

# 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 Center The Downtown Studio Campus 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

WEB Address www.ppcc.edu

# DEAR STUDENTS:

Welcome to Pikes Peak Community College. No matter what your educational goals, PPCC is the perfect solution. You can study liberal arts and sciences for transfer to a four-year college or university for a bachelor's degree; take hands-on, intensive vocational or high-tech training to get the critical job skills necessary for a satisfying career; or take classes for personal growth.



Because we are committed to your success, our small classes and quality instruction provide one-on-one attention and direct interaction with faculty to enrich your classroom

learning. To help you meet the challenge of a higher education, we offer many services to support you along the way, including individual faculty advising, peer and group tutoring, Writing Centers, Student Success Workshops, Career Services, Developmental Studies, and the Ethnic Student Enrichment Program.

We strive to create a dynamic and enriching environment to enhance your learning opportunities. Student activities, clubs, academic organizations, art exhibits, theatre and dance presentations, athletics and cultural events will make your experience at PPCC rewarding and enjoyable.

To make a college education more accessible to you, classes are offered days and evenings, weekends through our Weekend College program, and to your home via the Internet, television and independent study.

Our aim is for you to achieve the lifelong goals that you have set for yourselves. Once you've decided to take the first step by enrolling at PPCC, you're on your way to a brighter future.

Respectfully,

m

Joseph A. Garcia President



# CONTENTS

All About PPCC	5
Getting Started	9
Academic Standards	15
Student Conduct	19
Services for Students	27
Services for the Community	33
Educational Programs	36
Course Descriptions	125
Faculty and Staff	203
Index	215
Campus Maps	212
Campus Directory	213

## Accreditation

The College is accredited by The Higher Learning Commission and is a member of the North Central Association, 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 Enrollment Services Centers at the Centennial Campus or the Rampart Range Campus.

This catalog takes effect at the beginning of summer registration.

#### Nondiscrimination statement:

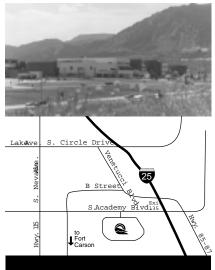


Pikes Peak Community College does not unlawfully discriminate on the basis of race, color, religion, national origin, sex, age, veteran's status, or disability in admission to, access to, treatment of, or employment in its educational programs or activities. Inquiries may be referred to Jeff Olson, AA/EEO/ADA 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.)

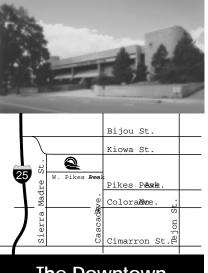
# All Around the

# COMMUNITY



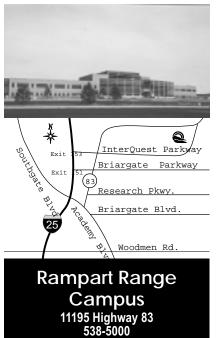
Centennial Campus 5675 S. Academy Bouldevard 576-7711

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.



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

History of the College	6
Vision Statement	6
Mission Statement	6
Transfer Programs	6
Career and Technical Education Programs	6
Locations and Facilities	6
Come See Us	6
Use of College Facilities	6
College Calendar	8

# ALL ABOUT PPCC

# 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 fullservice 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.

# Locations and Facilities

To make a college education accessible and convenient to everyone, Pikes Peak Community College has 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 campuses are the Centennial Campus, The Downtown Studio Campus, and Rampart Range Campus. Other sites include Fort Carson; Fountain-Fort Carson Center; Learning Enterprises' Training Center at The Downtown Studio Campus; Peterson Air Force Base; U.S. Air Force Academy; and the Astrozon Facility.

## Come See Us

We welcome visitors to Pikes Peak Community College, and we are happy to show prospective students the college. To arrange for a tour of any of our locations, call the Enrollment Services Center 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 Center at The Downtown Studio Campus 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 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, and vending machines.

Convenient 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 the Centennial Campus from all parts of the city. The Centennial Campus is fully accessible to persons with disabilities, including 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, (800) 456-6847

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

The Downtown Studio Campus offers courses leading to Associate of Arts, Associate of Science, Associate of General Studies, and some Associate of Applied Science degrees. The Legal Assistant Program and the Dance Program make their home at The Downtown Studio Campus. Courses are conveniently scheduled from 8 a.m. to 10 p.m. Monday through Thursday and from 9 a.m. to 2 p.m. on Friday and Saturday.

The Downtown Studio Campus includes art and dance studios, an art gallery and performance area, a foreign language laboratory, two computer classrooms, a computer laboratory, 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. Other events are open to the public at a nominal admission charge. Convenient parking is available during class hours on the third level (P3) in the Palmer Center Garage whose entrance is across the street from The Downtown Studio Campus beneath the Antlers Adams Mark Hotel. Parking is also available at metered spaces on the street.

#### RAMPART RANGE CAMPUS

11195 Highway 83 Colorado Springs, CO 80921 (719) 538-5000, (800) 456-6847, TTY (719) 540-7131

The newest location of Pikes Peak Community College, Rampart Range Campus, is conveniently located in northern Colorado Springs. The campus provides convenient access via I-25 and the Interquest Parkway exit.

A full array of support services and programs is available to students, including an admissions center, bookstore, career counseling, cashier/financial services, center for students with disabilities, financial aid/Veterans affairs, food services, learning resources center (library), new student scheduling center, placement testing, records, student government, and student life and activities.

The Rampart Range Campus offers courses leading to Associate of Arts, Associate of Science, Associate of General Studies, and Associate of Applied Science degrees.

It 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.

Convenient parking is available at Rampart Range Campus. The Rampart Range Campus is a fully accessible facility. Handicapped parking is reserved near most building entrances, including special spaces for wheelchair access.

#### LEARNING ENTERPRISES TRAINING CENTER

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

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

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.

Parking is available in the Palmer Center parking garage across the street from the building at no charge to customers. Handicapped parking is reserved near most building entrances, including special spaces for wheelchair access.

#### **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

# COLLEGE CALENDAR

#### Summer 2002

Standard Session (10 weeks)					
April	15	Μ	Registration		
May	27	М	Closed – Holiday		
June	3	Μ	Classes Begin		
June	3-4	MT	Late Registration		
July	4	R	Closed – Holiday		
August	10	S	Classes End		

#### Fall 2002

Standard Session (15 weeks + optional make-up/finals)				
April	15	М	Registration Begins	
May	27	М	Closed – Holiday	
July	4	R	Closed – Holiday (Web & Phone Registration Only)	
August	26	М	Classes Begin	
August	26-27	MT	Late Registration	
September	2	М	Closed – Holiday	
September	3	Т	Open – No Classes	
November	27	W	Open – No Classes	
November	28	R	Closed – Holiday	
November	29-30	FS	Open – No Classes	
December	14	S	Classes End	
December	16-18	M-V	V Optional Make-Up/Finals	
December	25-January 1 Closed – Holidays			

#### Spring 2003

Standard S	ession	(15 w	eeks + optional make-up/finals)	В
November	11	Μ	Registration Begins	Ja
December	25-31		Closed – Holiday (Web & Phone Registration Only)	M
January	1	W	Closed – Holiday (Web & Phone Registration Only)	M
January	20	М	Classes Begin	Μ
January	20-21	MT	Late Registration	
March	24-29	M-S	Open – No Classes (SPRING BREAK)	Tr
May	10	S	Classes End	Ja
May	12-14	M-W	/ Optional Make-Up/Finals	Fe
May	16	F	Graduation	Fe
				A

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.

#### **Bisemesters** (5 weeks each)

			,
June	3	М	Classes Begin
July	6	S	Classes End
July	8	Μ	Classes Begin
August	10	S	Classes End

Bisemsesters	(7_	weeks each)
--------------	-----	-------------

August	26	М	Classes Begin
October	19	S	Classes End
October	21	М	Classes Begin
December	14	S	Classes End

#### Trisemesters (5 weeks each)

			/
August	26	Μ	Classes Begin
September	30	М	Classes End
October	1	Т	Classes Begin
November	4	М	Classes End
November	5	Т	Classes Begin
December	14	S	Classes End

#### Bisemesters (7 \_ weeks each)

January	20	М	Classes Begin
March	11	Т	Classes End
March	12	W	Classes Begin
May	10	S	Classes End

#### Trisemesters (5 weeks each)

January	20	Μ	Classes Begin
February	22	S	Classes End
February	24	М	Classes Begin
April	5	S	Classes End
April	7	М	Classes Begin
May	10	S	Classes End



# GETTING STARTED

Class Schedule 10
New Students 10
Readmit Students 10
Transfer Students 10
International Students 10
Assessment/Placement Testing 10
English Language Institute 10
New Student Scheduling Centers 10
Registration 10
Physical Examinations11
Tuition and Fees
Tuition11
Tuition and Fees11
Student Activity Fees11
Residency Classification Appeals11
Refunds/Adjustments11
Books11
Financial Aid
Applying 12
Hope Tax Credit 12
Programs 12
Scholarships 12
Grants 12
Loans 12
Employment Opportunities 12
Application
Application for Admission 13

# GETTING STARTED

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 (High School 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 a 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 terms are 15 weeks long and may include finals week in some areas. The summer term is 10 weeks long.

To provide more flexibility, we offer some classes for 5-week, 7 1/2week, or other scheduling options. Open-entry/open-exit sections allow students to enter and complete the course at their own pace. Distance learning (Internet, interactive television, or telecourse) sections offer flexibility for students who have difficulty getting to campus on a regular basis.

Class schedule information may change without notice. A list of new courses and changes is available from the Enrollment Services Centers or the New Student Scheduling Centers.

## New Students

The first step is to submit an Application for Admission. An application is available on page 13 of this catalog and on the PPCC website at www.ppcc.edu. 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 for evaluation to the Enrollment Services Centers at PPCC from their prior institution. Request forms are available from the Enrollment Services Centers and The Downtown Studio Campus front desk. (See Academic Standards, page 16.)

# International Students

We welcome international students to Pikes Peak Community College. Students from other cultures enrich learning and campus life for everyone. International students with current visas may enroll at PPCC and will pay out-of-state tuition. All international students on F-1 visas should apply in the English Language Institute office, room A-324. Please call 540-7047 for more information.

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 will 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 527-6022 for further information.

# Assessment/Placement Testing

All new degree seeking 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. If students test into developmental courses, they must complete those courses within their first 30 hours. See page 42 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. The test is also available on the computer in the testing centers. The computer test can be taken at any time. Please call 540-7047 for more information.

# New Student Scheduling Centers

All students will be assigned a faculty advisor during their visit to the New Student Scheduling Centers. Advising is required for new students in degree or certificate programs and is strongly recommended for continuing students with majors. New Student Scheduling Centers are located at Centennial Campus, The Downtown Studio Campus, and 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
- 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 faculty advisor
- initial 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 physically 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 outof-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 Enrollment Services Centers for more information or see the second page of the Application for Admission on page 14.

**Seniors.** Persons age 60 or over may be eligible for financial tuition assistance. Visit the Enrollment Services Centers for details.

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

Olympic Training Center. Olympic athletes may pay in-state tuition rates. Student status must be verified by the U.S. Olympic Training Center. A separate "green form" must be submitted to the Enrollment Services Centers prior to the end of the first week of classes each term for which the in-state tuition rate is requested.

# Tuition and Fees (2002-03)\*

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

The in-state tuition rate for 2001-02 was \$60.05 per credit hour. The out-of-state tuition rate for 2001-2002 was \$291.30 per credit hour.

#### Student fees.

The student fee rates for 2001-2002 were \$35.35 per semester for all students enrolled in three or fewer credit hours and \$61.15 per semester for all students enrolled in four or more credit hours.

#### Course fees.

Some courses have extra fees ranging from \$5.10 per credit hour to \$210.00 per course. There are some courses that also have higher tuition rates. Please review the class schedule carefully to fully understand the tuition and fee rates that are charged.

\*Tuition and fee rates are set by the State Legislature and Governing Board late in the fiscal year and potential increases for the 2002-2003 year are unknown at the time of this printing. Tuition and fee rates for off-campus locations may vary according to operational costs.

# Student Activity Fees

Student fees are legally required of all students. 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 (the parking bond 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 Enrollment Services Centers or at The Downtown Studio Campus. The petition and required supporting documents must be submitted to the Enrollment Services Centers 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 Enrollment Services Centers personnel 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 Enrollment Services Centers 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 during the first week of each semester, at the Fountain-Fort Carson Center, at Peterson AFB and Ft. Carson 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.ppccbookstore.com. This is 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 Enrollment Services Centers personnel. 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 Enrollment Services Centers. 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 Enrollment Services Centers.

# 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

- American Association of Community Colleges www.aacc.nche.edu
- Pikes Peak Community College 540-7089/www.ppcc.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 Enrollment Services Centers, describes each of these programs.

#### Scholarships

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

#### Grants

- Colorado State Grants
- · Colorado Leveraging Educational Assistance Partnerships Grants
- Federal Pell 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					
		BIRTHDATE GENDER			
	MR. 🔲 MS. OR LIST OTHER	(M) MALE			
STUDENT ID/*SOCIAL SECURITY NUMBER	VIR. TIMS. OR LIST OTHER	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			
	FIRST NAME				
*Current Employment Status: *Ethnic C					
	herican Indian or Alaskan Native				
□ (P) part time (1-29 hrs/week) □ (O) As □ (U) unemployed □ (H) His	ian or Pacific Islander	PREVIOUS NAME Office Use			
	LENGER PROFESSION	Citizen? Yes No Only			
*Veteran/Military Service		y of Citizenship: Visa Type:			
	ii NO, Odinij	VISA			
(1) Veteran or Dependent Eligible for VA Educatio     (2) Veteran Net Eligible for VA Educational Dep		ach photocopy of I-94 (Arrival-Departure			
<ul> <li>(2) Veteran Not Eligible for VA Educational Ber</li> <li>(3) Active Duty Veteran</li> </ul>	Record), or I-5	51 (Alien Registration Receipt Card) (both			
(4) Active Duty Military	sides) and cop	y of parent(s) if you are under the age of 23.			
LOCAL ADDRESS		COUNTY OF LOCAL ADDRESS COUNTY			
		COUNTRY (AREA) RESIDENCE PHONE NUMBER			
PERMANENT ADDRESS (IF DIFFERENT FROM ABOVI	E)	E-MAIL ADDRESS			
	STATE ZIP CODE	COUNTRY (AREA) BUSINESS PHONE NUMBER			
	STUDENT GOALS				
While at this institution, do you intend to		Do you plan to transfer to another institution?			
<ul> <li>(1) Earn an academic degree (AA/AS/AGS)</li> <li>(2) Earn a vocational - technical degree (AAS)</li> </ul>		<ul> <li>(1) Yes, to a 4 year school after graduation</li> <li>(2) Yes, to a 4 year school before graduation</li> </ul>			
<ul> <li>(3) Earn a vocational - technical certificate</li> </ul>		(3) Yes, to a 2 year school after graduation			
(4) None of the above		<ul> <li>(4) Yes, to a 2 year school before graduation</li> <li>(5) No, I do not plan to transfer</li> </ul>			
Are you enrolling at this college for job or career	easons r	Please indicate planned length of study at this institution:			
Program/Major area of study:		<ul> <li>(1) Semester</li> <li>(2) 1 year</li> <li>(4) More than 2 years</li> </ul>			
	ENROLLMENT DATA				
Which best describes your current status?					
(RA)Re-entering former student at this institution Transfer, attended another college	* Do you consider yourself economically disadva	Name of Last High School Attended			
(TR) will transfer credit in	* Do you consider yourself academically disadva	antaged? City State			
(TN) will not transfer credit in     (NE)New Student first college attended	□ Yes	No     Name of Last College Attended			
<ul> <li>(NE)New Student, first college attended</li> <li>Which best describes the level of education you</li> </ul>	* Is your primary language other than English?				
have completed? (choose one)	Language	City State Type of Secondary Diploma			
<ul> <li>(LH) Less than High School</li> <li>(HS)High School Graduate/GED</li> </ul>		(Y) High School Diploma, year received 19/20			
<ul> <li>(CE)Certificate</li> <li>(AD)Associate Degree</li> </ul>	Have your parents earned a baccalaureate (	4-year) G (G) G.E.D year received 19/20			
(BD)Bachelor's Degree     (BD)Pachelor's Degree     (PD)Professional Degree (MD, JD, MBA, Ed S)	degree? □ (M) Mother □ (F) Father □ (B) Both □ (N	Neither         C) Currently enrolled in High School           Expected Graduation Date 19/20			
<ul> <li>(PD)Professional Degree (MD, JD, MBA, Ed S)</li> <li>(DD) Doctorate (Ed D, Ph D)</li> </ul>	□ (U) Unknown	(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 Selec	tive Service? 🛛 Yes 🔹 🗋 No		
If Yes, are you registered?  Yes No			
TUITION CLASSI	FICATION: (Has no effect on admission	n to the college)	
COMPL	ETE FOR COLORADO RESIDENCY CLASSIFI	CATION	
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.			
	YOU a	nd D YOUR PARENT or LEGAL GUARDIAN	
CURRENT AGE		(if you are under 23)	
Dates of continuous physical presence in Colorado	mo day yr to mo day yr	mo day yr mo day yr	
Dates of extended absences from Colorado during the last two years	mo yr and mo yr	mo yr and yr	
List the last two years Colorado income taxes have been filed	yr yr	yr yr	
List the last two years of employment or source of income.	Employer State mo yr mo yr Employer State mo yr mo yr	Employer State mo yr mo yr Employer State mo yr mo yr	
Date current Colorado Driver's License or Colorado I.D. was issued		mo yr New Renewal	
List the last two years of Colorado Motor Vehicle Registration	mo yr and yr	mo yr and yr	
Date of Colorado Voter Registration	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) .....

\* 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



4



# ACADEMIC STANDARDS

Maximum Course Load	16
Change of Major/Program	16
Credit by Examination	16
Transfer to PPCC	16
Grading System	16
Grading Options	17
Grade Changes	17
Repeated Courses	17
Academic Probation/Suspension/Dismissal	17
Academic Fresh Start	18
Honor Rolls	18
Application for Certificate or Degree	18
Accountability and Assessment	18

# 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 use stated objectives; 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 to three 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 New Student Scheduling Centers. A change in major place 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 or F 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 be transferred only from an official transcript from the originating institution.

Students who have credits they wish to transfer to PPCC that can replace a substandard grade earned at PPCC must see an advisor to initiate that request. If approved, this will result in the points associated with that grade being excluded from the student's cumulative GPA. The grade earned at PPCC will still appear on the student's official transcripts. Other institutions receiving a PPCC transcript for transfer of academic courses are not bound by this college policy and may choose to calculate the student's transfer GPA to include all grades, even those excluded by PPCC under this policy.

# Grading System

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

#### Quality

С

F

T

Grade 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
  - 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
  - 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
  - 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 a "Failing (F)" 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 course.
- 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. Courses taken S/U often will not transfer since PPCC considers a D or higher as "satisfactory." 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. 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 earn a grade of A, B, C, or S in a course, they are normally not permitted to retake the course to raise the grade. It is generally suggested that such students retake the course in an audit capacity if they want to take the course a second time unless a higher grade is needed for continued studies. If students receive a grade of D, F, or U in a course, they are permitted to retake the course to raise the grade.

When a course is repeated, regardless of initial grade earned, the most recent grade earned will be calculated in the GPA. However, all grades earned at PPCC will appear on the transcript. A course may be used only once to meet graduation requirements for any degree or program.

# Academic Probation/Suspension/ Dismissal

Pikes Peak Community College defines satisfactory academic progress as completion of the semester with a 2.0 grade point average (GPA). In order to remain in good standing at PPCC, students must maintain at least a 2.0 cumulative GPA. Students who do not earn at least a 2.0 GPA will be placed on academic probation for the semester for which they have a GPA below 2.0. Students who are placed on probation are advised to discuss resolution of their academic issues with their academic advisor as soon as possible. Students who have a cumulative GPA below 2.0 but complete each subsequent semester with a 2.0 or above will remain on probation as long as they continue earning a 2.0 or greater each subsequent semester. When the student's cumulative GPA rises above 2.0, the student will no longer be on probation.

Probationary students who do not earn at least a 2.0 GPA for the semester following the semester they are put on probation may be suspended for one semester. Suspended students must consult with the appropriate Instructional Dean before they enroll for the semester following the semester during which they are suspended. The dean and student will work together to create an academic plan that is suitable for the student. The dean will provide the student with a copy of an approved academic plan along with a "Permit to Register" form. Students need to take the "Permit to Register" form along with their registration form to the Enrollment Services Centers to complete the registration process. All registration changes for a suspended student must be approved by the Instructional Dean.

Suspended students are permitted to enroll after they have not been enrolled for a semester and during the semester for which they reenroll, they must earn a GPA of 2.0, or they will automatically be dismissed from the College for one calendar year. After academic dismissal, students must petition to return to the College. This petition is reviewed by the Instructional Dean, who will determine if the student should be reinstated and is able to benefit from a college education. If reinstated, the student must earn a GPA of at least 2.0 for that semester. Any appeal rights and procedures will be explained in the notification letter that is sent by certified mail to the student.

# Academic Fresh Start

All course work taken at Pikes Peak Community College appears on a permanent transcript; however, students who have earned 30 or fewer hours can initiate a petition to remove up to 30 credit hours of substandard grades from their cumulative grade point average. To apply for the Academic Fresh Start, students must

- Wait at least two calendar years after coursework was completed before applying for an Academic Fresh Start.
- Successfully complete 6 semester hours with a term GPA of at least 2.0 prior to submitting a Fresh Start application.
- Fill out a Fresh Start application.
- Meet with the Instructional Dean to discuss options and/or create an educational plan. A copy of this educational plan and/or Instructional Dean approval must accompany the Fresh Start Application.

Students applying for Academic Fresh Start are responsible for investigating the potential impact of Academic Fresh Start on transfer admission, financial aid, VA, and other agencies and organizations. Other institutions receiving a PPCC transcript for transfer of academic courses are not bound by this college policy and may choose to calculate the student's transfer GPA to include all grades, even those excluded by PPCC under this policy.

Once Academic Fresh Start is granted, it is not reversible. Credit excluded from the GPA calculation cannot be used to satisfy the requirements for completion of a degree or certificate. The Academic Fresh Start may only be granted once during a student's educational career at PPCC.

### 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 Enrollment Services Centers no later than the fourth week of the semester (second week for the summer term) in which they plan to graduate. Students completing certificate or degree requirements in the summer may participate in graduation ceremonies in the following spring term and must file a graduation application by the fourth week of the spring term.

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 20	
Standards of Conduct 20	
Student Complaints/Grievances 22	
Academic Honesty 22	
Conduct in College Buildings 23	
Restricted Attendance 23	
Drugs and Alcohol 23	
Sexual Harassment 23	
Security Report 23	
Required Disclosures 23	
AIDS Policy 24	
Firearms on Campus 24	
Smoking in College Buildings 24	
Parking and Traffic Regulations 24	
Days of Enforcement 25	
Report of Criminal Offenses 25	

# STUDENT CONDUCT

# Student Disciplinary Procedure SP 4-30b

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.
- 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 polices. 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 collegesponsored 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.

20

 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.

#### 3. 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.
- 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.

Children, except when needed for instruction, are not allowed in classrooms during class sessions.

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, 911 Readiness for children at CDC, and rape prevention (R.A.D.).

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 this page
- 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 Centers or online at www.ppcc.edu.
- The graduation rates for the College are available by request through the Office of Institutional Research at 540-7623.

# **AIDS Policy**

Current knowledge indicates that individuals with Acquired Immunodeficiency Syndrome (AIDS), AIDS Related Complex (ARC), or a positive test for antibody to the Human T-Lymphotrophic Virus Type III (HTLV-III/HIV) do not pose a health risk to others in a nonlaboratory academic setting. According to current medical data, the virus is not transmitted by casual contact. Based on this knowledge, individuals sharing common work or study areas, libraries, classrooms, recreational facilities, cafeterias, and theaters do not present a problem or public health threat to the College community. Laboratories and/or programs dealing with body fluids will teach and practice universal precautionary procedures.

Students or employees of Pikes Peak Community College who may become infected with the AIDS virus will not be excluded from enrollment or employment, or restricted in their access to College services or facilities unless medically-based judgments indicate restriction is necessary for the welfare of the individual or other members of the College community. There will be no mandatory screening of prospective or current students or employees for the AIDS virus; harassment or discrimination against people infected with the AIDS virus will not be tolerated. Further, the strictest principles of confidentiality will be maintained in management of personal medical information, as provided by law.

Currently, there is no cure for AIDS. Prevention of the disease through education is crucial. The College is committed to ongoing awareness efforts through its curriculum, student and staff activities, and community events.

## Firearms on Campus

According to PPCC Policy E-502. 2d, no person may have on his or her person any unauthorized firearm, ammunition, explosive device, look-alike weapon or device, or illegal weapon as defined in Colorado Revised Statutes Section 18-12-102, on the campus or any facility used by the community college.

The college has developed procedures and regulations pertaining to the use of firearms as a part of any recognized program of instruction which requires access to a firearm as an integral part of the instructional program.

Persons in violation of this policy shall be subject to appropriate action under College disciplinary policies and procedures as well as applicable local and/or state laws relating to possession and/or use of firearms.

Pikes Peak Community College will adhere to State Board Policy, BP19-10 as well as all related local and/or state regulations in regard to compliance.

# Smoking in College Buildings

Consistent with State of Colorado statute, smoking is NOT PERMITTED in any PPCC building or facility. In addition, smoking is prohibited in the courtyard between the Aspen and Breckinridge buildings on Centennial Campus.

# Parking and Traffic Regulations

The Pikes Peak Community College Centennial (Main) Campus and Rampart Range Campus will have OPEN parking in all general lots. You will pay your student fee when you register for classes. At Centennial: B, C, D, and E lots and at Rampart A, B, C lots. This means no hang tag will be required for use of these lots.

Instead, there will be a "hang tag" available. The benefits of the hang tag are:

- · Registering your vehicle with the PPCC Public Safety Office.
- Providing our officers with the ability to notify you more quickly in case of an emergency involving your vehicle.
- Using the same hang tag for the entire fiscal year.
- No charge for the hang tag.
- Continuing to set aside a portion of your student fee for development and maintenance of the parking facilities on campus.

At Centennial campus only, motorcycles may be parked in the designated marked areas in lots B, D, and E.

For the safety of all, DO NOT park in service drives, crosswalks, or roadways. Speed limits on campus are 25 M.P.H. on Perimeter Road unless otherwise posted and 10 M.P.H. in the parking lots. Pedestrians always have the right of way in crosswalks.

Handicap Parking: Vehicles bearing state handicapped placards, state-issued handicapped license plates, or temporary handicapped passes issued by the Department of Public Safety may park in the handicapped areas in lots A, B, and E at the Centennial Campus and in the handicapped areas in lots A, B, C at the Rampart Range Campus. Only those vehicles so marked may park in the handicapped areas.

At the Centennial Campus only: Special Wheelchair Only: These passes are issued through the DPS in A-100 for use by those persons confined to wheelchairs. Those parking spaces marked for "Wheelchair Only" are to be used only by those who have been issued the appropriate pass.

At the Centennial Campus only: Metered Parking: Metered Parking, for those on short-term business with the college, is available in lot A. These parking meters are for the convenience of college visitors and not for use by students, faculty, or staff. If you park at a meter, you will receive a ticket if the meter expires, even if you do have a service decal. Visitors whose business will take longer than the meters allow should use the parking spaces in B, C, D, and E lots.

Hang tags: Those wishing to obtain a "hang tag" may do so by bringing their current vehicle registration to the Public Safety office. Exceptions to this must be approved by DPS.

Emissions: No matter where you reside, you must have a current, valid emissions inspection sticker if you are a student here.

Traffic Violations: The DPS will issue citations which may include fines and/or vehicle impoundment for both parking and moving violations occurring on college property. Citations for moving citations must be answered in El Paso County Court. Citations for parking violations will result in a fine which must be paid to the college cashier in A-111 at Centennial Campus and S-102 at Rampart Range Campus, 8:00 a.m. -5:00 p.m., Monday-Friday. The registered owner of the vehicle or identified user of the vehicle shall be held liable for all violations.

Appeals: If you would like to file an appeal of a parking citation you must submit a statement in writing before the tenth working day from the date of the citation. Appeal forms are available in room A-100 at Centennial Campus and N-106 at Rampart Range Campus. The Director of Public Safety reviews the appeals and mails them back to the appropriate person. If you disagree with the decision of the Director of Public Safety, you may then appeal the citation to the Appeals Committee. A person who objects to the decision of the College, or the President's designee (Vice President of Administrative Services).

Bicycles and Mopeds: Service decals are not required for bicycles or mopeds. Parking for these vehicles is available at the Centennial Campus outside the main entrance to A-building and by A-262 and at Rampart Range Campus outside the main entrance. Bicycles or mopeds locked or parked in hazardous locations will have the lock or chain cut, and the vehicle will be impounded by DPS for safekeeping.

Accidents: Colorado law requires that all accidents be reported to proper authorities. Accidents occurring on PPCC campus must be reported to the Department of Public Safety at ext. 7111, in room A-100 for accidents that occur at the Centennial Campus and at ext. 5111, in room N-106 at the Rampart Range Campus.

Information concerning PPCC vehicle regulations may be obtained from DPS in A-100, or by calling ext. 7162 at the Centennial Campus and in N-106, or by calling ext. 5112 at the Rampart Range Campus.

Escort Service: Escort Service is available through the DPS. For Centennial Campus contact ext. 7111 or come to the Dispatch Office in A-100 anytime between 8:00 a.m. and 10:30 p.m. For Rampart Range Campus, contact ext. 5112 or come to the Dispatch Office in N-106 anytime between 8:00 a.m. and 5:00 p.m. After 5:00 p.m., call ext. 5112.

Call ext. 7111 at Centennial Campus and 5111 at Rampart Campus to report any of the following: fire, injury, illness, accident, lost and found items, or any emergency.

#### Days of Enforcement

Parking regulations are enforced in all lots, Monday through Saturday. Handicapped parking is enforced every day.

# Report of Criminal Offenses

Centennial Campus

Offense	1999	2000	2001
Murder & Non-negligent Manslaughter	0	0	0
Forcible Rape	0	0	0
Robbery	0	0	1
Aggravated Assault	0	0	2
Burglary	2	0	0
Motor Vehicle Theft	1	0	0
Arrests Made			
Liquor Law Violations	0	0	0
Drug Abuse Violations	1	0	0
Weapons possessions	1	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.

#### The Downtown Studio Campus

Offense	1999	2000	2001
Murder & Non-negligent Manslaughter	0	0	0
Forcible Rape	0	0	0
Robbery	0	0	0
Aggravated Assault	0	0	0
Burglary	2	0	3
Motor Vehicle Theft	1	0	0
Arrests Made			
Liquor Law Violations	0	0	0
Drug Abuse Violations	1	0	0
Weapons possessions	1	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	1999	2000	2001
Murder & Non-negligent Manslaughter	0	0	0
Forcible Rape	0	0	0
Robbery	0	0	0
Aggravated Assault	0	0	0
Burglary	2	0	2
Motor Vehicle Theft	1	0	0
Arrests Made			
Liquor Law Violations	0	0	0
Drug Abuse Violations	1	0	0
Weapons possessions	1	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.



# **Ethnic Student** Enrichment Program at See Pikes Peak Community College





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

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



# SERVICES FOR STUDENTS

Advising/New Student Scheduling Centers	28
Career Services Center	28
Center for Students with Disabilities	28
Child Development Center	28
Copy Center	29
Ethnic Student Enrichment Program	29
Information Technology Support Services	29
Learning Resources Center	29
Military Programs	29
Multimedia Instructional Design Center (MID Center)	29
Orientation Program for New Students	30
Pikes Peak News	30
Records	30
Re-Entry Program	30
Southern Colorado Educational Opportunity Center (SCEOC)	30
Testing Center	
Learning Assistance Center	30
Veterans Affairs Office	
Visitation Program (Four-year Colleges/ Universities)	31
Student Life	
Activities	31
Athletics	31
ID Cards	31
Fitness Center	31
Recreation/Sports Clubs	31
Student Center	31
Student Government	31
Student Clubs and Organizations	31

# SERVICES FOR STUDENTS

# Advising/New Student Scheduling Centers

Advising is required for new students in degree or certificate programs and is strongly recommended for continuing students with majors. After an initial visit to the New Student Scheduling Centers, students are assigned a faculty advisor in their program area and the advising hold is removed to allow students to register for classes. Faculty advisors can be located in their respective division office. New Student Scheduling Centers are located at Centennial Campus, at The Downtown Studio Campus, and at 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
- · 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 faculty 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. The center is located at Centennial Campus in room A-210.

**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 (COCIS), 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

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

# Center for Students with Disabilities

The Center for Students with Disabilities strives to create an accessible environment by providing students with documented disabilities reasonable and appropriate services and accommodations. The college is committed to providing quality educational support for the diverse needs of its students.

Support services and accommodations may include

- Computer Assistive Technology
- alternative testing arrangements
- advocacy training
- identification of strengths and weaknesses
- instruction in learning strategies
- note taking
- readers
- text on tape
- scribes
- "Smart Start" a preparation-for-college seminar.

The Center for Students with Disabilities is available to the PPCC community – students, faculty, and staff, for consultation and collaboration on disability issues. It is the responsibility of the students to identify themselves, apply for supportive services, and furnish documentation about the nature and extent of their disability. This information is kept confidential and will be used to plan for appropriate services and accommodations. Appointments for all campus locations can be made at 540-7128. We are located on the Centennial Campus, room A-115. Our website is http://www.ppcc.edu/dept/StudDisabilities/ default.htm .

**Computer Access Center.** The Computer Access Center is located at the Centennial Campus. The center utilizes computer assistive technology such as screen readers, voice recognition, alternative input/output devices, and screen magnification. Courses combining word processing and assistive technology are offered. Contact the Center for Students with Disabilities at 540-7128 for further information or visit us in room A-115.

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. Daily activities include art activities, science, math, music, creative play, language arts, computers, and outdoor play.

The CDC is licensed by the Colorado Department of Human Services 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.

#### Copy Center

Part of the Publications and Printing office, the Copy Center is located in room B-234 on the Centennial Campus. Services are available to students, faculty and staff for both personal and work-related jobs. The Copy Center is open Monday through Friday, 7:30 a.m. to 5:00 p.m. and offers black and white copies and transparencies; one and two color printing (large quantities only); color banners and posters; design, layout and production services; folding, binding, padding, and hole punching. Please call 540-7642 for more information.

#### 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 Enrollment Services Centers.

## 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.

## 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, 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 cassette, 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, 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.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.

## Military Programs

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

Military programs offer a schedule of evening, weekend, and openentry/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 or visit our website at www.ppcc.edu.

# Multimedia Instructional Design Center (MID Center)

The Multimedia Instructional Design Center is located at the Centennial Campus. The lab is equipped with computers, digital cameras, 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 use 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 Viz. The professional 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 consists 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 Enrollment Services Centers.

#### **Pikes Peak News**

"The Pikes Peak News" is the PPCC student newspaper, published by and for PPCC students. All PPCC students are welcome to participate in the production of this paper as writers, editors, designers, and photographers. "The Pikes Peak News" also welcomes articles and photos from all PPCC-sanctioned clubs and organizations. The Pikes Peak News has won second place and honorable mention awards at previous collegiate media conventions. For more information, contact us at 540-7480 or check out our website at www.ppcc.edu.

#### Records

All records of enrollment at PPCC are kept in the Enrollment Services Centers. 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 Enrollment Services Centers.

All students attending courses at PPCC are assumed to be independent and as such information is not provided to parents. Students may authorize the release of any data to any person or agency by completing the "Release of Non-Directory Information" form.

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 Enrollment Services Centers.

# 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 540-7722.

# 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. 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 DANTES tests. GED testing for a high school equivalency diploma is available on a weekly basis. Proctoring for other colleges are also available. LSAT and MCAT are offered in the Testing Center. For more information, call 538-5115 or 540-7115.

# Learning Assistance Center

The Learning Assistance Center offers organized learning clusters, individual tutoring, supplemental instruction tutorial groups, tutor referrals, tutor training, individual success plans, along with student success and placement test review and other specialized workshops.

Students seeking tutorial services through the Learning Assistance Center require an instructor referral and may then be referred to individualized tutoring or specific learning clusters. The Learning Assistance Center Coordinator will determine appropriate placement. Students may be assigned to individual tutors, learning clusters, or other campus resources. Referral for tutoring services does not guarantee that a tutor will be assigned.

Students seeking tutoring services are expected to:

- follow the course sequence outlined by their academic advisor. Tutoring services do not take the place of course prerequisites.
- be enrolled in the class for which tutoring is requested.
- be degree or certificate seeking, as priority will be given to students requesting help for classes in their program areas.
- be prepared for the tutoring session, which includes doing homework and follow up assignments specified by the tutor.
- attend and participate reasonably in class.

Students are also encouraged to consult with the Learning Assistance Center Coordinator at Centennial Campus, 540-7129, room A-362 or at the Rampart Range Campus, 538-5075, room N-204.

30

# 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, located in the Enrollment Services Centers, for more information at 540-7141.

# Visitation Program (Four-year Colleges and Universities)

The Visitation Program will help students make a smooth transition to a four-year college or university in Colorado. Representatives from four-year schools regularly visit Pikes Peak Community College to meet with students who plan to transfer after receiving an Associate's Degree from PPCC. For more information, contact the Enrollment Services Centers.

# 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. Discounted Colorado Springs Symphony tickets and selected city and state events are available to students as is free admission to the Colorado Springs Fine Arts Center. 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 540-7443.

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 Super Circuit; an elliptical trainer; and over a dozen muscle group 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, 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; 12 senators; and a State Student Advisory Council representative.

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

# 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.



# Save on Tuition

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.

# 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.edu (Pikes Peak Community College Web Site)
- ▲ 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.

32



# SERVICES FOR THE COMMUNITY

Activities and Events	34
The Downtown Studio Gallery	34
International and Multicultural Education	34
KEPC Radio - 89.7 FM	34
Learning Enterprises	34
The PPCC Theatre	35
Small Business Development Center	35
School Partnership Program	35
Options for Current High School Students	35

# SERVICES FOR THE COMMUNITY

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.

# 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 Awareness
- 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. For more information, call 527-6000.

## International and Multicultural Education

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."

The Office of International Education provides oversight and guidance for international programs and activities. Its mission is to provide opportunities and support for international curriculum development and international professional development. Its vision is to bring the world to our students.

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 Enrollment Services Centers 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 is housed at Centennial Campus. The Institute brings approximately 120 students from as many as 28 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.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
- developing and delivering workplace training and educational 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.

For more information, please call 527-6060.

# The PPCC Theatre

The Masquers, a student organization, presents two major facultydirected 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. 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 Post-Secondary Enrollment Options 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.

# Options for Current High School Students

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 Enrollment Services Centers.

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 each student with the concepts, academic and technical competencies, career skills, attitudes, and work habits essential to gain entry-level employment following high school graduation.

Instruction is provided in a two hour and forty minute day, five-day-aweek 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 postsecondary 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 Specialist
- Computer Aided Drafting
- Cisco Computer Networking
- 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

**Post-Secondary Enrollment Options (PSEO).** PSEO is a program for college-bound students seeking degrees in non-vocational areas or students who simply want to earn college credit while still in high school. PSEO 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 PSEO, 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 may reimburse the tuition for qualifying courses. Contact your high school counselor for more information or to enroll.

Articulation Agreements. High school students may earn college credits by taking career and technical education courses at their high school. Pikes Peak Community College has articulation agreements with all local school districts. Depending upon the school district, the high school, and the articulation agreement, these courses may include the areas of welding, business, computer information systems, hospitality, visual communications, machining, electronics, early childhood education, culinary arts, computer aided drafting, auto mechanics, auto collision, marketing, Cisco, and office information technology. Courses apply towards degrees and certificates at Pikes Peak Community College but do not transfer to four-year colleges and universities. For more information, call 540-7236.

**High School Student Records.** All students attending courses at PPCC are assumed to be independent and as such information is not provided to parents. Students may authorize the release of any data to any person or agency by completing the "Release of Non-Directory Information" form.



# EDUCATIONAL

Degree and Certificate Criteria	37
Degree Eligibility	37
Academic Requirements	37

# **Developmental Studies**

Purpose and Goals	37
The Math Laboratory	37
Specialized Courses	37
Developmental English	38
Developmental Mathematics	38
Developmental Reading	38
Advancing Academic Achievement	38

# Institutes and Academies

English Language Institute	38
Deaf Prep	
Integrated Circuit Fabrication Institute	39
Cisco Networking Academy	39
Pikes Peak Regional Law Enforcement Academy	39
Pikes Peak Technology Consortium (PPTC)	
Courses	39
Real Estate Institute	39

# Alternative Delivery Methods/ Distance Learning Option

Interactive Television	40
Telecourses	40
PPCC Online Courses	40
CCC Online Courses	40
Independent Study Courses by Division	40
Distance Education Independent Study	40
Open-Entry/Open-Exit Courses	40
Military Programs	41
Credit for Prior Learning (SWEEP)	41

# Assessment and Success in College

Placement Tes	sting		42
General Program	Education	CORE	Transfer
CORE Curricu	ılum		44
Degree/Certifi	cate Requiremen	its	45

# Program Directory

Program Directory	58
Educational Programs	

		-	J	-		
E	ducational	Degree	and Ce	rtificate	Programs	60
С	CC Online	Degree	Prograr	ns		121

### 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 scheduled to be taken together as a set during one semester. Each of these courses builds on and complements the knowledge and skills leaned 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 are developmental and 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 (q) 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 admission 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. Please review these agreements with your advisor for specific requirements. 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

A student who receives an AGS degree may subsequently pursue an AA, AS, or AAS degree. If they have received an AAS degree, they may pursue an AA, AS or AGS degree. However, students who have completed the degree requirements for an AA or AS degree from PPCC may not then 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 term), 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 Skills (AAA).

## Developmental English

Developmental English courses cover basic writing and grammar. These courses are a good refresher for students who have not written college reports or essays. The writing courses, 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 Writing Skills (basic grammar, usage, punctuation, sentence structure, and paragraphing)
- ENG 060 Writing Fundamentals (grammar/punctuation, text interaction, paragraph structure)
  - ENG 060 is a prerequisite for
  - SPE 115 Principles of Speech Communication
  - SPE 125 Interpersonal Communication
  - SPE 217 Group Communication
  - SPE 225 Introduction to Organized Communication
- ENG 090 Basic Composition (writing process, critical thinking, text interaction, effective dictation, and essay structure)

ENG 090 is a prerequisite for ENG 121 English Composition I ENG 131 Technical Writing

#### **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 030 Fundamentals of Math or equivalent modules MAT 021-025 (review of arithmetic, fractions, decimals, ratioproportion, and percent) MAT 030 is a prerequisite for MAT 060 Pre-Algebra MAT 110 Basic Finite Mathematics
- MAT 060 Pre-Algebra (Algebra I) (signed numbers, first degree equations, word problems and factoring)

MAT 060 is a prerequisite for MAT 090 Introductory Algebra

MAT 090 Introductory Algebra (Algebra II) (algebraic fractions, equations with two variables, quadratic equations, radicals, and graphing)

MAT 090 is a prerequisite for MAT 109 Survey of Algebra

#### **Developmental Reading**

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

- REA 060 Fundamentals 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)

### Advancing Academic Achievement

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.

