-7290	Front Desk 527-6000	S-202 • 538-5551
Career Services Center	A-210 • 540-7144		S-101 • 538-5113
Cashier	A-111 • 540-7608	Front Desk 527-6000	S-102 • 538-5126
Child Development Center	A-205 • 540-7215		
Communications and Humanities	F-200 • 540-7300		W-119 • 538-5300
Computer Access Center	A-119a • 540-7673		
Computer Laboratory	A-119 • 540-7280	116 • 527-6000	E-203 • 538-5280
Dance Studio		124 • 527-6000	
Deaf Studies Division	A-117 • 540-7205		
Developmental Studies Division	F-200 • 540-7339		W-119 • 538-5300
Disabilities, Center for Students with	540-7128		N-204 • 538-5075
Distance Education	A-209 • 540-7538		
Educational Services, Vice President's Office	A-229 • 540-7218		S-202 • 538-5551
Emergencies	A-101 • 540-7111	Front Desk 527-6000	N-106 • 538-5111
English Language Institute	A-324 • 540-7047		
Ethnic Student Enrichment Program	A-107 • 540-7132		
Financial Aid	A-115 • 540-7089		S-102 • 538-5120
Financial Services	A-111 • 540-7600		S-102 • 538-5125
First Aid Room	A-101 • 540-7111	Front Desk 527-6000	N-104 • 538-5112
Fitness Center	A-262 • 540-7443		
Food Services	C-205 • 540-7072		W-103 • 538-5362
Gymnasium	A-262 • 540-7447		
Human Resource Services	A-118 • 540-7557		
Information Center	2nd Floor Rotunda	Front Desk 527-6000	North Area, 1st Floor
Information Technology Support Services	A-120 • 540-7584		W-108 • 538-5360
Instructional Support Services	A-120 • 540-7205 540-7128		N-204 • 538-5075
Integrated Circuit Fabrication (IC Fab) Institute	B-208 • 540-7061		

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Room • Phone:

Room • Phone:

Room • Phone:

International Education	A-229 • 540-7202		
Interpreter Preparation	540-7205		
KEPC Radio	A-153 • 540-7489		
Language and Culture Laboratory		115 • 527-6000	W-113
Learning Resources Center (LRC)	A-201 • 540-7500		N-201 • 538-5500
Learning Resources Center (LRC) Computer Lab	A-201 • 540-7502		
Mathematics, Sciences and Health Sciences Division	F-300 • 540-7393		W-209 • 538-5400
Military Programs			E-213 • 538-5277
Multimedia Instructional Design (MID) Center	B-203 • 540-7063		
Pikes Peak News	A-307 • 540-7480		
President's Office	A-212 • 540-7551		S-202 • 538-5551
Prior Learning Services	540-7225		
Public Safety - Administrative Office	A-101 • 540-7162	Front Desk 527-6000	N-106 • 538-5112
Public Safety - Emergencies	A-101 • 540-7111	Front Desk 527-6000	N-106 • 538-5111
Re-Admit Program	A-108 • 540-7115		
Records	A-106 • 540-7119		S-102 • 538-5119
Recreation and Sports	A-262 • 540-7442		S-207 • 538-5162
Running Start Program	A-220 • 540-7250		
School Partnership Program	A-220 • 540-7238		
Social and Behavioral Sciences	F-200 • 540-7300		
Student Activities	C-202 • 540-7106		S-207 • 538-5161
Student Center	C-204 • 540-7108		
Student Government	C-206 • 540-7163		S-207 • 538-5164
Student Life	C-202 • 540-7105		S-207 • 538-5161
Student Services	A-115 • 540-7095	Front Desk 527-6000	S-101 • 538-5113
Student Work Experience Evaluation Program (SWEEP)	540-7225		
Technical, Industrial and Service Occupations Division	F-300 • 540-7346		
Testing Center	A-108 • 540-7115	115 • 527-6000	S-101 • 538-5115
Theatre (Box Office)	A-114a • 540-7418		
Veterans Affairs	540-7121		S-102 • 538-5121
Vocational Student Achievement Program	A-107 • 540-7114		
Writing Center	A-300 • 540-7769	113 • 527-6000	

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