- MEM 020 Memory Development and Study Techniques
- AAA 030 Math Success Strategies
- AAA 050 Semester Survival
- AAA 090 Learning Success Strategies (introduction to college study skills)
- AAA 109 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.

Any student who is interested in taking ELI courses must take the ELI placement exam. Non-native speakers of English whose COMPASS placement level is below ENG 090 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. Courses in the English Language Institute include grammar, composition, reading, and conversation. In addition, there are special topic courses that include Pronunciation and Computer Basics. 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.ppcc.edu/eli/ neweli or 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 Networking Academy**

The Cisco Networking Academy Program consists of four courses (20 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.

The CCNP curriculum consists of 4-75 contact hour (5 credit) courses; Level 5-Advanced Routing, Level 6-Remote Access, Level 7-Advanced Switching, Level 8-Network Troubleshooting. Students are required to possess a CCNA certification to enroll. The courses are designed to prepare students for the CCNP certification exams. Levels may be taken out of order, with the exception of Network Troubleshooting which carries a prerequisite of Levels 5 through 7.

These classes include significant hands-on lab experience in conjunction with a web-based curriculum and examination modules.

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 the P.O.S.T. certification eligibility with over 800 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.

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

## Pikes Peak Technology Consortium (PPTC) Courses

The Pikes Peak Technology Consortium (PPTC) was formed in 1996 and includes 34 K-12 school districts, the Pikes Peak and South Central Boards of Cooperative Educational Services, Pikes Peak Community College, and the University of Colorado at Colorado Springs.

Through this consortium, curriculum has been developed to offer .5 credit hour courses on computer technology. Courses include Windows, Word, Excel, PowerPoint, Access, and Use of the Internet, among others. These eight-hour workshops are offered at different times throughout the year to introduce students to computer technology. For more information, please call 540-7258 or 538-5200.

### Real Estate Institute

The Real Estate Institute consists of four courses (twelve credit hours) which are offered on a four-week basis. The entire program can be completed in 16 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 successful 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 540-7258.



Distance Learning is a convenient alternative to taking college courses in a traditional classroom setting. Go to www.ppcc.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.

Distance Learning at Pikes Peak Community College includes interactive television (1TV) courses, telecourses, two kinds of Internet courses, and independent study. For more information about Distance Learning, call 540-7538.

## Interactive Television (1TV)

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 (1TR)

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 faculty-to-student meetings may be scheduled.

## PPCC Online (1N1, 1N2)

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.

## CCC Online (C11, C21)

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 a number of others. Check the web site for complete information. 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.edu, or visit our website at www.ccconline.org.

Students on active military duty, please call 538-5277 or e-mail mil.programs@ppcc.edu.

#### Independent Study Courses by Division

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 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 Centers at 540-7226.

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

## Distance Education Independent Study

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 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), also known as Credit for Prior Learning. 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. For more information, call the SWEEP Evaluator at 540-7227. Students who have completed the SWEEP process may call the Distance Education office at 540-7452.

## 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.

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 10 weeks of the starting date. These courses are offered at the Centennial Campus and Rampart Range Campus. For more information, contact the Division of Business Education at 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 540-7346.

All Fitness Center classes and Spaceflight (SPS 101) are offered on an open-entry/open-exit basis. For more information, contact the Division of Mathematics, Sciences, and Health Sciences at 540-7645.

Military Programs offers a number of computer courses in an openentry/open-exit format. For more information, call 576-7212 or 574-1169.

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

### Military Programs

A comprehensive career education program is offered off campus to military personnel for resident credit. Evaluation of previous military education and training, federal government 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) one of the approved colleges and is listed in the DANTES Guide to External Degree Programs. The Associate of General Studies (AGS) 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.

## 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 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.

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

## **Placement Testing**

Since placement into basic skills instruction is now mandatory in Colorado, the placement test is very important. We advise you to review English, math, and reading with materials available in the Learning Resources Center and the Testing Center before you take the test. Please read the directions carefully and do your very best work when taking the test.

#### Who Needs To Be Assessed?

- · All first-time degree seeking students must be assessed.
- Students who seek to enter college-level English and math courses must be assessed.
- Students who change to degree seeking status must be assessed.

Exemptions may be granted under certain circumstances (with documentation):

- Student has earned an Associates Degree or higher.
- Student has previously been assessed at a Colorado public postsecondary institution.
- Student has successfully completed basic skills instruction in math, writing, or reading.
- Student has successfully completed college-level course in English.
- Student has successfully completed college-level course in math.
- Student has appropriate ACT (Eng 18, Read 18, Math 19) / SAT (Verb 450, Math 440) scores.

#### What Will Be On The Test?

- · Reading
- Math
- Writing Skills

Where Can I Take The Test? Centennial Campus, A-117, 540-7115 (walk-in)
The Downtown Studio Campus, 527-6000 (appointment)
Ft. Carson, Bldg 1117 576-7212
Peterson AFB, Bldg 1141 574-1169

Rampart Range Campus, S-101 538-5115 (walk-in)

Ft. Sill, OK, (580) 357-0198

#### Little Rock AFB, AR (501) 988-1403

#### How Do I Prepare For The Test?

- MATH REVIEW VIDEO is available in LRC (library) at both Centennial and Rampart Range Campuses.
- A sample packet is available in the Testing Centers at Centennial, Rampart Range, and The Downtown Studio Campuses.
- Reading and writing reviews are available in the LRC (library).
- Online COMPASS review is available at www.act.org/compass/
- Placement Test Review Workshops are held before the beginning of each semester.

#### How Do I Get My Results?

• COMPASS: You will receive your score report a few minutes after finishing the test.

#### After Testing?

- Do not lose your COMPASS score report! Take it to the New Student Scheduling Center for help in choosing your classes.
- Students are responsible for enrolling in basic skills instruction during the first thirty (30) hours of attendance at the college.

Accommodations available for those with documented disabilities.

Test results have no effect on acceptance to Pikes Peak Community College but will indicate the appropriate initial level of academic coursework for the student. Students are responsible for enrolling in basic skills instruction during the first thirty (30) hours of attendance at the college. See page 37 for more information.

## Community Colleges of Colorado Basic Skills Assessment Cut-Score Matrix and Translation Effective Spring 2002

READIN	IG COUF	RSES		
COMPASS	ASSET	ACCUPLACER	REQUIRED COURSES	SIS LEVEL
0-39*	0-22*	0-39*	REA 030 Foundations of Reading	1000
40-49*	23-33*	40-59*	REA 060 Fundamentals of Reading	2000
50-74	34-40	60-82	REA 090 College Preparatory Reading	3000
75 <b>↑</b>	41 <b>个</b>	83 <b>个</b>	No Basic Skills Placement	8000

ACT Reading Score of 18 or SAT Verbal Score of 450 Places in College Level \*Study Skills is highly recommended when Reading score is below 50.

ENGLIS	SH COUR	SES		
COMPASS (Writing)	ASSET (Writing)	ACCUPLACER (Sentence Skills)	REQUIRED COURSES	SIS LEVEL
0-20	0-22	0-39	ENG 030 Basic Writing Skills or Special Programs	1000
21-45	23-31	40-59	ENG 060 Writing Fundamentals	2000
46-69	32-40	60-85	ENG 090 Basic Composition	3000
70 <b>↑</b>	41 <b>个</b>	86个	ENG 121 English Composition	
			ENG 131 Technical Writing	8000

ACT English Score of 18 or SAT Verbal Score of 450 Places in ENG 121

MATH	COURSES			
COMPASS	ASSET	ACCUPLACER	REQUIRED COURSES	SIS LEVEL
0-35 (PA)	37-↓ (NS)**	44 ↓ (AR)**	MAT 030 Fundamentals of Mathematics or Refer to Special Prog.	1000
36-65 (PA)	38-55 (NS) 0-29 (EA)	60- <b>↓</b> (AR)	MAT 060 Pre-Algebra	2000
66-100 (PA) 0-44 (AL)	30-42 (EA) 0-34 (IA)	51-54 (EA)	MAT 090 Introductory Algebra	4000
45-54 (AL)	35-40 (IA)	55 个 (EA)	MAT 109 Survey of Algebra	5000
55-100 (AL)	41-100 (IA)	72 🛧 (EA)	MAT 121 College Algebra or MAT 124 Finite Mathematics or MAT 135 Introduction to Statistics	8000
41-100 (CA)			MAT 121 College Algebra or Higher	8500
0-60 (TR)			MAT 122 College Trigonometry	9000
61-100 (TR)			MAT 201 Calculus I	9500

#### ACT Math Score of 19 or SAT Score of 440 Places into MAT 121

Key to MATH Tests: AR=Arithmetic • EA=Intermediate Algebra • PA=Pre-Algebra • AL-Algebra • CA=College Algebra TR=Trigonometry • NS=Numerical Skills • IA=Intermediate Algebra

PLACEMENT			EXEMPTION		
Test Source	Last Digit Code	Posted in SIS	Posted in SIS	Explanation	
COMPASS	***0	1000, 2000, etc	9991	ACT(E18, R18,M19) /SAT(E450, M440) Scores	
Converted ASSET	***1	1001, 2001, etc.	9994	Completed College level Math with a "C" or better	
Converted Accuplace	r ***2	1002, 2002, etc.	9995	Completed College level English with a "C" or better	
BUM P	***3	1003, 2003, etc.	9996	Associate Degree or higher	
			9997	Other approved assessment	

## General Education CORE Transfer Program

#### The CORE Curriculum

The Community Colleges of Colorado System has entered into a series of agreements between Colorado's Community Colleges and Colorado's four-year public 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 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.

Foreign Language courses numbered 111, 112, 211, 212.

See page 45 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 47 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 a four year college or university. 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 ( $\Box$ ).

#### 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, CSC 116, or CSC 160
- III. Mathematics and Science (9 credit hours) Mathematics

Choose from approved course list, pg. 49, and include 3 CORE hours

#### Science

Choose from approved course list, pg. 49, and include 4 CORE hours  $% \left( {\left| {{{\rm{A}}} \right|_{\rm{A}}} \right)$ 

IV. Social and Behavioral Sciences (9 credit hours) From approved CORE list pg. 50 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, PSY, SOC}

#### Category 2

Policy Studies Area {ECO, HIS, POS}

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

From approved course list, pg. 50, 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. 51

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

Choose from all categories, pp. 49-51, taking into account suggested courses for a program's "Recommended Track."

\*See pages 49-51 for CORE sequence requirements.

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 PED activity courses.
- 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. Career and technical 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.
- Courses numbered below 100 normally may not apply toward degrees. AAA 109 and REA 115 may transfer to some institutions.

## 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	<ul> <li>V. Humanities (9 credit hours) Chose from approved CORE list, pg. 50</li> <li>Choose 9 CORE hours from two different disciplines and include at least one CORE sequence.</li> </ul>
II. Computer Communication (3 credit hours) Choose from CSC 105, CSC 116 or CSC 160	
	VI. Communication Studies or Fine Arts (3 credit hours)
III. Mathematics and Science (9 credit hours)	Choose from approved elective list, pg. 51
Mathematics         Choose from approved CORE list, pg. 49         (minimum 3 credit hours)         MAT         MAT	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."
Science Choose from approved CORE list, pg. 49 (minimum 4 credit hours)	
Additional hours from approved elective list pg. 49	
IV. Social and Behavioral Science (9 credit hours) Choose from approved CORE list, pg. 50 Choose 9 CORE hours from two different disciplines and include at least one CORE sequence.	Total Credits CORE Courses (minimum of 34)
Both categories must be included.	Other Courses and Electives
Category 1 – Behavioral Sciences Area {ANT, GEO, PSY, SOC}	Total Credits Earned Toward AA (minimum 60 credits)
Category 2 – Policy Studies Area {ECO, HIS, POS}	

## Associate of Science Degree (AS)

The Associate of Science Degree is designed for students who want an emphasis in natural sciences, mathematics, computer science, preengineering, 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 ( $\Box$ ).

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. 49
- III. Science (8 credit hours) Choose from CORE list, pg. 49
- IV. Social and Behavioral Sciences (6 credit hours) Choose from two different disciplines from CORE list, pg. 50
- Humanities (6 credit hours) Choose from one or two different disciplines from CORE list, pg. 50
- VI. Computer Communication (3 credit hours) (CSC 116 or CSC 160)
- VII. General Electives (6 credit hours) Select from elective list, pp. 49-51
- VIII. Mathematics or Science Electives

(18 credit hours) Select from elective list, pp. 49

- 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 PED activity courses.
- Students may concentrate their study in a specialized area. "Recommended Tracks" are included in the next section of this catalog.
- Career and technical 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. AAA 109 and REA 115 may transfer to some institutions.

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.

Mi I.	nimum Curriculum Requirements: English/Speech (9 credit hours) ENG 121 ENG 122 ENG 122 SPE 115	VI. Computer Communications (minimum of 3 credit hours) Choose from CSC 116 or CSC 160
II.	Mathematics (minimum of 4 credits from         CORE list, pg. 49)         MAT          MAT          MAT          MAT          MAT          MAT          MAT          MAT	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."
III.	Sciences (minimum of 8 credits from         CORE list, pg. 49)	VIII. Mathematics or Sciences Electives (minimum of 18 credit hours)
IV.	Social and Behavioral Sciences Choose 6 credit hours from CORE courses from two different disciplines. Choose from approved CORE list, pg. 50	  Total Credits
V.	Humanities Choose 6 credit hours from CORE courses from one or two different disciplines. Choose from approved CORE list, pg. 50	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 63 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 111, PHY 112, PHY 211, PHY 212, GEY 111, GEY 121, AST 101, AST 102

#### IV. Social and Behavioral Sciences

(Three (3) semester credits required) Choose from ANT 101, ANT 111, GEO 105, HIS 101, HIS 102, HIS 201, HIS 202, POS 105, POS 111, PSY 101, PSY 102, SOC 101, SOC 102

#### 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, Carrier compared source source and 411, 412, 241, 242

Foreign Language courses numbered 111, 112, 211, 212.

VI. Required Business and Economics 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.

# 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.

	0		
ENG SPE	Jish/Speech         121, 122       English Composition I,II         131, 132       Technical Writing I, II         221, 222       Creative Writing I,II         227       Poetry Writing         115       Principles of Speech Communicationq         125       Interpersonal Communication         216       Advanced Public Speaking         217       Group Communication         225       Introduction to Organizational Communication		dits 3,3 3,3 3,3 3 3 3 3 3 3 3 3 3 3 3 3
	thematics		
MAT	<ul> <li>121 College Algebra</li> <li>122 College Trigonometry</li> <li>123 Pre-calculus</li> <li>124 Finite Mathematics</li> <li>125 Survey of Calculus</li> </ul>		4 3 5 3 4
	135 Introduction to Statistics (AA and AGS only)		3
	201,202 Calculus I,II		5,5
	203 Calculus III		4
	255 Linear Algebra		3 3
	265 Differential Equations		3
III. Sc	ience		
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
	123 Foundations of Microbiology	-	3
	130 Environmental Biology		3
	133 Ecology		4
	134 Plant Taxonomy		4
	141,142 Applied Anatomy, Physiology, and		5,4
	Disease Processes I, II		0,1
	151,152 Introduction to Nutrition I,II		3,3
	201,202 Human Anatomy and Physiology I,II		4,4
	205 Microbiology		5
	225 Zoology		5
	226 Botany		5
CHE	101,102 Introduction to Chemistry I,II (AA only)		5,5
•=	111,112 General College Chemistry I,II		5,5
	211,212 Organic Chemistry I,II	_	5,5
CSC	105 Computer Literacy		3
	116 Problem Solving with Visual Basic for Application	ons	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
GEO	111 Physical Geography: Landforms (AA only)		3
	112 Weather and Climate (AA only)		3
			Ũ

	<ul> <li>106 Principles of Geology</li> <li>111 Physical Geology</li> <li>121 Historical Geology</li> <li>141 Landscapes of North America</li> <li>146 The Earth Revealed: Introductory Geology</li> </ul>		3 4 4 3 4	V. Humanities ART 110 Art Appreciation 111, 112 Art History I, II 131 Design I 132 Design II	3 3 3
	111,112 Physics: Algebra-Based I,II 211,212 Physics: Calculus-Based I,II 101 Spaceflight		5,5 5,5 3	135 Computer Graphics I 205 Film Studies FRE 111,112 French I,II	- / -
IV. So	cial and Behavioral Sciences			211,212 French III,IV	- 1 -
ANT	101 Cultural Anthropology		3		5,5 3,3,3
	107 Introduction to Archaeology		3	137 The Arts and Cultures of Mexico	3,0,0
	111 Physical Anthropology		3	201 20th Century American Arts	3
	211 Cultural Resource Management		3	205 Asian Arts and Cultures	3
FCO	221 Primitive Religions 106 Consumer Economics		3 3	235 Pre-Columbian Indian Arts	3
ECO	201 Principles of Macroeconomics		3	236 North American Indian Arts	3
	202 Principles of Microeconomics		3	237 Hispanic Arts of the Southwest	3
	205 Contemporary Economic Issues	-	3	238 Sacred Images, Sacred Spaces	3
GEO	105 World Regional Geography		3	266 Culture Studies	1-3 5
	106 Human Geography		3	JPN 111,112 Japanese I,II	
	111 Physical Geography: Landforms		3	211,212 Japanese III, IV	
	112 Weather and Climate		4	LIT 115 Introduction to Literature	
ше	206 Introduction to Cartography		4	121 Survey of Mythology	3
HIS	<b>101,102 Western Civilization I,II</b> 116 Native American Experience and Indian History		3,3 3	125 Study of the Short Story	3
	136 The Southwest United States		3	201,202 Masterpieces of Literature I,II	- ] -
	137 Contemporary World History		3	211,212 American Literature I,II	3,3
	201,202 U.S. History I,II		3,3	221,222 Survey of British Literature I,II 255 Children's Literature	3,3
	206 U.S. Family History and Genealogy		3	265 Native American Literature	3 3
	207 American Environmental History		3	MUS 100 Fundamentals of Music Theory	3
	215 Women in U.S. History		3	101,102 Music Theory 1,II	4,4
	225 Colorado History		3	120 Music Appreciation	
	<ul><li>235 The American West</li><li>236 Contemporary U.S. History</li></ul>		3 3	121,122 Introduction to Music History I,II	3,3
	241 History of the Pikes Peak Area		3	131 Performance Class I-V	1
POS	105 Introduction to Political Science		3		1,1,1,1
	111 American Government	ā	3		1,1,1,1
	125 American State and Local Government		3	PHI 111 Introduction to Philosophy 112 Ethics	
	205 International Relations		3	113 Logic	
PSY	101,102 General Psychology I,II		3,3	114 Philosophy of Religion	3
	106 Human Relations		3	115 Comparative Religions	3
	<ul><li>115 Psychology of Adjustment</li><li>217 Human Sexuality</li></ul>		3	RUS 111,112 Russian I,II	
	226 Social Psychology		3 3	SPA 111,112 Spanish I,II 🗆 🗆	,
	227 Death and Dying		3	211,212 Spanish III,IV	· .
	235 Human Growth and Development		3	266 Culture Studies	3
	247 Child Abuse and Neglect		3	SPE 216 Advanced Public Speaking 217 Group Communication	3 3
	265 Psychology of Personality		3	THE 105 Introduction to the Theatre Arts	
SOC	101,102 Introduction to Sociology I,II		3,3	211,212 Development of Theatre I,II	
	205 Marriage and Family		3	, , ,	, -
	<ul><li>218 Sociology of Minorities</li><li>231 Deviant Behavior</li></ul>		3 3		
	231 Deviant Benavior 232 Juvenile Delinquency		3 3		
			5		

CORE sequences in bold type.



#### **VI. Communication Studies** ART 150 Fundamentals of Photography 3 151 Photography I 3 159 Fine Art Digital Photography 3 205 Film Studies 3 JOU 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 3 206 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 3 241 Magazine Article Writing SPE 125 Interpersonal Communication 3 216 Advanced Public Speaking 3 217 Group Communication 3 225 Introduction to Organizational Communication 3 VII. Fine Arts ART 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 1,1,1 131,132,133 Ballet I,II,III 1,1,1 141 Regional Dances 1 152 Belly Dance II 1 225 Dance Performance ENG 201, 202, 203, 204 Creative Writing I, II, III, IV 4,4,4,4 MUS 100 Fundamentals of Music Theory 101,102 Music Theory I,II 4,4 131 Performance Class I-V 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 3 206 Technical Theatre 3 216 Theatre Lighting 3 218 Readers Theatre 231,232 Theatre Production III,IV 2,2 241,242 Intermediate Acting I,II 3,3

#### VIII. Physical Education PED 101 Body Toning 110 Physical Education Activities

	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. C	ompu	iting Skills			
CSC	105	Computer Literacy (AA only)	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		
		Discrete Structures	3		
	225	Computer Organization/Assembly			
		Language Programming	4		
	240	Java Programming	4		
CIS	110	Introduction to PC Operating Systems: DOS	2		
	115	Introduction to Computer Information Systems	3		
	150	Introduction to PC Spreadsheets: Excel	1		
		Advanced Electronic Spreadsheets: Excel	1		
		Visual Basic Programming	3		
		COBOL Programming	3		
		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**

Dusines	55/1010	magement			
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					

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**

2

3

1

CRJ	110	Introduction to Criminal Justice	3
	111	Substantive Criminal Law	3
	210	Constitutional Law	3
	230	Criminology	3
	ماله !! ماله	and Ductoccions	

#### Early Childhood Professions 101 Introduction to Early Childhood Professions ECP 3 Education

EDU	201	Introduction to Education	3
-----	-----	---------------------------	---

## 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 ( $\Box$ ) are eligible for transfer.

Requirements

- A minimum of 60 credit hours in a prescribed program of study with a cumulative grade point average of 2.0 (a C average). At least 15 of these credit hours must be earned from 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.
- 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.

	i <b>sh/Speech</b> 121,122 English Composition I,II	Cro	edits 3,3
SPE	131 Technical Writing		3 3
	225 Organizational Communication		3
	ematics and Science 110 Basic Finite Mathematics		3
IVIA I	109 Survey of Algebra		4
	121 College Algebra		4 3
	122 College Trigonometry 124 Finite Mathematics		3 3
	125 Survey of Calculus		4
	135 Introduction to Statistics 151,152 Technical Mathematics I,II		3 4,3
	153 Statistical Techniques for Quality Control		4
	156 Problem Solving in College Math. 201,202 Calculus I,II		4 5,5
AST			3,3 4,4
BIO	105 Science of Biology		4
	110 Foundations of College Biology 111,112 General College Biology I,II		5 5,5
	130 Environmental Biology		3
	<ul><li>133 Ecology</li><li>141 Applied Anatomy, Physiology, and</li></ul>		4
	Disease Processes I		5
	151,152 Introduction to Nutrition I,II		3,3
CHE	201,202 Human Anatomy and Physiology I,II 101,102 Introduction to Chemistry I,II		4,4 5,5
	111,112 General College Chemistry I,II		5,5
CSC	<ul><li>105 Computer Literacy</li><li>116 Problem Solving with Visual Basic for Applicati</li></ul>	ons	3 3
GEY	106 Principles of Geology	0.10	3
	<ul><li>111 Physical Geology</li><li>121 Historical Geology</li></ul>		4 4
	145 The Earth Revealed: Introduction Geology		3
PHY	111,112 Physics: Algebra-Based I,II		5,5
	133 Technical Physics 211,212 Physics: Calculus-Based I,II		5 5,5
SPS			3
	al and Behavioral Sciences		
ANT	<ul><li>101 Cultural Anthropology</li><li>111 Physical Anthropology</li></ul>		3 3
ECO	106 Consumer Economics	-	3
	<ul><li>201 Principles of Macroeconomics</li><li>202 Principles of Microeconomics</li></ul>		3 3
	205 Contemporary Economic Issues		3
050	225 Money and Banking		3
GEO	<ul><li>105 World Regional Geography</li><li>106 Human Geography</li></ul>		3 3
HIS	101,102 Western Civilization I,II		3,3
POS	201,202 U.S. History I,II 105 Introduction to Political Science		3,3 3
. 00	111 American Government		3
	125 American State and Local Government 205 International Relations		3 3
			3

	<ul> <li>101,102 General Psychology I,II</li> <li>105 Psychology of Workplace Relationships</li> <li>106 Human Relations</li> <li>115 Psychology of Adjustment</li> <li>226 Social Psychology</li> <li>235 Human Growth and Development</li> <li>101,102 Introduction to Sociology I,II</li> <li>105 Principles of Practical Sociology</li> <li>205 Marriage and Family</li> <li>218 Sociology of Minorities</li> </ul>		3,3 3 3 3 3 3,3 3,3 3 3 3 3 3
	anities	_	
ART	110 Art Appreciation		3
	111 Art History I		3 3
EDE	112 Art History II 111,112 French I,II		
	211,212 French III,IV		3,3
GER	111,112 German I,II		5,5
	121,122,123 Survey of Humanities I,II,III		3,3,3
	201 20th Century American Arts		3
	205 Asian Arts and Cultures		3
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
БШ	121,122 Introduction to Music History I,II		3,3
PHI	<ul><li>111 Introduction to Philosophy</li><li>112 Ethics</li></ul>		3 3
	113 Logic		3
	114 Philosophy of Religion	-	3
	115 Comparative Religions		3
RUS	111,112 Russian I, II		5,5
	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 Discussion		3
-	225 Introduction to Organizational Communication		3
THE	105 Introduction to the Theatre Arts		3
	211,212 Development of Theatre I,II		3,3
Othe	r General Education		
BUS	105 Business Mathematics		4
	115 Introduction to Business		3
CIS	110 Introduction to PC Operating Systems: DOS		3
	115 Introduction to Computer Information Systems		3
000	118 Introduction to PC Applications		3 3
PED	105 Computer Literacy Any PED course		3
FED	ANY FED COUISE		

## 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 technical and transfer courses without the constraints of specialization. Transferability of the AGS depends upon the courses taken and the receiving institution.

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 career and technical courses. The selected courses must not be considered developmental.

<b>Req</b> 1. 2. 3. 4. 5.	Jirements A minimum of 60 credit hours of course work. 30 credits of general education with 15 credits from CORE (□) Courses. A cumulative grade point average of 2.0 (a C average). At least 15 of these credit hours must be earned from PPCC. AAA 109 and REA 115 may transfer to some institutions.	II.	. General Education Electives (15 credit hours)
To a cheo	S Degree Checklist void any confusion or disappointment, students should fill in this k list when meeting with their advisor. Many options are identified h will fulfill the CORE curriculum requirement for the AGS degree.	١١.	. Open Electives (30 credit hours)
(NO	imum Curriculum Requirements: TE: Sections I & II must have a minimum of 15 credit hours of RE (口) courses.)		
	General Education (15 credit hours) English (3 credit hours) ENG 121 or ENG 131		
	Mathematics (3 credit hours) MAT 110 or higher		
	Science (3 credit hours)		
	Social and Behavioral Science (3 credit hours)		
	Humanities (3 credit hours)	To	otal Credits (minimum 60 credits)

I.	General Education (30 Credits - 15 CORE) (Minimum of 3 credits from English/Speech, Mathem Science, Social and Behavioral Sciences and Huma		
		Cr	edits
	sh (minimum 3 credit hours) 121 English Composition I or		3
	131 Technical Writing		3
Math MAT	ematics (minimum 3 credit hours) 110 Basic Finite Mathematics		2
MAI	121 College Algebra		3 4
	124 Finite Mathematics		3
	<ul><li>125 Survey of Calculus</li><li>135 Introduction to Statistics (AA and AGS only)</li></ul>		4 3
	151, 152 Technical Mathematics II, II	-	4,3
	156 Problem Solving in College Mathematics		4
Scier	201,202 Calculus I,II nce (minimum 3 credit hours)		5,5
	101,102 Astronomy I,II		4,4
BIO	105 Science of Biology		4
	110 Foundations of College Biology 111,112 General College Biology I,II		5 5,5
	130 Environmental Biology	-	3
	<ul><li>133 Ecology</li><li>141 Applied Anatomy, Physiology, and</li></ul>		4
	Disease Processes I		5
	151,152 Introduction to Nutrition I, II		3,3
	201,202 Human Anatomy and Physiology I,II 226 Botany		4,4 5
CHE	101,102 Introduction to Chemistry I,II (AA only)		5,5
	110 Foundations of College Chemistry		4
GEY	111,112 General College Chemistry I,II 106 Principles of Geology		5,5 3
	111 Physical Geology		4
	<ul><li>121 Historical Geology</li><li>141 Landscapes of North America</li></ul>		4 3
	145 The Earth Revealed: Introductory Geology		3
PHY	, , , ,		5,5
Saaia	211,212 Physics: Calculus-Based I,II al and Behavioral Sciences (minimum 3 credit hou		5,5
	101 Cultural Anthropology		3
	111 Physical Anthropology		3
ECO	<ul><li>106 Consumer Economics</li><li>201 Principles of Macroeconomics</li></ul>		3 3
	202 Principles of Microeconomics	ā	3
GEO	<ul><li>105 World Regional Geography</li><li>106 Human Geography</li></ul>		3 3
	111 Physical Geography: Landforms		3 3
	112 Weather and Climate	_	3
HIS	101,102 Western Civilization I,II 137 Contemporary World History		3,3 3
	201,202 U.S. History I,II		3,3
DOC	236 Contemporary U.S. History		3
POS	105 Introduction to Political Science 111 American Government		3 3
	125 American State and Local Government		3
PSY	205 International Relations 101,102 General Psychology I,II		3 3,3
101	105 Psychology of Workplace Relationships	-	3
	106 Human Relations		3
	<ul><li>115 Psychology of Adjustment</li><li>226 Social Psychology</li></ul>		3 3
	, · · · · · · · · · · · · · · · · · · ·		-

105 P 205 M	2 Introduction to Sociology I,II rinciples of Practical Sociology larriage and Family ociology of Minorities		3,3 3 3 3
Humanities (	minimum 3 credit hours)		3
	rt Appreciation		3
	rt History I		3
	rt History II		3
FRE 111,112			5,5
211,212	2 French III,IV		3,3
GER 111,112			5,5
HUM 121,122	2,123 Survey of Hum. I,II,III		3,3,3
	2 Japanese I,II		5,5
LIT 115 In	troduction to Literature		3
125 S	tudy of the Short Story		3
201,20	2 Masterpieces of Literature I,II		3,3
211,212	2 American Literature I, II		3,3
221,22	2 Survey of British Literature I, II		3,3
	lusic Appreciation		3
121,12	2 Introduction to Music History I,II		3,3
PHI 111 In	troduction to Philosophy		3
112 E			3
113 Lo			3
	hilosophy of Religion		3
	omparative Religions		3
RUS 111,112			5,5
	2 Spanish I,II		5,5
	2 Spanish III,IV		3,3
	rinciples of Speech Communication		3
	terpersonal Communication		3
	roup Communication		3
	troduction to Organizational Communication		3
	troduction to the Theatre Arts		3
	2 Development of Theatre I,II		3,3
Additional G	eneral Education Electives		
BUS 105 B	usiness Mathematics		4
	troduction to Business		3
	troduction to PC Operating Systems: DOS		3
	troduction to Computer Information Systems		3
	troduction to PC Applications		3
	omputer Literacy		3
ENG 122 E	nglish Composition II		3
Electives (30	credit hours)		
	nclude courses from general education sourc		
electives (pp.	49-51), and/or career and technical courses. Th	ne sel	ected
courses must	not he developmental		

#### courses must not be developmental. NOTE: Refer to page 63 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.

## TEACHER EDUCATION

## Pikes Peak Community College

#### Background:

The most common route that community college students take to becoming a teacher is through a collegiate teacher preparation program. For each of these programs, the Colorado Commission on Higher Education (CCHE) requires the following:

- All prospective teachers hold a degree in an academic area or have a strong multi-disciplinary degree.
- Institutions must assure each teacher preparation program may be completed within four academic years, including degree and pedagogical requirements. (Non-public institutions are exempt from this requirement.)
- All programs developed by 4-year institutions in the state must receive approval from the CCHE.

These requirements have resulted in some changes in the advising process at the community college level. Because each 4-year institution in Colorado has developed its own Teacher Education Preparation program, approved by the Colorado Commission on Higher Education, the programs differ from college to college and even the content for similar program majors is different. Students who plan to complete the teacher education preparation program in four years/120 credit hours must:

- Decide on a major as soon as they enter college.
- Identify a transfer institution.
- Enroll in community college classes that follow the freshman/ sophomore curriculum established by their target transfer institution.
- Keep in constant contact with their community college advisor and the transfer institution while they are attending the community college.

Throughout their first two years, they will need to keep in constant contact with their community college advisor and the transfer institution while they are attending the community college. This is the first of three teacher education preparation routes a student may choose:

- 1. Collegiate Teacher Preparation Programs
- Currently, 16 institutions of higher education prepare candidates for initial teacher licensure in Colorado. Based on legislation passed in 1999, the primary responsibility for approval of teacher education institutions and the programs within those institutions resides with the Colorado Commission on Higher Education.
- 2. Alternative Teacher Programs

Currently, 30 school districts, boards of cooperative services, institutions for higher education, accredited independent schools, and charter schools annually prepare candidates for initial licensure. Alternative teachers must hold a bachelor's degree from an accredited institution prior to their approval by the Colorado Department of Education and must pass a content assessment in their teaching area.

- 3. Teacher in Residence Programs
- Colorado schools districts and boards of cooperative services may hire non-licensed persons as teachers in residence. The Teacher in Residence Programs will be a two-year program of training and support for non-licensed teachers developed and implemented by school districts and Boards of Cooperative Services in collaboration with approved teacher education institutions.

#### Possible Emphasis Areas

At PPCC, most teacher education preparation students will transfer to UCCS or USC. Each of these institutions offers different majors and endorsement areas:

USC

#### UCCS

Elementary Education:

- History
- English
- Spanish
- Geography
- Biology

#### Secondary Education:

- English
- Mathematics
- Natural Science
   Biology
   Chemistry
- Physics Social Studies
- Spanish

- Physical Education (K-12)Art (K-12)
- Music (K-12)
- · Liberal Studies

#### Secondary Education:

Elementary Education:

- Physical Education (K-12)
- Art (K-12)
- Music (K-12)
- English/Language Arts
- History
- Mathematics
- Political Science
- SpanishScience
  - Biology Chemistry Physics
  - Physics or Chemistry

## The Five Steps to Success in Teacher Education Preparation

Students interested in pursuing a teaching career should try to meet with a teacher preparation advisor as soon as possible when they get to PPCC. Below is a general outline of the steps involved in beginning teacher education preparation at PPCC:

- 1. Declare teacher education preparation as your PPCC emphasis area.
- 2. Identify the content area in which you want to teach.
- 3. Designate either elementary or secondary level.
- 4. Make an appointment with a Teacher Education Preparation Advisor
  - a. Art Taffy Mulliken
  - b. Downtown Studio (General advising)- Nancy McCollum
  - c. Drama and Music Michael Stansbery, Bill Malone
  - d. Early Childhood Education Cindy Buckley
  - e. English Language Arts Cathy Henrichs, Janele Johnson, Annette Lyttle
  - f. Foreign Language Kathryn Birkhead
  - g. Health Karla Belew

- h. Mathematics Sharon Butler
- i. Physical Education Karla Belew
- j. Science Karla Belew
- k. Social Studies-History Katherine Sturdevant, Wayne Artis Social Studies-Geography - Mary Hayden
- I. Speech Lois Kline, Stephen Collins
- 5. Designate a transfer institution.
  - a. Review the complete program at the transfer institution to ensure that you are able to meet their program criteria.
  - b. Identify freshman level courses at PPCC that are
  - equivalent to those of the transfer institution. c. Enroll in those courses, or enroll in the developmental courses that are prerequisites.
  - Make an appointment with an advisor at the transfer institution.
    - i. Review entry requirements for the program at the transfer institution.
    - ii. Complete any necessary freshman-sophomore level steps.
    - iii. Keep in contact with your advisor at the 4-year institution.
  - e. Complete any necessary background checks.
  - f. Continue with PPCC courses that have equivalent courses at the transfer institution. Be sure you are meeting the GPA requirements for the transfer institution.
  - g. At the appropriate time, transfer into the teacher training program at the 4-year institution.

Students who do not follow the five steps listed above will not be able to complete a teacher education program in four years (120 semester hours).

Developmental studies classes and/or prerequisites must be taken in addition to the designated courses and do not count as part of the four-year programs.

## Getting Started at PPCC

•

Sometimes our PPCC students need to get started with classes, even though they may not have had a chance to review the specific programs in which they are interested. The following instructions may help PPCC's prospective teachers get started with their first semesters.

- If you plan to transfer to UCCS in any of their major areas, enroll in the following classes to begin your program at PPCC: ENG 121 (or developmental prerequisite) PSY 101 General Psychology I PHI 111 Introduction to Philosophy GEO 105 World Regional Geography
- If you plan to transfer to USC in any of their major areas, enroll in the following classes to begin your program at PPCC:

ENG 121 English Composition I (or developmental prerequisite) SPE 115 Principles of Speech HIS 201 U.S. History I GEO 105 World Regional Geography

## PROGRAM DIRECTORY

Rec. AAS Track Deg. Cert. Page

	THACK	Dcg.	OCIT.	i ayu
Business Robert Jager, Acting Dean • 540-7258, 538-5200 Karla J. Rodie, Assistant Dean • 540-7262 Russell Flora, Assistant Dean • 540-7264				
Accounting Judy Jager • Louise Hunter		Х	Х	60
Business Administration* Charles F. Bowles • Robert R. Bricker Sharon Meyer • Carl J. Sonntag • Jacqueline Tag	gart		Х	67
*Emphasis Areas Business Administration	on			
Business Foundations Charles F. Bowles • Robert R. Bricker • Shar Carl J. Sonntag • Jacqueline Taggart	on Me	X eyer	Х	71
Customer Service Robert R. Bricker		Х	Х	68
E-Commerce Jennifer Jirous • Bob Bricker		Х	Х	68
Entrepreneurial Charles F. Bowles		Х	Х	69
Financial Services Carl J. Sonntag		Х	Х	69
Hospitality Robert R. Bricker		Х	Х	69
International Business Sharon Meyer		Х	Х	69
Management Charles F. Bowles • Sharon Meyer • Carl J. Sonntag • Jacqueline Taggart		Х	Х	70
Marketing Robert R. Bricker		Х	Х	70
Office Administration Janice A. Larson • Karla J. Rodie • Jeanette	Walg	X ren	Х	70
Real Estate Charles Albrecht		Х	Х	70
Supervision Carl J. Sonntag		Х	Х	71
CISCO Networking Academy Richard Reynolds • Judy Hitchell • Nate Wadman Stephen Walth			Х	72
Computer Information Systems Jennifer Jirous • Frank Kuehn • Janice A. Larson Diane Pirraglia • Ken Riddle • Stephen Walth	• Car	X ol Oh	X Ile	72
Economics Russell Flora	Х			78
Legal Assistant Mike Adams		Х		94
Unix Certification Clement Lee			Х	
Networking Technology David Walters • Clement Lee		Х	Х	101
Office Training Fast Track Jeanette Walgren			Х	104
Travel Industry Robert R. Bricker				198

#### **Communications and Humanities** Jane Abbott, Ph.D., Dean • Phone: 540-7300, 538-5300

Art Stephanie Mulliken • Laura Ben-Amots	Х			63
English Chris Clendenin • Deidre Farrington • Barbara G Elliott Gruner, Ph.D. • Cathy Henrichs • Mary Hilt Janele Johnson • Annette Lyttle • Mark Miller, Ph	brand	1		82
English Language Institute Jean Echevarria • Rebecca Hicks				157
Foreign Language Kathryn Birkhead • Tim Davis	Х			86
Humanities Chris Clendenin • Cathy Henrichs • Mary Hiltbran Nancy McCollum	X nd			89
Journalism Janet Rohan	Х			92
Latin American Studies Nancy McCollum	Х			94
Music William Malone				178
Philosophy Ruth Beardsley, Ph.D • Richard Trussell				188
Southwest Studies Nancy McCollum	Х			112
Speech Hal Bergeson , Ph.D. • Steven Collins, Ph.D. • Lo	X bis Kli	ine, P	h.D.	114
Technical Writing Annette Lyttle			Х	115
Theatre Michael Stansbery	Х			116

Learning Enterprises Nancy Meiklejohn, Director • Phone: 527-6060

Deaf Studies Jo Berger Ed.D. Director • Phone: 540-7210/TTY	′ 540-	7081		
American Sign Language Diana Eurek				128
Interpreter Preparation Lariissa McClung		Х		91
Developmental Studies Jo Berger, Ed.D. Dean • Phone: 540-7320, 538-5	5340			
English Karen Bowen • Christine Getz • Larry Giddings • Sandra Miller • Karen Standridge, Ph. D.	Mark	King		156
Reading Kathy Beggs • Patrichia A. Lichty				192
Mathematics, Sciences, and Healtl Judy D. Baros, Dean • Phone: 540-7393; 538-54 Robert McMullen, Assistant Dean • 540-7401		ienc	es	
Astronomy David Esker • Mark Izold				133

Biological Sciences Karla Belew • Robert Henderson Robert W. McMullen • Albert L. Threlfall	Х	67
Robert VV. Miciviulien • Albert L. Threnall		

	Dur			
	Rec. Track		Cert.	Page
Chemistry Juan-Carlos Herraez • Evan McHugh	Х			71
Computer Science Michael Simpson • Laurie DeHerrera	Х			73
Dental Assisting Anne Maestas • Frank Delgesso		Х	Х	76
Emergency Medical Technician-B David Wells			Х	81
Emergency Medical Technology-Parame David Wells	edic		Х	81
Geology Mark Izold	Х			87
Mathematics Sharon Butler • Deric Davenport • Gwen Wiley	Х			97
Medical Office Technology Barbara Burke		Х	Х	97
Medical Transcriptionist Barbara Burke			Х	98
Nursing Cynthia Askvig • Mary Ann Wermers • Gillian Mo Angela Carrlington • Deborah Center	osier	Х		102
Physical Education Dawn Jacobson				188
Physics David Esker • Evan McHugh	Х			104
Pre-Allied Health Robert W. McMullen	Х			106
Pre-Engineering David Esker	Х			107
Pre-Med Professions Robert W. McMullen	Х			107
Space Science David Esker	Х			113
Military Programs Bart Guthrie, Director • 538-5276				
Upholster y Barbara Flippen			Х	116
Social and Behavioral Sciences Wayne Artis, Interim Dean • Phone 540-7430				
Anthropology Rhonda Burkhart	Х			60
Environmental Studies Mary Hayden	Х			83
Geography Mary Hayden	Х			87
History Wayne Artis • Katherine Scott Sturdevant	Х			88
Political Science Leonard Riley, II	Х			105
Psychology John Andrade • Stefanie Bell • Cindy Kamilar, Ph Calvin Toombs • Michael Trumball, Ph.D.	X n.D.			108
Social Work Transfer Calvin Toombs • Cindy Kamilar, Ph.D. • Jane Ast	X or			111

	Rec. Track		Cert.	Page
Sociology Joanna Grey • Lisa Donaldson	Х			112
Technical, Industrial and Service C Margarette Goodwin Dahl, Dean • Phone: 540-73		pati	ons	
Architectural Drafting Thomas E. Kelly • William H. Wysong, Jr.			Х	61
Architecture and Construction Technolo Thomas E. Kelly • William H. Wysong, Jr.	gу	Х		62
Art for Artisans Stefanie Mulliken	Х			63
Auto Collision Repair Wade Knight		Х	Х	64
Automotive Technology/Diesel Joe Magnuson • James L. McCarty Larry Schneider		Х	Х	65
Computer Aided Drafting (CAD) Janet Wilson		Х		72
Criminal Justice Michael Ensminger • Jeff Engles • Larry Iverson Kenneth Jones • Colins McLean		Х	Х	74
Culinary Arts Rob Hudson		Х		75
Early Childhood Professions Michelle Bender • Cynthia Webster-Buckley		Х	Х	77
Electronics Technology Scott Fambrough		Х		79
Energy Management and Control Systems Technology		Х		81
Facilities Maintenance Technology Management Robert P. Smith		Х		83
Farrier Science Franklin Moore			Х	85
Fire Science Technology Lonnie Inzer • Bob Burton		Х		85
Integrated Circuit Fabrication Phil Myers		Х	Х	89
Interior Design Ruth Garrett Graul		Х		90
Landscape Technician		Х		93
Law Enforcement Academy Dan Dirscherl			Х	105
Machining Technology Kelly Oswald		Х	Х	95
Natural Resource Technology Ruth-Ann Larish		Х	Х	99
Radio, Television, Telecommunications Production Kurt M. Grow • Dick Chase		Х	Х	108
Social Services Technician Jane Astor		Х	Х	110
Visual Communications Sandra K. Laxson • Robert L. Olson • Jenna She	arn	Х		117
Welding Scott Mannering		Х	Х	119

## EDUCATIONAL PROGRA

## Accounting

Recommended basic skills standards are

- ENG 090
- MAT 060
- **REA 090**
- AAA 090

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	3
ACC	155	PC Spreadsheets Complete: Excel	3
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
			32

#### **Accounting Electives**

Choose 2 c	courses from the following list			
ACC 222	Federal Income Tax			
ACC 225	Accounting for Governmental and			
	Nonprofit Organizations			
ACC 226	Cost Accounting			
Other Electives				
Choose 6 hours from the following courses				

BUS	171	Cooperative Work Experience I/Internship I	3
CIS	120	Word Processing I: Microsoft Word	3
CIS	123	DOS Complete	3
CIS	128	Windows Complete: Windows 98/Windows XP	3
CIS	130	Introduction to the Internet	1
CIS	131	Introduction to Web Authoring: HTML	1
CIS	145	PC Database Complete: Access	3
			6
General education courses			
BUS	105	Business Mathematics	4
DLIC	11E	Introduction to Ducinees	2

803	110	Introduction to Business	3
CIS	118	Introduction to PC Applications	3
ECO	201	Principles of Macroeconomics	3
SPE	115	Principles of Speech Communication	3
			16

#### **Total Credit Hours**

\* 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	3
ACC	155	PC Spreadsheets Complete: Excel	3
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
		••	26-27

#### Electives:

Choose 6 hours from the following courses

011000	0001		
ACC	122	Principles of Accounting II	4
CIS	110	Introduction to PC Operating System: DOS	2
CIS	120	Word Processing I: Microsoft Word	3
CIS	123	DOS Complete	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
			6
	-		

Total Credit Hours 32-33 \* If you are proficient in ten key by touch, contact your advisor for testing instructions.

## Anthropology

Recommended basic skills standards are

ENG 090

4

3

3

3 3 3

60-61

<u>3</u> 6-7

REA 115

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

#### 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
			9

#### II. Computer Communication

II. Co CSC		ter Communication Computer Literacy (or CSC 116 or CSC 160)	_3
Sugg	este	d to Fulfill This Track	3
		natics and Science	
MAT		Introduction to Statistics	3
BIO	105	Science of Biology or	4
GEY	111	Physical Geology or	(4)
GEY	121	Historical Geology	(4)
BIO	201	Human Anatomy and Physiology I	4
IV Sc	ncial	and Behavioral Sciences (sequence needed)	11
		nours from the following courses	
ANT	101	Cultural Anthropology	3
ANT	111	Physical Anthropology	3
		Western Civilization I	3
HIS	201	Western Civilization II U.S. History I	ა ვ
HIS	202	U.S. History II	3 3 3 3 <u>3</u> 9
		2	9
V. Hu			
		nours from the following courses	0
ART	111	Art History I or	3
ART	112	Art History II	(3)
,		Any CORE Foreign Language	5
		or	
HUM	121	Survey of Humanities I	3
ним	122	or Survey of Humanities II	(3)
		or	(•)
		Survey of Humanities III	(3)
PHI	111	Introduction to Philosophy	<u>3</u> 9
		unication Studies or Fine Arts	9
		credit hours from list on p. 51	3
			<u>3</u>
		nmended Electives	
		credit hours from the following courses	0
AN I ANT		Introduction to Archaeology Cultural Resource Management	3
ANT		Indians of North America	3
ANT		Anthropology of Religion	3 3
ECO	201	Principles of Macroeconomics	3
GEO		World Regional Geography	3
HIS		Western Civilization I	3
HIS HUM		Western Civilization II Survey of Humanities I	ა ვ
HUM		Survey of Humanities I	3
POS	105	Introduction to Political Science	3
PSY		General Psychology I	3
PSY		General Psychology II	3 3 3 3 3 3 3 3 3 3 3 3 3
SOC	101	Introduction to Sociology I	<u> </u>
		gree for sequence requirements	60

# Architectural Drafting Recommended basic skills standards are

- ENG 090 •
- MAT 060 •
- REA 115 ٠

AAA 090 •

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

Cert	IIICC	ວເບ	
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	Architectural Technology Theory Building Service Systems I Presentation Drawings and Models Contemporary Architectural Theory II	2 3 2 3 2 3 2
MAT	235	Technical Mathematics I	2
			32
		udents may substitute ARC 151 and 152. students may substitute ARC 153 and 154.	
	Ũ		
Basi	c Dr	rafting Certificate (Day Students)	
ARC	101	Architectural Drawing I	5
		Architectural Drawing Theory	4
			9
Deel	~ D.	coffing Cortificate (Evening Studente)	
Dasi		rafting Certificate (Evening Students)	4
	104	Architectural Drawing Theory Architectural Drafting I	4 3
	157	Architectural Drafting II	2
AILO	152		<u>2</u> 9
			9
CAD	Pro	ofessional Upgrade Certificate	
ARC	108	Architectural CAD I	3
ARC	262	Architectural CAD II	3
			6
Cong	stru	ction Professional Upgrade	
Cert			
		Level and Transit	S
	201	Estimating and Print Reading	3 5
ARC	226	Construction Scheduling and Supervision _	3
	220		<u> </u>

# Intermediate Drafting Certificate (Day Students)

ARC	101	Architectural Drawing I	5
ARC	102	Architectural Drawing II	5
ARC	104	Architectural Drawing Theory	4
ARC	108	Architectural CAD I	_3
			17

# Intermediate Drafting Certificate (Evening Students)

ARC	104	Architectural Drawing	Theory
		Architactural CAD I	

- ARC 108 Architectural CAD I ARC 151 Architectural Drafting I
- ARC 152 Architectural Drafting II
- ARC 153 Architectural Drafting III
- ARC 154 Architectural Drafting IV

# Architecture and Construction Technology

Recommended basic skills standards are

- ENG 090
- MAT 060
- REA 115
- AAA 090

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*
ARC	104	Architectural Drawing Theory
ARC	111	Architectural Technology Theory
CIS	118	Introduction to PC Applications±
MAT	151	Technical Mathematics I±
		or
MAT	121	College Algebra±
Seme	ester	Two - Spring
		Two - Spring Architectural Drawing II**
ARC	102	
ARC ARC	102 105	Architectural Drawing II**
ARC ARC ARC	102 105 108	Architectural Drawing II** Architectural Building Materials I
ARC ARC ARC ARC	102 105 108 114	Architectural Drawing II** Architectural Building Materials I Architectural CAD I

	0	

MAT	122	College	Trigonometry±
-----	-----	---------	---------------

## Options

4

17

(4) 18

(3)

18

### 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. AAS electives chosen from the list on page 53 must total 15.

#### 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	2 3 _ <u>3</u> 16
ARC 262 Architectural CAD II	3
	16
Semester Four - Spring	
ARC 202 Architectural Drawing IV	5
ARC 224 Construction Contracts and Management	3
ARC 227 Architectural Structures	3 5
ARC 235 Contemporary Architectural Theory II	2
BUS 217 Business Communication and Report Writing±	3
or	
ENG 131 Technical Writing I±	(3)
±Indicates AAS electives	(13)
Additional elective	<u>2</u>
	20-21
Courses required for all options	36
Total Credit Hours	72-73

#### **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 jobsite problem solving. AAS electives chosen from the list on page 53 must total 15.

#### Semester Three - Fall

Seille	53161		
		Architectural Building Materials II	3
		Building Service Systems II	2
		Estimating and Print Reading	5
ARC	223	Introduction to Building Codes	3
ARC	262	Architectural CAD II	3
			16
Seme	ester	Four - Spring	
ARC	207	Level and Transit	3
ARC	224	Construction Contracts and Management	3
		Construction Scheduling and Supervision	3
		Architectural Structures	5
		Contemporary Architectural Theory	2
		Business Communication and Report Writing±	3
000	217		Ū
ENG	131	Technical Writing I±	(3)
		AAS electives	(13)
		elective	
/ tooltin	onart		<u>2</u> 21
Cours	ses r	equired for all options	36
		lit Hours	73
			13
		tudents may substitute ARC 151 and 152.	
		students may substitute ARC 153 and 154.	
***Coi	urses	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. AAS electives chosen from the list on page 53 must total 15.

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 3 <u>3</u> 19
BUS 115 Introduction to Business±	3
MAR 111 Principles of Sales±	3
	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 3
MAR 216 Principles of Marketing±	3
±Indicates AAS electives	(13)
Additional elective	2
	16
Courses required for all options	36
Total Credit Hours	71

## Art

Recommended basic skills standards are

- ENG 090
- MAT 030
- REA 090
- AAA 090

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**

\*\*CORE Science (

Math/Science Elective

#### **Minimum Requirements**

ENG ENG	121 122	Speech English Composition I English Composition II Principles of Speech Communication
		ter Communication Computer Literacy (or CSC 116 or CSC 160)
III. Ma	then	d to Fulfill This Track: natics and Science ath (❑)

#### IV Casial and Dahayianal Calanaa\*

		and Behavioral Sciences*	
		Cultural Anthropology	3
ANT	111	Physical Anthropology or	3
PSY	101	General Psychology **CORE History (□)	(3)
			_ <u>3</u> 9
V. Hu	mani	ties*	
ART	110	Art Appreciation or	3
ART	111	Art History I	3
ART	112	Art History II or	3
HUM	121	Survey of Humanities I	(3)
		Survey of Humanities II or	(3)
		Survey of Humanities III	(3)
MUS	120	Music Appreciation	<u>_(3)</u> 9
		unication Studies or Fine Arts	
ART	205	Film Studies	<u>_3</u> 3
			3
		nmended Electives hours from the following courses	
		ART 241	
		ourse excluding ART 280s)	3
		E Foreign Language Course (	5
		North American Indian Arts	3
		Hispanic Arts of the Southwest	3
		Sacred Images, Sacred Places	3
		Arts and Cultures of Mexico	3
IUC	121	Set Design	5 3 3 3 3 3 <u>3</u> 17
			17

#### **Total Credit Hours**

\*See AA degree for sequence requirements \*\*See CORE list

## Art for Artisans

Recommended basic skills standards are

- ENG 090
- MAT 060
- REA 090
- AAA 090 •

3

3

3 a

3 3

3

4

3 10

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 Degre	e MACHINING AND JEWELRY MAKING
Recommended Track	MAG 114 Machining Process 4
I. Prescribed general education	MAG115Machining Lab4ART141Jewelry & Metalwork I33ART142Jewelry & Metalwork II33ART143Enameling on Metal33ART241Jewelry & Metalwork III33WEL101Oxyacetylene Welding & Cutting4
ANT 101 Cultural Anthropology	ART 141 Jewelry & Metalwork I 3 ART 142 Jewelry & Metalwork II 3
ART 110 Art Appreciation	<sup>3</sup> ART 143 Enameling on Metal 3
ENG 131 Technical Writing	<sup>3</sup> ART 241 Jewelry & Metalwork III 3
GEY 141 Landscapes of North America	3 WEL 101 Oxyacetylene Welding & Cutting 4
MAT 110 Basic Finite Mathematics	-3 WEL 107 Introduction to Ornamental Iron 4
II. Elective courses in general education	WEL 200 Advanced Layout and Fabrication 4
II. Elective courses in general education ART 121 Basic Drawing I	OTHER 3 ART 137 Drawing from the Imagination 3
ART 122 Basic Drawing I	
MUS 120 Music Appreciation	3 Development
THE 105 Introduction to Theatre Arts	Bevelopinion
	3MAN227Small Business Management31222
III. Professional/generally transferable	Total Credit Hours 69
SPE 115 Principles of Speech	3
CIS 118 Introduction to PC Applications or	<sup>3</sup> Auto Collision Repair
CSC 105 Computer Literacy	(3) Recommended basic skills standards are
ART 131 Design I	3 • ENG 060
ART 132 Design II	3 • MAT 030
VIC 141 Photoshop I	4 • REA 090
VIC 226 Rendering and Illustration	$-\frac{4}{20}$ • AAA 090
	20 This program prepares students to enter into upgrade skills in auto
IV. Other courses as prescribed	collision repair. Students have the opportunity to develop skills in
Choose 22 hours from the following courses	non-structural metal repair, structural repair, and all aspects of
CERAMICS	refinishing. Students who complete a certificate program are prepared
ART 161 Ceramics I	<sup>3</sup> to optor into a specific area of the collision repair industry. The degree
ART 162 Ceramics II ART 163 Handbuilt Clay I	program provides students with a broader background and training
ART 164 Handbuilt Clay II	3 In all areas of auto collision repair. Students completing entrer a
ART 261 Ceramics III	3 degree or certificate program should have little difficulty in finding
ART 262 Ceramics IV	3 employment. The program utilizes late-model vehicles for training
TEXTILES	purposes and is certified by the National Institute for Automotive
ART 153 Fiber Design I	3 Service Excellence (ASE).
ART 154 Fiber Design II	3 Students must provide their own work clothes and hand tools. A
ART 253 Fiber Design III	3 complete set of collision repair tools should be purchased before job
ART 254 Fiber Design IV	<sup>3</sup> entry.
PRINTMAKING/PAPER & BOOKMAKING	3 Students may complete deficiencies concurrently with the beginning
ART 150 Fundamentals of Photography ART 226 Papermaking	3 Students may complete deliciencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite
ART 220 Papernaking ART 227 Marbling of Paper	must have instructor permission to enroll.
ART 228 Printmaking I	Additionally, students should work with a program faculty advisor to
ART 230 Printmaking II	additionally, students should work with a program factory advisor to ensure that they are taking the correct classes for their program.
PRT 219 Book Binding	4
STAINED GLASS	Associate of Applied Science Degree
ART 115 Stained Glass I	
ART 202 Stained Glass II	0
ART 203 Stained Glass III	
ART 204 Stained Glass IV	3 ACR 110 Orientation and Safety 4 ACR 116 Introduction to Refinishing 4
SOUTHWEST CRAFTS ART 156 Leathercraft & Wood	3 ACR 121 Introduction to Metal Repair 4
ART 150 Learner and wood ART 157 Basketry	3 WEL 108 Auto Body Welding 4 16
ART 158 Beading	3 16
HUM 236 North American Indian Arts	2 Semester Two - Spring
HUM 237 Hispanic Arts of the Southwest	2 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
	MAT 156 Problem Solving in College Mathematics4 16

#### Semester Three - Summer

		Introduction to Computers General Education Elective	-
•••••		Four - Fall Non-Structural Metal Repair II	
		Plastic Repair and Refinishing	
		Structural Repair I	
		Introduction to Organization Communication	_
ACR ACR	128 220	Five - Spring Refinishing II Structural Repair II Production General Education Elective	-

#### **Total Credit Hours**

\*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 ACR 121 Introduction to Metal Repair ACR 122 Non-Structural Metal Repair I ACR 123 Part Replacement and Alignment ACR 124 Non-Structural Metal Repair II WEL 108 Auto Body Welding <b>Total Credit Hours</b>
Structural Repair Technician
ACR 110 Orientation and Safety
ACR 121 Introduction to Metal Repair
ACR 123 Part Replacement and Alignment ACR 219 Structural Repair I
ACR 220 Structural Repair II
WEL 108 Auto Body Welding
Total Credit Hours
Refinish Technician
ACR 110 Orientation and Safety
ACR 116 Introduction to Refinishing
ACR 123 Part Replacement and Alignment
ACR 125 Plastic Repair and Refinishing ACR 127 Refinishing I
ACR 127 Refinishing I
Total Credit Hours

## Automotive Technology

Recommended basic skills standards are

- ENG 060
- MAT 030
- REA 090
- AAA 090

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

3

2 5

4

4

4 3

15

4

4 4 3

15 67

4

4

4 4

4 4 24

24

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
		·	36
Gene	ral e	ducation courses	
MAT	156	Problem Solving in College Mathematics	4
		Psychology of Adjustment	3
		Introduction to Organizational Communication	3
		Electives*	_5

\*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
	24
General education courses	15
Courses required for all options	36
Total Credit Hours	75
Total Credit Hours	75
Diesel Engine Performance	
DPM 100 Introduction to Diesel Mechanics	4
DPM 106 Fuel Injection	4
DPM 210 Air Induction and Engine Analysis	<u>4</u> 12
	12
Diesel Engine Repair	
<b>0</b> 1	4
DPM 100 Introduction to Diesel Mechanics	4
DPM 103 Diesel Engines I	4
DPM 203 Diesel Engines II	<u>4</u> 12
	12
Diesel Fuel Injection	
DPM 100 Introduction to Diesel Mechanics	4
DPM 106 Fuel Injection	4
AUT 103 Auto Electricity I	4
	12

General Automotive Option		Automotive Brakes
Recommended Program Sequence		AUT 100 Basic Auto Mechanics
Semester One - Fall		AUT 103 Auto Electricity I
AUT 100 Basic Auto Mechanics	4	AUT 114 Automotive Brakes
AUT 103 Auto Electricity I	4	Total Credit Hours
AUT 111 Power Trains		
	4	Automotive Electricity
AUT 113 Fuel Systems	4	AUT 100 Basic Auto Mechanics
SPE 225 Organizational Communication	3	AUT 103 Auto Electricity I
	19	AUT 204 Auto Electricity II
Semester Two - Spring		Total Credit Hours
AUT 114 Brake and Front End Systems	4	
AUT 115 Suspension and Alignment	4	Engine Performance
AUT 123 Tune-Up Services	4	AUT 100 Basic Auto Mechanics
AUT 125 Engines I	4	AUT 103 Auto Electricity I
PSY 115 Psychology of Adjustment	_3	AUT 113 Automotive Fuel Systems and Emission
	19	AUT 123 Automotive Tune-Up Services
Semester Three - Fall		AUT 125 Engines I
AUT 126 Engines II	4	AUT 204 Auto Electricity
AUT 204 Auto Electricity II	4	AUT 211 Engine Diagnosis and Tune Up
AUT 211 Tune-Up and Diagnosis		
MAT 156 Problem Solving in College Mathematics	4 4	Total Credit Hours
Electives (AAS Degree Options Page 53)	4	Gasoline Engine Repair
Electives (AAS Degree Options Page 55)	<u>3</u> 19	AUT 100 Basic Auto Mechanics
	19	AUT 103 Auto Electricity I
Semester Four - Spring		
AUT 203 Auto Air Conditioning, Heating, and		AUT 125 Engines I
Ventilating Systems	4	AUT 126 Engines II
AUT 213 Production Mechanics	4	Total Credit Hours
AUT 215 Automatic Transmission I	4	Manual Drivetrain
AUT 216 Automatic Transmission II	4	
Electives (AAS Degree Option Page 53)	_2	AUT 100 Basic Auto Mechanics
Electives (AAS Degree Option Page 53)	<u>2</u> 18	AUT 103 Auto Electricity I
	18	AUT 103 Auto Electricity I AUT 111 Power Trains
General education courses	18 <b>15</b>	AUT 103 Auto Electricity I
General education courses Courses required for all options	18 <b>15</b> 36	AUT 103 Auto Electricity I AUT 111 Power Trains Total Credit Hours
General education courses	18 <b>15</b>	AUT 103 Auto Electricity I AUT 111 Power Trains Total Credit Hours Motorsports Technology Option
General education courses Courses required for all options Total Credit Hours	18 <b>15</b> 36	AUT 103 Auto Electricity I AUT 111 Power Trains Total Credit Hours Motorsports Technology Option AUT 105 Introduction to Motorsports Technology
General education courses Courses required for all options Total Credit Hours Certificate	18 15 36 75	AUT103Auto Electricity IAUT111Power TrainsTotal Credit HoursMotorsports Technology OptionAUT105Introduction to Motorsports TechnologyAUT108Racing Vehicle Systems
General education courses Courses required for all options Total Credit Hours Certificate AUT 100 Basic Auto Mechanics	18 15 36 75 4	AUT 103 Auto Electricity I AUT 111 Power Trains Total Credit Hours Motorsports Technology Option AUT 105 Introduction to Motorsports Technology AUT 108 Racing Vehicle Systems AUT 109 Suspension and Chassis Design
General education courses Courses required for all options Total Credit Hours Certificate AUT 100 Basic Auto Mechanics AUT 103 Auto Electricity I	18 15 36 75 4 4	AUT103Auto Electricity IAUT111Power TrainsTotal Credit HoursMotorsports Technology OptionAUT105Introduction to Motorsports TechnologyAUT108Racing Vehicle SystemsAUT109Suspension and Chassis DesignAUT116High Performance Brake Systems
General education courses Courses required for all options Total Credit Hours Certificate AUT 100 Basic Auto Mechanics AUT 103 Auto Electricity I AUT 111 Power Trains	18 15 36 75 4 4 4 4	AUT103Auto Electricity IAUT111Power TrainsTotal Credit HoursMotorsports Technology OptionAUT105Introduction to Motorsports TechnologyAUT108Racing Vehicle SystemsAUT109Suspension and Chassis DesignAUT116High Performance Brake SystemsAUT118High Performance Power Trains
General education courses Courses required for all options Total Credit Hours Certificate AUT 100 Basic Auto Mechanics AUT 103 Auto Electricity I AUT 111 Power Trains AUT 113 Fuel Systems	18 <b>15</b> <b>36</b> <b>75</b> 4 4 4 4 4 4	AUT103Auto Electricity IAUT111Power TrainsTotal Credit HoursMotorsports Technology OptionAUT105Introduction to Motorsports TechnologyAUT108Racing Vehicle SystemsAUT109Suspension and Chassis DesignAUT116High Performance Brake SystemsAUT118High Performance Power TrainsAUT119Electrical and Fuel Systems
General education courses Courses required for all options Total Credit Hours Certificate AUT 100 Basic Auto Mechanics AUT 103 Auto Electricity I AUT 111 Power Trains AUT 113 Fuel Systems AUT 114 Brake and Front End Systems	18 <b>15</b> <b>36</b> <b>75</b> 4 4 4 4 4 4 4	AUT103Auto Electricity IAUT111Power TrainsTotal Credit HoursMotorsports Technology OptionAUT105Introduction to Motorsports TechnologyAUT108Racing Vehicle SystemsAUT109Suspension and Chassis DesignAUT116High Performance Brake SystemsAUT118High Performance Power TrainsAUT119Electrical and Fuel SystemsAUT127Lubrication and Cooling Systems
General education courses Courses required for all options Total Credit Hours Certificate AUT 100 Basic Auto Mechanics AUT 103 Auto Electricity I AUT 111 Power Trains AUT 113 Fuel Systems AUT 113 Fuel Systems AUT 114 Brake and Front End Systems AUT 115 Suspension and Alignment	18 <b>15</b> <b>36</b> <b>75</b> 4 4 4 4 4 4 4 4	AUT103Auto Electricity IAUT111Power TrainsTotal Credit HoursMotorsports Technology OptionAUT105Introduction to Motorsports TechnologyAUT108Racing Vehicle SystemsAUT109Suspension and Chassis DesignAUT116High Performance Brake SystemsAUT118High Performance Power TrainsAUT119Electrical and Fuel SystemsAUT127Lubrication and Cooling SystemsAUT128Engine Design, Blueprinting, and Testing
General education courses Courses required for all options Total Credit Hours Certificate AUT 100 Basic Auto Mechanics AUT 103 Auto Electricity I AUT 111 Power Trains AUT 113 Fuel Systems AUT 113 Fuel Systems AUT 114 Brake and Front End Systems AUT 115 Suspension and Alignment AUT 123 Tune-Up Services	18 <b>15</b> <b>36</b> <b>75</b> 4 4 4 4 4 4 4 4 4 4	AUT103Auto Electricity IAUT111Power TrainsTotal Credit HoursMotorsports Technology OptionAUT105Introduction to Motorsports TechnologyAUT108Racing Vehicle SystemsAUT109Suspension and Chassis DesignAUT116High Performance Brake SystemsAUT118High Performance Power TrainsAUT119Electrical and Fuel SystemsAUT127Lubrication and Cooling SystemsAUT128Engine Design, Blueprinting, and TestingAUT135Introduction to Racecar Painting Techniques
General education courses Courses required for all options Total Credit Hours Certificate AUT 100 Basic Auto Mechanics AUT 103 Auto Electricity I AUT 111 Power Trains AUT 113 Fuel Systems AUT 113 Fuel Systems AUT 114 Brake and Front End Systems AUT 115 Suspension and Alignment AUT 123 Tune-Up Services AUT 125 Engines I	18 <b>15</b> <b>36</b> <b>75</b> 4 4 4 4 4 4 4 4 4 4 4	<ul> <li>AUT 103 Auto Electricity I</li> <li>AUT 111 Power Trains</li> <li>Total Credit Hours</li> <li>Motorsports Technology Option</li> <li>AUT 105 Introduction to Motorsports Technology</li> <li>AUT 108 Racing Vehicle Systems</li> <li>AUT 109 Suspension and Chassis Design</li> <li>AUT 116 High Performance Brake Systems</li> <li>AUT 118 High Performance Power Trains</li> <li>AUT 119 Electrical and Fuel Systems</li> <li>AUT 127 Lubrication and Cooling Systems</li> <li>AUT 128 Engine Design, Blueprinting, and Testing</li> <li>AUT 135 Introduction to Racecar Painting Techniques</li> <li>AUT 136 Introduction to Racecar Body Fabrication</li> </ul>
General education courses Courses required for all options Total Credit Hours Certificate AUT 100 Basic Auto Mechanics AUT 103 Auto Electricity I AUT 111 Power Trains AUT 113 Fuel Systems AUT 113 Fuel Systems AUT 114 Brake and Front End Systems AUT 115 Suspension and Alignment AUT 123 Tune-Up Services AUT 125 Engines I AUT 126 Engines II	18 <b>15</b> <b>36</b> <b>75</b> 4 4 4 4 4 4 4 4 4 4	<ul> <li>AUT 103 Auto Electricity I</li> <li>AUT 111 Power Trains</li> <li>Total Credit Hours</li> <li>Motorsports Technology Option</li> <li>AUT 105 Introduction to Motorsports Technology</li> <li>AUT 108 Racing Vehicle Systems</li> <li>AUT 109 Suspension and Chassis Design</li> <li>AUT 116 High Performance Brake Systems</li> <li>AUT 118 High Performance Power Trains</li> <li>AUT 119 Electrical and Fuel Systems</li> <li>AUT 127 Lubrication and Cooling Systems</li> <li>AUT 128 Engine Design, Blueprinting, and Testing</li> <li>AUT 135 Introduction to Racecar Painting Techniques</li> <li>AUT 136 Introduction to Racecar Chassis Fabrication</li> <li>AUT 137 Introduction to Racecar Chassis Fabrication</li> </ul>
General education courses Courses required for all options Total Credit Hours Certificate AUT 100 Basic Auto Mechanics AUT 103 Auto Electricity I AUT 111 Power Trains AUT 113 Fuel Systems AUT 113 Fuel Systems AUT 114 Brake and Front End Systems AUT 115 Suspension and Alignment AUT 123 Tune-Up Services AUT 125 Engines I AUT 126 Engines II AUT 203 Auto Air Conditioning, Heating, and	18 <b>15</b> <b>36</b> <b>75</b> 4 4 4 4 4 4 4 4 4 4	<ul> <li>AUT 103 Auto Electricity I</li> <li>AUT 111 Power Trains</li> <li>Total Credit Hours</li> <li>Motorsports Technology Option</li> <li>AUT 105 Introduction to Motorsports Technology</li> <li>AUT 108 Racing Vehicle Systems</li> <li>AUT 109 Suspension and Chassis Design</li> <li>AUT 116 High Performance Brake Systems</li> <li>AUT 118 High Performance Power Trains</li> <li>AUT 119 Electrical and Fuel Systems</li> <li>AUT 127 Lubrication and Cooling Systems</li> <li>AUT 128 Engine Design, Blueprinting, and Testing</li> <li>AUT 135 Introduction to Racecar Painting Techniques</li> <li>AUT 137 Introduction to Racecar Chassis Fabrication</li> <li>AUT 175 Suspension and Chassis Set-Up</li> </ul>
General education courses Courses required for all options Total Credit Hours Certificate AUT 100 Basic Auto Mechanics AUT 103 Auto Electricity I AUT 111 Power Trains AUT 113 Fuel Systems AUT 113 Fuel Systems AUT 114 Brake and Front End Systems AUT 115 Suspension and Alignment AUT 123 Tune-Up Services AUT 125 Engines I AUT 126 Engines II AUT 203 Auto Air Conditioning, Heating, and Ventilating Systems	18 <b>15</b> <b>36</b> <b>75</b> 4 4 4 4 4 4 4 4 4 4 4 4 4	<ul> <li>AUT 103 Auto Electricity I</li> <li>AUT 111 Power Trains</li> <li>Total Credit Hours</li> <li>Motorsports Technology Option</li> <li>AUT 105 Introduction to Motorsports Technology</li> <li>AUT 108 Racing Vehicle Systems</li> <li>AUT 109 Suspension and Chassis Design</li> <li>AUT 116 High Performance Brake Systems</li> <li>AUT 118 High Performance Power Trains</li> <li>AUT 119 Electrical and Fuel Systems</li> <li>AUT 127 Lubrication and Cooling Systems</li> <li>AUT 128 Engine Design, Blueprinting, and Testing</li> <li>AUT 135 Introduction to Racecar Painting Techniques</li> <li>AUT 137 Introduction to Racecar Chassis Fabrication</li> <li>AUT 175 Suspension and Chassis Set-Up</li> <li>MAG 100 Introduction to Machining Technology</li> </ul>
General education courses Courses required for all options Total Credit Hours Certificate AUT 100 Basic Auto Mechanics AUT 103 Auto Electricity I AUT 111 Power Trains AUT 113 Fuel Systems AUT 113 Fuel Systems AUT 114 Brake and Front End Systems AUT 115 Suspension and Alignment AUT 123 Tune-Up Services AUT 125 Engines I AUT 126 Engines II AUT 203 Auto Air Conditioning, Heating, and	18 <b>15</b> <b>36</b> <b>75</b> 4 4 4 4 4 4 4 4 4 4	<ul> <li>AUT 103 Auto Electricity I</li> <li>AUT 111 Power Trains</li> <li>Total Credit Hours</li> <li>Motorsports Technology Option</li> <li>AUT 105 Introduction to Motorsports Technology</li> <li>AUT 108 Racing Vehicle Systems</li> <li>AUT 109 Suspension and Chassis Design</li> <li>AUT 116 High Performance Brake Systems</li> <li>AUT 118 High Performance Power Trains</li> <li>AUT 119 Electrical and Fuel Systems</li> <li>AUT 127 Lubrication and Cooling Systems</li> <li>AUT 128 Engine Design, Blueprinting, and Testing</li> <li>AUT 135 Introduction to Racecar Painting Techniques</li> <li>AUT 137 Introduction to Racecar Chassis Fabrication</li> <li>AUT 175 Suspension and Chassis Set-Up</li> </ul>
General education courses Courses required for all options Total Credit Hours Certificate AUT 100 Basic Auto Mechanics AUT 103 Auto Electricity I AUT 111 Power Trains AUT 113 Fuel Systems AUT 113 Fuel Systems AUT 114 Brake and Front End Systems AUT 115 Suspension and Alignment AUT 123 Tune-Up Services AUT 125 Engines I AUT 126 Engines II AUT 203 Auto Air Conditioning, Heating, and Ventilating Systems	18 <b>15</b> <b>36</b> <b>75</b> 4 4 4 4 4 4 4 4 4 4 4 4 4	<ul> <li>AUT 103 Auto Electricity I</li> <li>AUT 111 Power Trains</li> <li>Total Credit Hours</li> <li>Motorsports Technology Option</li> <li>AUT 105 Introduction to Motorsports Technology</li> <li>AUT 108 Racing Vehicle Systems</li> <li>AUT 109 Suspension and Chassis Design</li> <li>AUT 116 High Performance Brake Systems</li> <li>AUT 118 High Performance Power Trains</li> <li>AUT 119 Electrical and Fuel Systems</li> <li>AUT 127 Lubrication and Cooling Systems</li> <li>AUT 128 Engine Design, Blueprinting, and Testing</li> <li>AUT 135 Introduction to Racecar Painting Techniques</li> <li>AUT 137 Introduction to Racecar Chassis Fabrication</li> <li>AUT 175 Suspension and Chassis Set-Up</li> <li>MAG 100 Introduction to Machining Technology</li> <li>WEL 108 Auto Body Welding and Cutting</li> </ul>
General education courses Courses required for all options Total Credit Hours Certificate AUT 100 Basic Auto Mechanics AUT 103 Auto Electricity I AUT 111 Power Trains AUT 113 Fuel Systems AUT 113 Fuel Systems AUT 114 Brake and Front End Systems AUT 115 Suspension and Alignment AUT 123 Tune-Up Services AUT 125 Engines I AUT 126 Engines II AUT 203 Auto Air Conditioning, Heating, and Ventilating Systems AUT 204 Auto Electricity II Total Credit Hours	18 <b>15</b> <b>36</b> <b>75</b> 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	AUT 103 Auto Electricity I AUT 111 Power Trains <b>Total Credit Hours</b> Motorsports Technology Option AUT 105 Introduction to Motorsports Technology AUT 108 Racing Vehicle Systems AUT 109 Suspension and Chassis Design AUT 116 High Performance Brake Systems AUT 118 High Performance Power Trains AUT 119 Electrical and Fuel Systems AUT 127 Lubrication and Cooling Systems AUT 128 Engine Design, Blueprinting, and Testing AUT 135 Introduction to Racecar Painting Techniques AUT 136 Introduction to Racecar Chassis Fabrication AUT 175 Suspension and Chassis Set-Up MAG 100 Introduction to Machining Technology WEL 108 Auto Body Welding and Cutting <b>Total Credit Hours</b>
General education courses Courses required for all options Total Credit Hours Certificate AUT 100 Basic Auto Mechanics AUT 103 Auto Electricity I AUT 111 Power Trains AUT 113 Fuel Systems AUT 113 Fuel Systems AUT 114 Brake and Front End Systems AUT 115 Suspension and Alignment AUT 123 Tune-Up Services AUT 125 Engines I AUT 126 Engines II AUT 203 Auto Air Conditioning, Heating, and Ventilating Systems AUT 204 Auto Electricity II Total Credit Hours Air Conditioning and Heating	18 <b>15</b> <b>36</b> <b>75</b> 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	AUT 103 Auto Electricity I AUT 111 Power Trains Total Credit Hours Motorsports Technology Option AUT 105 Introduction to Motorsports Technology AUT 108 Racing Vehicle Systems AUT 109 Suspension and Chassis Design AUT 116 High Performance Brake Systems AUT 118 High Performance Power Trains AUT 119 Electrical and Fuel Systems AUT 127 Lubrication and Cooling Systems AUT 128 Engine Design, Blueprinting, and Testing AUT 135 Introduction to Racecar Painting Techniques AUT 136 Introduction to Racecar Chassis Fabrication AUT 137 Introduction to Racecar Chassis Fabrication AUT 137 Introduction to Machining Technology WEL 108 Auto Body Welding and Cutting Total Credit Hours Suspension and Steering
General education courses Courses required for all options Total Credit Hours Certificate AUT 100 Basic Auto Mechanics AUT 103 Auto Electricity I AUT 111 Power Trains AUT 113 Fuel Systems AUT 113 Fuel Systems AUT 114 Brake and Front End Systems AUT 115 Suspension and Alignment AUT 123 Tune-Up Services AUT 125 Engines I AUT 126 Engines II AUT 203 Auto Air Conditioning, Heating, and Ventilating Systems AUT 204 Auto Electricity II Total Credit Hours AIT Conditioning and Heating AUT 100 Basic Auto Mechanics	18 <b>15</b> <b>36</b> <b>75</b> 4 4 4 4 4 4 4 4 4 4 <b>4</b> 4 4 <b>4</b> 4 4 4 4	AUT 103 Auto Electricity I AUT 111 Power Trains Total Credit Hours Motorsports Technology Option AUT 105 Introduction to Motorsports Technology AUT 108 Racing Vehicle Systems AUT 109 Suspension and Chassis Design AUT 116 High Performance Brake Systems AUT 118 High Performance Power Trains AUT 119 Electrical and Fuel Systems AUT 127 Lubrication and Cooling Systems AUT 128 Engine Design, Blueprinting, and Testing AUT 135 Introduction to Racecar Painting Techniques AUT 136 Introduction to Racecar Chassis Fabrication AUT 137 Introduction to Racecar Chassis Fabrication AUT 137 Introduction to Machining Technology WEL 108 Auto Body Welding and Cutting Total Credit Hours Suspension and Steering AUT 100 Basic Auto Mechanics
General education courses Courses required for all options Total Credit Hours Certificate AUT 100 Basic Auto Mechanics AUT 103 Auto Electricity I AUT 111 Power Trains AUT 113 Fuel Systems AUT 113 Fuel Systems AUT 114 Brake and Front End Systems AUT 115 Suspension and Alignment AUT 123 Tune-Up Services AUT 125 Engines I AUT 126 Engines II AUT 203 Auto Air Conditioning, Heating, and Ventilating Systems AUT 204 Auto Electricity II Total Credit Hours AIT 100 Basic Auto Mechanics AUT 103 Auto Electricity I	18 <b>15</b> <b>36</b> <b>75</b> 4 4 4 4 4 4 4 4 4 <b>4</b> 4 <b>4</b> 4 <b>4</b> 4 4 4 4	AUT 103 Auto Electricity I AUT 111 Power Trains Total Credit Hours Motorsports Technology Option AUT 105 Introduction to Motorsports Technology AUT 108 Racing Vehicle Systems AUT 109 Suspension and Chassis Design AUT 116 High Performance Brake Systems AUT 118 High Performance Power Trains AUT 119 Electrical and Fuel Systems AUT 127 Lubrication and Cooling Systems AUT 128 Engine Design, Blueprinting, and Testing AUT 135 Introduction to Racecar Painting Techniques AUT 136 Introduction to Racecar Chassis Fabrication AUT 137 Introduction to Racecar Chassis Fabrication AUT 137 Introduction to Machining Technology WEL 108 Auto Body Welding and Cutting Total Credit Hours Suspension and Steering
General education courses Courses required for all options Total Credit Hours Certificate AUT 100 Basic Auto Mechanics AUT 103 Auto Electricity I AUT 111 Power Trains AUT 113 Fuel Systems AUT 113 Fuel Systems AUT 114 Brake and Front End Systems AUT 115 Suspension and Alignment AUT 123 Tune-Up Services AUT 125 Engines I AUT 126 Engines II AUT 203 Auto Air Conditioning, Heating, and Ventilating Systems AUT 204 Auto Electricity II Total Credit Hours AIT Conditioning and Heating AUT 100 Basic Auto Mechanics	18 <b>15</b> <b>36</b> <b>75</b> 4 4 4 4 4 4 4 4 4 4 <b>4</b> 4 4 <b>4</b> 4 4 4 4	AUT 103 Auto Electricity I AUT 111 Power Trains Total Credit Hours Motorsports Technology Option AUT 105 Introduction to Motorsports Technology AUT 108 Racing Vehicle Systems AUT 109 Suspension and Chassis Design AUT 116 High Performance Brake Systems AUT 118 High Performance Power Trains AUT 119 Electrical and Fuel Systems AUT 127 Lubrication and Cooling Systems AUT 128 Engine Design, Blueprinting, and Testing AUT 135 Introduction to Racecar Painting Techniques AUT 136 Introduction to Racecar Chassis Fabrication AUT 137 Introduction to Racecar Chassis Fabrication AUT 137 Introduction to Machining Technology WEL 108 Auto Body Welding and Cutting Total Credit Hours Suspension and Steering AUT 100 Basic Auto Mechanics
General education courses Courses required for all options Total Credit Hours Certificate AUT 100 Basic Auto Mechanics AUT 103 Auto Electricity I AUT 111 Power Trains AUT 113 Fuel Systems AUT 113 Fuel Systems AUT 114 Brake and Front End Systems AUT 115 Suspension and Alignment AUT 123 Tune-Up Services AUT 125 Engines I AUT 126 Engines II AUT 203 Auto Air Conditioning, Heating, and Ventilating Systems AUT 204 Auto Electricity II Total Credit Hours AIT 100 Basic Auto Mechanics AUT 103 Auto Electricity I	18 <b>15</b> <b>36</b> <b>75</b> 4 4 4 4 4 4 4 4 4 <b>4</b> 4 <b>4</b> 4 <b>4</b> 4 4 4 4	AUT 103 Auto Electricity I AUT 111 Power Trains Total Credit Hours Motorsports Technology Option AUT 105 Introduction to Motorsports Technology AUT 108 Racing Vehicle Systems AUT 109 Suspension and Chassis Design AUT 116 High Performance Brake Systems AUT 118 High Performance Power Trains AUT 119 Electrical and Fuel Systems AUT 127 Lubrication and Cooling Systems AUT 128 Engine Design, Blueprinting, and Testing AUT 135 Introduction to Racecar Painting Techniques AUT 136 Introduction to Racecar Chassis Fabrication AUT 137 Introduction to Racecar Chassis Fabrication AUT 137 Introduction to Machining Technology WEL 108 Auto Body Welding and Cutting Total Credit Hours Suspension and Steering AUT 100 Basic Auto Mechanics AUT 103 Auto Electricity I AUT 115 Automotive Brakes
General education courses Courses required for all options Total Credit Hours Certificate AUT 100 Basic Auto Mechanics AUT 103 Auto Electricity I AUT 111 Power Trains AUT 113 Fuel Systems AUT 113 Fuel Systems AUT 114 Brake and Front End Systems AUT 115 Suspension and Alignment AUT 123 Tune-Up Services AUT 125 Engines I AUT 126 Engines II AUT 203 Auto Air Conditioning, Heating, and Ventilating Systems AUT 204 Auto Electricity II Total Credit Hours AUT 100 Basic Auto Mechanics AUT 100 Basic Auto Mechanics AUT 103 Auto Electricity I AUT 203 Air Conditioning, Heat and Vent Systems <b>Total Credit Hours</b>	18 <b>15</b> <b>36</b> <b>75</b> 4 4 4 4 4 4 4 4 <b>4</b> <b>4</b> <b>4</b> <b>4</b> <b>4</b> <b>4</b>	AUT 103 Auto Electricity I AUT 111 Power Trains Total Credit Hours Motorsports Technology Option AUT 105 Introduction to Motorsports Technology AUT 108 Racing Vehicle Systems AUT 109 Suspension and Chassis Design AUT 116 High Performance Brake Systems AUT 118 High Performance Power Trains AUT 119 Electrical and Fuel Systems AUT 127 Lubrication and Cooling Systems AUT 128 Engine Design, Blueprinting, and Testing AUT 135 Introduction to Racecar Painting Techniques AUT 136 Introduction to Racecar Chassis Fabrication AUT 137 Introduction to Racecar Chassis Fabrication AUT 137 Introduction to Machining Technology WEL 108 Auto Body Welding and Cutting Total Credit Hours Suspension and Steering AUT 100 Basic Auto Mechanics AUT 103 Auto Electricity I
General education courses Courses required for all options Total Credit Hours Certificate AUT 100 Basic Auto Mechanics AUT 103 Auto Electricity I AUT 111 Power Trains AUT 113 Fuel Systems AUT 113 Fuel Systems AUT 114 Brake and Front End Systems AUT 115 Suspension and Alignment AUT 123 Tune-Up Services AUT 125 Engines I AUT 126 Engines II AUT 203 Auto Air Conditioning, Heating, and Ventilating Systems AUT 204 Auto Electricity II Total Credit Hours AIT 100 Basic Auto Mechanics AUT 100 Basic Auto Mechanics AUT 103 Auto Electricity I AUT 203 Air Conditioning, Heat and Vent Systems Total Credit Hours AUT 203 Air Conditioning, Heat and Vent Systems Total Credit Hours Automatic Transmissions	18 <b>15</b> <b>36</b> <b>75</b> 4 4 4 4 4 4 4 <b>4</b> 4 <b>4</b> <b>4</b>	AUT 103 Auto Electricity I AUT 111 Power Trains Total Credit Hours Motorsports Technology Option AUT 105 Introduction to Motorsports Technology AUT 108 Racing Vehicle Systems AUT 109 Suspension and Chassis Design AUT 116 High Performance Brake Systems AUT 118 High Performance Power Trains AUT 119 Electrical and Fuel Systems AUT 127 Lubrication and Cooling Systems AUT 128 Engine Design, Blueprinting, and Testing AUT 135 Introduction to Racecar Painting Techniques AUT 136 Introduction to Racecar Chassis Fabrication AUT 137 Introduction to Racecar Chassis Fabrication AUT 137 Introduction to Machining Technology WEL 108 Auto Body Welding and Cutting Total Credit Hours Suspension and Steering AUT 100 Basic Auto Mechanics AUT 103 Auto Electricity I AUT 115 Automotive Brakes
General education courses Courses required for all options Total Credit Hours Certificate AUT 100 Basic Auto Mechanics AUT 103 Auto Electricity I AUT 111 Power Trains AUT 113 Fuel Systems AUT 113 Fuel Systems AUT 114 Brake and Front End Systems AUT 115 Suspension and Alignment AUT 123 Tune-Up Services AUT 125 Engines I AUT 126 Engines II AUT 203 Auto Air Conditioning, Heating, and Ventilating Systems AUT 204 Auto Electricity II Total Credit Hours AIT 100 Basic Auto Mechanics AUT 103 Auto Electricity I AUT 203 Air Conditioning, Heat and Vent Systems Total Credit Hours AUT 100 Basic Auto Mechanics AUT 100 Basic Auto Mechanics	18 <b>15</b> <b>36</b> <b>75</b> 4 4 4 4 4 4 4 4 4 <b>4</b> 4 4 4 <b>4</b> 4 4 <b>4</b> 4 4 4 <b>12</b> 4	AUT 103 Auto Electricity I AUT 111 Power Trains Total Credit Hours Motorsports Technology Option AUT 105 Introduction to Motorsports Technology AUT 108 Racing Vehicle Systems AUT 109 Suspension and Chassis Design AUT 116 High Performance Brake Systems AUT 118 High Performance Power Trains AUT 119 Electrical and Fuel Systems AUT 127 Lubrication and Cooling Systems AUT 128 Engine Design, Blueprinting, and Testing AUT 135 Introduction to Racecar Painting Techniques AUT 136 Introduction to Racecar Chassis Fabrication AUT 137 Introduction to Racecar Chassis Fabrication AUT 137 Introduction to Machining Technology WEL 108 Auto Body Welding and Cutting Total Credit Hours Suspension and Steering AUT 100 Basic Auto Mechanics AUT 103 Auto Electricity I AUT 115 Automotive Brakes
General education courses Courses required for all options Total Credit Hours Certificate AUT 100 Basic Auto Mechanics AUT 103 Auto Electricity I AUT 111 Power Trains AUT 113 Fuel Systems AUT 113 Fuel Systems AUT 114 Brake and Front End Systems AUT 115 Suspension and Alignment AUT 123 Tune-Up Services AUT 125 Engines I AUT 126 Engines II AUT 203 Auto Air Conditioning, Heating, and Ventilating Systems AUT 204 Auto Electricity II Total Credit Hours AIT 100 Basic Auto Mechanics AUT 103 Auto Electricity I AUT 203 Air Conditioning, Heat and Vent Systems Total Credit Hours AUT 100 Basic Auto Mechanics AUT 100 Basic Auto Mechanics	18 <b>15</b> <b>36</b> <b>75</b> 4 4 4 4 4 4 4 4 4 <b>4</b> 4 4 <b>4</b> 4 4 <b>4</b> 4 <b>4</b> 4 4 <b>4</b> 4 4 4 4	AUT 103 Auto Electricity I AUT 111 Power Trains Total Credit Hours Motorsports Technology Option AUT 105 Introduction to Motorsports Technology AUT 108 Racing Vehicle Systems AUT 109 Suspension and Chassis Design AUT 116 High Performance Brake Systems AUT 118 High Performance Power Trains AUT 119 Electrical and Fuel Systems AUT 127 Lubrication and Cooling Systems AUT 128 Engine Design, Blueprinting, and Testing AUT 135 Introduction to Racecar Painting Techniques AUT 136 Introduction to Racecar Chassis Fabrication AUT 137 Introduction to Racecar Chassis Fabrication AUT 137 Introduction to Machining Technology WEL 108 Auto Body Welding and Cutting Total Credit Hours Suspension and Steering AUT 100 Basic Auto Mechanics AUT 103 Auto Electricity I AUT 115 Automotive Brakes
General education courses Courses required for all options Total Credit Hours Certificate AUT 100 Basic Auto Mechanics AUT 103 Auto Electricity I AUT 111 Power Trains AUT 113 Fuel Systems AUT 113 Fuel Systems AUT 114 Brake and Front End Systems AUT 115 Suspension and Alignment AUT 123 Tune-Up Services AUT 125 Engines I AUT 126 Engines II AUT 203 Auto Air Conditioning, Heating, and Ventilating Systems AUT 204 Auto Electricity II Total Credit Hours AUT 100 Basic Auto Mechanics AUT 100 Basic Auto Mechanics AUT 103 Auto Electricity I AUT 203 Air Conditioning, Heat and Vent Systems Total Credit Hours Aut 100 Basic Auto Mechanics AUT 101 Basic Auto Mechanics AUT 102 Auto Electricity I	18 <b>15</b> <b>36</b> <b>75</b> 4 4 4 4 4 4 <b>4</b> <b>4</b> <b>4</b> <b>4</b>	AUT 103 Auto Electricity I AUT 111 Power Trains Total Credit Hours Motorsports Technology Option AUT 105 Introduction to Motorsports Technology AUT 108 Racing Vehicle Systems AUT 109 Suspension and Chassis Design AUT 116 High Performance Brake Systems AUT 118 High Performance Power Trains AUT 119 Electrical and Fuel Systems AUT 127 Lubrication and Cooling Systems AUT 128 Engine Design, Blueprinting, and Testing AUT 135 Introduction to Racecar Painting Techniques AUT 136 Introduction to Racecar Chassis Fabrication AUT 137 Introduction to Racecar Chassis Fabrication AUT 137 Introduction to Machining Technology WEL 108 Auto Body Welding and Cutting Total Credit Hours Suspension and Steering AUT 100 Basic Auto Mechanics AUT 103 Auto Electricity I AUT 115 Automotive Brakes
General education courses Courses required for all options Total Credit Hours Certificate AUT 100 Basic Auto Mechanics AUT 103 Auto Electricity I AUT 111 Power Trains AUT 113 Fuel Systems AUT 113 Fuel Systems AUT 114 Brake and Front End Systems AUT 115 Suspension and Alignment AUT 123 Tune-Up Services AUT 125 Engines I AUT 126 Engines II AUT 203 Auto Air Conditioning, Heating, and Ventilating Systems AUT 204 Auto Electricity II Total Credit Hours AIT 100 Basic Auto Mechanics AUT 103 Auto Electricity I AUT 203 Air Conditioning, Heat and Vent Systems Total Credit Hours AUT 100 Basic Auto Mechanics AUT 100 Basic Auto Mechanics	18 <b>15</b> <b>36</b> <b>75</b> 4 4 4 4 4 4 4 4 4 <b>4</b> 4 4 <b>4</b> 4 4 <b>4</b> 4 <b>4</b> 4 4 <b>4</b> 4 4 4 4	AUT 103 Auto Electricity I AUT 111 Power Trains Total Credit Hours Motorsports Technology Option AUT 105 Introduction to Motorsports Technology AUT 108 Racing Vehicle Systems AUT 109 Suspension and Chassis Design AUT 116 High Performance Brake Systems AUT 118 High Performance Power Trains AUT 119 Electrical and Fuel Systems AUT 127 Lubrication and Cooling Systems AUT 128 Engine Design, Blueprinting, and Testing AUT 135 Introduction to Racecar Painting Techniques AUT 136 Introduction to Racecar Chassis Fabrication AUT 137 Introduction to Racecar Chassis Fabrication AUT 137 Introduction to Machining Technology WEL 108 Auto Body Welding and Cutting Total Credit Hours Suspension and Steering AUT 100 Basic Auto Mechanics AUT 103 Auto Electricity I AUT 115 Automotive Brakes
General education courses Courses required for all options Total Credit Hours Certificate AUT 100 Basic Auto Mechanics AUT 103 Auto Electricity I AUT 111 Power Trains AUT 113 Fuel Systems AUT 113 Fuel Systems AUT 114 Brake and Front End Systems AUT 115 Suspension and Alignment AUT 123 Tune-Up Services AUT 125 Engines I AUT 126 Engines II AUT 203 Auto Air Conditioning, Heating, and Ventilating Systems AUT 204 Auto Electricity II Total Credit Hours AUT 100 Basic Auto Mechanics AUT 100 Basic Auto Mechanics AUT 103 Auto Electricity I AUT 203 Air Conditioning, Heat and Vent Systems Total Credit Hours Aut 100 Basic Auto Mechanics AUT 101 Basic Auto Mechanics AUT 102 Auto Electricity I	18 <b>15</b> <b>36</b> <b>75</b> 4 4 4 4 4 4 <b>4</b> <b>4</b> <b>4</b> <b>4</b>	AUT 103 Auto Electricity I AUT 111 Power Trains Total Credit Hours Motorsports Technology Option AUT 105 Introduction to Motorsports Technology AUT 108 Racing Vehicle Systems AUT 109 Suspension and Chassis Design AUT 116 High Performance Brake Systems AUT 118 High Performance Power Trains AUT 119 Electrical and Fuel Systems AUT 127 Lubrication and Cooling Systems AUT 128 Engine Design, Blueprinting, and Testing AUT 135 Introduction to Racecar Painting Techniques AUT 136 Introduction to Racecar Chassis Fabrication AUT 137 Introduction to Racecar Chassis Fabrication AUT 137 Introduction to Machining Technology WEL 108 Auto Body Welding and Cutting Total Credit Hours Suspension and Steering AUT 100 Basic Auto Mechanics AUT 103 Auto Electricity I AUT 115 Automotive Brakes

## **Biological Sciences**

Recommended basic skills standards are

- ENG 060
- MAT 090
- REA 090
- AAA 090

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**

degrees.

Neco	mme			
CSC	116	Problem Solving with Visual Basic		
		for Applications (or 160)	3	
ENG	121	English Composition I	3	
		English Composition II	3	
		Principles of Speech Communication	3	
01 2	110		3 3 <u>3</u> 12	
Reco	mme	ended to satisfy area requirements		
Math	emat	ics 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		General College Chemistry II	5	
		Science Electives	4	
			36	
Socia	al and	d Behavioral Sciences		
	Elec	tives*	6	
Huma	anitie	S		
	Electives* 6			
Total	Total Credit Hours 60			
*Elect	*Electives must be from the approved elective course list for AA/AS			
	de avec e			

## **Business Administration**

Recommended basic skills standards are

- ENG 060
- MAT 060
- REA 090
- AAA 090

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**

OCIIC		adeation Requirements	
BUS	105	Business Mathematics	4
BUS	115	Introduction to Business	3
CIS	118	Introduction to PC Applications	3
		Consumer Economics	3
		or	
ECO	201	Macroeconomics	(3)
SPE	225	Organizational Communication	3
		0	<u>_3</u> 16
Busir	IASS	Foundation Requirements	
		Business Records	3
/ 10 0		or	0
ACC	121	Principles of Accounting I	(4)
		Legal Environment of Business	3
		Business Report Writing and Comm.	3
		Management Skills for Supervisors	3
		Principles of Sales	3
1010 (1) (1)			15-16
			10-10

#### **Total General Education and**

#### **Business Foundations**

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

31-32

#### 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	_3
			18
* Cus	tome	er Service Emphasis Electives	
Choos	se 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

	101	Toann Bananig
MAN	108	Personal Leadership Development
MAR	216	Principles of Marketing
PHI	113	Logic

\*Program advisors may approve additional elective choices.

#### Summary of Customer Services Emphasis

Total Degree Requirement	60-61
Customer Service Emphasis	29
General Education and Business Foundations	31-32

#### Electronic-Commerce - Business Emphasis

The Electronic-Commerce (E-Commerce) - Business Emphasis is designed to provide the student with a thorough knowledge of Ecommerce 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**

CWB	221	Introduction to Electronic-Commerce Technology Foundations for E-Commerce Business Process Foundations for E-Commerce	3 3  9	
BUS MAR	261 222	requirements E-Commerce Business Value Implementing E-Commerce E-Commerce Business Seminar	3 3 1 7	
Optional electives				
MAR	297	E-Commerce Business Internship or	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	
				12-13	
				29-31	
	Summary of E-Commerce - Business Emphasis				
•				31-32	
				29-31	
I					

#### **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

1

1

3

3

MAR CWB	221 221	Introduction to Electronic-Commerce Technology Foundations for E-Commerce Business Process Foundations for E-Commerce	3 3 <u>3</u> 9		
CWB CWB	222 223	equirements Java Technologies for E-Commerce Advanced E-Commerce Technologies E-Commerce Technology Seminar	3 3 _1 7		
		electives E-Commerce Technology Internship or	1-2		
CWB	299	E-Commerce Technology Independent Study	(1-2) <u>1-2</u> 17-18		
Choo		2-13 hours from the following courses			
CIS		Introduction to the Web Authoring: HTML	1		
CIS		Advanced Web Authoring Front Page	1		
CIS CIS		PC Database Complete: Access Visual Basic Programming	33		
CIS		C Language Programming	3		
CIS		Java Programming	3		
CIS	260	COBOL Programming	3 3 3 3 3 3 3 1		
CIS		Advanced Visual Basic	3		
CIS MAN		Advanced C Language Programming Personal Time Management	3		
MAN		Management Skills for Supervisors	_3		
1017 41 4	220		12-13 29-31		
Sum	Summary of E-Commerce - Technology				
	Emphasis				

Total Degree Requirement	60-63
E-Commerce - Technology Emphasis	29-31
General Education and Business Foundations	31-32
Emphasis	

#### **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	<u>3</u> 29		
			29		
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		Coop. Work Experience II/Internship II	3
			3
		Advanced Coop. Work Experience I/Internship I	
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
			29
Sum	narv	of Financial Services Emphasis	
			31-32
Finan	cial S	ervices Emphasis	29
Total Degree Requirement 60			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 HOM *HOM	132 139 151	Introduction to Hospitality Front Office Procedures Housekeeping Management Hospitality Supervision	3 3 3 3 3 3 3 3 3 3
		Hotel/Motel Security Hospitality Law	3
		Coop. Work Experience I/Internship I	3
		Introduction to Customer Service	3
		Purchasing for the Food Service Industry	4
		Team Building	1
			29
Hosp	itality	y Emphasis Electives	
•		ours from the following courses	
		Coop. Work Experience II/Internship II	3
		Tourism and Hospitality Industry	3
		Hospitality Industry Training	3 3
HOM	262	Financial Accounting for the Hospitality Industry	3
HOM	269	Hospitality Industry Computer Systems	3
HOM	271	Marketing of Hospitality Services	3 3
HOM	273	Hospitality Sales and Marketing	3
HOM	275	Convention Management and Services	3
			6
Sumn	nary	of Hospitality Emphasis	
		Line Real and Dividuals Francischer a	05 00

General Education and Business Foundations	25-26
Hospitality Emphasis	35
Total Degree Requirement	60-61

#### **Total Degree Requirement**

\*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 INT INT INT BUS	221 222 241	International Business Office Administration Principles of International Business Exporting and Importing Doing Business in a Global Environment Coop. Work Experience I/Internship I	1 3 3 3 3
INT		Principles of International Marketing	3
MAN		Contemporary Business Ethics	3
PHI		Comparative Religion	3
POS	205	International Relations	<u>3</u> 25
			25
Choo	se o	ne foreign language course from the following	20
Choo FRE	<b>se o</b> 111		-0
FRE	111		
FRE	111 111	French I	5
FRE GER ITA JPN	111 111 111 111 111	French I German I Italian I Japanese I	5 5 5 5
FRE GER ITA JPN RUS	111 111 111 111 111 111	French I German I Italian I Japanese I Russian I	5 5 5 5 5 5
FRE GER ITA JPN	111 111 111 111 111	French I German I Italian I Japanese I	5 5 5 5

### Summary of International Business Emphasis

General Education and Business Foundations	31-32
International Business Emphasis	30
Total Degree Requirement	61-62

### 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.

<ul> <li>MAN 104 Personal Time Management</li> <li>MAN 105 Contemporary Business Ethics</li> <li>MAN 226 Principles of Management</li> <li>MAN 251 Human Resource Management</li> <li>MAN 258 Principles of Finance</li> <li>MAR 216 Principles of Marketing</li> <li>BUS 226 Business Statistics</li> </ul>	1 3 3 3 3 3 3 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 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	1 _ <u>3</u> 10
	10
Summary of Management Emphasis	
General Education and Business Foundations	31-32
Management Emphasis	29

#### Management Emphasis **Total Degree Requirement**

## 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	$\frac{3}{24}$				
	24				
*Marketing Electives					
Choose 5 hours from the following courses					

		0
ACC	122	Principles of Accounting II
BUS	271	Advanced Coop. Work Experience I/Internship I
MAN	106	Action Planning
MAN	107	Team Building
MAN	108	Personal Leadership Development
MAN	227	Small Business Management
MAR	262	Purchasing
		5

\*Program advisors may approve additional elective choices.

#### Summary of Marketing Emphasis

General Education and Business Foundations	31-32
Marketing Emphasis	
Total Degree Requirement	29 <b>60-61</b>
iotal Degree Requirement	00-01

#### 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		Keyboarding Applications	2
BTE	108	Calculating Machines	1
BTE	110	Business Language Skills	3
BTE	116	Files Management	1
CIS	107	Voice Recognition with Dragon Naturally Speaking	1
CIS	118	Introduction to PC Applications	3
CIS	120	Word Processing I: Microsoft Word	3
CIS	130	Introduction to the Internet	1
CIS	136	Presentation Graphics: PowerPoint	3
CIS	137	Desktop Publishing	3
CST	115	Introduction to Customer Service	_3
			28

#### Electives

60-61

3 3 5

Choos	se 5 h	ours from the following courses	
ACC	138	Payroll Accounting	3
BUS	171	Cooperative Work Experience I/Internship I	3
CIS	133	Advanced Web Authoring: FrontPage	1
CIS	145	PC Database Complete: Access	3
CIS	155	PC Spreadsheets Complete: Excel	3
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
			5

#### Summary of Office Administration Emphasis

Total Degree Requirements	64-65
Office Administration Emphasis	33
General Education and Business Foundations	31-32

#### 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.

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

\* Program advisors may approve additional elective choices.



Summary of Real Estate Emphasis	
General Education and Business Foundations	31-32
Real Estate Emphasis	29
Total Degree Requirement	60-61

#### 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				
		DOS Complete				
		Introduction to Customer Service				
MAN	104	Personal Time Management				
		Contemporary Business Ethics				
MAN	106	Action Planning				
MAN	107	Team Building				
MAN	108	Personal Leadership Development				
MAN	226	Principles of Management				
MAN	251	Human Resource Management				
Supe	Supervision Electives					
Choos	Choose 9 hours from the following courses					
BUS	172	Coop. Work Experience II/Internship II				
BUS	271	Advanced Coop. Work				
		Experience I/Internship I				
PSY	115	Psychology of Adjustment				

FUI	115	r sychology of Aujustinent				
EHS	131	Introduction to Industrial and				
		Environmental Safety				
SPE	125	Interpersonal Communications				
SSE	100	Introduction to Human Services				
Summary of Supervision Emphasis						
Gene	General Education and Business Foundations					
-						

## Supervision Emphasis Total Degree Requirement

## **Business Foundations**

Recommended basic skills standards are

- ENG 060
- MAT 060
- REA 090
- AAA 090

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 67 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	

		Principles of Sales Organizational Communication	3 _3
MAN	225	Macroeconomics Management Skills for Supervisors	(3)
F00	201	Or Maaraaaaa	(2)
		Consumer Economics	3
CIS	118	Introduction to PC Applications	3

## Chemistry

Recommended basic skills standards are

- ENG 060
- MAT 090

3

3

3

1

3 1

1

1 3

<u>3</u> 22

3

3 3

3 3

<u>3</u> 9

31-32

62-63

31

- REA 090
- AAA 090

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		
			3 3 <u>3</u> 12		
Reco	mme	nded to satisfy area requirements			
Math	emat	ics and Science			
CHE	111	General College Chemistry I	5		
CHE	112	General College Chemistry II	5		
		Organic Chemistry I	5		
		Organic Chemistry II	5		
		Calculus I	5		
		Calculus II	5		
PHY			5		
	211	Math/Science Elective	_1		
			36		
•			50		
Socia	ii and	Behavioral Sciences	•		
		Electives*	6		
Huma	anitie	S			
		Electives*	6		
			12		
Total	Crod	lit Hours	60		
		must be from the approved elective course list for the			
FIECI	IVEST	IIUSEDE ITOTIETIE AOOTOVEO EIECIIVE COUISE IISFIOLII	IE AA/		

\*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 060
- REA 090
- AAA 090

This certificate program prepares students to design, build, and maintain networks capable of supporting national and global organizations. Course work covers a complete range of basic through advanced networking concepts from pulling cable to such complex concepts as subnet masking rules and strategies. Methods of learning are varied with interactive on-line lessons, texts, movies, and 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.

## 

Total Credit Hours			20
CIS	209	Cisco Networking Associate IV	_5
CIS	208	Cisco Networking Associate III	5
CIS	207	Cisco Networking Associate II	5
CIS	206	Cisco Networking Associate I	5

## Computer Aided Drafting (CAD)

Recommended basic skills standards are

- ENG 090
- MAT 109
- REA 115
- AAA 090

This program prepares students for drafting positions in manufacturing, engineering, and other areas requiring productionready 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	Basic Computer Aided Drafting I	3	
DRT	104	Basic Computer Aided Drafting II	3	
DRT	116	Computer Aided Drafting/Technical Drafting		
		Applications	4	
MAT	152	Technical Mathematics II	3	
CIS	115	Introduction to Computers	3	
*12 Credit Hours of Guided Technical Electives <u>12</u>				
Total Credit Hours 31				
*Students must meet with an advisor to select appropriate technical				

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

#### Advanced CAD Skills DRT 103 Basic Computer Aided Drafting I 3 3 DRT 104 Basic Computer Aided Drafting II DRT 206 Computer Aided Drafting/3D 3 DRT 216 Computer Aided Drafting/Custom 3 Total Credit Hours 12 Basic CAD Skills 3 DRT 103 Basic Computer Aided Drafting I DRT 104 Basic Computer Aided Drafting II 3 6 Total Credit Hours Mechanical Desktop DRT 103 Basic Computer Aided Drafting I 3 DRT 104 Basic Computer Aided Drafting II 3 DRT 207 Mechanical Desktop I 4 Total Credit Hours 10

## Computer Information Systems

Recommended basic skills standards are

- ENG 090
- MAT 060
- REA 090

The associate of applied science degree is designed for students who plan careers as information systems specialists. This program is designed with three options. The first option is for students who plan to obtain a job as an entry-level programmer. It provides a broad background that allows free movement within the computer programming industry. The second option will lead the student into the database specialist role. It provides a background in database design and administration. The third option is in management of information systems. It prepares students for a career in management of information technology within business.

Students must have the ability to type 20 wpm or have completed CIS100.

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

# Associate of Applied Science Degree CIS Core

ACC 110 Business Records 3 3 BUS 217 Business Communications and Report Writing 3 CIS 123 DOS Complete CIS 128 Windows Complete: Windows 98/Windows XP 3 CIS 116 Logic and Program Design 3 CIS 166 Introduction to Visual Basic 3 3 CIS 245 Database Mgmt Design and Development 3 CST 115 Introduction to Customer Service 3 NET 115 Introduction to Computer Networking 27 **CIS Emphasis Areas** Programming CIS 167 C Language Programming: C++ 3 CIS 168 Java Programming (3) CIS 266 Advanced Visual Basic 3 or CIS 267 Advanced C++ (3)or CIS 268 Advanced Java (3)



CIS CIS		Systems Analysis and Design Applied Programming and Micro Projects
Dat	aba	se
CIS	220	Fundamentals of UNIX
CIS	222	UNIX System Administrator I
CIS	243	Introduction to SQL
CIS	276	Systems Analysis and Design

CIS 279 Computer Information Systems Management

#### Management of Information Systems

- CIS 226 Current Topics in Computing
- CIS 276 System Analysis and Design
- CIS 279 Computer Information Systems Management
- CIS 280 Applied Programming and Micro Projects

#### **General education courses**

or

BUS 105 Business Mathematics or ECO 106 Consumer Economics BUS 115 Introduction to Business CIS 115 Introduction to Computer Information Systems ENG 131 Technical Writing SPE 125 Interpersonal Communication

#### Electives

Choos	se 3 h	nours from the following courses		
BUS	171	Cooperative Work Experience I/Internship I	3	
CIS	107	Voice Recognition with Dragon Naturally Speakin	ig 1	
CIS	120	Word Processing I: Microsoft Word	3	
CIS	130	Introduction to the Internet	1	
CIS	131	Introduction to Web Authoring: HTML	1	
CIS	133	Advanced Web Authoring: Front Page	1	
CIS	145	PC Databases Complete: Access	3 3	
CIS	155	PC Spreadsheets Complete: Excel		
CIS		C Language Programming	3 3 3 3	
CIS	168	Java Programming	3	
CIS	220	Fundamentals of UNIX	3	
CIS		Advanced UNIX	3	
CIS		UNIX System Administrator I	3	
CIS		UNIX System Administrator II	3	
CIS		Current Topics in Computing	3	
CIS		Introduction to SQL	3	
CIS	260	COBOL Programming	3	
CIS		Advanced Visual Basic	3 3 3 3 3 3	
CIS		Advanced C++	3	
		Advanced Java	3	
		Technology Foundations		
MAN	104	Personal Time Management	_1	
6				
Total Credit Hours 60-61				

**Computer Applications Specialist Certificate** This certificate program is designed to provide students with a

proficiency in using microcomputer software that is used in today's business environment. Students may complete deficiencies concurrently with the beginning courses in the program. Students

not meeting a course prerequisite must have the instructor's

CIS 130 Introduction to the Internet CIS 136 Presentation Graphics: Powerpoint CIS 145 PC Database Complete: Access 155 PC Spreadsheets Complete: Excel CIS **Total Credit Hours** 

1

3

3

3

15

### **Computer Science**

Recommended basic skills standards are

• ENG 060

3

3

12

3 3

3 3

(3)

12

4

3

3

3

3

3 19

> 1 1 3

- MAT 090
- **REA 090**
- AAA 090

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

	Computer Science I: C++	4	
	English Composition I		
	English Composition I	2	
		5	
SPE 115	Principles of Speech Communication	3 3 <u>3</u> 13	
		13	
Recomme	ended to satisfy area requirements		
Mathemat	tics 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	_5	
		35	
Social and	d Behavioral Sciences		
Elec	ctives*	6	
Humanitie	36		
	ztives*	6	
LICC		12	
Total Cred			
		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	_3
			12

CIS	107	Voice Recognition

permission to enroll.

CIS	112	Windows I
CIC	100	Word Dragonaing I: Migragoft Word

120 Word Processing I: Microsoft Word CIS

-					
		nded to satisfy area requirements			
Mathe	emat	ics and Science			
		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	(5)		
			36		
Socia	al and	Behavioral Sciences			
2.5010	Electives* 6				
Humanities					
nunia	annue	5			

6

12

60

3

3 3

3 3

3

3

3 3

Electives\*

#### **Total Credit Hours**

### Criminal Justice

Recommended basic skills standards are

- ENG 090
- MAT 030
- **REA 090**
- AAA 090

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 Justic	се
---	----

CRJ 111 S	ubstantive	Criminal Law	

- CRJ 118 Police Report Writing
- CRJ 135 Judicial Function
- CRJ 209 Criminal Investigation I
- CRJ 210 Constitutional Law
- CRJ 216 Juvenile Law and Procedures
- CRJ 220 Human Relations and Social Conflicts 230 Criminology CR.I

CRJ 251 Police Supervision Techniques 2 3 262 Introduction to Crime Scene Technology CRJ 32 General education courses 3 CSC 105 Computer Literacy ENG 121 English Composition I 3 or ENG 131 Technical Writing I (3) ENG 122 English Composition II Ś. or 115 Principles of Speech Communication SPE (3) PSY 115 Psychology of Adjustment 3 or PSY 215 The Criminal Mind (3)

\*Elective must meet general education requirements in humanities or mathematics and science. See list of approved general education courses on page 53.

Elective\*

Ŝ.

3

3

3

3

1

3

3

3

3

2

1

28

15

32

75

3

3

3

3

3 2

2

3

3

2

1

3

#### **Corrections Option** CRJ 113 Criminal Justice Information Systems CRJ 117 Defensive Tactics CRJ 145 Correctional Process CRJ 146 Community Based Corrections 203 F.A.T.S. Judgmental Shooting CRJ 215 Constitutional Rights of Inmates CRJ 236 Criminal Justice Crisis Intervention CRJ CRJ 250 Penology 255 Organization and Management of CRJ **Correctional Institutions** CRJ 275 **Correctional Field Experience** Electives General education courses Courses required for all options **Total Credit Hours**

#### Investigations/Management Option

CRJ 112 Procedural Criminal Law CRJ 113 Criminal Justice Information CRJ 125 Law Enforcement Operations CRJ 160 Fingerprinting CRJ 211 Criminal Investigation II CRJ 212 Criminal Investigation III CRJ 213 Criminal Investigation IV CRJ 260 Police Photography CRJ 264 Practical Crime Scene Investigation CRJ 276 Investigations Field Experience Electives 28 General education courses 15 Courses required for all options 32 Total Credit Hours 75 Patrol Option CRJ 112 Procedural Criminal Law

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



<ul> <li>CRJ 211 Criminal Investigation II</li> <li>CRJ 236 Criminal Crisis Intervention</li> <li>CRJ 246 Accident Investigation</li> <li>CRJ 277 Patrol Field Experience</li> </ul>				
General education courses Courses required for all options Total Credit Hours				
Certificate				
Retail/Industrial Security CRJ 110 Introduction to Criminal Justice CRJ 111 Substantive Criminal Law CRJ 112 Procedural Criminal Law CRJ 117 Defense Tactics CRJ 140 Introduction to Retail Security CRJ 141 Introduction to Industrial Security CRJ 201 Police Patrol Procedures CRJ 209 Criminal Investigation I CRJ 210 Constitutional Law CRJ 240 Security Administration CRJ 241 Security of Specialized Facilities				
Total Credit Hours				

## Culinary Arts

Recommended basic skills standards are

- ENG 060
- MAT 030
- **REA 090**
- AAA 090

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.

3	Associate of Applied Science Degree					
3 3 <u>2</u>	Reco	mme	nded Program Sequence One - Fall			
2 28 15 32 <b>75</b>	CUA CUA CUA	101 105 106	Introduction to Food Production and Cooking Restaurant Management and Menu Planning Applied Food Service Sanitation Baking Principles and Yeast Products	3 4 2 <u>3</u> 12		
3	CUA CUA	125 156	<b>Two - Spring</b> Breakfast Line Cookery Nutrition for the Food Service Professional Food Service Internship I	3 3 <u>4</u> 10		
3 3 3 2 2 3 3 2 2 2	CUA CUA CUA	116 120 128	Three - Summer Catering, Buffets, and Tableside Cooking Wine and Spirits Center of the Plate Technical Writing I	3 2 3 3 11		
3			Four - Fall			
2 _2 <b>29</b>	SPE	225	Food Service Internship II Organizational Communication Problem Solving in College Mathematics	4 3 _ <u>4</u> 11		
	Seme	ester	Five - Spring			
	CUA	162 101	Soups, Sauces, and Consommes Purchasing for the Food Service Industry General Psychology I Introduction to PC Applications	3 4 3 <u>3</u> 13		
	Seme	ester	Six - Summer	10		
cult. as it aits and	CUA	233	Advanced Cuisine and Garde Manger Advanced Line Cooking and Preparation Consumer Economics	4 3 1		
e to	Total	Cred	lit Hours	68		

#### Total Credit Hours

Certificates

#### Culinary Arts

Recommended basic skills standards are

- ENG 060
- MAT 030 ٠
- **REA 090**
- AAA 090

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	_3			
		12			
Semester Two - Spring					
	Breakfast Line Cookery	3			

CUA 127 Soups, Sauces, and Consummes CUA 156 Nutrition for the Food Service Professional

#### Semester Three - Summer

CUA 128 Center of the Plate	
-----------------------------	--

CUA 201 Advanced Cuisine and Garde Manger

CUA 233 Advanced Line Cookery and Preparation

### **Total Credit Hours**

#### Baking\*

Recommended basic skills standards are

- ENG 060
- MAT 030
- REA 090
- AAA 090

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	_3			
	0 9 1	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	4			
		10			
Semester	Three - Summer				
	Individual Fancy Dessert Production	3			
	•				
CUA 236	Advanced Baking	3			
		6			
Total Credit Hours					
Pending S	*Pending State approval				

# Customer Service

Recommended basic skills standards are

- ENG 060
- MAT 060
- REA 090
- AAA 090

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 68 of this catalog.

#### Certificate

3

4

4

32

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	3
			18
* Cus	tome	er Service Electives	
		hours from the following courses	
		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	3
		Total Electives	1

#### **Total Credit Hours**

\* Your Program Advisor may approve additional elective choices.

29

### **Dental Assisting**

Recommended basic skills standards are

- ENG 060
- MAT 030
- REA 060
- AAA 090

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

102 106 108 109 111 114 115	Dental Science Principles of Clinical Practice Preventive and Dental Emergency Procedures Dental Radiology I Dental Radiology II Dental Office Procedures Dental Materials I Dental Materials II Clinical Work Experience and Cert. Review
200	Introduction to Expanded Duties
205	Expanded Functions for Dental Auxiliary
ral e	ducation courses
101	General Psychology I or
	Psychology of Adjustment
125	Communication Interpersonal or
	English Composition I
115	Introduction to Computers or
	Introduction to PC Applications
115	Principles of Speech Communications or
225	Organizational Communication
122	or English Composition II
	Social Psychology
	or
235	Human Development
	102 106 108 109 111 114 115 173 200 205 <b>ral ee</b> 101 115 125 121 115 125 121 115 125 122 225

#### **Total Credit Hours**

Cert	Certificate				
DEA	101	Dental Science			
DEA	102	Principles of Clinical Practice			
DEA	106	Preventive and Dental Emergency Procedures			
DEA	108	Dental Radiology I			
DEA	109	Dental Radiology II			
DEA	111	Dental Office Procedures			
DEA	114	Dental Materials I			
DEA	115	Dental Materials II			
		Clinical Work Experience and Cert. Review			
CIS	115	Introduction to Computer Information Systems			
SPE	125	Interpersonal Communication			
		or			
ENG	121	English Composition I			
Total Credit Hours					

## Early Childhood Professions

Recommended basic skills standards are

- ENG 090
- MAT 030
- REA 115

5

4

3

(3)

(3)

(3) 3

(3)

(3)

<u>(3)</u> 15

62

7

<u>(3)</u> 46

3

3

47

• AAA 090

Early childhood education, like all education, demands well-prepared teachers. A growing body of research supports the value of highquality 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

Cours	ses r	equired for all options	
ECP		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 3 3 3 3 3 3 3 3 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 3 3 5 <u>3</u> 53
		Administrative Practicum	3
		Early Childhood Education Internship	5
ECP	287	The Exceptional Child	_3
			53
Gene	ral e	ducation courses	
BUS	105	Business Mathematics	4
CIS	118	Introduction to PC Applications	3
PSY		Psychology of Adjustment	3
		or	
PSY	101	General Psychology	(3)
SOC		Marriage and Family	Ì Ś
		or	
SOC	101	Introduction to Sociology	(3)
		Art/Humanities or Math/Science Elective*	_3
			16
Total	Cred	lit Hours	69
		nust meet general education requirements. See	

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

### Certificate

Certificate				
ECP ECP ECP ECP ECP	101 102 148 227 238	Leader Introduction to Early Childhood Professions Introduction to Early Childhood Lab Techniques Guidance Strategies for Children Methods/Techniques: Curriculum Development Child Development <b>lit Hours</b>	3 3 3 <u>3</u> 3 <b>15</b>	
Cert	ifica	ate		
Dire				
ECP ECP ECP ECP	101 102 148 205	Introduction to Early Childhood Professions Introduction to Early Childhood Lab Techniques Guidance Strategies for Children Health, Safety, and Nutrition Administration: Human Relations for Early Childhood Professions	3 3 3 3 3	
ECP	226	Administration of ECP Programs	3	
		Methods/Techniques: Curriculum Dev.	3	
		Child Development Administrative Practicum	3 3	
ECP		The Exceptional Child	_3	
Total	Cred	lit Hours	30	
Cert	ifica	ate		
ECP	101 102	Introduction to Early Childhood Professions Introduction to Early Childhood Lab Techniques Infant and Toddler Theory and Practice	3 3 3 3	
ECP	112	Introduction to Infant/Toddler Lab Techniques	3	
ECP	148	Guidance Strategies for Children	3	
ECP ECP		School Age Practicum Health, Safety, and Nutrition	3 3	
ECP		Administration: Human Relations for	3	
ECP		Early Childhood Professions Administration of Early Childhood Care and	3	
ECP		Educational Programs Methods/Techniques: Curriculum	3 3	
ECP		Development Child Development	3	
ECP		Recreational Activities	3	
		lit Hours	36	
Cert	ifica	ate		
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 Toddlor				

#### 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			

### **Economics**

Recommended basic skills standards are

- ENG 090 •
- MAT 060 •
- REA 090 •
- AAA 090 •

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** 

#### L English/Speech

		English Composition I English Composition II	3
SPE	115	Principles of Speech Communication	3 3 _ <u>3</u> 9
II. Co	mput	ter Communication	
CSC	105	Computer Literacy	<u>3</u>
Sugg	este	d to Fulfill This Track	
III. Ma	athen	natics and Science	
MAT	121	College Algebra	4
		Introduction to Statistics	3
GEY	111	Physical Geology	<u>4</u> 11
			11
		and Behavioral Sciences*	
		Principles of Macroeconomics	3
		Principles of Microeconomics	3
P05	111	American Government	3 3 _ <u>3</u> 9
v II		4:	9
V. Hu			5
		German I (or any 🗅 Language) German II (or any 🗅 Language)	5
PHI		Introduction to Philosophy	3
		indeduction to r micoophy	5 5 _ <u>3</u> 13
VI. Co	omm	unication Studies or Fine Arts	
		from approved list p. 51	3
			<u>_3</u> 3
VII. R	econ	nmended Electives	
		Contemporary Economic Issues	3
ECO	225	Money and Banking	3
		Western Civilization I	3
PSY	101	General Psychology I	3 3 <u>3</u> 12
Total	Cred	lit Hours	60

\* See AA degree for sequence requirements.

See the Associate of Arts Degree listing on page 45. In addition, many courses can be substituted using the courses listed on pages 49-51.

# 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.

For Teacher Education Preparation Program guidelines, please see page 56.

# **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.

### Certficates

#### **E-Commerce Business Track**

Core	requ	irements	
CWB	221	Business Process Foundations for E-Commerce Technology Foundations for E-Commerce Introduction to Electronic Commerce	3 3 3
Progr	am r	equirements	
		E-Commerce Business Value	3
		Implementing E-Commerce	3
MAR	295	E-Commerce Business Seminar	1
Electi			
		E-Commerce Business Value	1-2
		E-Commerce Business Independent Study	<u>1-2</u>
Total	Cred	lit Hours	18-20
E-Co	omm	nerce Technology Track	
Core	requ	irements	
		Business Process Foundations for E-Commerce	3
		Technology Foundations for E-Commerce	3
		Introduction to Electronic Commerce	3
		equirements	
		Java Technologies for E-Commerce	3
		Advanced E-Commerce Technologies	3 1
		E-Commerce Technology Seminar	I
Electi		E Commerce Technology Seminer	10
		E-Commerce Technology Seminar E-Commerce Technology Independent Study	1-2 1-2
			18-20
rotal	orea	lit Hours	10-20

# Electronics Technology

Recommended basic skills standards are

- ENG 060
- MAT 109
- REA 090 •
- AAA 090 •

This degree program prepares students with technical job entry skills as electronics technicians. Graduates become gualified 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 desireable skill and knowledge foundations be developed to enhance student success:

- developed college-level study skills
- working knowledge of algebraic principles and basic trigonometric ٠ functions
- college-level reading and comprehension skills •
- working knowledge and application of college-level English ٠
- demonstrated time management skills
- awareness of workplace utilization of self-management workteams
- ٠ basic understanding of physics principles
- keyboarding, mouse and MS Windows experience ٠
- 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	<u>4</u> 13
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
0	16
Semester Three - Fall	
ELE 216 Semiconductor Active Devices and	6
Mixed Signal IC's	
ELE 217 Semiconductor Active Devices and	6
Mixed Signal IC's Lab	
ELE 222 Microprocessor Control Systems	4
	16

Seme ELE ELE ELE	223 224	Four - Spring Microprocessor Interface and Industry Applications Enhanced Microprocessor Systems Enhanced Microprocessor Systems Lab	3 6 6	Em Recor • EN • RE	nmen IG 06	
		ucation courses to be scheduled by student	15 15	• MA • AA	AT 03 A 09	
		lit Hours	75	Pikes	Peak	Community
Reco	mme	nded Program Sequence - Nights				y Medical Še
		One - Fall				t of Health a
ELE	110	Electronic Programming Applications	3			proved traini
ELE	111	Data Acquisition and Applications	2			of the State al Education.
		Passive Circuits Passive Circuits Lab	4			n of local me
	115		13	agenc		
Seme	ester	Two - Spring		Ũ		
ELE	114	Semiconductor Active Devices	4			te of App
ELE	115	Semiconductor Active Devices Lab	4	Opt		
ELE	110	or Digital Circuits	(4)			m provides t
ELE		Digital Circuits Lab	(4) _(4)			ining with the
		Digital Olivato Lab	8			ts for the AAS t the EMT –
Seme	ster	Three - Summer				eir knowledge
		Semiconductor Active Devices	6			or the EMT -
ELE	217	Semiconductor Active Devices Lab	6			to pursue a ca
ELE	222	or Microprocessor Systems	(4)	option	or co	ombination of
ELE		Microprocessor Interface and Industry	(+)	Gene	ral e	ducation req
		Applications	<u>(3)</u>	BIO		Applied Anat
•		F F.H.	12/7	BIO	110	Processes I
		Four - Fall Digital Circuits	4	ыо	142	Applied Anat Processes II
ELE	119	Digital Circuits Lab	4	PSY	101	General Psyc
	110	or	•			or
		Enhanced Microprocessor Systems	(6)			English Com
ELE	225	Enhanced Microprocessor Systems Lab	<u>(6)</u>	CIS	115	Introduction t
<b>0</b>	- 4	First Oracia a	8/12	CIS	118	Introduction 1
		Five - Spring Enhanced Microprocessor Systems	6			or
ELE		Enhanced Microprocessor Systems Lab	6	CSC	105	Computer Lit
		or				
ELE		Semiconductor Active Devices	(4)			Medical Term
ELE	115	Semiconductor Active Devices Lab	(4)			Medical Term
Gene	ral ed	ucation courses to be scheduled by student	12/8 15	EMS EMS		Pediatric Em Geriatric Em
		lit Hours	63-68	EMS		Wellness for
		ducation courses	00-00			Advanced Pa
		Business Communication and Report Writing	3	PSY		Social Psych
MAN	109	Team Skills in the Business Environment	2	PSY		Death and D
		Technical Mathematics I	4	PSY	247	Child Abuse
PHY	133	Technical Physicals	5			
		Electives*	<u>1</u> 15	EMS	125	Emergency M
*Elect	ives	must meet general education requirements. Se				Approved EN

approved general education courses.

NOTE: ELE 210, ELE 216, ELE 217, and ELE 229 are also available for students who desire advanced microprocessor training.

### Medical Services

lls standards are

College offers a variety of courses in the ervices field. It is a State of Colorado, and Environment, and Pre-hospital Care ing center and training group. It has the Board for Community Colleges and The programs are implemented with the edical societies and emergency medical

# lied Science Degree – Basic

the Emergency Medical Technician of any opportunity to complete the educational S Degree in Emergency Medical Services. Basic and EMT - Intermediate level can e in emergency medical care. Options are Paramedic level to allow the student an areer compatible with their interest. A single options may be pursued.

#### uirements

Gene	ral e	ducation requirements	
BIO		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 or	3
ENG	121	English Composition I	(3)
CIS		Introduction to Computers	3
		or	
CIS	118	Introduction to PC Applications	(3)
000	105	or Computer Literacy	(2)
CSC	105	Computer Literacy	<u>(3)</u> 16
		Medical Terminology I	2
		Medical Terminology II	2 3 2 2 3 3 3 23
		Pediatric Emergencies	ა ა
		Geriatric Emergencies Wellness for Emergency Services	ა ე
		Advanced Patient Assessment & History Taking	2
		Social Psychology	2
		Death and Dying	3
		Child Abuse and Neglect	3
			23
EMS	125	Emergency Medical Technician - Basic	8
		Approved EMS Electives	14
			22

61

### **Emergency Medical Services**

Recommended basic skills standards are

- ENG 060
- **REA 060**
- MAT 030
- AAA 090

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, and 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 – Paramedic Option

			•		
	Gene BIO		ducation requirements Applied Anatomy and Physiology and Disease		
			Processes I	5	
	BIO	142	Applied Anatomy and Physiology and Disease	_	
		101	Processes II	5 3	
	PSY	101	General Psychology I or	3	
	ENG	121	English Composition I	(3)	
	CIS		Introduction to Computers	3	
			or		
	CIS	118	Introduction to PC Applications	(3)	
	000	405	or Or and the literature	$\langle 0 \rangle$	
	CSC	105	Computer Literacy	<u>(3)</u> 16	
				10	
		405		•	
	EMS		Emergency Medical Technician (Basic) EMT-Paramedic I	8 10	
			EMT-Paramedic I	10	
			EMT-Paramedic III	10	
			Paramedic Internship		
	MOT	181	Medical Terminology	2 2 2	
	MOT	185	Advanced Medical Terminology	_2	
				44	
	Total	Cred	lit Hours	60	
	Cert	ifica	ate		
	Fme	rae	ncy Medical Services		
	EMS	115	First Responder	3	
	EMS	125	Emergency Medical Technician – Basic	8	
	EMS	126	Emergency Medical Technician – Basic Refresher	_3	
	Total	Cred	lit Hours	14	
Emergency Medical Services Certificates					
		-	sponder		

First Responder EMS 115 First Responder

### **Total Credit Hours**

**Emergency Medical Technician - Basic** EMS 125 Emergency Medical Technician – Basic

#### **Total Credit Hours**

**Emergency Medical Technician - Basic** Refresher

EMS	126	Emergency	Medical	Technician	– Basic F	Refresher	_3
Total	Cred	lit Hours					3

#### **Emergency Medical Technician - Paramedic**

	5		
EMS	211	EMT-Paramedic I	10
EMS	212	EMT-Paramedic II	10
EMS	213	EMT-Paramedic III	10
EMS	270	Paramedic Internship	2
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	_2
Total	Cred	lit Hours	46

### Energy Management and Control Systems Technology

Recommended basic skills standards are

- ENG 060
- MAT 060
- **REA 090**
- AAA 090

> 3 3

8

8

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.

Students must also demonstrate proficiency equivalent to or completion of ELE 110, ELE111, ELE 112, ELE 113.

### Associate of Applied Science Degree

		11 5	
Cours	ses r	equired 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	6
			53
Gene	ral e	ducation courses	
ENG	131	Technical Writing	3
		Human Relations	3
MAT	151	Technical Mathematics I	4
MAT	152	Technical Mathematics II	3 _3
SPE	217	Group Communication	_3
			16
Total	Cred	lit Hours	69
		216, ELE 217, FMT 242 are also available for s	

# English

Recommended basic skills standards are

- ENG 090
- MAT 030
- REA 090
- AAA 090

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**

#### English/Speech

ENĞ	121	English Composition I English Composition II
SPE		Principles of Speech Communication
		ter Communication Computer Literacy (or CSC 116 or CSC 160)
		d to Fulfill This Track
		ics and Science
		Introduction to Statistics
		Physical Geology
GEO	111	Physical Geography: Landforms
		I Behavioral Sciences* nours from the following courses
		Cultural Anthropology
		or
		Physical Anthropology
HIS	101	Western Civilization I
1110	100	or Western Civilization II
HIS HIS		American History I
1110	201	or
HIS	202	American History II
PSY	101	General Psychology I
DOV	100	or Canadal Davahala av II
PSY	102	General Psychology II
V. Hu	mani	ties*
	121	Survey of Humanities I
LIT		Masterpieces of Literature I
LIT	202	Masterpieces of Literature II

#### VI. Communication Studies or Fine Arts

#### ART 205 Film Studies

#### VII. Recommended Electives

Choos	se17	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
PHI	111	Introduction to Philosophy	3
THE	211	Development of the Theatre I	3
THE	212	Development of the Theatre II	_3
			17

<u>3</u> 3

60

#### **Total Credit Hours**

\*See AA degree for sequence requirements

### Entrepreneurial\*

Recommended basic skills standards are

• ENG 060

3 3

3 9

<u>3</u>

3

4 3 10

3

(3)

(3)

(3)

<u>(3)</u> 9

> 3 3 3

> 3

3

3

- MAT 060
- REA 090
- AAA 090

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 69 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	Cred	lit Hours	29

## **Environmental Studies**

Recommended basic skills standards are

- ENG 090
- REA 115 .

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 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. Eng	I. English/Speech						
ENG	121	English Composition I	3				
ENG	122	English Composition II	3				
SPE	115	Principles of Speech Communication	_3				
			9				
II. Co	II. Computer Communications						
CSC	105	Computer Literacy	3				
		or					
CSC	116	Problem Solving with Visual Basic for Applications	(3)				

#### Suggested to fulfill this track

#### III. Mathematics and Science

		redit hours total, of which only one in science may	be
non-co	ore (3	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	_5
			9
IV So	cial	and Behavioral Sciences	
		credit hours (sequence needed)	
		Cultural Anthropology	3
		1 65	
ANT	111	Physical Anthropology	3

	101	Cultural Antinopology
ANT	111	Physical Anthropology
(ANT	101 a	and ANT 111 are a sequence)
		or
POS	105	Introduction to Political Science
POS	111	American Government
(POS	105 a	and POS 111 are a sequence)
		and
ECO	202	Microeconomics
000	105	World Designal Caestranky

GEO	105	World	Regional	Geography

#### V. Humanities

Choose 9	Choose 9 credit hours (sequence needed)				
HUM 122	Survey of Humanities II	3			
	or				
HUM 123	Survey of Humanities III	(3) 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					
•		ģ			

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

Choose 3 credits, from approved Fine Arts electives list, or choose from the following recommended courses

		Drawing I	3
		Fundamentals of Photography	3
JOU	121	Photojournalism	3 _ <u>3</u> 3
			3
VII. R	econ	nmended Electives	
Choos	se 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	206	Cartography	4
		Colorado History	
HUM	266	Culture Studies	3 _ <u>3</u> 18
			18
Total	Cred	lit Hours	60

#### Total Credit Hours

3

3

3

3 3

### Facilities Maintenance Technology

This program prepares students to enter the facilities maintenance field. This field of work involves different trade disciplines. The oneyear program of core courses trains 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	Problen Solving in College Mathematics	4
			17
Sprin	ig Se	mester - First Year	
FMT	123	Refrigerator Repair & Service	4
FMT	132	Residential HVAC Controls	4

FMT	142	Residential Air Conditioning
FMT	143	Residential HVAC Trouble Shooting
PSY	106	Human Relations

#### Heating, Ventilation, Air Conditioning, and **Refrigeration Option**

The Heating, Ventilation, Air Conditioning, and Refrigeration (HVAC&R) Option will prepare the student for service in 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 Inroduction to Computers	3	
SPE	217 Group Discussion	3	
		18	
Sprii	ng Semester - Second Year		
	222 HVAC Systems Trouble Shooting	5	
	241 Advanced Air Conditioning	3	
	242 Advanced Controls II	4	
ENG	131 Technical Writing	3	
	-	15	
Total Hours for HVAC & R Degree Option			

#### **Total Hours for HVAC & R Degree Option**

#### General Maintenance Option

The General Maintenance Option prepares the student for entrylevel 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
			11

#### Fall Semester - Second Year

i an c			
FMT	112	Swimming Pool Maintenance	2
FMT	201	Appliance Technology I	7
ENG	131	Technical Writing	3
		Ũ	12
Sprin	g Se	mester - Second Year	
FMT	103	Facilities Plumbing	4
FMT	202	Appliance Technology II	7
SPE	217	Group Discussion	3
		·	14
Total Hours for General Maintenance Degree Option			

#### 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
		Technical Writing	3
		Introduction to Computers	3
SPE	217	Group Discussion	_3
			16
Sprin	g Se	mester - Second Year	
FMT	103	Facilities Plumbing	4
FMT	202	Appliance Technology II	7
FMT	203	Appliance Technology III	4
			15
Total	Hou	rs for Major Appliance Degree Option	67

#### Certificate

4 3 19

#### 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
		3	13
Sprin	ig Se	mester - 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
		· · · · ·	16
Total Hours for Residential Certificate			

#### 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
			12

5 3

#### Spring Semester - Second Year

FMT	222	HVAC Systems Trouble Shooting
	044	Advanced Air Canditioning



#### Total Hours for Industry Upgrade Certificate

#### 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 FacilitiesManagement Certificate29*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 FAS 110 Farrier Science II FAS 120 Farrier Science III **Total Credit Hours**

Master Farrier Option

Total	Cred	lit Hours	12
FAS	150	Master Farrier III	4
FAS	140	Master Farrier II	4
FAS	130	Master Farrier I	4

# **Financial Services\***

Recommended basic skills standards are

• ENG 060

4 12 24

- MAT 060
- **REA 090** •
- AAA 090

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 69 of this catalog.

#### Certificate

001	11100		
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	Cred	lit Hours	29
*Pend	ina S	tate approval	

Pending State approval

### Fire Science Technology

Recommended basic skills standards are

ENG 090

4

4

12

- MAT 030
- **REA 115**
- AAA 090

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
			39
Tables			

#### **Technical Elective Courses**

Choos	Choose 15 hours from the following courses						
FST	100	Firefighter I					
FST	101	Firefighter II					
FST	151	Driver/Operator					
FST	150	Introduction to Fire Prevention and Education					
FST	207	Fire Fighting Strategy and Tactics II					
FST	252	Fire Arson Detection					
FST	253	Fire Ground Organization and Command					
FST	254	Hazardous Materials II					
FST	255	Fire Department Administration					
FST	256	Fire Service EMS Management					
FST	257	Volunteer Fire Department Administration					
FST	259	Wildland Fires					
EMS	125	EMT - Basic					

\*Other related technical courses may be substituted under technical electives with permission from the program coordinator.

#### **General education courses**

86

CIS	118	Introduction to PC Applications	3
SPE	225	Introduction to Organizational Communication	3
		and	
ENG	131	Technical Writing	3
ENG	121	English Composition I	(3)
		or	. ,
ENG	122	English Composition II	(3)
POS	111	American Government	3
		or	

- POS 125 American State and Local Government
- MAT 110 Basic Finite Mathematics

#### **Total Credit Hours**

### Foreign Language

Recommended basic skills standards are

- ENG 090
- MAT 030
- REA 090

7

6 4 3

3

3

3

3

3

3

3 3 8

15

• AAA 090

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 ENG 122 English Composition II SPE 115 Principles of Speech Communication II. Computer Communication CSC 105 Computer Literacy (or CSC 116 or CSC 160) Suggested to Fulfill This Track III. Mathematics and Science MAT 135 Introduction to Statistics GEY 111 Physical Geology BIO 105 Science of Biology IV. Social and Behavioral Sciences\* ANT 101 Cultural Anthropology ANT 111 Physical Anthropology HIS 101 Western Civilization I or 102 Western Civilization II HIS V. Humanities\* \*\*FOL 111 Foreign Language I \*\*FOL 112 Foreign Language II

HUM 121 Survey of Humanities I or HUM 122 Survey of Humanities II

or

3 <u>3</u> 9

<u>3</u> 3

3

4

4 11

3

3

3

<u>(3)</u> 9

5

5 3

(3)

HUM 123 Survey of Humanities III						
VI. Communication Studies or Fine Arts Choose 3 credit hours from list on p. 51						
VII. Recommended Electives **FOL 211 Foreign Language III **FOL 212 Foreign Language IV						
Choose 6 hours from the following courses GEO 105 World Regional Geography HUM 237 Hispanic Arts of the Southwest HUM 238 Sacred Images, Sacred Places LIT 121 Survey of Mythology LIT 202 Masterpieces of Literature II PHI 111 Introduction to Philosophy SOC 101 Sociology I SOC 102 Sociology I						
Total Credit Hours						

\*See AA degree for sequence requirements

\*\*FOL is a standard course prefix. Each specific foreign language has its own prefix, for example, SPA = Spanish.

### Geography

Recommended basic skills standards are

- ENG 090
- MAT 030
- REA 115

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.

#### Associate of Arts Degree

#### **Recommended Track**

#### Minimum Requirements

#### I. English/Speech

ENG	121	English Composition I	
ENG	122	English Composition II	
SPE	115	Principles of Speech Communication	

#### II. Computer Communication

CSC	105	Computer	Literacy	(or CSC	; 116	or CSC	160)
-----	-----	----------	----------	---------	-------	--------	------

	III.	Mathematics	and Science
--	------	-------------	-------------

MAT	135	Introduction to Statistics
	444	Dhusiaal Caasee hus I am dfamma

GEO 111 Physical Geography - Landforms

IV. Social and Behavioral Science GEO 105 World Regional Geography HIS 101 Western Civilization I or HIS 102 Western Civilization II			Weather and Climate Physical Geology	4 4
GEO       105       World Regional Geography         HIS       101       Western Civilization I       or         HIS       102       Western Civilization II       (1)         ANT       101       Cultural Anthropology	GEY	121	•	_ <u>(4)</u> 14
GEO       105       World Regional Geography         HIS       101       Western Civilization I       or         HIS       102       Western Civilization II       (1)         ANT       101       Cultural Anthropology	IV Sc	ncial	and Behavioral Science	
HIS       101       Western Civilization I       or         HIS       102       Western Civilization II       (a         ANT       101       Cultural Anthropology				3
or HIS 102 Western Civilization II (1) ANT 101 Cultural Anthropology V. Humanities* HUM 121 Survey of Humanities I HUM 122 Survey of Humanities II (or 123) LIT 115 Introduction to Literature VI. Communication Studies or Fine Arts Choose 3 credit hours from list on p. 51 Recommended Electives Choose 17 hours from the following courses				3
AN1       101       Cultural Anthropology		101		Ŭ
AN1       101       Cultural Anthropology	HIS	102	Western Civilization II	(3)
V. Humanities* HUM 121 Survey of Humanities I HUM 122 Survey of Humanities II (or 123) LIT 115 Introduction to Literature				<u>3</u> 9
HUM       121       Survey of Humanities I         HUM       122       Survey of Humanities II (or 123)         LIT       115       Introduction to Literature         VI. Communication Studies or Fine Arts				9
HUM       122       Survey of Humanities II (or 123)         LIT       115       Introduction to Literature         VI. Communication Studies or Fine Arts	V. Hu	mani	ities*	
HUM       122       Survey of Humanities II (or 123)         LIT       115       Introduction to Literature         VI. Communication Studies or Fine Arts	HUM	121	Survey of Humanities I	3
VI. Communication Studies or Fine Arts Choose 3 credit hours from list on p. 51				3
Choose 3 credit hours from list on p. 51	LIT	115	Introduction to Literature	3 _ <u>3</u> 9
Choose 3 credit hours from list on p. 51				9
Recommended Electives Choose 17 hours from the following courses	VI. Co	omm	unication Studies or Fine Arts	
Choose 17 hours from the following courses	Choos	se 3 c	credit hours from list on p. 51	<u>3</u>
Choose 17 hours from the following courses				3
0	Reco	mme	ended Electives	
ANT111Physical AnthropologyGEO106Human GeographyGEO206Introduction to CartographyHIS137Contemporary World HistoryHIS225Colorado HistoryMAT121College AlgebraPOS111American GovernmentSOC101Introduction to Sociology	Choos	se 17	hours from the following courses	
GEO106Human GeographyGEO206Introduction to CartographyHIS137Contemporary World HistoryHIS225Colorado HistoryMAT121College AlgebraPOS111American GovernmentSOC101Introduction to Sociology				3
GEO206Introduction to CartographyHIS137Contemporary World HistoryHIS225Colorado HistoryMAT121College AlgebraPOS111American GovernmentSOC101Introduction to Sociology				3
HIS       137       Contemporary World History         HIS       225       Colorado History         MAT       121       College Algebra         POS       111       American Government         SOC       101       Introduction to Sociology				4
HIS       225       Colorado History         MAT       121       College Algebra         POS       111       American Government         SOC       101       Introduction to Sociology				3
MAT 121 College Algebra POS 111 American Government SOC 101 Introduction to Sociology				3
POS       111       American Government         SOC       101       Introduction to Sociology	MAT	121	College Algebra	4
SUC 101 Introduction to Sociology				3
	SOC	101	Introduction to Sociology	3
		_		17

#### **Total Credit Hours**

<u>(3)</u> 13

> 3 3

3 3 3

<u>3</u> 6 **60** 

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

### Geology

Recommended basic skills standards are

- ENG 060
- MAT 090
- REA 090
- AAA 090

3

3 3 9

<u>3</u> 3

3

3

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) ENG 121 English Composition I ENG 122 English Composition II SPE 115 Principles of Speech Communication	3 3 <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*	_1		
	36		
Social and Behavioral Sciences			
Electives*	6		
Humanities			
Electives*	<u>6</u> 12		
Total Credit Hours	60		
*Electives must be from the approved elective course list for AA/AS			

History

degrees.

Recommended basic skills standards are

- ENG 090
- REA 115

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?

#### Associate of Arts Degree

#### **Recommended Track**

#### **Minimum Requirements**

#### I. English/Speech 101 English Commercition I

ENG	121	English Composition I	3
ENG	122	English Composition II	3
SPE	115	Principles of Speech Communication	<u>_3</u> 9
	omr	outor Communication	

II. U	սոր	Julei	CO		unic	allu	11		
CSC	105	Compu	ter l	iterac	v (or	CSC	116 o	r CSC	160)

636	105	Computer	Literacy	(01	636	10 01	636	160)	ł

#### Suggested to Fulfill This Track

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

MAT	135	Introduction to Statistics
GEY	121	Historical Geology
GEO	111	Physical Geography: Landforms

		ities* (9 core credit hours)	<b>о</b>
HUM		Survey of Humanities I or	3
HUM	122	Survey of Humanities II or	(3)
hum Phi	123 111	Survey of Humanities III Introduction to Philosophy	(3) 3
**Any	COR	or E Foreign Language Course	<u>(5)</u> 9
		unication Studies or Fine Arts credit hours from list on p. 51	<u>3</u>
Choos HIS HIS HIS HIS HIS HIS HIS HIS HIS HIS	se 18 101 102 201 202 116 136 137 206 215 225 235	hours from the following courses Western Civilization I Western Civilization II U.S. History I U.S. History II The Native American Experience The Southwest United States Contemporary World History U.S. Family History and Genealogy Women in U.S. History Colorado History The American West	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
		Contemporary U.S. History History of the Pikes Peak Area	3 3 18

\*See AA degree for sequence requirements \*\*See CORE list

### Hospitality\*\*

Recommended basic skills standards are

- ENG 060
- MAT 060
- REA 090 •

3

3

3 4 3 AAA 090

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 69 of this catalog.

Certificate				
HOM 103 Introduction to Hospitality	3			
HOM 132 Front Office Procedures	3			
HOM 139 Housekeeping Management	3 3 3 3 3 3 3 4			
*HOM 151 Hospitality Supervision	3			
HOM 186 Hotel/Motel Security	3			
*HOM 191 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			
	29			
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 3 3 3 3 3 3 3 3			
Total Electives 6				
Total Credit Hours 35				
*For students choosing Hospitality, HOM 151 - Hospi	tality			

\*⊢or 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 090
- MAT 030
- REA 090
- AAA 090

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
-----	-----	---------	---------------

- ENG 122 English Composition II
- SPE 115 Principles of Speech Communication

		ter Communication Computer Literacy (or CSC 116 or CSC 160)	_ <u>3</u> 3
		d to Fulfill This Track natics and Science	
MAT	135	Introduction to Statistics Physical Geology	3 4
GEY	121	Historical Geology	4 11
IV. Sc	cial	and Behavioral Sciences*	
ANT		Cultural Anthropology	3
HIS	101	Western Civilization I	3
HIS	102	Western Civilization II	<u>_3</u> 9
V. Hu			·
HUM	121	Survey of Humanities I or	3
HUM	122	Survey of Humanities II	(3)
ним	123	or Survey of Humanities III	(3)
LIT	115	•	3
		Any CORE Foreign Language Course	_ <u>5</u> 11
VI. Co	omm	unication Studies or Fine Arts	
Choos	se 3 c	redit hours from list on p. 51	<u>3</u>
		nmended Electives	Ū
		hours from the following courses	_
		Foreign Language Course	5
	101	Physical Anthropology Drawing I	3 3
DAN	111-	DAN 133 Various Dance Courses	1
		Arts and Cultures of Mexico	3
		North American Indian Arts	3
		Hispanic Arts of the Southwest	3
		Sacred Images, Sacred Places	3
LIT	201	Masterpieces of Literature I Masterpieces of Literature II	3
MUS	121	Music History I	3
MUS	122	Music History I Music History II	1 3 3 3 3 3 3 3 3 3 3 3 3 3 3
PHI	112	Ethics	3
THE	111	Acting I	3 14
Total	Cred	lit Hours	60
		•	

#### **Total Credit Hours**

\*See AA degree for sequence requirements

### Integrated Circuit Fabrication

Recommended basic skills standards are

- ENG 090
- REA 090 •
- MAT 109 •
- AAA 090

3

3

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
ICF	102	Cleanroom Processes
ICF	104	Vacuum Systems
ICF	106	Semiconductor Active Devices & Mixed
		-Signal IC's Lecture
ICF	107	Semiconductor Active Devices & Mixed
		-Signal IC's Lab
ICF	108	Control Systems
ICF	214	RF Energy
ICF	218	Automated Process Control Systems
ICF	219	Automated Process Control Systems – Lab
ELE	112	Passive Circuits
ELE	113	Passive Circuits Lab

#### **General education courses**

CHE	101	College Chemistry
ENG	131	Technical Writing
MAN	109	Team Skills in the Business Environment
MAT	135	Introduction to Statistics
SPE	125	Interpersonal Communications
PHY	133	Technical Physics

### **Process Option**

Courses required for all options				
Gene	General education courses			
ICF	230	Advanced Process: Thin Films, Dopants		
ICF	240	Advanced Process: Photo, Etch		
Total Credit Hours				
Process Equipment Option				

#### Courses required for all options

#### General education courses

ICF		High-Vacuum Systems
ICF	216	Electromechanical & Pneumatic Systems

### Total Credit Hours

#### Certificates

Entry Level Operator				
ICF 101 Microelectronics Fabrication				
ICF 102 Cleanroom Processes				
Total Credits Hours				

#### Operator

ICĖ	101	Microelectronics Fabrication
ICF	102	Cleanroom Processes
ENG	131	Technical Writing
MAN	109	Team Skills in the Business Environment

#### MAT 135 Introduction to Statistics 3 3 SPE 125 Interpersonal Communication 18 Total Credit Hours Advanced Operator (Technical) 101 Microelectronics Fabrication ICF 6 ICF 102 Cleanroom Processes 1 ICF 104 Vacuum Systems 4 ICF 108 Control Systems 5 5 CHE 101 College Chemistry ELE 112 Passive Circuits 4 ELE 113 Passive Circuits Lab 4 3 ENG 131 Technical Writing 2 MAN 109 Team Skills in the Business Environment 3 MAT 135 Introduction to Statistics 5 PHY 133 Technical Physics SPE 125 Interpersonal Communication 3 **Total Credit Hours** 45 Vacuum ICF 104 Vacuum Systems 4 IC

Total	Credit Hours	11
ICF	214 RF Energy	_3
ICF	212 High-Vacuum Systems	4

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 030

6

1

4

6

3

5

3

6

3

4

4

5 3 2

3

3

<u>5</u> 21

45

21

75

45

21

4

5

75

6

1

7

6

1

3 2

5 4

45

- REA 090
- AAA 090

The interior design program provides students an opportunity to develop an understanding of the principles and elements of design and to 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

IDE 100 Interior Design I - Overview and Application

		History of Interior Design Architecture Drawing I
ARC	101	Architecture Drawing Theory
•		
IDE	120	Two - Spring Interior Design II - Space Planning and
		Human Factors
IDE		Estimating Interior Materials Textiles and Resources
ARC	108	Architectural CAD I
		Principles of Sales Principles of Speech Communication
SFE	115	Finciples of Speech Communication
		Three - Summer
		Local Market Tour Internship
	210	interiorip
		Four - Fall
IDE	210	Interior Design III - Materials, Details, Codes and Specs
IDE		Professional Practice for Interior Designers
IDE	217	Window Treatments or
IDE		Special Topic Studies
IDE	230	Studio I - Residential or
		Studio I - Commercial
ENG	131	Technical Writing I General Education Electives
		Five - Spring
		Interior Design IV - Specialty CAD Applications Studio II - Residential
		or
		Studio II - Commercial Presentation Drawing
ART		Art Appreciation
		General Education Electives

#### **Total Credit Hours**

### International Business\*

Recommended basic skills standards are

- ENG 060
- MAT 060
- REA 090
- AAA 090

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.

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 - International Business located on page 69 of this catalog.

#### Certificate

- INT 210 International Business Office Administration
- INT 221 Principles of International Business
- INT 222 Principles of Exporting & Importing
- INT 241 Doing Business in a Global Environment

3			or	
5	BUS	171	Coop. Work Experience I/Internship I	(3)
_4	INT	243	Principles of International Marketing	Ì3́
18	MAN	105	Contemporary Business Ethics	3
	PHI	115	Comparative Religions	3
	POS	205	International Relations	<u>3</u> 22
4				22
3	Choo	se o	ne foreign language course from the following	
3 2 3 3 3	FRE		French I	5
3	GER	111	German I	5
3	ITA	111	Italian I	5
_3	JPN	111	Japanese I	5
18	RUS	111	Russian I	5
	SPA	111	Spanish I	<u>5</u> 5
3				5
3 _3	Total	Cred	lit Hours	27
6	* Pen	ding S	State approval	

### Interpreter Preparation

4

2

2

(2)

3

(3) 3

<u>3</u> 17

3

4

(4) 3

3

3

16

75

1

3

3

3

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 090, REA 090, MAT 030 or placement scores of ENG 121, REA 115, and MAT 060 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		Text Analysis	3
IPP	121	Aspects of Interpreting I	3
IPP	144	Diversity within the Deaf Community	2
ANT	101	Cultural Anthropology	<u>3</u> 16
			16
Seme	ester	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
			18
Seme	ester	Three - Fall	
ASL	212	American Sign Language IV	3
ASL	214	American Sign Language Literature	3
IPP	221	Voice to Sign Interpreting	3

IPP IPP		Sign to Voice Interpreting Transliterating	3 _ <u>3</u> 15
Seme	ster	Four - Spring	
IPP		Sign Vocabulary Expansion	2
IPP	230	Advanced Interpreting	4
IPP	240	Interpreter Seminar	3
IPP	244	Interpreter Internship	_5
			14
Gene	ral e	ducation courses	
ENG	121	English Composition I	3
MAT	110	Basic Finite Mathematics (or higher)	3
SPE	115	Principles of Speech	3
Scien	ce or	humanities elective.	
Choos	se fro	m AAS course list on p. 53	_3
			12
Total	Cred	lit Hours	75

### Journalism

Recommended basic skills standards are

- ENG 090
- MAT 030
- **REA 090**
- AAA 090

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 computerassisted 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 ENG 122 English Composition II 3 3 3 9 SPE 115 Principles of Speech Communication II. Computer Communication CSC 105 Computer Literacy 3 3 Suggested to Fulfill This Track **III. Mathematics and Science** MAT 135 Introduction to Statistics 3 Science CORE 4 3 Math/Science Electives 10

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

Choose 9 hours from the following courses 3 ECO 201 Principles of Macroeconomics HIS 101 Western Civilization I 3 or 102 Western Civilization II (3) HIS Ś POS 111 American Government 3 POS 125 American State and Local Government PSY 101 General Psychology I 3 or PSY 102 General Psychology II (3) 9 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 LIT 202 Masterpieces of Literature II (3)PHI 113 Logic 3 or THE 211 Development of Theatre I (3)

#### VI. Communication Studies or Fine Arts

Choose 3 credit hours from list on p. 51	_ <u>3</u> 3
	3 48
VII. Recommended Electives	
Choose 18 hours from pages 49-51	18
	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 102 Introduction to Editing

JON JON JON	121	Introduction to Print Media Advertising Introduction to Print Media Introduction to Public Relations	4 3 4
JOU	105 109 221	n the following Introduction to Mass Media Introduction to Desktop Publishing Newspaper Production I Newspaper Production II	3 4 3 3 17-18
Recon Adver	nmen tising	of Advertising Public Relations Emphasis ded Track Public Relations Emphasis ee Requirement	48 17-18 <b>60</b>
		dia Emphasis	
100 100	102 109	nded courses Introduction to Editing Introduction to Desktop Publishing Publications and Design or	3 4 3
JOU	221	Newspaper Production	(3)
Choos JOU JOU	106	b 8 credits from the following categories Fundamentals of Reporting Intermediate News Writing and Editing	3 3
JON JON		or Introduction to Print Media Advertising Introduction to Public Relations	(4) 4
JOU ART		or Introduction to Print Media Photography Fundamentals of Photography or	(3) 3
ART ART		Film Studies Design I	(3) 3 <u>6-8</u> 16-18
Sumn	nary	of Multimedia Emphasis	10 10
		ded Track Emphasis	48 16-18
		ee Requirement	60
For t	the tives	News Editorial Emphasis, see the s below	
JON JON JON	102 109 121 206	nded courses Introduction to Editing Introduction to Desktop Publishing Introduction to Print Media Photography Publications Production and Design Newspaper Production I	3 4 3 3 3
JON JON	105 106	redits from these courses Introduction to Mass Media Fundamentals of Reporting Newspaper Production II	3 3 <u>3</u> 18
Recon	nmen	<b>of News Editorial Emphasis</b> ded Track rial Emphasis	48 18
		ee Requirement	60
New	/slei	ter Emphasis	
		nded Courses Introduction to Editing	3
JOU		Introduction to Desktop Publishing	4

JOU 121 Introduction to Print Media Photography JOU 215 Publications Production and Design JOU 221 Newspaper Production I	3 3 3
Choose 3 credits from these courses JOU 105 Introduction to Mass Media JOU 106 Fundamentals of Reporting JOU 222 Newspaper Production II *See AA degree for sequence requirements	3 3 <u>3</u> 19
Summary of Newsletter Emphasis Recommended Track Newsletter Emphasis Total Degree Requirement	48 19 <b>67</b>

### 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 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

		5 1	
Seme	ester	One - Fall	
NRT	101	Introduction to Soils	4
LTE	105	Woody Landscape Plants	3 2
LTE	106	Green Industry Equipment	2
PED		Any PED course	1
		Biology of Plants	4
MAT	151	Technical Math I	<u>4</u> 18
			18
Seme	ester	Two - Spring	
LTE	112	Landscape Irrigation Design & Installation	3
		Landscape Drafting and Design	3
		Landscape Installation	3
		Herbaceous Plants	3
BUS	217	Business Communication and Report Writing	3
		Any approved elective	_3
			18
Seme	ester	Three - Summer	
LTE	270	Landscape Internship	_ <u>5</u> 5
			5
Seme	ester	Four - Fall	
LTE	205	Landscape Insects and Diseases	4
LTE	207	Landscape Maintenance	3
LTE	217	Hardscape Construction	3

LTE PED	218	Principles of Grading and Drainage Any PED course Any approved elective
Seme LTE LTE LTE LTE SPE	225 226 227 235	Four - Spring Landscape Pesticides and Fertilizers Green Industry Business Operations Principles of Turf Grasses Introduction to Arboriculture Organizational Communications Any approved elective
Total	Cred	it Hours
		Electives
LTE LTE		Plant Propagation Landscape Irrigation Maintenance & Repair
LTE		Introduction to LanCAD
LTE		Green Industry Large Equipment
LTE		Landscape Plant Usage
LTE	236	Xeriscape Landscapes
LTE		Green Industry Bidding and Estimating
NRT		
NRT NRT	202 203	
NRT		· · · · · · · · · · · · · · · · · · ·
NRT		
DRT		
CIS	115	
	118	
MAN		<b>-</b>
BIO	134	Plant Taxonomy

### Latin American Studies

Recommended basic skills standards are

- ENG 090
- MAT 030
- **REA 090**

AAA 090

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
ENG	122	English Composition II
SPE	115	Principles of Speech Communication

#### II. Computer Communication

CSC	105	Computer	Literacy	
-----	-----	----------	----------	--

#### Recommended to satisfy area requirements

#### III. Mathematics and Science

Choose 10 hours from the following courses				
MAT 135 Introduction to Statistics (or MAT 121)				

GEY	121	Physical Geology (or BIO 111 or AST 101) Historical Geology (or BIO 112 or AST 102 Physical Geography - Landforms	4 3 _10
IV. So	ocial	and Behavioral Sciences*	10
Choos		nours from the following courses	
ANT		Cultural Anthropology	3
ANT	111	Physical Anthropology Western Civilization I	3
			ა ა
HIS	201	Western Civilization II U.S. History I	3
HIS	202	U.S. History II	3 3 3 3 3 3 3
GEO	105	World Regional Geography	3
			9
V. Hu	mani	ities*	
		Survey of Humanities II	(3)
HUM	123	Survey of Humanities III	(3)
SPA	111,	112 Spanish I, II 212 Spanish III, IV	5/10 3/6
		Music Appreciation	3/6 3
1000	120	Music Appreciation	9
VI. Co	omm	unication Studies or Fine Arts	-
		nours from the following courses	
ART	121,	122 Drawing I,II	3
ART	161,	162 Ceramics I,II Regional Dance: Latin American Ballroom	3
DAN	141	Regional Dance: Latin American Ballroom	1-3
		122 Jazz I,II or Ballet or Modern Voice and Articulation I	1-3
THE	204	voice and Articulation I	_ <u>2</u> 3
	acon	nmended Electives	0
		hours from the following courses	
ANT	107	Introduction to Archeology	3
DAN	141	Regional Dances: Mexican Folk	1
HIS	137	Contemporary World History	3
HUM	137	Arts and Cultures of Mexico Pre-Columbian Indian Arts	3
		North American Indian Arts	ა ა
		Sacred Images Sacred Spaces	3
INT	221	Principles of International Business	3
		Comparative Religions	3 3 3 3 3 3 3 3 3
ANT,F	IUM,S	SPA 266 Culture Studies	1-3
POS	212	Comparative Politics of Developing Nations	3
			17
Total	Cred	lit Hours	60

\*See AA degree for sequence requirements

### Legal Assistant

Recommended basic skills standards are

ENG 090

- MAT 060 •
- . **REA 115**
- AAA 090

<u>3</u> 3

3

Approved by the American Bar Association.

The objectives of the program are to (1) train students for employment as legal assistants (paralegals) in a variety of legal settings; (2) provide opportunities for students who wish to upgrade existing job skills; and (3) provide coursework and transfer information to students who are interested in continuing their education.

Graduates will be qualified to perform basic legal research, draft various legal documents, conduct client and witness interviews,

participate in basic fact-finding and investigation, and assist in trial preparation. They will also be knowledgeable about the rules of professional and ethical conduct.

Graduates are not authorized to practice law. The legal assistant program provides training for legal assistants (paralegals) who are authorized to perform substantive legal work only under the supervision of a lawyer.

LEG 20 LEG 20 LE	iate of Applied Science Degree 0 The Paralegal in the Legal System 1 Legal Research I 2 Legal Research II 3 Corporation Law 4 Legal Writing 1 Family Law 12 Real Estate Law 13 Bankruptcy - Principles and Practices 21 The Court Sys - Pleading and Practice II 22 The Court Sys - Pleading and Practice II 31 Commercial Law I 32 Commercial Law II 33 Probate 45 Torts 47 Legal Ethics 11 Substantive Criminal Law 10 Constitutional Law	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
Elective		
	9 hours from the following courses I0 Business Records	3
	or	
BUS         2'           CIS         11           CIS         12           CIS         13           CIS         13           CIS         14           CIS         15           CIS         14           CIS         15           CRJ         11           CRJ         12           LEG         25           LEG         27	<ul> <li>Principles of Accounting I</li> <li>Business Communication and Report Writing</li> <li>Introduction to PC Applications</li> <li>Word Processing I: Microsoft Word</li> <li>Introduction to the Internet</li> <li>Introduction to Web Authoring: HTML</li> <li>PC Database Complete: Access</li> <li>PC Spreadsheets Complete: Excel</li> <li>Procedural Criminal Law</li> <li>Judicial Function</li> <li>Juvenile Law and Procedures</li> <li>Employment and Labor Law</li> <li>Cooperative Work Experience</li> </ul>	(4) 3 3 2 1 3 3 3 3 3 2 3 9
	education courses 21 English Composition I	2
	21 English Composition I	3 3
POS 11	1 American Government	3 3
PSY 10	01 General Psychology I	<u>3</u> 12
Choose	two courses from the following	
AST 10	01 Astronomy I	4
	05 Science of Biology 21 Survey of Humanities I	4 3
PHI 11		3

**Total Credit Hours** 

# Machining Technology

Recommended basic skills standards are

- ٠ ENG 090
- MAT 060
- **REA 115** •
- AAA 090 •

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

		Introduction to Machine Shop	3
		Blueprint Reading	3
DRT	103	Basic Computer Aided Drafting I	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 I 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 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
MAG	225	CADCAM 3D	3
MAG	226	CADCAM 3D Lab	3
MAG	240	Practical Metallurgy	_3
			60-61
		ducation courses	
CIS	115	Introduction to Computers	3
SPE	125	Interpersonal Communication	3
		or	
ENG	121	English Composition I	(3)
MAT	152	Technical Mathematics II	
MAT	156	Problem Solving in College Mathematics	3 3 3
PSY	115	Psychology of Adjustment	3
SPE	217	or Group Communication	_(3)
			15
Total	Cred	lit Hours	75-76
Cort	flor	ata	

Certificate

Courses required for all options

MAG MAG	101 102	Introduction to Machine Shop Blueprint Reading
MAG MAG	215 216	M 2D Option CADCAM 2D CADCAM 2d Lab <b>it Hours</b>
MAG MAG	225 226	M 3D Option CADCAM 3D CADCAM 3D Lab <b>it Hours</b>
TOLAI	Creu	
MAG MAG MAG	201 202 203	the Option CNC Lathe Operations I* CNC Lathe Operations II* CNC Lathe Lab*
Total	Cred	it Hours
MAG MAG	205 206	II Option CNC Milling Operations I* CNC Milling Operations II* CNC Milling Lab
Total	Cred	it Hours
MAG MAG MAG MAG MAG MAG MAG MAG MAG	201 202 203 204 205 206 215 216 225 226	er Aided Machining Option CNC Lathe Operations I* CNC Lathe Operations II* CNC Lathe Lab* CNC Milling Operations I* CNC Milling Operations II* CNC Milling Lab* CADCAM 2D CADCAM 2D CADCAM 3D CADCAM 3D Lab quired for all options
		it Hours
Lath MAG MAG MAG MAG MAG MAG MAG Cours	e Jo 110 111 201 202 203 215 216 es ree	Durneyman Option Engine Lathe I Engine Lathe II Engine Lathe III CNC Lathe Operations I* CNC Lathe Operations II* CNC Lathe Lab* CADCAM 2D CADCAM 2D CADCAM 2d Lab quired for all options <b>it Hours</b>
MAG MAG MAG MAG MAG MAG	120 121 122 204 205 206	Journeyman Option Milling Machine I Milling Machine II CNC Milling Operations I* CNC Milling Operations II* CNC Milling Operations II* CNC Milling Lab* CADCAM 2D

MAG 216 CADCAM 2D Lab

Courses required for all options Total Credit Hours

## Management\*

Recommended basic skills standards are

• ENG 060

3

\_\_\_\_\_3 \_\_\_\_6

3

\_\_\_\_3

6

3 3

6

3

3

3

9

3 3

<u>3</u> 9

3333333333333

6 36

3

3 3 3

30

- MAT 060
- REA 090
- AAA 090

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 70 of this catalog.

### Certificate

Cert			
		Personal Time Management	1
		Contemporary Business Ethics	3 3 3 3 <u>3</u> 19
		Principles of Management	3
		Human Resource Management	3
MAN	258	Principles of Finance	3
MAR	216	Principles of Marketing	3
BUS	226	Business Statistics	<u>_3</u>
			19
		ent Electives	
Choos	se 10	hours from the following courses	
ACC	122	Principles of Accounting	4
BUS	265	Investments	3 1 1
MAN	106	Action Planning	1
MAN	107	Team Building	
MAN	108	Personal Leadership Development	1 3 3
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 I		0	3 _ <u>3</u> 10
Total	Cred	lit Hours	29
		State approval.	20
	5	11	

### Marketing\*

Recommended basic skills standards are

- ENG 060
- MAT 060
- REA 090
- AAA 090

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 70 of this catalog.

#### Certificate

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

#### Marketing Electives

Choose 5 hours from the following courses

- ACC 122 Principles of Accounting II
- BUS 271 Advanced Coop. Work Exp. I/Internship I
- MAR 262 Purchasing
- MAN 106 Action Planning
- MAN 107 Team Building
- MAN 108 Personal Leadership Development
- MAN 227 Small Business Management

#### **Total Credit Hours**

\* Pending State approval.

### **Mathematics**

Recommended basic skills standards are

- ENG 060
- MAT 090
- REA 090
- AAA 090

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

		101			
Recommended Track					
CSC 160 Computer Science I: C++	4	Μ			
ENG 121 English Composition I	3	Μ			
ENG 122 English Composition II	3	Μ			
SPE 115 Principles of Speech Communic	ation <u>3</u>	BI			
Recommended to satisfy area requiren	nents	BI			
Mathematics and Science					
CSC 161 Computer Science II: C++	4	С			
MAT 121 College Algebra	4	М			
MAT 122 College Trigonometry	3	М			
MAT 201 Calculus I	5	М			
MAT 202 Calculus II	5	М			
MAT 203 Calculus III	4	N			
PHY 211 Physics: Calculus-Based I	5	E			
PHY 212 Physics: Calculus-Based II	_ <u>5</u> 35				
	35	G			
Social and Behavioral Sciences		E			
Electives*	6	P			
Humanities		E			
Electives*	6	P			
Electives	<u> </u>				
	12				

#### **Total Credit Hours**

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

### Medical Office Technology

Recommended basic skills standards are

- ENG 090
- REA 090

4

3

3

1

1

1

<u>3</u> 5

29

- MAT 030
- AAA 090

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

		to of rippinod bolorido Bogi oo	
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 2 3 3 3 3 3 5
MOT	210	Medical Office Procedures II	3
		Clinical Procedures II	3
MOT	251	Medical Assistant Externship I	3
MOT	252	Medical Assistant Externship II	3
BIO	141	Applied Anatomy and Physiology	5
		and Disease Processes I	
BIO	142	Applied Anatomy and Physiology	4
		and Disease Processes II	
		Word Processing I : Microsoft Word	3
		Beginning Medical Transcription	4
MOT	247	Medicolegal Concepts & Ethics	3
		Medical Terminology	2
MOT	185	Advanced Medical Terminology	3 2 2 3
NUR	108	Accelerated CAN	3
EMS	107	Standard First Aid – CPR	_1
			47
Gene	ral e	ducation courses	
ENG	131	Technical Writing	3
PSY	101	General Psychology	3
		Technical Writing	3 3 3
		General Psychology	3
			97

SPE	225	Organizational Communication	3
Gene	6		
			15

#### **Total Credit Hours**

### 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	5
		and Disease Processes I	
BIO	142	Applied Anatomy and Physiology	4
		and Disease Processes II	
CIS	120	Word Processing I : Microsoft Word	3
NUR	108	Accelerated Nurse Aide	3
ENG	131	Technical Writing	3
		or	
SPE	225	Organizational Communication	_(3)
Total	Cred	lit Hours	34

#### Medical Coding Specialist

MOT	108	Medical Career Options and Readiness	1
MOT	181	Medical Terminology I	2
MOT	185	Medical Terminology II	2
MOT	257	Medical Coding Specialist	4
BIO	141	Applied Anatomy and Physiology	5
		and Disease Processes I	
BIO	142	Applied Anatomy and Physiology	5
		and Disease Processes II	
CIS	110	Introduction to PC Operating Systems: DOS	2
CIS	112	Introduction to Windows: 98	1
CIS	120	Word Processing I: Microsoft Word	_3
Total Credit Hours		25	

#### Medical Transcriptionist

Recommended basic skills standards are

- ENG 090
- **REA 090**
- MAT 030
- AAA 090

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

62

BTE	110	Business Language Skills	3
BIO	141	Applied Anatomy and Physiology	5
		and Disease Processes I	
BIO	142	Applied Anatomy and Physiology	4
		and Disease Processes II	
CIS	120	Word Processing I: Microsoft Word	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	<u>(3)</u>
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 10	08 Medical Career Options and Readiness	1
MOT 11	10 Medical Office Procedures I	3
MOT 12	20 Clinical Procedures I	2
MOT 18	31 Medical Terminology	2
MOT 2	10 Medical Office Procedures II	3
MOT 22	21 Beginning Medical Transcription	4
MOT 24	47 Medicolegal Concepts and Ethics	3
CIS 12	20 Word Processing I: Microsoft Word	3
NUR 10	01 Certified Nurse Aide	6
ENG 1	31 Technical Writing	3
	or	
SPE 22	25 Organizational Communication	_(3)
Total Credit Hours		

#### 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 gualify 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.

1 5

1

7

#### Certificate

MOT	108	Medical Careers Options and Procedures	1
MOT	115	Phlebotomy/Specimen Collection/	3
		Special Procedures	
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
Total	Total Credit Hours		15

#### Certificate

Professional Household Health Assistant				
EMS	107	Standard First Aid - CPR		
MOT	140	Professional Household Health Assistant		
MOT	141	Pharmacology for the Health Assistant		

**Total Credit Hours** 

## Natural Resource Technology

Recommended basic skills standards are

- ENG 060 ٠
- MAT 030
- REA 090
- AAA 090 •

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**

Seme	Semester One - Fall				
NRT	101	Introduction to Soils	4		
NRT	102	Natural Resource Conservation	4		
NRT	103	Equipment Use and Maintenance	3		
BIO	133	Ecology	4		
MAT	151	Technical Mathematics I	4		
			19		
Semester Two - Spring					
Seme	ester	Two - Spring			
Seme NRT		Two - Spring Wilderness Skills and First Aid	3		
NRT	104		3		
NRT NRT	104 202	Wilderness Skills and First Aid			
NRT NRT NRT	104 202 203	Wilderness Skills and First Aid Surveying and Measurement	3		
NRT NRT NRT	104 202 203	Wilderness Skills and First Aid Surveying and Measurement Principles Forestry and Measurement	3		

BUS 217 Business Communication & Report Writing PED 150 Fitness Center I	3 <u>1</u> 18
Semester Three - Summer NRT 210 Natural Resource Internship	<u>5</u> 5
Semester Four - FallNRT205Wildlife and Fisheries PrinciplesNRT211Environmental Policies and EconomicsNRT236Public Relations of Natural ResourcesGEY106Principles of GeologySPE214Natural Resource Interpretation and CommunicationNRT Approved Elective/Any LTE Elective*	3
Semester Five - SpringNRT117Introduction to Natural Resource GISNRT204Range Management and RestorationNRT212Ecosystem ManagementNRT214Environmental Issues and EthicsNRT Approved Elective/Any LTE Elective*	1 4 2 3 3 13
Total Credit Hours*NRT Approved ElectivesANT101Cultural AnthropologyBIO105Science of BiologyBIO110Foundations of College BiologyCHE101Introduction to Chemistry ICIS115Introduction to ComputersDRT103Basic Computer Aided Drafting IEMS115First ResponderGEO112Weather and ClimateHIS225Colorado HistoryAny NRT or LTE course not required in specific programSPE216Advanced SpeechAssociate of Applied Science Degree	<b>74</b> 3 4 5 5 3 3 3 3 3 3 3 3

#### Associate of Applied Science Degree

#### Zookeeping Technology Option

#### **Recommended Program Sequence** Somester One Fall

Seme	ster	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
Seme	ster	Two - Spring	
		Bird Husbandry	4
		Zookeeping Internship**	5
		Plant Taxonomy	4
		or	
BUS	135	Biology of Plants	(4)
BUS	217	Business Communication & Report Writing	3
NRT A	Appro	ved Zookeeping Elective*	3
			19-20
Seme	ster	Three - Fall	
		Mammal Husbandry	4
		· · · · · · · · · · · · · · · · · · ·	

BIO	209 Zookeeping Internship** 133 Ecology	5 4	NRT102Natural Resource Conservation4NRT150Introduction to ArcInfo Using ArcMap3
SPE	214 Natural Resource Interpretation	•	NRT 118 GIS Field Study 2
	and Communication	3 _3	BIO 133 Ecology 4 GIS Elective 3
INITAL F	Approved Elective*	<u>_</u> 19	GIS Elective
Seme	ester Four - Spring	10	Semester Five - Spring
	116 Fish and Invertebrate Husbandry	4	NRT 214 Environmental Issues and Ethics 3
	135 Horticulture for the Zookeeper	1	
	206 Exhibit Design	2	NRT249Technical GPS & Remote Sensing3BUS217Business Communication & Report Writing3MAT135Introduction to Statistics3
	209 Zookeeping Internship**	5	MAT 135 Introduction to Statistics 3
	214 Environmental Issues and Ethics	3	GIS Elective15
INEXT	215 Veterinary Zookeeping	<u>4</u> 19	Total Credit Hours 70
Total	Credit Hours	73	
	Zookeeping approved electives	10	Approved GIS Electives NRT 121 Characterizing Forests – Using ArcView 2
	102 Natural Resource Conservation	4	NRT 122 Conservation GIS Using ArcView 3
	137 Outdoor Leadership	2	NRT 123 Intro to ArcView 3D Analyst 3
	205 Wildlife and Fisheries Management	3	NRT 124 Intro to ArcView Network Analyst 3
	216 Elephant Management	3	NRT 140 Intro to ArcView Spatial Analyst
	217 Animal Behavior	3	NRT 141 Intro to ArcView Tracking Analyst 2
	<ul><li>236 Public Relations of Natural Resources</li><li>136 Animal Conservation</li></ul>	2 3	NRT         152         Programming with Avenue         3           NRT         212         Ecosystem Management         2
	110 Foundations of College Biology	5	NRT212Ecosystem Management2NRT240ArcInfo and Natural Resources3
	115 First Responder	2	BIO 134 Plant Taxonomy 4
	101 Introduction to Chemistry I	5	DRT 104 Basic Computer Aided Drafting II 3
**Zoo	okeeping Internships		GEO 105 World Regional Geography
209	101 Hoofstock		Certificates
209	102 Primates and Carnivores		
209	103 Birds and Reptiles		Adventure Guide
Asso	ociate of Applied Science Degree		Semester One - Fall
Toch	inical GIS for Natural Resources Option	h	NRT         102         Natural Resource Conservation         4           NRT         103         Equipment Use and Maintenance         3
	•	1	NRT         103         Equipment Use and Maintenance         33           NRT         137         Outdoor Leadership         22
	mmended Program Sequence		SPE 214 Natural Resource Interpretation &
	ester One - Fall 101 Introduction to Soils	1	Communication 3
	111 ARC View & Technical GIS for Natural Resources	4 3	NRT 230 Desert Field Studies14
CIS	115 Introduction to Computer Information Systems	3	
	or		Semester Two - Spring
CIS	118 Introduction to PC Applications	(3)	NRT 104 Wilderness Skills and First Aid 3
DRT	103 Basic Computer Aided Drafting I	3	NRT 214 Environmental Issues and Ethics 3 NRT 235 Programming for Outdoor Education and Recreation 3
MAI	151 Technical Mathematics I	<u>4</u> 17	NRT 236 Public Relations
Same	ator Two Caring	17	NRT 245 Mountain Field Studies 2
	ester Two - Spring 117 Introduction to GIS and Natural Resources	1	NRT 257 Avalanche Safety 3
	151 Visual Basic for ESRI or	3	NRT       257       Avalanche Safety       33         EMS       115       First Responder       33         19       19       19
CIS	166 Visual Basic Programming	(3)	Semester Three - Summer
NRT	202 Introduction to Surveying	ÌŚ	NRT 207 Adventure Guide Internship
CIS	145 PC Database Complete: Access	3	
010	or	(0)	Total Credit Hours 38
CIS	167 Language Programming C++	(3)	Forestry Technician I*
CIS GEO	<ul><li>155 PC Spreadsheets Complete: Excel</li><li>206 Introduction to Cartography</li></ul>	3 _4	NRT 102 Natural Resources Conservation 4
010		17	NRT 103 Equipment Use and Maintenance 3
Seme	ester Three - Summer		NRT 117 Introduction to Natural Resource GIS 1
	239 GIS Internship	5	NRT 203 Introduction to Forestry 4
	· · · · ·	_ <u>5</u> 5	NRT 236 Public Relations of Natural Resources
Seme	ester Four - Fall		Total Credit Hours 14
			Introductory GIS*
			NRT 111 ArcView Technical GIS in Natural Resources 3

Intro	du	ctory GIS*	
NRT	111	ArcView Technical GIS in Natural Resources	3
NRT	117	Introduction to Natural Resource GIS	1

NRT NRT	118 249	Introduction to Visual Basics for ESRI Software GIS Field Study Technical GPS and Remote Sensing Basic Computer Aided Drafting I	3 2 3 _3	
Total	Cred	lit Hours	15	
NRT NRT BIO	101 204 133	echnician I* Introduction to Soils Range Management and Restoration Ecology Biology of Plants	4 4 4	
Total	Cred	lit Hours	16	
NRT NRT NRT NRT NRT SPE	104 137 203 235 236 214	ional Technician I* Wilderness Skills and First Aid Outdoor Leadership Introduction to Forestry Programming for Outdoor Education and Recreati Public Relations of Natural Resources Natural Resource Interpretation and Communicati	2 on <u>3</u>	
Total Credit Hours       17         *Pending State Approval       17				

### Networking Technology

Recommended basic skills standards are

- ENG 090 .
- . MAT 060
- REA 090 •
- AAA 090

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 123 DOS Complete CIS 128 Windows Complete: Windows 98/Windows XP CIS 130 Introduction to the Internet CIS 131 Introduction to Web Authoring: HTML CIS 145 PC Database Complete: Access CIS 155 PC Spreadsheets Complete: Excel CIS 166 Visual Basic Programming 167 C Language Programming: C++ CIS \*NET 115 Introduction to Computer Networking and \*NET 201 Introduction to TCP/IP or (5) \*CIS 206 Cisco Networking Level I 27 (26) \*Students must take both NET 115 and NET 201 or they may take

only CIS 206.

#### General education courses

BUS	217	Business	Communication	and Report	Writing
-----	-----	----------	---------------	------------	---------

MAN	115 131 105	Introduction to Computer Information Systems Introduction to Customer Service Technical Writing I Contemporary Business Ethics Principles of Speech Communication	3 3 3 <u>3</u> 3
Softw	are -	Track	10
NET	120	Local Area Networks MCP Test Preparation or	3 3
	155	CNA Test Preparation Wide Area Networks Network Design and Installation	(3) 3 <u>3</u> 12
		Track	
CIS CIS CIS	208	Cisco Networking Level II Cisco Networking Level III Cisco Networking Level IV	5 5 5 15
	se 4 h	ours from the following courses	
CIS CIS MAN MAN MAN	133 136 168 266 267 104 105 106 107	Coop. Work Experience I/Internship I Advanced Web Authoring: FrontPage Presentation Graphics: PowerPoint Java Programming Advanced Visual Basic Programming Advanced C Language Programming: C++ Personal Time Management Contemporary Business Ethics Action Planning Team Building Personal Leadership Development	3 1 3 3 3 3 1 1 1 1 1 4
-		th Software track th Hardware track	60-62 63-65

#### Certificate

3

3

2

1 3

3 3

3

3

3

3

CCL			
CIS CIS		Introduction to Computer Information Systems Word Processing I: Microsoft Word	3 3
CIS		Introduction to the Internet	2
CIS	131	Introduction to Web Authoring: HTML	1
CIS		PC Database Complete: Access	3
CIS		PC Spreadsheets Complete: Excel	3
			15
Softv	vare <sup>-</sup>	Track	
CIS	123	DOS Complete	3
CIS	128	Windows Complete: Windows 98/Windows XP	3
NET	115	Introduction to Computer Networking	3
NET	120	Local Area Networks	3
NET	150	MCP Test Preparation	3
		or	
		CAN Test Preparation	(3)
NET	155	Wide Area Networks	3
NET	201	Networking Architectures and TCP/IP	3
			21
		Track	
CIS		Cisco Networking Academy Level I	5
		Cisco Networking Level II	5
CIS	208	Cisco Networking Level III	5

CIS	209 Cisco Networking Level IV	<u>5</u> 20
Certi	36	
Certi	ificate with Hardware track	35

### 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.

NUA	101	Nurse Aide Theory/Lab	4
NUA	102	Nurse Aide Clinical	1
NUA	114	Home Health Aide Internship	_1
			6

\*NUR 108 is designed for students who are pursuing the LPN Certificate or the RN degree.

#### Licensed Practical Nursing

Recommended basic skills standards are

- ENG 090
- MAT 060
- REA 115

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 September. 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**

Gene	rai e	ducation 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
		General Psychology	3
PSY	235	Human Growth and Development	3
MOT	130	Basic Pharmacology for Medical Careers	_2
			19
Nursi	ing c	ourses	
NUR	108	Accelerated Nurse Aide	3
NUR	130	Introduction to Practical Nursing	3
NUR	131	Fundamental Concepts of Practical Nursing	3
NUR	134	Clinical Synthesis	1
NUR	135	Medical-Surgical Concepts for LPN's	11
NUR	140	Personal and Vocational Adjustments	1
NUR		Nutrition for Health Occupations	1
NUR	173	Family Centered Nursing I	5
			28

#### Total Credit Hours

#### Psychiatric Technician

Recommended basic skills standards are

- ENG 090
- MAT 060
- REA 090

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.

47

11

Students completing the psychiatric technician certificate are eligible to take the Colorado Psychiatric Technician Certification Exam. Applications are available the first working day of September. 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	_2
			19
Nursi	ng c	ourses	
NUR	108	Accelerated Nurse Aide	3
NUR	130	Introduction to Practical Nursing	3
NUR	131	Fundamental Concepts of Practical Nursing	3

NUR 135 Medical-Surgical Concepts for LPN's

- NUR 151 Dynamics of Psychiatric Nursing I
- NUR 152 Dynamics of Psychiatric Nursing Lab I
- NUR 153 Dynamics of Psychiatric Nursing II
- NUR 154 Dynamics of Psychiatric Nursing Lab II

#### **Total Credit Hours**

#### Associate of Applied Science Degree

Nursing - Track One Registered Nurse Recommended basic skills standards are

- ENG 090
- MAT 090
- REA 115

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 BIO BIO	201	Foundations of Microbiology Human Anatomy and Physiology I Human Anatomy and Physiology II	3 4 4
		English Composition I	3
		General Psychology I	3
PSY	235	Human Development	<u>3</u> 20
			20
Nursi	ing c	ourses	
NUR	108	Accelerated Nurse Aide	3
NUR	109	Introduction to Nursing	1
NUR	173	Family Centered Nursing I	5
NUR	174	Medical/Surgical Nursing I	13
NUR	175	Fundamental Nursing Concepts	1
NUR	176	Basic Medical Concepts of Nursing	8
NUR	221	Medical/Surgical Nursing II	15
NUR	227	Mental Health Nursing	8
NUR	224	Family Centered Nursing II	4
			58
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

3 through a selection process and criteria for selection are available 4

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

NUrsi	ng C	redits transferred in from the LPN transcript	
NUR	173	Family Centered Nursing I	5
NUR	174	Medical/Surgical Nursing I	13
NUR	175	Fundamental Nursing Concepts	1
NUR	176	Basic Medical Concepts of Nursing	8
			27
Gene	ral e	ducation courses	
BIO	123	Foundations of Microbiology	3
BIO	201	Human Anatomy and Physiology I	4
BIO	202	Human Anatomy and Physiology II	4
		English Composition I	3
PSY		General Psychology I	3
PSY	235	Human Development	3
			20
Nursi	ing c	ourses	
		LPN Advanced Placement for ADN	2
NUR	187	Medical/Surgical Bridge Course for LPN's	2
		Medical/Surgical Nursing II	15
		Family Centered Nursing II	4
NUR	227	Mental Health Nursing	8
			31

#### **Total Credit Hours**

#### Pharmacy Technician

Recommended basic skills standards are

ENG 060

3

4

53

- MAT 030
- REA 060

Pharmacy Technicians assist and support licensed pharmacists in providing health care and medications to patients. The pharmacy technician has broad knowledge and training in pharmacy, however does not require the advanced college education required of a licensed pharmacist. Pharmacy technicians perform the practical duties, allowing the pharmacist to focus on patient education, pharmaceutical care and medication management.

#### Certificate

#### Semester One

3 5 3 15
15
3
5
3
-
4
15
10
_
.5
I

PHT 206 Employment Preparation	ΡHT
--------------------------------	-----

PHT 215 Community Pharmacy Clinical

PHT 225 Hospital Pharmacy Clinical

SPE 125 Interpersonal Communications

#### **Total Credit Hours**

# Office Administration

Recommended basic skills standards are

- ENG 060
- MAT 060
- **REA 090**
- AAA 090

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 70 of this catalog.

#### Certificate

0011				
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	118	Introduction to PC Applications	3	
CIS	120	Word Processing I: Microsoft Word	3	
CIS	130	Introduction to the Internet	1	
CIS	136	Presentation Graphics: PowerPoint	3	
CIS	137	Desktop Publishing	3	
CIS	107	Voice Recognition with Dragon NaturallySpeaking	1	
CST	115	Introduction to Customer Service	_3	
			28	
Office Administration Electives				
Choose 5 hours from the following courses				
		Payroll Accounting	3	
			-	

BUS 171 Coop. Work Experience I/Internship I

- CIS 133 Advanced Web Authoring: FrontPage
- CIS
- 145 PC Database Complete: Access
- CIS 155 PC Spreadsheets Complete: Excel
- MAN 104 Time Management MAN 105 Contemporary Business Ethics

MAN 106 Action Planning MAN 107 Team Building

MAN 108 Personal Leadership Development

#### **Total Credit Hours**

## Office Training Fast Track

Recommended basic skills standards are

- ENG 060
- MAT 060

5

5

3

14

44

3

1

3

3

1

3

- **REA 090**
- AAA 090

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

110	Business Records	3
101	Keyboard Skill Building	1
102	Keyboarding Applications	2
108	Ten Key by Touch	1
110	Business Language Skills	3
116	Files Management	1
118	Introduction to PC Applications	3
120	Word Processing I: Microsoft Word	3
136	Presentation Graphics: PowerPoint	_3
Total Credit Hours 2		
	110 101 102 108 110 116 118 120 136	<ul> <li>110 Business Records</li> <li>101 Keyboard Skill Building</li> <li>102 Keyboarding Applications</li> <li>108 Ten Key by Touch</li> <li>110 Business Language Skills</li> <li>116 Files Management</li> <li>118 Introduction to PC Applications</li> <li>120 Word Processing I: Microsoft Word</li> <li>136 Presentation Graphics: PowerPoint</li> </ul>

### Physics

Recommended basic skills standards are

- ENG 060
- MAT 109
- **REA 090**
- AAA 090

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	160	Computer Science I: C++
ENG	121	English Composition I
ENG	122	English Composition II
SPE	115	Principles of Speech Communication

#### Recommended to satisfy area requirements

Recommended to satisfy area requirements				
Mathematics and Science				
CHE 111 General College Chemistry I				
CSC 161 Computer Science II: C++				
MAT 201 Calculus I				
MAT 202 Calculus II				
MAT 203 Calculus III				
PHY 211 Physics: Calculus-Based I				
PHY 212 Physics: Calculus-Based II				
Math/Science Elective				
Social and Behavioral Sciences				
Electives*				
Humanities				
Electives*				
Total Credit Hours				

\*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 090
- MAT 030
- REA 115
- AAA 090

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	o Criminal Justice
CRJ 110	Introduction	o Criminal Justice

CRJ 111 Substantive Criminal Law

CRJ	115	Law Enforcement Driving	3
		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
		F.A.T.S. Judgmental Shooting	1
CRJ	246	Traffic Investigations & Management	3
EMS	107	Standard First Aid - Adult CPR	_1
Total	Cred	lit Hours	31

### **Political Science**

Recommended basic skills standards are

ENG 090

4

5

6

<u>6</u> 12

60

3

3

REA 115

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.

#### Associate of Arts Degree

#### Recommended Track

### Minimum Requirements

#### I. English/Speech

ENG	121	English Composition I	3
ENG	122	English Composition II	3 3 3
		Principles of Speech Communication	3
			9
II. Co	mpu	ter Communication	
		Computer Literacy (or CSC 116 or CSC 160)	3
		,	3
Sugg	este	d to Fulfill This Track	
		natics and Science	
		Introduction to Statistics	3
GEY	121	Historical Geology	
		ence Course	4
			10
IV. So	cial	and Behavioral Sciences*	
POS	105	Introduction to Political Science	3
		American Government	3
		or	
POS	125	American State and Local Government	(3)
PSY	101	General Psychology I	(3) 3
			9
V. Hu	mani	ties*	
LIT	115	Introduction to Literature	3

PHI PHI		Introduction to Philosophy Ethics			
VI. Communication Studies or Fine Arts Choose 3 credit hours from list on p. 51					
VII. R	econ	nmended Electives			
Choos	se17	hours from the following courses			
GEO	105	World Regional Geography			
HIS	101	Western Civilization I			
HIS	102	Western Civilization II			
JOU	102	Introduction to Editing			
JOU	106	Fundamentals of Reporting			
POS	205	International Relations			
		Comparative Politics of Developing Nations			
POS	215	Current Political Issues			
<b>Total Credit Hours</b> *See AA degree for sequence requirements					
Pre	Δ_د	llied Health			

Pre-Alled Health Recommended basic skills standards are

ENG 060

- MAT 090
- MAT 090
  REA 090
- AAA 090

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

#### Medical Technology Option

#### Recommended Track

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

#### Recommended to satisfy area requirements Mathematics and Science

BIO	111	General College Biology I
BIO	205	Microbiology
CHE	111	General College Chemistry I
CHE	112	General College Chemistry II
MAT	121	College Algebra

PHY 112 Phys	sics: Algebra-Based I sics: Algebra-Based II n/Science Electives	5 5 _2 36			
Elec	navioral Sciences tives*	6			
Humanities Elec	tives*	<u>_6</u> 12			
	Total Credit Hours60*Electives must be from the approved elective course list for AA/ASdegrees.				
	erapy Option blem Solving with Visual Basic				
ENG 121 Engl ENG 122 Engl	Applications (or 160) lish Composition I lish Composition II ciples of Speech Communication	3 3 <u>3</u> 12			
Recommendec Mathematics a	to satisfy area requirements:	12			
BIO 111 Gen	eral College Biology I nan Anatomy and Physiology I	5 4			

#### **Total Credit Hours**

Humanities

3

3

9

<u>3</u> 3

> 3 3

3

3 3

3 3 3

17

60

> > 4

BIO

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

3

36

6

6

12

60

6

### Associate of General Studies Degree

202 Human Anatomy and Physiology II

CHE 111 General College Chemistry I

CHE 112 General College Chemistry II PHY 111 Physics: Algebra-Based I

Math/Science Elective

PHY 112 Physics: Algebra-Based II

Social and Behavioral Sciences

Electives\*

Electives\*

#### Pre-Nursing Option

110	1 4 01		
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
Reco	mme	nded Courses	
Math	emat	ics 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 Behavioral Sciences Electives\*

**Humanities** 

Electives\*

#### **Total Credit Hours**

### Pre-Engineering

Recommended basic skills standards are

- ENG 060 .
- MAT 109
- **REA 090**
- AAA 090 •

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			
		English Composition II	3			
SPE		Principles of Speech Communication	3			
•			13			
Reco	mme	nded to satisfy area requirements	10			
		ics and Science				
		General College Chemistry I	5			
		General College Chemistry II	5			
		Calculus I	5			
		Calculus II	5			
		Calculus III	4			
		Physics: Calculus-Based I	5			
PHY	212	Physics: Calculus-Based II	5			
		Math/Science Elective	_1			
			35			
Social and Behavioral Sciences						
ECO	201	Principles of Macroeconomics	3			
ECO	202	Principles of Microeconomics				
_,,,			<u>_3</u> 6			
•						
Humanities						

Electives\*

#### **Total Credit Hours**

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

# **Pre-Med Professions**

Recommended basic skills standards are

- ENG 060
- MAT 090
- **REA 090**
- AAA 090

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**

11000				
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 3 _ <u>3</u> 12	
			12	
Reco	mme	nded to satisfy area requirements		
Mathe	emat	ics and Science		
BIO	111	General College Biology I	5	
BIO	112	General College Biology II	5	
		General College Chemistry I	5	
CHE	112	General College Chemistry II	5	
		Calculus I	5	
PHY	111	Physics: Algebra-Based I	5	
PHY	112	Physics: Algebra-Based II	5	
		Math/Science Elective	1	
			36	
Socia	l and	Behavioral Sciences		
PSY	101	General Psychology I	3	
SOC	101	Introduction to Sociology I	3 _3 6	
			6	
Humanities				
		Electives*	6	
		(Languages or Literature is recommended)		

<u>6</u> 12 60

#### **Total Credit Hours**

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

### Psychology

Recommended basic skills standards are

- ENG 090
- **REA 115**

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.

#### Associate of Arts Degree

#### **Recommended Track**

#### **Minimum Requirements**

### L English/Speech

ENG	121	English Composition I English Composition II	3 3	
SPE	115	Principles of Speech Communication	3 3 9	
		ter Communication		
CSC	105	Computer Literacy (or CSC 116 or CSC 160)	<u>3</u>	
Sugg	este	d to Fulfill This Track		
III. Ma	ather	natics and Science		
MAT	135	Introduction to Statistics	3	
BIO	111	General College Biology I	5	
BIO	112	General College Biology II	5 _5 13	
			13	
IV. So	ocial	and Behavioral Sciences*		
PSY	101	General Psychology I	3	
		General Psychology II	3 3 3	
HIS	101	Western Civilization I or	3	
HIS	102	Western Civilization II	_(3)	
			9	
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	

#### VI. Communication Studies or Fine Arts

Choose 3 credit hours from list on p. 51

#### VII. Recommended Electives

Choose 14 hours from the following courses					
PSY	115	Psychology of Adjustment	3		
PSY	205	Psychology of Women	3		
PSY	217	Human Sexuality	3		
PSY	226	Social Psychology	3		
PSY	227	Death and Dying	3		
PSY	235	Human Development	3		
PSY	247	Child Abuse and Neglect	3		
PSY	249	Abnormal Psychology	3		
PSY	265	Psychology of Personality	_3		
			14		
Total Credit Hours			60		

\*See AA degree for sequence requirements

### Radio, Television, Telecommunications

Recommended basic skills standards are

- ENG 060
- MAT 030
- **REA 090**
- AAA 090

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

9

or CIS 118 Introduction ENG 121 English Co	n to PC Applications omposition I	(3) _ <u>3</u> 18
Semester Two - Spri TCM 201 Television TCM 206 TV Studio TCM 213 News Writi TCM 214 Principles of SPE 115 Principles of	Production Production ing and Reporting	3 3 3 3 <u>3</u> 15
Semester Three - Fa TCM 102 Radio Prog or	II gramming & Production II	3
TCM 202 Advanced TCM 107 Radio Prog	Television Production gramming & Production Lab II	(3) 3
or TCM 207 Advanced TCM 221 Basic Vide TCM 271 Internship Company or		(3) 4 4
	<ul> <li>Radio Station/Audio Production</li> </ul>	(4)
TCM 273 Internship BUS 115 Introductio		(4) 
Semester Four - Spr	in Telecommunications	4
SOC 101 Introduction	n to Sociology I	3
		(3)
SOC 101 Introduction or ANT 101 Cultural An TCM Electives <b>Total Credit Hours</b> TCM Electives: Studen		(3) <u>6</u> 13 <b>63</b> ne list
SOC 101 Introduction or ANT 101 Cultural An TCM Electives Total Credit Hours TCM Electives: Student below. Students may m TCM 102 Radio Prog TCM 107 Radio Prog TCM 107 Radio Prog TCM 107 Radio Prog TCM 202 Advanced TCM 202 Advanced TCM 207 Advanced TCM 207 Advanced TCM 270 Internship TCM 271 Internship Company TCM 273 Internship TCM 275 Internship TCM 276 Internship TCM 277 Internship TCM 277 Internship TCM 277 Internship	nthropology nts must choose elective credits from th neet with an advisor to discuss alternati gramming and Production II gramming and Production Lab II adcast Technical Operations Television Production TV Studio Production TV Studio Production Videotape Editing in News - KEPC Radio – Television Station/Video Production – KEPC Radio - KEPC II – Radio Station/Audio Production II – Television Station/Video Production	(3) <u>6</u> 13 <b>63</b> ne list
SOC 101 Introduction or ANT 101 Cultural An TCM Electives Total Credit Hours TCM Electives: Student below. Students may m TCM 102 Radio Prog TCM 107 Radio Prog TCM 107 Radio Prog TCM 107 Radio Prog TCM 202 Advanced TCM 202 Advanced TCM 202 Advanced TCM 207 Advanced TCM 207 Advanced TCM 270 Internship TCM 271 Internship Company TCM 273 Internship TCM 275 Internship TCM 275 Internship TCM 277 Internship TCM 277 Internship Company I TCM 277 Internship Company I	nthropology nts must choose elective credits from th neet with an advisor to discuss alternation gramming and Production II gramming and Production Lab II adcast Technical Operations Television Production TV Studio Production TV Studio Production Videotape Editing in News - KEPC Radio – Television Station/Video Production – KEPC Radio - KEPC II – Radio Station/Audio Production II – Television Station/Video Production II	(3) <u>6</u> 13 <b>63</b> ne list ves. 3 2 3 4 4 4 4 3 3 3 4 4 3 3 3 4 4 3 3 3 4 4 3 3 3 4 4 3 3 3 3 4 4 3 3 3 3 4 4 3 3 3 4 4 3 3 3 3 4 4 3 3 3 4 4 4 3 3 3 3 4 4 4 3 3 3 3 4 4 4 3 3 3 3 4 4 4 3 3 3 3 3 4 4 4 3 3 3 3 4 4 4 3 3 3 3 4 4 4 3 3 3 3 4 4 4 3 3 3 3 4 4 3 3 3 4 4 3 3 3 4 4 3 3 3 3 4 4 3 3 3 3 4 4 3 3 3 3 4 4 3 3 3 3 3 4 4 3 3 3 3 3 4 4 3 3 3 3 3 3 3 4 4 3 3 3 3 3 3 4 4 3 3 3 3 3 3 3 3 4 4 3 3 3 3 3 3 3 3 3 3 3 3 3
SOC 101 Introduction or ANT 101 Cultural An TCM Electives Total Credit Hours TCM Electives: Student below. Students may m TCM 102 Radio Prog TCM 107 Radio Prog TCM 107 Radio Prog TCM 107 Radio Prog TCM 202 Advanced TCM 202 Advanced TCM 207 Advanced TCM 207 Advanced TCM 270 Internship TCM 271 Internship Company TCM 273 Internship TCM 275 Internship TCM 276 Internship TCM 277 Internship TCM 277 Internship TCM 277 Internship	nthropology nts must choose elective credits from th neet with an advisor to discuss alternation gramming and Production II gramming and Production Lab II adcast Technical Operations Television Production TV Studio Production TV Studio Production Videotape Editing in News - KEPC Radio – Television Station/Video Production – KEPC Radio - KEPC II – Radio Station/Audio Production II – Television Station/Video Production II	(3) <u>6</u> 13 <b>63</b> ne list ves. 3 2 3 4 4 4 4 3 3 3 4 4 3 3 3 4 4 3 3 3 4 4 3 3 3 4 4 3 3 3 3 4 4 3 3 3 3 4 4 3 3 3 4 4 3 3 3 3 4 4 3 3 3 4 4 4 3 3 3 3 4 4 4 3 3 3 3 4 4 4 3 3 3 3 4 4 4 3 3 3 3 3 4 4 4 3 3 3 3 4 4 4 3 3 3 3 4 4 4 3 3 3 3 4 4 4 3 3 3 3 4 4 3 3 3 4 4 3 3 3 4 4 3 3 3 3 4 4 3 3 3 3 4 4 3 3 3 3 4 4 3 3 3 3 3 4 4 3 3 3 3 3 4 4 3 3 3 3 3 3 3 4 4 3 3 3 3 3 3 4 4 3 3 3 3 3 3 3 3 4 4 3 3 3 3 3 3 3 3 3 3 3 3 3

TCM TCM TCM TCM	206 207 221 222	Advanced TV Production TV Studio Production Advanced Studio Production Basic Video Production Advanced Videotape Editing Internship – Television Station/Video Production	3 3 3 4 4
TCM 2 CIS	274 100	Company Internship – College/Interactive TV Studio Computer Keyboarding it Hours	4 3 _1 <b>31</b>
		pption	
TCM TCM TCM TCM	101 102 106 107	Radio Programming & Production I Radio Programming & Production II Radio Programming & Production Lab I Radio Programming & Production Lab II Writing for TV & Radio or	3 3 3 3 3
TCM TCM TCM	131 213 214	Corporate Scriptwriting Radio Broadcast Technical Operations News Writing and Reporting Principles of Audio Internship – Radio Station/Audio Production	(3) 2 3 3
тсм 2	273	Company Internship – KEPC Radio	4 4
Total C	Cred	it Hours	31
TCM TCM	101 106	ng Radio Production Radio Programming & Production I Radio Programming & Production Lab I <b>it Hours</b>	3 _3 6
Adva	ance	ed Radio Production	
TCM TCM TCM	101 102 106	Radio Programming & Production I Radio Programming & Production II Radio Programming & Production Lab I Radio Programming & Production Lab II	3 3 3 3
Total C	Cred	it Hours	12
TCM TCM TCM TCM	101 106 131 273	adio Operations Radio Programming & Production I Radio Programming & Production Lab I Radio Broadcast Technical Operations Internship – KEPC Radio <b>it Hours</b>	3 3 2 4 <b>12</b>
		ed Radio Operations	
TCM TCM TCM TCM TCM	101 102 106 107 131	Radio Programming & Production I Radio Programming & Production II Radio Programming & Production Lab I Radio Programming & Production Lab II Radio Broadcast Technical Operations Internship – Radio Station/Audio Production	3 3 3 2
		Company Internship – KEPC Radio <b>it Hours</b>	4 4 <b>22</b>
TCM TCM TCM	201 206 221	ng TV Production Television Production TV Studio Production Basic Video Production <b>it Hours</b>	3 3 _4 <b>10</b>
			10
TCM 2	201	ed TV Production Television Production Advanced Television Production	3 3

TCM206TV Studio ProductionTCM207Advanced TV Studio ProductionTCM222Advanced Video Tape EditingTotal Credit Hours
Beginning TV Production and Editing TCM 221 Basic Video Production TCM 222 Advanced Video Tape Editing Total Credit Hours
Iolal Credit Hours
Advanced TV Production and Video Edit TCM 201 Television Production TCM 202 Advanced TV Production TCM 206 TV Studio Production TCM 207 Advanced TV Studio Production TCM 221 Basic Video Production TCM 222 Advanced Video Tape Editing Total Credit Hours
Basic Copywriting TCM 123 Writing for TV and Radio TCM 216 Corporate Script Writing Total Credit Hours
Sales and Copywriting TCM 123 Writing for TV and Radio

#### TCM 213 News Writing and Reporting Total Credit Hours

# **Real Estate**

Recommended basic skills standards are

- ENG 060
- MAT 060
- REA 090
- AAA 090

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 70 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		Record Keeping Trust Accts. & Closings	3
			12
*Dool	Ecto	te Electives	. –
Choos	se17	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
		Principles of Management	3
		Small Business Management	3
		Principles of Advertising	3
		Sales/Advertising/Real Estate Techniques	1

MAR	216	Principles of Marketing
MAT	156	Problem Solving in College Mathematics

### **Total Credit Hours**

\*Program advisors may approve additional elective choices.

3

4

17

29

# Social Services Technician

Recommended basic skills standards are

- ENG 060
- MAT 030

3

3

\_\_\_\_\_ 16

4

4

8

3

3

3

3

4

4

20

3

6

3

3

6

3

ng

- REA 090
- AAA 090

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 participate in supervised work experience in various social agencies within the community which often serves as an avenue to obtaining employment. Elective courses are offered to help students learn more advanced 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		Application of Group Counseling	3
SSE		Community Field Experience I	6
SSE		Community Field Experience II	6
SSE		Social Work Case Management	3
		Human Behavior in the Social Environment	3
		Client Development	3
		Differential Approaches in Social Services	3
SSE	271	Community Field Experience III	6
			42
Gene	ral e	ducation courses	
		ducation courses English Composition I	3
			3
ENG	121	English Composition I	3 3
ENG ENG	121 122	English Composition I and English Composition II or	3
ENG ENG	121 122	English Composition I and English Composition II or Introduction to Organizational Communication	-
ENG ENG SPE	121 122 225	English Composition I and English Composition II or Introduction to Organizational Communication and either	3 (3)
ENG ENG SPE	121 122 225	English Composition I and English Composition II or Introduction to Organizational Communication and either Business Communication & Report Writing	3
ENG ENG SPE BUS	121 122 225 217	English Composition I and English Composition II or Introduction to Organizational Communication and either Business Communication & Report Writing or	3 (3) (3)
ENG ENG SPE BUS ENG	<ol> <li>121</li> <li>122</li> <li>225</li> <li>217</li> <li>131</li> </ol>	English Composition I and English Composition II or Introduction to Organizational Communication and either Business Communication & Report Writing or Technical Writing	3 (3) (3) (3)
ENG ENG SPE BUS ENG PSY	<ol> <li>121</li> <li>122</li> <li>225</li> <li>217</li> <li>131</li> <li>115</li> </ol>	English Composition I and English Composition II or Introduction to Organizational Communication and either Business Communication & Report Writing or	3 (3) (3)

SOC	102	Introduction to Sociology II Electives
Total	Cred	lit Hours

\*Electives must meet general education requirements in humanities. See list of approved general education courses.

# Cortificato

CELL	IIICo		
SSE	100	Introduction to Human Services	3
SSE	115	Social Welfare and Community Agencies	3
SSE		Intervention Techniques	3
		Community Field Experience I	6
		Client Development	3
		Differential Approaches in Social Services	3
SOC	101	Introduction to Sociology I	3
		Elective*	3 3 3 3
Total	Cred	lit Hours	27
		nust consult with advisors for selection of elective cou	
Fost	er P	Parent**	
		The Foundation for Meeting the Developmental	
	101	Needs of Children at Risk	.5
SSE	102	Using Discipline to Protect, Nurture and Meet	.0
001	102	Developmental Needs	.5
Total	Crad	lit Hours	1
			I
Pen	ung	State Approval	
Cert	ifica	ate Options	
Case	⊃ M	anagement Open Field Placement	_
Inter			
		Social Welfare and Community Agencies	2
SOE	100	Community Field Experience I	3 6
			3
		Social Work Case Management	
Total	Cred	lit Hours	12
Chil	d W	/elfare	
		Social Welfare and Community Agencies	3
201		or	5
SSE	192	Community Field Experience I	(6)

**Total Credit Hours** 

#### Gerontological SSE 115 Social Welfare and Community Agencies

33L	115	Social Wellare and Community Agencies	
		or	
SSE	192	Community Field Experience I	
SSE	205	Social Work Case Management	
SOC	236	Aging and the Aged	
Total Credit Hours			
~ '		A 1	

Substance Abuse

SSE	115	Social	Welfare and	Community	Agencies
-----	-----	--------	-------------	-----------	----------

SSE 205 Social Work Case Management

PSY 247 Child Abuse and Neglect

Total	Cred	lit Hours	9 (12)
SSE	205	Social Work Case Management	3
SSE	141	Introduction to Alcohol and Drugs	3
SSE	192	Community Field Experience I	(6)
		or	

# Social Work

Recommended basic skills standards are

ENG 090 •

3 6

63

3

3

3

(6) Ś 3 9 (12)

3

9 (12)

- MAT 030
- REA 115

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 3 _ <u>3</u> 9
II. Computer Communication	
CSC 105 Computer Literacy	<u>3</u>
Suggested to Fulfill This Track	
III. Mathematics and Science	
MAT 135 Introduction to Statistics	3
CORE Science Math/Science Elective	3 4 _2 9
	9
IV. Social and Behavioral Sciences*	
CORE Sequence SOC or PSY	6
CORE POS or ECO or HIS	6 _3 9
V. Humanities*	Ŭ
Choose 9 credit hours from CORE courses listed on p. 5	50 <u>9</u> 9
	9
VI. Communication Studies or Fine Arts SPE 125 Interpersonal Communication	3
	<u>3</u>
VII. Recommended Electives	
Choose18 hours from the following courses	
**SSE 100 Introduction to Human Services	3
**SSE 115 Social Welfare and Community Agencies **SSE 122 Intervention Techniques	3 3 3 3
**SSE 211 Human Behavior and Social Environment	3

**SSE 212		Client Development	3
		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
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
		· · · · ·	18
Total Credit Hours			60

#### **Total Credit Hours**

\*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 only to the University of Southern Colorado Social Work program.

# Sociology

Recommended basic skills standards are

- ENG 090
- REA 115

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.

# Associate of Arts Degree

#### **Recommended Track**

#### **Minimum Requirements**

#### I. English/Speech

ENG	122	English Composition I English Composition II Principles of Speech Communication			
		ter Communication			
CSC	105	Computer Literacy (or CSC 116 or CSC 160)			
Sugg	este	d to Fulfill This Track:			
III. Ma	ather	natics and Science			
GEO	111	Physical Geography: Landforms			
		or			
GEO	112	Weather and Climate			
GEY	121	Historical Geology			
MAT	135	Introduction to Statistics			
IV. So	IV. Social and Behavioral Sciences*				
SOC	101	Introduction to Sociology I			
		Introduction to Sociology II			
HIS	202	U.S. History II			

		Survey of Humanities I Survey of Humanities II	3 3		
hum Phi		or Survey of Humanities II Introduction to Philosophy	(3) 3 9		
VI. Communication Studies or Fine Arts         Choose 3 credit hours from list on p. 51         3					
		nmended Electives			
		hours from the following courses			
		Cultural Anthropology	3		
		Physical Anthropology	3		
		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	218	Sociology of Minorities	3		
SOC	231	Deviant Behavior	3		
SOC	232	Juvenile Delinquency	3		
		Death and Dying	_3		
			17		

#### Total Credit Hours

\*See AA degree for sequence requirements

# Southwest Studies

Recommended basic skills standards are

- ENG 090
- MAT 030 .
- REA 090
- AAA 090

The Southwest Studies program provides an interdisciplinary view of different social, cultural, artistic, and environmental aspects of the regions of the Southwest.

60

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

3 3 3

9

<u>3</u> 3

3

(4)

4

3 10

> 3 3

> 3 9

Minimum Requirements					
I. English/Speech					
ENG 121 English Composition I	3				
ENG 122 English Composition II	3				
SPE 115 Principles of Speech Communication	_3				
	9				
II. Computer Communication					
CSC 105 Computer Literacy	_3				
•	3				

#### Recommended to satisfy area requirements

**III. Mathematics and Science** 

V. Humanities\*

Choose 9 hours from the following courses MAT 135 Introduction to Statistics (or MAT 121) 3 4 4 GEY 111 Physical Geology (or BIO 111 or AST 101) GEY 121 Historical Geology (or BIO 112 or AST 102) 3 GEO 111 Physical Geography - Landforms 9 **IV. Social and Behavioral Sciences\*** Choose 9 hours from the following courses 3 ANT 101 Cultural Anthropology 3 ANT 111 Physical Anthropology • 101 Western Civilization I 3 3 3 3 HIS ٠ 102 Western Civilization II HIS ٠ HIS 201 U.S. History I HIS 202 U.S. History II GEO 105 World Regional Geography 3 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 3/6 9 VI. Communication Studies or Fine Arts 3 ART 121,122 Drawing I, II 3 ART 161,162, 261,262 Ceramics I, II, III, IV DAN 121,122, 123 Jazz I, II, III or Ballet or Modern 1-3 2 THE 204 Voice and Articulation I 3 VII. Recommended Electives Choose18 hours from the following courses 3 ANT 107 Introduction to Archeology 3 ART 141 Jewelry and Metalwork I 3 ART 251 Navajo Weaving Techniques I 1 DAN 141 Regional Dances: Latino Folk 3 HIS 116 Native American Experience HIS 136 The Southwest United States 3 225 Colorado History 3 HIS 3 HUM 236 North American Indian Arts 3 HUM 237 Hispanic Arts of Southwest 3 HUM 238 Sacred Images, Sacred Spaces PHI 115 Comparative Religions 3 SOC 218 Sociology of Minorities 3

ANT, HUM, SPA 266 Culture Studies

#### <u>1-3</u> 18 **60**

#### Total Credit Hours

\*See AA degree for sequence requirements.

# Space Science

Recommended basic skills standards are

- ENG 060
- MAT 060
- REA 090
- AAA 090

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

Reco	mme	nded 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>3</u> _13
			13
Reco	mme	nded to satisfy area requirements	
Mathe	emat	ics 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	_3
			35
Socia	l and	Behavioral Sciences	
		Electives*	6
Huma	anitie	s	
		Electives*	6

#### **Total Credit Hours**

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

# Speech

Recommended basic skills standards are

- ENG 090
- MAT 030
- **REA 090** •
- AAA 090

(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

		Speech	
		English Composition I	
		English Composition II	
SPE	115	Principles of Speech Communication	
		or Communication	
		er Communication Computer Literacy (or CSC 116 or CSC 160)	
000	105		
Sugg	ested	to Fulfill This Track	
III. Ma	athen	natics and Science	
BIO	105	Science of Biology	
GEY	146	The Earth Revealed: Introductory Geology	
MAT	135	Introduction to Statistics	
		and Behavioral Sciences*	
		ours from the following courses	
		Physical Anthropology	
HIS	201	U.S. History I	
		U.S. History II	
		American Government	
		General Psychology I	
		General Psychology II Introduction to Sociology I	
SOC		Introduction to Sociology I	
300	102		•
V. Hu	mani	tios*	
Choos	se 9 h	ours from the following courses Survey of Humanities I (or HUM 122)	

HUM 122 Survey of Humanities II (or HUM 123)

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	_5
			9
VI. Co	omm	unication Studies or Fine Arts	
Choos	se 3 h	nours from the following courses	
SPE	125	Interpersonal Communication	3

### ۷

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	205	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

60

Any JOU prefix courses

and/or Any THE prefix courses

Total Credit Hours

(or more depending on course choices) \*See AA degree for sequence requirements

# Supervision

Recommended basic skills standards are

ENG 060

12

60

- MAT 060
- **REA 090** •
- AAA 090

3 3

3

9

<u>3</u>

4 3

<u>3</u> 10

3

3

The Supervision Certificate Program is designed for those students who are primarily interested in the supervisory or operational level of management in a 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 71 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 MAN BUS CIS	226 251 171 112	Personal Leadership Development Principles of Management Human Resource Management Coop. Work Experience I/Internship I Introduction to Windows: 98 Introduction to Customer Service			
Supe	rvisio	on Electives			
		ours from the following courses			
BUS	172	Coop. Work Experience II/Internship II			
BUS	271	Advanced Coop. Work			
		Experience I/Internship I			
PSY	115	Psychology of Adjustment			
EHS	131	Introduction to Industrial and			
		Environmental Safety			
SPE	125	Interpersonal Communications			
SSE	100	Introduction to Human Services			
Total Credit Hours					

# Technical Writing\*

Recommended basic skills standards are

- ENG 060
- MAT 030
- REA 090
- AAA 090

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		
			6		

4	Chao		hours from the following courses	
1			hours from the following courses	2
3	ENG		Designing Online Documentation	3 3
3			Designing Print Documentation	3
3	ENG	117	Grammar, Usage, and Style for the	0
1	FNO	005	Professional Writer	3
3 3 1 <u>3</u> 20	ENG	205	Technical Editing	3 _ <u>3</u> 9
20				9
	Comi	muni	cation Tools and Techniques	
	Choos	se 9 h	nours from the following courses	
3	CIS	130	Introduction to the Internet	2
	CIS	131	Introduction to Web Authoring: HTML	1
3 3			Advanced Web Authoring: FrontPage	1
3	CIS	136	Presentation Graphics: PowerPoint	3
	CIS	137	Desktop Publishing	3 3 3 3
3	CIS	168	Java Programming	3
3 3 9	CSC	105	Computer Literacy	3
_3	JOU	109	Introduction to Desktop Publishing	4
9	JOU	215	Publications Production and Design	3
29	LEG	204	Legal Writing	2
	MOT	181	Medical Terminology	2 2 3
	MOT	185	Advanced Medical Terminology	2
	TCM	123	Writing for Television and Radio	3
			Introduction to Electronic Publishing	4
	VIC	103	Introduction to Visual Communication	<u>_2</u> 9
				9
	Profe	ssio	nal Skills	
			credit hours from the following	
	011000		a calcheard norm are renorming	

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
SPE	225	Organizational Communication

#### **Total Credit Hours**

\*Pending State Approval

# Theatre

Recommended basic skills standards are

- ENG 090
- MAT 030
- **REA 090** .
- AAA 090

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

	luili	Requirements
I. End	alish/	Speech
		English Composition I
	122	English Composition II
SPE	115	Principles of Speech Communication
II. Co	mpu	ter Communication
		Computer Literacy (or CSC 116 or CSC 160)
000	100	
Suga	ester	d to Fulfill This Track
		natics and Science
		Introduction to Statistics (or MAT 121)
AST	101	Astronomy I (or BIO 111)
AST	102	Astronomy II (or BIO 112)
		•
IV Sc	ncial	and Behavioral Sciences*
		nours from the following courses
		Cultural Anthropology
HIS	101	Western Civilization I
		or
HIS	102	Western Civilization II
HIS	201	U.S. History I
		or
HIS	202	U.S. History II
		General Psychology I
101	101	
DOV	400	or Conserved December 14
P51	102	General Psychology II
V. Hu	mani	ities*
MUS	120	Music Appreciation
		···· IL ······

THE 211 Development of Theatre I THE 212 Development of Theatre II	3 _ <u>3</u> 9
VI. Communication Studies or Fine Arts ART 121 Drawing I	<u>3</u>
VII. Recommended Electives	
Choose16 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	3
	16
Total Credit Hours	60

#### **Total Credit Hours**

\*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 030 •

3

3 3 9

3 3

3

4 4

11

3

3

(3) Ś

(3) Ś

(3) 9

3

3 3 6

30

- REA 090 .
- AAA 090 •

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	_3
Total Credit Hours	12
Household Option	
UPH 100 Basic Upholstery Techniques	3

UPH 104 Furniture Upholstery I
UPH 105 Furniture Upholstery II
UPH 106 Furniture Upholstery III
UPH 107 Advanced Upholstery Techniques I
UPH 108 Advanced Upholstery Techniques II
Total Credit Hours
Combination Auto and Household Option
UPH 100 Basic Upholstery Techniques
UPH 101 Auto Upholstery I
UPH 102 Auto Upholstery II
UPH 103 Auto Upholstery III
UPH 104 Furniture Upholstery I
UPH 105 Furniture Upholstery II
UPH 106 Furniture Upholstery III
UPH 107 Advanced Upholstery Techniques I
UPH 108 Advanced Upholstery Techniques II
Total Credit Hours

# Visual Communications

Recommended basic skills standards are

- ENG 060 •
- MAT 030
- **REA 090**
- AAA 090

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 ٠ 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 VIC VIC VIC VIC	102 103 201	Introduction to Electronic Publishing Typography History and Design Introduction to Visual Communication Design to Publish School to Work	4 2 2 <u>2</u> 12
ECO MAT SPE	106 156 225	ducation courses Consumer Economics Problem Solving College Math Organizational Communication Introduction to Print Media Photography or	3 4 3 3
ART		Fundamentals of Photography	<u>(3)</u> 15

### Options

3

3

3 3

3

18

3

27

# **Design Option**

#### **First Year** VIC 101 Introduction to Electronic Publishing VIC 102 Typography History and Design VIC 103 Introduction to Visual Communications VIC 108 Design Tools and Techniques' VIC 110 Layout and Typography VIC 130 Design and Color General education courses (see list) Approved VIC Design electives (see list)

#### 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
Gene	7		
Approved VIC Design electives (see list)			
			39
Total	Cred	lit Hours	75

# **Total Credit Hours**

#### Electronic Image Option

First Year

- VIC 101 Introduction to Electronic Publishing VIC 102 Typography History and Design VIC 103 Introduction to Visual Communications VIC 108 Design Tools and Techniques' VIC 110 Layout and Typography VIC 130 Design and Color General education courses (see list) Approved VIC Design electives (see list) Second Year VIC 107 Electronic Image VIC 125 Traditional and Electronic Art Production VIC 201 Design to Publish VIC 202 School to Work VIC 203 Design Protocol and Ethics VIC 205 Electronic Studio I VIC 208 Design and Color II
- VIC 245 Visual Communication Exit Portfolio

4

2

2

4

4

4

8

8

36

4

2

2

4

4

4

8

8

36

4 4

2 2 2

4

	& Career Development General education courses (see list) Approved VIC Design electives (see list)	1 7 _9	VIC 216 Multimedia Authoring I VIC 225 Multimedia for the Internet or	3 3
Total	Credit Hours	39 <b>75</b>	TCM 214 Principles of Audio	<u>(3)</u> 30
Illus	tration Option		Second Year	_
First	-		VIC 204 Digital Video Editing	3 3
VIC	101 Introduction to Electronic Publishing	4	VIC 217 Multimedia Authoring II or	3
VIC	102 Typography History and Design	2	DRT 201 Computer Animation	(3)
VIC	103 Introduction to Visual Communications	2	VIC 219 Digital 2-D Animation	(3) 3
VIC	108 Design Tools and Techniques	4	VIC 228 Web Authoring and Design	3
VIC	130 Design and Color	4	VIC 229 DVD Authoring	2
VIC VIC	131 Drawing Skills I 132 Drawing Skills II	4 4	VIC 235 Animation for Web and Interactive Media VIC 236 Multimedia Storytelling I - Web	3 2
VIC	General education courses (see list)	8	VIC 237 Multimedia Storytelling II – Interactive Media	2
	Approved VIC Design electives (see list)	_4	VIC 238 Multimedia Storytelling III - DVD	2
		36	VIC 246 Portfolio, Self Promotion and Professionalism	2 2 <u>3</u> 26
Seco	nd Year			
VIC	107 Electronic Image	4	Total Credit Hours	71
VIC	201 Design to Publish	2	Multimedia	
VIC VIC	<ul><li>202 School to Work</li><li>203 Design Protocol and Ethics</li></ul>	2		
VIC	208 Design and Color II	2 4	Certificate Options	
VIC	209 Painting for Illustrators	4	Video Editing and Movie Making*	
VIC	226 Rendering and Illustration	4	VIC 135 Digital Audio for Multimedia	3
VIC	245 Visual Communication Exit Portfolio		VIC 141 Digital Imaging I	3
Cono	& Career Development	1 7	VIC 204 Digital Video Editing	3
	ral education courses (see list) ved VIC Design electives (see list)	9	VIC 219 Digital 2-D Animation	3 3 4
Арріс		39	TCM 221 Basic Video Production TCM 222 Advanced Video Editing	4
Total	Creadit Harris		TOW ZZZ Advanced video Editing	
	Credit Hours	75	Total Credit Hours	20
		75	Total Credit Hours	20
<b>Appr</b> Any V	oved VIC Design Electives IC course not required in the selected option may be	used as	Web*	
<b>Appr</b> Any V long a	oved VIC Design Electives IC course not required in the selected option may be is the prerequisites are met. Please see advisor for g	used as	Web* VIC 141 Digital Imaging I	3
<b>Appr</b> Any V long a	oved VIC Design Electives IC course not required in the selected option may be	used as	Web* VIC 141 Digital Imaging I VIC 225 Multimedia for the Internet	3
Appr Any V long a on se VIC	oved VIC Design Electives IC course not required in the selected option may be is the prerequisites are met. Please see advisor for g	used as	Web* VIC 141 Digital Imaging I VIC 225 Multimedia for the Internet	3
Appr Any V long a on se VIC VIC	oved VIC Design Electives IC course not required in the selected option may be as the prerequisites are met. Please see advisor for g ection of electives. 131 Drawing Skills 141 Photoshop I	used as guidance 4 4	Web* VIC 141 Digital Imaging I VIC 225 Multimedia for the Internet VIC 228 Web Authoring and Design	
Appr Any V long a on se VIC VIC VIC	oved VIC Design Electives         IC course not required in the selected option may be as the prerequisites are met. Please see advisor for g lection of electives.         131 Drawing Skills         141 Photoshop I         205 Electronic Studio	used as guidance 4 4 4	Web* VIC 141 Digital Imaging I VIC 225 Multimedia for the Internet VIC 228 Web Authoring and Design VIC 235 Animation for Web and Interactive Media Total Credit Hours	3 3 3 3
Appr Any V long a on se VIC VIC VIC VIC VIC	oved VIC Design ElectivesIC course not required in the selected option may beis the prerequisites are met. Please see advisor for gettion of electives.131 Drawing Skills141 Photoshop I205 Electronic Studio210 Advertising and Corporate Design	used as guidance 4 4	Web* VIC 141 Digital Imaging I VIC 225 Multimedia for the Internet VIC 228 Web Authoring and Design VIC 235 Animation for Web and Interactive Media <b>Total Credit Hours</b> Digital Illustration*	3 3 3 <u>3</u> 12
Appr Any V long a on se VIC VIC VIC VIC VIC VIC VIC	oved VIC Design Electives IC course not required in the selected option may be as the prerequisites are met. Please see advisor for g lection of electives. 131 Drawing Skills 141 Photoshop I 205 Electronic Studio 210 Advertising and Corporate Design timedia Option*	used as guidance 4 4 4	VVeb* VIC 141 Digital Imaging I VIC 225 Multimedia for the Internet VIC 228 Web Authoring and Design VIC 235 Animation for Web and Interactive Media <b>Total Credit Hours</b> Digital Illustration* VIC 136 Digital Illustration VIC 141 Digital Imaging I	3 3 3 3 12 3 3 3
Appr Any V long a on se VIC VIC VIC VIC VIC VIC VIC Reco	oved VIC Design Electives         IC course not required in the selected option may be as the prerequisites are met. Please see advisor for g lection of electives.         131 Drawing Skills         141 Photoshop I         205 Electronic Studio         210 Advertising and Corporate Design         timedia Option*         mmended Program Sequence	used as guidance 4 4 4	Web* VIC 141 Digital Imaging I VIC 225 Multimedia for the Internet VIC 228 Web Authoring and Design VIC 235 Animation for Web and Interactive Media <b>Total Credit Hours</b> Digital Illustration* VIC 136 Digital Illustration	3 3 3 3 12 3
Appr Any V long a on se VIC VIC VIC VIC VIC VIC VIC Reco Gene	oved VIC Design Electives IC course not required in the selected option may be as the prerequisites are met. Please see advisor for g lection of electives. 131 Drawing Skills 141 Photoshop I 205 Electronic Studio 210 Advertising and Corporate Design timedia Option* mmended Program Sequence ral education courses	used as guidance 4 4 4 4 4	Web* VIC 141 Digital Imaging I VIC 225 Multimedia for the Internet VIC 228 Web Authoring and Design VIC 235 Animation for Web and Interactive Media <b>Total Credit Hours</b> Digital Illustration* VIC 136 Digital Illustration VIC 141 Digital Imaging I <b>Total Credit Hours</b>	3 3 3 3 12 3 3 3
Appr Any V long a on se VIC VIC VIC VIC VIC VIC VIC Mull Reco Gene ART	oved VIC Design Electives IC course not required in the selected option may be as the prerequisites are met. Please see advisor for g lection of electives. 131 Drawing Skills 141 Photoshop I 205 Electronic Studio 210 Advertising and Corporate Design timedia Option* mmended Program Sequence ral education courses 110 Art Appreciation	used as guidance 4 4 4 4 4 3	VVeb* VIC 141 Digital Imaging I VIC 225 Multimedia for the Internet VIC 228 Web Authoring and Design VIC 235 Animation for Web and Interactive Media <b>Total Credit Hours</b> Digital Illustration* VIC 136 Digital Illustration VIC 141 Digital Imaging I	3 3 3 3 12 3 3 6
Appr Any V long a on se VIC VIC VIC VIC VIC VIC VIC Reco Gene ART BUS	oved VIC Design Electives         IC course not required in the selected option may be as the prerequisites are met. Please see advisor for glection of electives.         131 Drawing Skills         141 Photoshop I         205 Electronic Studio         210 Advertising and Corporate Design         timedia Option*         mmended Program Sequence         ral education courses         110 Art Appreciation         115 Introduction to Business	used as guidance 4 4 4 4 4 3 3 3	Web* VIC 141 Digital Imaging I VIC 225 Multimedia for the Internet VIC 228 Web Authoring and Design VIC 235 Animation for Web and Interactive Media <b>Total Credit Hours</b> Digital Illustration* VIC 136 Digital Illustration VIC 141 Digital Imaging I <b>Total Credit Hours</b> Digital Image*	3 3 3 3 12 3 3 3 6
Appr Any V long a on se VIC VIC VIC VIC VIC VIC VIC VIC Reco Gene ART BUS CSC ENG	oved VIC Design Electives         IC course not required in the selected option may be as the prerequisites are met. Please see advisor for glection of electives.         131 Drawing Skills         141 Photoshop I         205 Electronic Studio         210 Advertising and Corporate Design         timedia Option*         mmended Program Sequence         ral education courses         110 Art Appreciation         115 Introduction to Business         105 Computer Literacy         131 Technical Writing I	used as guidance 4 4 4 4 4 3 3 3 3 3 3 3 3	VVeb* VIC 141 Digital Imaging I VIC 225 Multimedia for the Internet VIC 228 Web Authoring and Design VIC 235 Animation for Web and Interactive Media <b>Total Credit Hours</b> Digital Illustration* VIC 136 Digital Illustration VIC 141 Digital Imaging I <b>Total Credit Hours</b> Digital Image* VIC 141 Digital Imaging I	3 3 3 3 12 3 3 6
Appr Any V long a on se VIC VIC VIC VIC VIC VIC VIC VIC Reco Gene ART BUS CSC ENG	oved VIC Design Electives         IC course not required in the selected option may be as the prerequisites are met. Please see advisor for glection of electives.         131 Drawing Skills         141 Photoshop I         205 Electronic Studio         210 Advertising and Corporate Design         timedia Option*         mmended Program Sequence         ral education courses         110 Art Appreciation         115 Introduction to Business         105 Computer Literacy	used as guidance 4 4 4 4 4 3 3 3 3 3 3 3 3	Web* VIC 141 Digital Imaging I VIC 225 Multimedia for the Internet VIC 228 Web Authoring and Design VIC 235 Animation for Web and Interactive Media <b>Total Credit Hours</b> Digital Illustration* VIC 136 Digital Illustration VIC 141 Digital Imaging I <b>Total Credit Hours</b> Digital Image* VIC 141 Digital Imaging I VIC 142 Digital Imaging I VIC 142 Digital Imaging I	3 3 3 3 12 3 3 6 3 3 3 3
Appr Any V long a on se VIC VIC VIC VIC VIC VIC VIC VIC VIC VIC	<ul> <li>oved VIC Design Electives</li> <li>IC course not required in the selected option may be us the prerequisites are met. Please see advisor for glection of electives.</li> <li>131 Drawing Skills</li> <li>141 Photoshop I</li> <li>205 Electronic Studio</li> <li>210 Advertising and Corporate Design</li> <li>timedia Option*</li> <li>mmended Program Sequence</li> <li>ral education courses</li> <li>110 Art Appreciation</li> <li>115 Introduction to Business</li> <li>105 Computer Literacy</li> <li>131 Technical Writing I</li> <li>120 Music Appreciation</li> </ul>	used as guidance 4 4 4 4 4 3 3 3 3 3	VVeb* VIC 141 Digital Imaging I VIC 225 Multimedia for the Internet VIC 228 Web Authoring and Design VIC 235 Animation for Web and Interactive Media <b>Total Credit Hours</b> Digital Illustration* VIC 136 Digital Illustration VIC 141 Digital Imaging I <b>Total Credit Hours</b> Digital Image* VIC 141 Digital Imaging I VIC 142 Digital Imaging II <b>Total Credit Hours</b> Digital Image Upgrade*	3 3 3 12 3 3 6 3 3 6
Appr Any V long a on se VIC VIC VIC VIC VIC VIC VIC VIC VIC VIC	IC course not required in the selected option may be us the prerequisites are met. Please see advisor for g lection of electives. 131 Drawing Skills 141 Photoshop I 205 Electronic Studio 210 Advertising and Corporate Design timedia Option* mmended Program Sequence ral education courses 110 Art Appreciation 115 Introduction to Business 105 Computer Literacy 131 Technical Writing I 120 Music Appreciation Year	used as guidance 4 4 4 4 4 4 3 3 3 3 3 3 3 3 3 3 3 3 3	VVeb* VIC 141 Digital Imaging I VIC 225 Multimedia for the Internet VIC 228 Web Authoring and Design VIC 235 Animation for Web and Interactive Media <b>Total Credit Hours</b> Digital Illustration* VIC 136 Digital Illustration VIC 141 Digital Imaging I <b>Total Credit Hours</b> Digital Image* VIC 141 Digital Imaging I VIC 142 Digital Imaging II <b>Total Credit Hours</b> Digital Image Upgrade* VIC 142 Digital Imaging II	3 3 3 12 3 3 6 3 3 6
Appr Any V long a on se VIC VIC VIC VIC VIC VIC VIC VIC VIC ENG MUS First VIC	oved VIC Design Electives         IC course not required in the selected option may be as the prerequisites are met. Please see advisor for glection of electives.         131 Drawing Skills         141 Photoshop I         205 Electronic Studio         210 Advertising and Corporate Design         timedia Option*         mmended Program Sequence         ral education courses         110 Art Appreciation         115 Introduction to Business         105 Computer Literacy         131 Technical Writing I         120 Music Appreciation         Year         102 Typography History and Design	used as guidance 4 4 4 4 4 4 3 3 3 3 3 3 3 3 15 2	Web* VIC 141 Digital Imaging I VIC 225 Multimedia for the Internet VIC 228 Web Authoring and Design VIC 235 Animation for Web and Interactive Media <b>Total Credit Hours</b> Digital Illustration* VIC 136 Digital Illustration VIC 141 Digital Imaging I <b>Total Credit Hours</b> Digital Image* VIC 141 Digital Imaging I VIC 142 Digital Imaging II <b>Total Credit Hours</b> Digital Image Upgrade* VIC 142 Digital Imaging II <b>Total Credit Hours</b>	3 3 3 12 3 3 6 3 3 6
Appr Any V long a on se VIC VIC VIC VIC VIC VIC VIC VIC BUS CSC ENG MUS First VIC VIC	oved VIC Design Electives         IC course not required in the selected option may be us the prerequisites are met. Please see advisor for glection of electives.         131 Drawing Skills         141 Photoshop I         205 Electronic Studio         210 Advertising and Corporate Design         timedia Option*         mmended Program Sequence         ral education courses         110 Art Appreciation         115 Introduction to Business         105 Computer Literacy         131 Technical Writing I         120 Music Appreciation         Year         102 Typography History and Design	used as guidance 4 4 4 4 4 4 3 3 3 3 3 3 3 3 15 2 2	<ul> <li>Web*</li> <li>VIC 141 Digital Imaging I</li> <li>VIC 225 Multimedia for the Internet</li> <li>VIC 228 Web Authoring and Design</li> <li>VIC 235 Animation for Web and Interactive Media</li> <li>Total Credit Hours</li> <li>Digital Illustration*</li> <li>VIC 136 Digital Illustration</li> <li>VIC 136 Digital Illustration</li> <li>VIC 141 Digital Imaging I</li> <li>Total Credit Hours</li> <li>Digital Image*</li> <li>VIC 141 Digital Imaging I</li> <li>VIC 142 Digital Imaging II</li> <li>Total Credit Hours</li> <li>Digital Image Upgrade*</li> <li>VIC 142 Digital Imaging II</li> <li>Total Credit Hours</li> <li>Digital Image Upgrade*</li> <li>VIC 142 Digital Imaging II</li> <li>Total Credit Hours</li> <li>Digital Image Upgrade*</li> <li>VIC 142 Digital Imaging II</li> <li>Total Credit Hours</li> <li>Digital Image Upgrade*</li> <li>VIC 142 Digital Imaging II</li> <li>Total Credit Hours</li> </ul>	3 3 3 12 3 12 3 6 3 3 6 3 3 3 3
Appr Any V long a on se VIC VIC VIC VIC VIC VIC VIC VIC VIC ENG MUS First VIC	oved VIC Design Electives         IC course not required in the selected option may be as the prerequisites are met. Please see advisor for glection of electives.         131 Drawing Skills         141 Photoshop I         205 Electronic Studio         210 Advertising and Corporate Design         timedia Option*         mmended Program Sequence         ral education courses         110 Art Appreciation         115 Introduction to Business         105 Computer Literacy         131 Technical Writing I         120 Music Appreciation         Year         102 Typography History and Design	used as guidance 4 4 4 4 4 4 3 3 3 3 3 3 3 5 15 2 2 2 2 3	<ul> <li>Web*</li> <li>VIC 141 Digital Imaging I</li> <li>VIC 225 Multimedia for the Internet</li> <li>VIC 228 Web Authoring and Design</li> <li>VIC 235 Animation for Web and Interactive Media</li> <li>Total Credit Hours</li> <li>Digital Illustration*</li> <li>VIC 136 Digital Illustration</li> <li>VIC 141 Digital Imaging I</li> <li>Total Credit Hours</li> <li>Digital Image*</li> <li>VIC 141 Digital Imaging I</li> <li>VIC 142 Digital Imaging II</li> <li>Total Credit Hours</li> <li>Digital Image Upgrade*</li> <li>VIC 142 Digital Imaging II</li> <li>Total Credit Hours</li> <li>Digital Image Upgrade*</li> <li>VIC 142 Digital Imaging II</li> <li>Total Credit Hours</li> <li>Digital Image Upgrade*</li> <li>VIC 142 Digital Imaging II</li> <li>Total Credit Hours</li> <li>Digital Image Upgrade*</li> <li>VIC 142 Digital Imaging II</li> <li>Total Credit Hours</li> <li>Digital Image Upgrade*</li> <li>VIC 142 Digital Imaging II</li> <li>Total Credit Hours</li> </ul>	3 3 3 12 3 12 3 3 6 3 3 6 3 3 3 3 3
Appr Any V long a on se VIC VIC VIC VIC VIC VIC VIC ENG MUS First VIC VIC VIC VIC VIC VIC VIC VIC	oved VIC Design Electives         IC course not required in the selected option may be as the prerequisites are met. Please see advisor for glection of electives.         131 Drawing Skills         141 Photoshop I         205 Electronic Studio         210 Advertising and Corporate Design         timedia Option*         mmended Program Sequence         ral education courses         110 Art Appreciation         115 Introduction to Business         105 Computer Literacy         131 Technical Writing I         120 Music Appreciation         Year         102 Typography History and Design         116 Interface Design         117 Introduction to Multimedia         126 Creative Composition for Multimedia         127 Design Styles and Branding	used as guidance 4 4 4 4 4 4 4 3 3 3 3 3 3 3 5 15 2 2 2 2 3 2	<ul> <li>Web*</li> <li>VIC 141 Digital Imaging I</li> <li>VIC 225 Multimedia for the Internet</li> <li>VIC 228 Web Authoring and Design</li> <li>VIC 235 Animation for Web and Interactive Media</li> <li>Total Credit Hours</li> <li>Digital Illustration*</li> <li>VIC 136 Digital Illustration</li> <li>VIC 141 Digital Imaging I</li> <li>Total Credit Hours</li> <li>Digital Image*</li> <li>VIC 141 Digital Imaging I</li> <li>VIC 142 Digital Imaging II</li> <li>Total Credit Hours</li> <li>Digital Image Upgrade*</li> <li>VIC 142 Digital Imaging II</li> <li>Total Credit Hours</li> <li>Digital Image Upgrade*</li> <li>VIC 142 Digital Imaging II</li> <li>Total Credit Hours</li> <li>Digital Image Upgrade</li> <li>VIC 142 Digital Imaging II</li> <li>Total Credit Hours</li> <li>Digital Image Upgrade</li> <li>VIC 142 Digital Imaging II</li> <li>Total Credit Hours</li> <li>Digital Image Upgrade</li> <li>VIC 142 Digital Imaging II</li> <li>Total Credit Hours</li> <li>Digital Image Upgrade</li> <li>VIC 142 Digital Imaging II</li> <li>Total Credit Hours</li> <li>Digital Image Upgrade</li> <li>VIC 142 Digital Imaging II</li> <li>Total Credit Hours</li> <li>Digital Imaging II</li> <li>Total Credit Hours</li> <li>Q-D Animation*</li> <li>VIC 219 2-D Animation</li> <li>VIC 235 Animation for Web &amp; Interactive Media</li> </ul>	3 3 3 3 12 3 3 6 3 3 6 3 3 3 3 3 3
Appr Any V long a on se VIC VIC VIC VIC VIC VIC VIC VIC VIC VIC	oved VIC Design Electives         IC course not required in the selected option may be as the prerequisites are met. Please see advisor for glection of electives.         131 Drawing Skills         141 Photoshop I         205 Electronic Studio         210 Advertising and Corporate Design         timedia Option*         mmended Program Sequence         ral education courses         110 Art Appreciation         115 Introduction to Business         105 Computer Literacy         131 Technical Writing I         120 Music Appreciation         Year         102 Typography History and Design         116 Interface Design         117 Introduction to Multimedia         126 Creative Composition for Multimedia         127 Design Styles and Branding         131 Drawing Skills I	used as guidance 4 4 4 4 4 4 4 3 3 3 3 3 3 3 3 5 15 2 2 2 2 3 2 4	<ul> <li>Web*</li> <li>VIC 141 Digital Imaging I</li> <li>VIC 225 Multimedia for the Internet</li> <li>VIC 228 Web Authoring and Design</li> <li>VIC 235 Animation for Web and Interactive Media</li> <li>Total Credit Hours</li> <li>Digital Illustration*</li> <li>VIC 136 Digital Illustration</li> <li>VIC 141 Digital Imaging I</li> <li>Total Credit Hours</li> <li>Digital Image*</li> <li>VIC 141 Digital Imaging I</li> <li>VIC 142 Digital Imaging II</li> <li>Total Credit Hours</li> <li>Digital Image Upgrade*</li> <li>VIC 142 Digital Imaging II</li> <li>Total Credit Hours</li> <li>Digital Image Upgrade*</li> <li>VIC 142 Digital Imaging II</li> <li>Total Credit Hours</li> <li>Digital Image Upgrade</li> <li>VIC 142 Digital Imaging II</li> <li>Total Credit Hours</li> <li>Z-D Animation*</li> <li>VIC 219 2-D Animation</li> <li>VIC 235 Animation for Web &amp; Interactive Media</li> <li>Total Credit Hours</li> </ul>	3 3 3 12 3 12 3 3 6 3 3 6 3 3 3 3 3
Appr Any V long a on se VIC VIC VIC VIC VIC VIC VIC VIC VIC VIC	oved VIC Design Electives         IC course not required in the selected option may be as the prerequisites are met. Please see advisor for glection of electives.         131 Drawing Skills         141 Photoshop I         205 Electronic Studio         210 Advertising and Corporate Design         timedia Option*         mmended Program Sequence         ral education courses         110 Art Appreciation         115 Introduction to Business         105 Computer Literacy         131 Technical Writing I         120 Music Appreciation         Year         102 Typography History and Design         116 Interface Design         117 Introduction to Multimedia         126 Creative Composition for Multimedia         127 Design Styles and Branding         131 Drawing Skills I         135 Digital Audio for Multimedia	used as guidance 4 4 4 4 4 4 4 4 5 3 3 3 3 3 3 3 15 2 2 2 3 2 4 3	VVeb* VIC 141 Digital Imaging I VIC 225 Multimedia for the Internet VIC 228 Web Authoring and Design VIC 235 Animation for Web and Interactive Media <b>Total Credit Hours</b> Digital Illustration* VIC 136 Digital Illustration VIC 141 Digital Imaging I <b>Total Credit Hours</b> Digital Image* VIC 141 Digital Imaging I VIC 142 Digital Imaging I VIC 142 Digital Imaging II <b>Total Credit Hours</b> Digital Image Upgrade* VIC 142 Digital Imaging II <b>Total Credit Hours</b> 2-D Animation* VIC 219 2-D Animation VIC 235 Animation for Web & Interactive Media <b>Total Credit Hours</b> Interactive Media*	3 3 3 3 12 3 12 3 3 6 3 3 6 3 3 3 6
Appr Any V long a on se VIC VIC VIC VIC VIC VIC VIC VIC VIC VIC	oved VIC Design Electives         IC course not required in the selected option may be as the prerequisites are met. Please see advisor for glection of electives.         131 Drawing Skills         141 Photoshop I         205 Electronic Studio         210 Advertising and Corporate Design         timedia Option*         mmended Program Sequence         ral education courses         110 Art Appreciation         115 Introduction to Business         105 Computer Literacy         131 Technical Writing I         120 Music Appreciation         Year         102 Typography History and Design         116 Interface Design         117 Introduction to Multimedia         126 Creative Composition for Multimedia         127 Design Styles and Branding         131 Drawing Skills I	used as guidance 4 4 4 4 4 4 4 3 3 3 3 3 3 3 3 5 15 2 2 2 2 3 2 4	<ul> <li>Web*</li> <li>VIC 141 Digital Imaging I</li> <li>VIC 225 Multimedia for the Internet</li> <li>VIC 228 Web Authoring and Design</li> <li>VIC 235 Animation for Web and Interactive Media</li> <li>Total Credit Hours</li> <li>Digital Illustration*</li> <li>VIC 136 Digital Illustration</li> <li>VIC 141 Digital Imaging I</li> <li>Total Credit Hours</li> <li>Digital Image*</li> <li>VIC 141 Digital Imaging I</li> <li>VIC 142 Digital Imaging II</li> <li>Total Credit Hours</li> <li>Digital Image Upgrade*</li> <li>VIC 142 Digital Imaging II</li> <li>Total Credit Hours</li> <li>Digital Image Upgrade*</li> <li>VIC 142 Digital Imaging II</li> <li>Total Credit Hours</li> <li>Digital Image Upgrade</li> <li>VIC 142 Digital Imaging II</li> <li>Total Credit Hours</li> <li>Z-D Animation*</li> <li>VIC 219 2-D Animation</li> <li>VIC 235 Animation for Web &amp; Interactive Media</li> <li>Total Credit Hours</li> </ul>	3 3 3 3 12 3 3 6 3 3 6 3 3 3 3 3 3

VIC 216 Multimedia Authoring I

# **Total Credit Hours**

\*Pending State Approval

# Welding

Recommended basic skills standards are

- ENG 060
- MAT 030
- REA 090
- AAA 090

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

Courses required for all options
WEL 101 Oxyacetylene Welding and Cutting
WEL 102 Introduction to Shielded Metal Arc Welding
WEL 103 Blueprint Reading for Welders and Fitters
WEL 104 Introduction to Gas Tungsten Arc Welding
WEL 105 Introduction to Gas Metal Arc Welding
WEL 106 Shielded Metal Arc Pipe Welding
WEL 107 Introduction to Ornamental Iron
WEL 200 Advanced CAD/CAM Cutting Processes
WEL 202 Intermediate Shielded Metal Arc Welding
WEL 203 Advanced Layout and Fabrication
WEL 204 Advanced Gas Tungsten Arc Welding
WEL 205 Advanced Gas Metal Arc Welding
WEL 206 Advanced Structural and Pipe Welding
MAG 215 CADCAM 2D
General education courses
MAT 156 Problem Solving in College Mathematics
PSY 115 Psychology of Adjustment
SPE 225 Introduction to Organizational Communication
Electives*
Total Cradit Hours

#### Total Credit Hours

\*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

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	4
0 0	20
Pipe Option	
WEL 106 Shielded Metal Arc Pipe Welding	4
WEL 206 Advanced Structural and Pipe Welding	4
Courses required for all options	20
Total Credit Hours	28
	20
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	20
and a set of the set o	

#### **Total Credit Hours**

4

6

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
Cours	es re	quired for all options	_20
Total Credit Hours			

#### Certificate Basic General Job Entry Skill Level WEL 101 Oxy-acetylene Welding and Cutting WEL 102 Beginning Shielded Metal Arc Welding 4 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 WEL 202 Intermediate Shielded Metal Arc Welding 4 24 **Total Credit Hours** Basic Military Maintenance Welding\* WEL 101 Oxy-acetylene Welding and Cutting 4 WEL 106 Shielded Metal Arc Welding 4 **Total Credit Hours** 8 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 4 16 **Total Credit Hours**

\*Pending State Approval

4

4

4 4

4

4

4

4

4

4

4

4

4

3

55

# Check Us Out on the Web!

# 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
<u>change</u>	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
See	an unofficial transcript • order an official transcript • division and department home pages
search	the Learning Resources Center and Pikes Peak Library's online library catalogs
look up	office hours and lab schedules • faculty and staff phone numbers



Don't have a computer? Use ours! Stop by the Learning Resources Center Computer Lab Today.



# CCC ONLINE

Associate of Arts Degree	122
Associate of Science Degree	122
Public Administration Emphasis (AA)	122
Accounting (AAS)	123
Business (AAS)	123
Computer Networking Certificate	123
Early Childhood Education Certificate	123
Criminial Justice	123

# **CCC-Online Degree 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 \$122.70 per credit hour for both in-state and out-of-state residency. Listed below are the degrees and certificates that are currently available. Please go to the web site (www.ccconline.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.

# Associate of Science Degree (AS)

To earn the associate of arts degree, students must complete the following course requirements for a total of 60 semester credits.

# 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 44 for complete PPCC Degree requirements and checklist.

# 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
			28

### **Total Credit Hours**

# Accounting

1 101	500	anting		
Associate of Applied Science Degree				
		ducation Requirements English Composition I		
		College Algebra		
		or		
MAT	124	Finite Math		
CIS	118 201	Introduction to Microcomputer Applications Macroeconomics		
LUU	201	Wide occorrenties		
		tudies Elective		
		m Speech, Physical and Biological Sciences, Soci	ial	
Scien	ces, r	lumanities	15	
Maio	r Cou	irse Requirements		
ACC	121	Principles of Accounting I		
ACC	122	Principles of Accounting II		
ACC	131	Income Tax I Intermediate Financial Accounting I		
ACC	211	Accounting Information Systems and Business		
ACC	226	Cost Accounting I		
BUS	115	Introduction to Business		
		Business Communications and Report Writing		
		Legal Environment of Business Introduction to Spreadsheets		
		Principles of Management		
		······		
		num - Deministration		
		ourse Requirements credit hours		
ACC	110	Business Mathematics		
ACC	115	Payroll Accounting		
ACC	212	Intermediate Financial Accounting II		
		Governmental and Not-for-profit Accounting Cost Accounting II		
		Income Tax II		
		Business Statistics		
		Principles of Marketing		

#### **Total Credit Hours**

**Business** 

### Associate of Applied Science Degree

Associate of Applied Science Degree					
General Education Requirements					
201	Principles of Microeconomics	3			
		3			
		3			
		3			
		4			
115	Principles of Speech Communication	_3			
		19			
r Cou	Irse Requirements				
121	Principles of Accounting I	4			
122	Principles of Accounting II	4			
		3			
		3			
	5	3			
		3			
		3			
216	Small Business Management	3			
	ral E 201 202 121 122 121 115 122 121 121 122 115 158 216 217 226				

	MAN 226 Principles of Management MAR 111 Principles of Sales MAR 216 Principles of Marketing	3 3 3
		35
3	Information Technology Requirements	
4	CIS 115 Introduction to Computer Information Systems	3
-	CIS 118 Introduction to PC Applications	3
(3)	CIS 155 Introduction to PC Spreadsheet: Excel	3
(3) 3		9
3	Total Credit Hours	63

# Certificates

3 5-16

4

434333333333

36

63-64

# Computer Networking To earn the certificate in computer networking, students must

complete the following course requirements for a total of 30 semester credits.

CIS	118	Introduction to PC Applications	3
CNT	200	Introduction to Networking	3
CNT	201	Local Area Networks	3
CNT	202	Wide Area Networks	3
CNT	203	TCP/IP and Network Architectures	3
CNT	204	Introduction to Internet Technologies	3
CNT	205	Internetworking	3
CNT	206	Processes and Protocols	3
CNT	207	Network Analysis and Design	3
CNT	209	Computer Networking Lab/Practicum	3
		(On-campus or proctored on-the-job practicum	
		experience required)	3
Total Credit Hours30			30

# Early Childhood Education

### Group Leader

010	տթ ւ		
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
Total	Cred	lit Hours	15
Diro	ator		

#### 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	216	Administration: Human Relations for	
		Early Childhood Professions	3
ECP	226	Administration of ECP Programs	3
ECP	227	Methods/Techniques: Curriculum Dev.	3
ECP	238	Child Development	3
ECP	262	Administrative Practicum	3
ECP	287	The Exceptional Child	_3
Total	Cred	lit Hours	30

# **Criminal Justice**

CCC Online currently has nine (9) courses in Criminal Justice that may be applied to an Associate of General Studies degree. Please visit the website at www.ccconline.org for more information.



COMBINE ON-CAMPUS CLASSES AT PIKES PEAK COMMUNITY COLLEGE WITH ONLINE COURSES THROUGH FRANKLIN UNIVERSITY. COMPLETING YOUR BACHELOR'S DEGREE CAN NOW FIT YOUR LIFESTYLE!

• SEVEN INNOVATIVE UNDERGRADUATE MAJORS

BUSINESS ADMINISTRATION, COMPUTER SCIENCE, DIGITAL COMMUNICATION, HEALTH CARE MANAGEMENT, MANAGEMENT INFORMATION SCIENCE, PUBLIC SAFETY MANAGEMENT AND TECHNICAL MANAGEMENT

• SUPPORT FROM TWO SCHOOLS

• MAXIMIZED TRANSFER CREDIT

• RECOGNIZED AND ACCREDITED ACADEMIC EXCELLENCE

• SIX, TWELVE, AND FIFTEEN-WEEK COURSES AVAILABLE

1-888-341-6237 alliance@franklin.edu www.alliance.franklin.edu





# COURSE

Core Curriculum	126
Course Descriptions	126
Course Numbering System	126
Developmental Courses	126
Independent Study	126
Off-Campus Courses	126
Selected Topics	126
Work Experience Courses	126
Statewide Common Course Descriptions	126

# 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 ( $\Box$ ) 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 numeric 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 090 through ENG 105 and MAT 030 through MAT 109 are developmental and are not applicable to an AA, AS, or AGS degree.

Course numbers and descriptions are subject to change.

# **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 offcampus 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 that has the required software comes with the text.

#### ACC 131 Income Tax I

3 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

3 Credit Hours • 45 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 155 PC Spreadsheets Complete: Excel

3 Credit Hours • 45 Contact Hours (Lecture)

This course covers the complete array of spreadsheet user skills. Topics include spreadsheet design, formatting, formulas, functions, charts, databases, macros, statistical and "what if" analysis, and macros.

#### 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

3 Credit Hours • 45 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.

# Advancing Academic Achievement

### AAA 030 Math Success Strategies

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: MAT 030 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.

#### AAA 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.

#### AAA 090 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-ofclass techniques to help meet the challenges of academic and interpersonal situations.

#### AAA 109 Advanced Learning Strategies

4 Credit Hours • 60 Contact Hours (Lecture) Prerequisite: REA 115 or concurrent, ENG 090 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.

# 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: ENG 090, REA 115

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 107 Introduction to Archaeology

3 Credit Hours • 45 Contact Hours (Lecture) Prerequisite: ENG 090, REA 115

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: ENG 090, REA 115

Studies human biology and its effects on behavior. Includes principles of genetics and evolution, vertebrates and primates, human origins, human variation, and ecology.

#### ANT 211 Cultural Resource Management

3 Credit Hours • 45 Contact Hours (Lecture) Prerequisite: ENG 090, REA 115

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: ENG 090, REA 115

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: ENG 090, REA 115

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.

# Architecture

#### **ARC 101 Architectural Drawing I**

5 Credit Hours • 150 Contact Hours (Lab) Prerequisite or Corequisite: ARC 104

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, ARC104

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 I**

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 covers 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 are components.

#### 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 are included.

#### **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 includes 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 are components. New materials and building components with applications included.

#### 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 included.

### 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 are included.

### **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 are components.

# 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 are components. Structural systems of wood, reinforced concrete, and steel will be covered. Numerous problems involving these concepts are included.

# 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 090

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 090

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 090

Provides the knowledge base to understand the visual arts, especially as related to Western Culture. Surveys from the Renaissance through the Modern periods.

### 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 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 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 145 Computer Graphics II**

3 Credit Hours •

67.5 Contact Hours (Lecture/Lab Combination)

Prerequisites: ART 135

Continues the processes of generating computer design.

#### **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)

A contemporary approach to fiber and textile arts with projects covering both two-and three-dimensional works. Course includes lectures and presentations covering historical and contemporary philosophies of this art form, including costume, sculpture, and installation in the context of fiber arts. Experimentation and individual project study will be encouraged.

#### ART 154 Fiber Design II

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab) Prerequisite: ART 153

A continuation of ART 153.

#### 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 159 Fine Art Digital Photography**

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab

Combination)

Prerequisite: ART 150

This course provides an introduction to digital photography as a fine arts medium and instructs students in the basic operation of a digital camera and the production of digital imagery.

#### 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 includes 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 090

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 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 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 233 Watercolor III

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

This course provides continuing study of watercolor techniques with an emphasis on original compositions and experimentation with materials.

#### ART 234 Watercolor IV

3 Credit Hours • 75 Contact Hours (15 Lecture, 60 Lab)

This course provides advanced study of techniques, individual style or expression, and consistency of compositional problem solving.

#### 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 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 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, dollys 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 included.

#### 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-dozers 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 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 will be covered.

# 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 included.

# 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 105 Introduction to Motorsports Technology

2 Credit Hours • 37.5 Contact Hours (15 Lecture, 22.5 Vocational Lab)

This course provides an introduction to the motorsports and support industries. An introduction to shop safety and vehicle safety is also included.

# AUT 108 Racing Vehicle Systems

2 Credit Hours • 37.5 Contact Hours (15 Lecture, 22.5

Vocational Lab) Prerequisite: AUT 105 or faculty consent

This course introduces racing vehicle systems, placing emphasis on chassis design, suspension and steering, engine systems, ignition systems, cooling systems, lubrication systems, clutch systems, transmissions, drive axles, and brake systems. Discussion will involve these systems as found on racing vehicles.

# AUT 109 Suspension and Chassis Design

2 Credit Hours

• 37.5 Contact Hours (15 Lecture, 22.5 Vocational Lab)

Prerequisite: AUT 108 or faculty consent

This course introduces the fundamentals of chassis types and components. Topics include steering and suspension components, tires and wheels, chassis design and geometry as applied to circle track, drag race, and road race vehicles.



#### 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 103

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)

Prerequisite: AUT 100 or DPM 100 for students entering Diesel Option

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 116 High Performance Brake Systems

2 Credit Hours • 37.5 Contact Hours (15 Lecture, 22.5 Vocational Lab)

Prerequisite: AUT 108 or faculty consent

This course is an introduction to high performance brake systems as applied to racing vehicles. Topics include fundamental of brake systems operation, hydraulics, high performance disc brake systems, brake line plumbing, brake cooling, and related components.

#### **AUT 118 High Performance Power Trains**

2 Credit Hours • 37.5 Contact Hours (15 Lecture, 22.5 Vocational Lab)

Prerequisite: AUT 108 or faculty consent

This course is an introduction to high performance transmissions, drive lines, and differentials. Topics include design, repair, and service techniques as applied to racing vehicles.

#### AUT 119 Electrical and Fuel Systems

2 Credit Hours • 37.5 Contact Hours (15 Lecture, 22.5 Vocational Lab)

Prerequisite: AUT 105 or faculty consent

This course is an introduction to electrical and fuel systems as applied to racing vehicles. Topics include carburetion, fuel injection, fuel pumps, fuel cells, ignition systems, switches, and wiring.

#### AUT 123 Automotive Tune-Up Services

4 Credit Hours	•	82.5 Contact Hours (15 Lecture, 67.5
		Vocational Lab)

#### Prerequisite: AUT 113

This course includes instruction in the theory, diagnosis, and repair of ignition components and timing controls. Included in this course are 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 using 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. Students confirm their 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. Includes the use of video and computer-assisted instruction.

#### AUT 127 Lubrication and Cooling Systems

2 Credit Hours • 37.5 Contact Hours (15 Lecture, 22.5 Vocational Lab)

Prerequisite: AUT 105 or faculty consent

This course introduces the basics of wet and dry sump lubrication systems, oil delivery, and chemical design and function. Theory of cooling system design, components, and coolants used in high performance applications are also covered.

#### AUT 128 Engine Design, Blueprinting and Testing

4 Credit Hours • 82.5 Contact Hours (15 Lecture, 67.5

Vocational Lab) Prerequisite: AUT 105 or faculty consent

This course is an introduction to High Performance Engine theory, design, components, and their function. Disassembly and assembly techniques and an introduction to dynamometer testing are also included.

#### AUT 135 Introduction to Racecar Painting Techniques

3 Credit Hours 60 Contact Hours (15 Lecture, 45 ٠ Vocational Lab)

# Prerequisite: AUT 105 or faculty consent

This course introduces the student to the basics of preparation and painting of racecar chassis, bodies, and components. Paint preparation procedures for different types of metal and plastic components will be covered as well as priming and sanding techniques. Students will also be taught proper spray gun techniques and the application of a variety of topcoats commonly used on race vehicles.

#### AUT 136 Introduction to Racecar Body Fabrication

2 Credit Hours 37.5 Contact Hours (15 Lecture, 22.5 . Vocational Lab)

Prerequisite: AUT 105 or faculty consent

This course is designed to introduce the student to a variety of techniques used in the forming of racecar body panels made up of various types of materials. Sheet steel, aluminum, and composite plastics will be emphasized. Students will practice the fabrication and finishing of body panels. Tools and equipment typically used in the industry will also be covered.

#### AUT 137 Introduction to Racecar Chassis Fabrication

2 Credit Hours 37.5 Contact Hours (15 Lecture, 22.5 Vocational Lab)

Prerequisite: AUT 105 or faculty consent

This course is designed to introduce the student to various designs and methods for fabrication of racecar chassis and roll cage components. Body mounting techniques and suspension pick up points will be covered.

#### AUT 175 Suspension and Chassis Set-Up

4 Credit Hours 82.5 Contact Hours (15 Lecture, 67.5 Vocational Lab)

Prerequisite: AUT 108 or faculty consent

This course introduces chassis set-up based on vehicle purpose. It involves chassis measurement.

#### 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 ٠ 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.

82.5 Contact Hours (15 Lecture, 67.5

#### AUT 206 High Performance Engines

4 Credit Hours

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 flatrate 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 ٠

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

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 090 or test score of 4000, 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 090 or test score of 4000, 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 phylogeuetic 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.

# Business

#### **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 030 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 is a lecture/lab-based course that 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 090 or test score of 4000, 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: One year of high school chemistry, or one semester of college level chemistry, or permission of instructor.

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 107 Voice Recognition with Dragon NaturallySpeaking** *Grading: S/U only*

1 Credit Hours • 15 Contact Hours (Lecture)

This course is designed to teach the basics of voice recognition software for word processing and other related office applications. Benefits include the reduction of repetitive stress injuries, increasing accuracy, and saving report time preparation.

#### CIS 108 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 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 116 Logic and Program Design**

3 Credit Hours • 45 Contact Hours (Lecture) Prerequisite: CIS 115 or faculty consent

This course is an introduction to the development of computer program design using the concepts of structured programming and logic. Topics include pseudo-code and/or flowcharts, structure charts, and other current structured design tools.

#### **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 120 Word Processing I: 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 123 DOS Complete**

3 Credit Hours • 45 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 computer.

#### 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 Windows Complete**

3 Credit Hours • 45 Contact Hours (Lecture)

This course introduces the functions and capabilities of Microsoft Windows. Topics include configuring and modifying the operating system environment.

#### 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: 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 Complete: Access

3 Credit Hours • 45 Contact Hours (Lecture) Prerequisite: CIS 115 or faculty consent

This course explores the complete array of database skills. Topics include database design, table operations, searches, sorts, edits, queries, forms, and reports. Interfaces with other packages and creating a user interface is also covered. This course is the equivalent of CIS 140, CIS 141, and CIS 142 taken together.

#### 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 Spreadsheets Complete: Excel

3 Credit Hours • 45 Contact Hours (Lecture)

This course covers the complete array of spreadsheet user skills. Topics include spreadsheet design, formatting, formulas, functions, charts, databases, macros, statistical and "what if" analysis, and macros. This course is the equivalent of CIS 150, CIS 151, and CIS 152 taken together.

#### 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 220 Fundamentals of UNIX**

3 Credit Hours • 45 Contact Hours (Lecture) Prerequisite: CIS 123

This essential course teaches students how to use the UNIX operating system and basic Solaris 8 Operating Environment commands and introduces the Common Desktop Environment (CDE).

#### CIS 221 UNIX System Administrator I

4 Credit Hours • 60 Contact Hours (Lecture) Prerequisite: CIS 220

This course teaches students the essential skills of Sun Solaris 8 in environment, stand alone installation, file system management, back-ups, process control, user administration, and device management.

#### **CIS 222 Shell Programming**

4 Credit Hours • 60 Contact Hours (Lecture) Prerequisite: CIS 221

The Shell Programming course provides students with the knowledge to read, write, and debug C shell scripts. Students are taught how to develop simple scripts to automate frequently executed sequence of commands and how to use conditional logic, user interaction, loops, and menus to enhance the productivity and effectiveness of the user.

#### **CIS 223 UNIX System Administrator II**

4 Credit Hours • 60 Contact Hours (Lecture) Prerequisite: CIS 220, CIS 221, CIS 222

This course provides students with the skills necessary to administer Sun Solaris 8 in a network environment, install and maintain Sun systems, configure and troubleshoot the NFS (network file system) environment, configure the NIS (network information service) environment, and add thin clients.

#### **CIS 226 Current Topics in Computing**

3 Credit Hours • 45 Contact Hours (Lecture) Prerequisite: CIS 115

This course explores social, ethical and legal issues related to computer use in business. These will also be explored in an international context. The course also considers some of the philosophical challenges posed by emerging technologies.

#### **CIS 243 Introduction to SQL**

3 Credit Hours • 45 Contact Hours (Lecture) Prerequisite: CIS 115 or faculty consent

Introduces students to creating database structures and storing, retrieving, and manipulating data in a relational database. SQL is the set of statements that all users and programs must use to access data in the Oracle database. This course also will use SQL \*Plus to manipulate SQL statements.

#### CIS 245 Data Modeling & Relational Database Design

3 Credit Hours • 45 Contact Hours (Lecture) Prerequisite: CIS 115 or faculty consent

Students will understand and be able to create entity relationship models. Students will be able to define entities, attributes, and relationships. From here, students will develop an entity-relationship diagram that accurately reflects a business scenario. Finally, students will learn how to map the ER diagram to an internal database design.

#### **CIS 246 Oracle Administration I**

3 Credit Hours • 45 Contact Hours (Lecture) Prerequisite: CIS 123, CIS 128

This course is designed to help students who have SQL skills to create databases, manage tables and indexes, and support data integrity. Students will learn to create users, manage privileges, profiles, and roles.

#### 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.

#### **CIS 280 Applied Programming and Micro Projects**

3 Credit Hours • 45 Contact Hours (Lecture) Prerequisite: CIS 116, CIS 166, CIS 245, CIS 276 or CIS 279

This course is the capstone course for CIS majors. IT consists of five projects that will allow students to develop advanced techniques and bring together information for many different courses. Most projects will include the creation of interactive application programs for the non-computer user and will require study and research beyond the classroom setting to best prepare the student for entry level employment in a variety of situations.

# 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. Students 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 students 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

45 Contact Hours (Lecture) 3 Credit Hours • 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

45 Contact Hours (Lecture) 3 Credit Hours

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) ٠

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 pre-requisite 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 121 or test score of 8000, 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 121 or test score of 8000, 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 students to have 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) *Pre-reguisite:* CSC 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 121 or test score of 8000, 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 analyzes 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)

Includes 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 will be covered.

#### **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 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)

Includes 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

Covers technical terms used in fingerprinting, pattern interpretation, classification of fingerprints, lifting and photographing of fingerprints, and searching and filing procedures. Covers 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

Includes 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, semiautomatic 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)

Includes 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 will be covered.

# CRJ 203 F.A.T.S. Judgmental Shooting

1 Credit Hour • 22.5ContactHours(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). Covers 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 searchers, 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; includes 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 incendiarism, 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 are also included.

# **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 sociopsychological 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)

Covers the 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 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 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 food spoilage, classifications of microorganisms, incidence of food borne illness, and infectious outbreaks through the use of experimentation. 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 cookery 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.

147

# **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, flambéed 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, parfaits, 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)

Involves 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.

Field Experience)

150 Contact Hours (15 Lecture, 135

# CUA 272 Advanced Field Experience II

4 Credit Hours

Prereguisite: 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.

# 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 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 151 Belly Dance I**

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

This course presents Belly Dance, the oldest dance form known to humankind. Emphasis is on developing balance. Students learn to perform a belly dance, the history of belly dance and costuming techniques.

#### DAN 152 Belly Dance II

22.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: DAN 151

1 Credit Hour

This is a continuation of DAN 151.

# **DAN 211 Dance Composition**

2 Credit Hours • 45 Contact Hours (Lecture, Lab Combination)

Prerequisite: REA 090, ENG 090

This course focuses on principles of choreography and the development of individual expressive style.

# **DAN 225 Dance Performance**

2 Credit Hours • 45 Contact Hours (Lecture, Lab Combination)

#### Prerequisite: faculty consent

After a selection through audition, students rehearse and perform dances for community concerts. The class will consist of warm-up/ advanced technique, rehearsals and cool down in a dance company atmosphere. Choreography learned will include original ballet, modern dance, and jazz dance works.

# 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. Students will be taught ASL grammar principles, 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) *Prerequisite: faculty consent required* Continuation of DEP 011.

# DEP 013 Deaf Prep - Sign Language III

3 Credit Hours • 67.5 Contact Hours (Vocational Lab) *Prerequisite: faculty consent required* Continuation of DEP 012.

# DEP 014 Deaf Prep - Sign Language IV

3 Credit Hours • 67.5 Contact Hours (Vocational Lab) *Prerequisite: faculty consent required* Continuation of DEP 013.

# 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) *Prerequisite: faculty consent required* Continuation of DEP 021.

# DEP 023 Critical Thinking III

2 Credit Hours • 45 Contact Hours (Vocational Lab) *Prerequisite: faculty consent required* Continuation of DEP 022.

# **DEP 024 Critical Thinking IV**

2 Credit Hours • 45 Contact Hours (Vocational Lab) *Prerequisite: faculty consent required* Continuation of DEP 023.

# 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) *Prerequisite: faculty consent required* Continuation of DEP 031.

# DEP 033 English III

5 Credit Hours • 112.5 Contact Hours (Vocational Lab) *Prerequisite: faculty consent required* Continuation of DEP 032.

# **DEP 034 English IV**

5 Credit Hours • 112.5 Contact Hours (Vocational Lab) Prerequisite: faculty consent required

Continuation of DEP 033.

# 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) *Prerequisite: faculty consent required* Continuation of DEP 041.

#### DEP 043 Mathematics III

3 Credit Hours • 67.5 Contact Hours (Vocational Lab) *Prerequisite: faculty consent required* Continuation of DEP 042.

#### **DEP 044 Mathematics IV**

3 Credit Hours • 67.5 Contact Hours (Vocational Lab) Prerequisite: faculty consent required

Continuation of DEP 043.

#### 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) *Prerequisite: faculty consent required* Continuation of DEP 051.

# **DEP 053 Resource Management III**

2 Credit Hours • 45 Contact Hours (Vocational Lab) Prerequisite: faculty consent required Continuation of DEP 052.

# **DEP 054 Resource Management IV**

2 Credit Hours • 45 Contact Hours (Vocational Lab) *Prerequisite: faculty consent required* Continuation of DEP 053.

# DEP 061 Study Skills I

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.

#### DEP 062 Study Skills II

2 Credit Hours • 45 Contact Hours (Vocational Lab) *Prerequisite: faculty consent required* Continuation of DEP 061.

# 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

Includes 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 will be covered.

#### **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 •

rs • 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. Includes 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 is included.

# **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,

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 Basic Computer Aided Drafting I**

3 Credit Hours	•	60 Contact Hours (15 Lecture, 45
		Vocational Lab)

Corequisite: DRT 102 or faculty consent

Using the latest release of CAD software, students learn to use basic computer aided drafting skills. Topics of study include file management, Cartesian coordinate system, drawing set-ups, drawing aids, layer usage, drawing geometric shapes, editing objects, array, text applications, basic dimensioning, and Help access.

# DRT 104 Basic Computer Aided Drafting II

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Vocational Lab)

Prerequisite: DRT 103 or faculty consent.

Using the latest release of CAD software, students learn to use advanced computer aided drafting skills. Topics of study include blocks and wblocks, polylines, multilines, polyline editing, advanced editing, editing with grips, hatching, isometric drawings, dimensions and dimension variables, paper space and viewports, templates, external references, and printing/plotting.

# DRT 116 Computer Aided Drafting/Technical Drafting Applications

4 Credit Hours • 90 Contact Hours (Vocational Lab) Prerequisite: DRT 104

Using the latest release of CAD software, students learn the principles of technical drafting. Topics of study include geometric constructions, multiview projection, sectional views, auxiliary views, manufacturing design and processes, dimensioning and tolerancing, threads, fasteners, classes of fit, design and working drawings, bill of materials, axonometric projection, intersections and developments, and gearing and cams.

# 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.

# DRT 206 Computer Aided Drafting/3D

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Lab) Prerequisite: DRT 103

Using the latest release of CAD software, students learn to construct three-dimensional objects. Topics of study include wireframe construction, surface modeling, solid modeling, extrusions, Boolean operations, 3D editing, 3D views, rendering, and 3D to 2D construction.

# **DRT 207 Mechanical Desktop I**

4 Credit Hours • 90 Contact Hours (Vocational Lab) Prerequisite: DRT 206

Using the latest release of Autodesk Mechanical Desktop software, students learn feature-based parametric modeling. Topics of study include part modeling, surface modeling, assembly modeling, stress analysis, orthographic view creation from 3D models, and parts catalog manager.

# DRT 215 3D Studio VIZ

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Lab)

Using the latest version of 3D Studio VIZ, students will learn introductory level basic features of the software. Topics of study include creation and modification of primitive and complex shapes. Boolean constructions, creation and modification of lights, applying materials to objects, creation and modification of backgrounds, creation and adjustment of cameras, rendering, and animation by keyframing.

# **DRT 216 Computer Aided Drafting/Custom**

3 Credit Hours • 60 Contact Hours (15 Lecture, 45 Lab) Prerequisite: DRT 103

Using the latest release of CAD software, students learn program customization. Topics of study include customizing menus, customizing toolbars, attribute extraction, basic CAD programming, advanced dimensioning, path options, script files, and slide shows.

# 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 216 Administration: Human Relations for Early Childhood Professions

3 Credit Hours • 45 Contact Hours (Lecture)

This course focuses on the human relations component of an early childhood professional's responsibilities. Course content includes director-staff relationships, staff development, leadership strategies, parent-professional partnerships, and community interaction.

#### 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 requirements, 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

# ECO 202 Principles of Microeconomics

3 Credit Hours • 45 Contact Hours (Lecture)

System, money and banking, and international trade.

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 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.

154

# 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 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, instructorled 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 • 75 Contact Hours (15 Lecture, 60 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 reentry 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 (Lecture) 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 finding more options and making wise choices in the midst of difficult situations.

# EMS 137 Advanced Patient Assessment and History Taking

2 Credit Hours • 30 Contact Hours (Lecture)

Prerequisite: EMS 115 or EMS 125 or its equivalent, or program coordinator consent

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 settings 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. Handson 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 270 Paramedic Internship

2 Credit Hours • 90 Contact Hours (Internship)

Students serve as interns with local EMS advanced ambulance companies. Includes patient assessment and treatment under the direct supervision of a qualified paramedic.

# English

# ENG 030 Basic Writing Skills

2 Credit Hours • 30 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**

3 Credit Hours • 45 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 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 090 Basic Composition**

3 Credit Hours • 45 Contact Hours (Lecture) Prerequisite: COMPASS placement or ENG 060, REA 090 or concurrent

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 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: Compass placement test or REA 090, ENG 090

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: Compass placement or REA 090, ENG 090

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 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, roleplaying, 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 help the student to read more quickly and accurately and to understand a variety of more complex reading material.

#### 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.

# 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. Includes 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, and 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, 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 090

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 090, 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 211 French III

3 Credit Hours • 45 Contact Hours (Lecture) Prerequisite: REA 090, ENG 090, 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 090, 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 266 Culture Studies

1-3 Credit Hours • 22.5-67.5 Contact Hours (Lecture, Lab) *Prerequisite: REA 090, ENG 090* 

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: ENG 090, REA 115

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 030, REA 090, ENG 090

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: ENG 090, REA 115

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: ENG 090, REA 115

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 206 Introduction to Cartography**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab) Prerequisite: ENG 090, REA 115

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 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 090 or test score of 4000, 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 090 or test score of 4000, 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.

# German

#### \*GER 111 German I

5 Credit Hours • 75 Contact Hours (Lecture) Prerequisite: REA 090, ENG 090

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 090, 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.

\*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: ENG 090, REA 115

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: ENG 090, REA 115

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: ENG 090, REA 115

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: ENG 090, REA 115

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: ENG 090, REA 115

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: ENG 090, REA 115

This course surveys events, trends, peoples, groups, cultures, ideas, and institutions in North American and the United States history, including the multiple perspectives of gender, class, and ethnicity between the period when Native American Indians were the sole inhabitants of North America and the American Civil War. A principle focus of this course is on developing, practicing, and strengthening the skills historians use while constructing knowledge in the discipline.

'

# HIS 202 U.S. History II

3 Credit Hours • 45 Contact Hours (Lecture) Prerequisite: ENG 090, REA 115

This course surveys events, trends, peoples, groups, cultures, ideas, and institutions in United States history, including the multiple perspectives of gender, class, and ethnicity between the period of the American Civil War and the present. A principle focus of this course is on developing, practicing, and strengthening the skills historians use while constructing knowledge in the discipline.

# HIS 206 U.S. Family History and Genealogy

3 Credit Hours • 45 Contact Hours (Lecture) Prerequisite: ENG 090, REA 115

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: ENG 090, REA 115

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: ENG 090, REA 115

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: ENG 090, REA 115

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: ENG 090, REA 115

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: ENG 090, REA 115

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

3 Credit Hours • 45 Contact Hours (Lecture) Prerequisite: ENG 090, REA 115

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 090

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 equals a sequence.

# HUM 122 Survey of Humanities II

3 Credit Hours • 45 Contact Hours (Lecture) Prerequisite: REA 090, ENG 090

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 090

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 090

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 205 Asian Arts and Cultures

3 Credit Hours • 45 Contact Hours (Lecture) Prerequisite: ENG 090, REA 090

This course will explore the most popular religions and philosophies of China, Japan, and India and their relationships to the arts and cultures of Asia. Special emphasis will be placed on Hinduism, Buddhism, and Islam.

# HUM 235 Pre-Columbian Indian Arts

3 Credit Hours • 45 Contact Hours (Lecture) Prerequisite: REA 090, ENG 090

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 090

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 090

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 are covered.

# HUM 238 Sacred Images, Sacred Spaces

3 Credit Hours • 45 Contact Hours (Lecture) Prerequisite: REA 090, ENG 090

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 090

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.

164

# **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 126 Introduction to Financial Planning**

3 Credit Hours • 45 Contact Hours (Lecture) Prerequisite: IRM 121 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 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.

# 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) Prerequisite or Corequisite: IDE 105, IDE 115

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.

# 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, IDE 110

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, IDE 110

This course emphasizes the study of fabrics, fibers, weaves, finishes, dyeing, and printing methods for residential and commercial fabrics and carpets. Resources are discussed and developed.

# 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) Corequisite: IDE 270

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

# **IDE 205 Special Topics Studies**

become familiar with local trade sources.

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: For IDE majors only, IDE 120, 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 • 200 Contact Hours (Work Experience) Prerequisite: faculty consent Corequisite: IDE 201

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.

167

# **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 090

Begins a sequence dealing in the development of functional proficiency in listening, speaking, reading, and writing the language. \*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 090

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 090, 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 090, 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 090, 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.

\*Note: All native speakers must have permission of full-time foreign language faculty to enter.

# Journalism

# JOU 102 Introduction to Editing

3 Credit Hours • 45 Contact Hours (Lecture) Prerequisite: MAT 030, REA 115, ENG 090

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 030, REA 115, ENG 090

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 030, REA 115, ENG 090

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

3 Credit Hours • 67.5 Contact Hours (Lecture, Lab Combination)

Prerequisite: MAT 030, REA 090, ENG 090

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 030, REA 115, ENG 090

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 030, REA 115, ENG 090

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 206 Intermediate Newswriting and Editing

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab) Prerequisite: MAT 030, REA 115, ENG 090, 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 030, REA 115, ENG 090

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 030, REA 115, ENG 090, 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 030, REA 115, ENG 090, 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 030, REA 115, ENG 090

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 030, REA 115, ENG 090

In this course students will study magazine feature writing techniques with an emphasis on freelance marketing and sale of articles. The course may also include practice in opinion writing, especially reviews and editorials.

# Korean

# \*KOR 101 Conversational Korean I

3 Credit Hours • 45 Contact Hours (Lecture) Prerequisite: REA 090, ENG 090

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 102 Conversational Korean II

3 Credit Hours • 45 Contact Hours (Lecture)

This is the second course in a sequence for beginning students who wish to understand and speak Korean. The material will continue to cover basic conversational patterns, expressions, and grammar.

\*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, walkbehind 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 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 xericfriendly 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 midnineteenth 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 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 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.

# 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 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 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 are 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 152, 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 are turned in for a grade. This class is NOT offered on an open-entry, open-exit basis.

# MAG 215 CADCAM 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 CADCAM 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 CADCAM 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 CADCAM 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 CADCAM 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 CADCAM 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 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.

# 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.

174

# 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 ecommerce 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 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 021 Whole Numbers

1 Credit Hour • 30 Contact Hours (Lab)

This open-entry/open-exit module is offered via computer-assisted instruction and covers the vocabulary and basic arithmetic operations of whole numbers and includes factoring, exponents, order of operations, and applications.

# MAT 022 Fractions and Mixed Numbers

1 Credit Hour • 30 Contact Hours (Lab) Prerequisite: COMPASS placement or MAT 021

This open-entry/open-exit module is offered via computer-assisted instruction and covers the vocabulary, basic arithmetic operations, and applications of fractions and mixed numbers.

# MAT 023 Decimals

1 Credit Hour • 30 Contact Hours (Lab) Prerequisite: COMPASS placement or MAT 022

This open-entry/open-exit module is offered via computer-assisted instruction and covers the vocabulary, basic arithmetic operations, and applications of decimal numbers.

#### MAT 024 Ratio, Proportion, Percent, and Rate

1 Credit Hour • 30 Contact Hours (Lab) Prerequisite: COMPASS placement or MAT 022, MAT 023

This open-entry/open-exit module is offered via computer-assisted instruction and covers the vocabulary, operations, and applications of ratios and rates, proportions, and percent.

# MAT 025 Measurement

1 Credit Hour • 30 Contact Hours (Lab) Prerequisite: COMPASS placement or MAT 022, MAT 023

This open-entry/open-exit module is offered via computer-assisted instruction and covers the vocabulary, conversions, and application of U.S. and metric measures (linear, weight, volume, and temperature.)

# MAT 030 Fundamentals of Mathematics

2 Credit Hours • 30 Contact Hours (Lecture) Prerequisite: COMPASS placement

This course includes the vocabulary, basic operations, and applications of whole numbers, fractions, and decimals and a brief introduction to U.S. and metric measure.

# MAT 060 Pre-Algebra

3 Credit Hours • 45 Contact Hours (Lecture) Prerequisite: COMPASS placement or MAT 030

This course includes the vocabulary, basic operations, and applications of ratio, proportion, percent, integers, algebraic expressions, and the solution of basic first-degree equations, inequalities, and word problems. A review of the metric system and introduction to basic geometric shapes may be included.

#### MAT 090 Introductory Algebra

4 Credit Hours • 60 Contact Hours (Lecture) Prerequisite: COMPASS placement or MAT 060

This course includes solution and application of first-degree equations, inequalities, and formulas, polynomials, factoring polynomials and solving quadratic equations by factoring, rational expressions, and applications.

#### MAT 109 Survey of Algebra

4 Credit Hours • 60 Contact Hours (Lecture) Prerequisite: MAT 090 or test score of 5000

This course emphasizes problem solving with further study of equations, slope, inequalities, systems of equations, polynomials, quadratic equations, rational expressions, rational expressions, radical expressions, graphing, and applications.

#### MAT 110 Basic Finite Mathematics

3 Credit Hours • 45 Contact Hours (Lecture) Prerequisite: MAT 030 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 • 60 Contact Hours (Lecture) Prerequisite: Test score of 8000 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: Test score of 9000 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 124 Finite Mathematics**

3 Credit Hours • 45 Contact Hours (Lecture) Prerequisite: MAT 121

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 121

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: test score of 8000 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 090 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 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: Test score of 9500, MAT 122 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 calculus. Topics include vectors, vector-valued functions, and multi-variables (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 090

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 selfmedication, 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 090

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; student must be in the final semester of an MOT degree or certificate program or have permission of the department chair.

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.

# 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 regards 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.

# Music

# **MUS 100 Fundamentals of Music Theory**

3 Credit Hours • 45 Contact Hours (Lecture) Prerequisite: MAT 030, REA 090, ENG 090

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 030, REA 090, ENG 090, 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 030, REA 090, ENG 090, 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 030, REA 090, ENG 090

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 030, REA 090, ENG 090

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 030, REA 090, ENG 090

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 131 Performance Class I-V

1 Credit Hour • 30 Contact Hours (Lab) Prerequisite: MAT 030, REA 090, ENG 090

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 030, 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 030, 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 030, 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 030, 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 030, 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 030, 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 030, 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 030, 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 030, 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 Introduction to ArcView GIS

3 Credit Hours • 67.5 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 118 GIS Field Study

2 Credit Hours • 45 Contact Hours (Vocational Lab) Prerequisite: NRT 111, NRT 117

Students will work with a local agency/company on an actual GIS project. This hands-on experience will enhance the student's coursework and give them the inside view of the GIS industry.

# 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

3 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 an \$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 with 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 136 Animal Conservation**

3 Credit Hours • 45 Contact Hours (Lecture)

Students will study the importance of animal conservation programs in captive environments throughout the world. The background, current programs, and future issues will be discussed. Some topics will include animals relationships with man, modern zoo programs, and extinction issues.

### 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 a basic level, how to use these three Windows-based components of Arc Info to perform GIS tasks 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 framing. 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 hyrdology, 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

Cover 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)

Covers 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

This 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 225 Adventure Guide Seminar

1 Credit Hour • 22.5 Contact Hours (Vocational Lab) Prerequisite NRT 120

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 235 Programming for Outdoor Education and Recreation

3 Credit Hours • 45 Contact Hours (Lecture)

Prerequisite: NRT 131

The focus of this course is on the planning, development, and leadership of outdoor education and recreation programs and activities, using a variety of materials and resources. Various outdoor/ environmental education curricula and philosophies will be examined. Design and development of publication materials and resources will also be examined.

### **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.

### NUA 101 Nursing Assistant Theory/Lab

4 Credit Hour • 67.5 Contact Hours (45 Lecture, 22.5 Lecture/Lab Combination)

Prepares the student to perform the fundamental skills of the nurse aide. Basic nursing skills, restorative services, personal care skills, and safety and emergency care issues are covered in theory and lab. The student will learn skills that address mental health needs as well as patient/resident/client rights.

### NUA 102 Nursing Assistant Clinical

1 Credit Hour

 22.5 Contact Hours (Lecture/Lab Combination)

Grading: S/U only Prerequisite: NUA 101

Applies knowledge gained from NUA 101 in a clinical setting. Upon completion of NUA 101 and NUA 102, the student should be able to form a relationship, communicate and interact competently on a one-to-one basis with patient/resident/clients; demonstrate sensitivity to residents' emotional, social, and mental health needs; assist residents in attaining and maintaining independence; exhibit behavior in support and promotion of residents' rights; demonstrate observational and documenting skills needed in the assessment of residents' health, physical condition, and well-being.

### NUR 108 Accelerated Nursing Assistant

3 Credit Hours • 80 Contact Hours (18 Lecture, 30 Lab, 32 Clinical)

Prerequisite: BIO 202 or BIO 142 or program coordinator consent

Covers basic theory and nursing practice principles utilizing lecture, laboratory practice, and a clinical. This 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 • 22.5 Contact Hours (Lecture, Lab Combination)

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.

### NUA 114 Home Health Aide Internship

1 Credit Hour • 30 Contact Hours (Clinical Lab) Grading: S/U only

Prerequisite: Current CNA certification or successful completion of a Colorado Nurse Aide course with an unencumbered Colorado criminal background check, current CPR card, required immunizations.

Designed to prepare the nurse aide for entry level into the home healthcare setting. Upon completion of this course, the student should be able to demonstrate basic nurse aide skills in the home setting; perform skills that enhance home and family life; develop skills to work with the elderly, ill, disabled, and/or children. Topical outline includes application of nurse aide skills in a home care setting. See NUA 101 and NUA 102 for nurse aide skills.



### 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 healthcare delivery with focus on behavioral concepts and communication. Presents theoretical information related to biophychosocial, 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 infection control, critical thinking, and physical assessment.

### 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 134 Clinical Synthesis

1 Credit Hour • 24 Contact Hours (Clinical Lab) Prerequisite: NUR 108, NUR 130, NUR 131, NUR 141, BIO 141, BIO 142

Corequisite: NUR 135, NUR 140

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 135 Medical-Surgical Concepts for LPNs

11 Credit Hours • 223.5 Contact Hours (60 Lecture, 96 Clinical Lab, 67.5 Technical Lab)

Prerequisite: Satisfactory completion of NUR 108, NUR 130, NUR 131, NUR 141, BIO 141, BIO 142

Care of the adult patient with various uncomplicated medical surgical problems including incorporated drug and diet therapy, and identifying special concerns related to the geriatric population. Content to include issues of grief, death and dying, and fluid and electrolytes. This course also includes application of concepts and principles through supervised experience in campus laboratory and clinical setting.

### NUR 140 Personal and Vocational Adjustment

1 Credit Hour • 15 Contact Hours (Lecture) Prerequisite: NUR 108, NUR 130, NUR 131, NUR 141, BIO 141, BIO 142

Corequisite: NUR 134, NUR 135

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 141 Maternal Child Nursing

5 Credit Hours • 97.5 Contact Hours (30 Lecture, 22.5 Vocational Lab, 45 Clinical Lab) Prerequisite: NUR 108, NUR 130, NUR 131, BIO 141, BIO 142

This course addresses fundamental nursing care of the uncomplicated obstetrical client/family newborn. It also addresses health promotion of the pediatric client within the community. In addition, basic concepts and direct application of pediatric nursing care of acute and chronic illnesses are introduced.

### NUR 151 Dynamics of Psychiatric Nursing I

3 Credit Hours • 45 Contact Hours (Lecture) Prerequisite: NUR 108, NUR 130, NUR 131, BIO 141, BIO 142 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 135 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 135 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 135 or program coordinator consent Corequisite: NUR 151, NUR 152, NUR 153 Gradina: 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 173 Family Centered Nursing I

5 Credit Hours • 100.5 Contact Hours (30 Lecture, 22.5 Lecture/Lab Combination, 48 Clinical) Prerequisite: NUR 108, NUR 109, NUR 175 Corequisite: NUR 176

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 108, NUR 109, NUR 175, NUR 176

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 175 Fundamental Nursing Concepts

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)

Prerequisite: NUR 108 or nursing program coordinator consent

Introduction to the fundamentals of nursing. Includes nursing history, critical thinking, the nursing process, communication, the teaching/ learning theory, health/wellness promotion, grief, death and dying.

### NUR 176 Basic Medical Concepts of Nursing

8 Credit Hours 
• 165 Contact Hours (30 Lecture, 45 Lecture/Lab Combination, 90 Clinical)

Prerequisite: NUR 108 and NUR 109 or nursing program coordinator consent

Introduction to the care of the medical client. Includes instruction on effective documentation, the infectious process, pharmacology, the assessment of the normal and abnormal findings in a client. Evaluation of basic interventions in the following areas: nutrition, fluid and electrolyte, cardiopulmonary system, gastrointestinal system, and genitourinary system.

### 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 224 Family Centered Nursing II

4 Credit Hours • 103.5 Contact Hours (25 Lecture, 22.5 Lecture/Lab Combination, 56 Clinical)

Prerequisite: NUR 174 or NUR 187, or program coordinator

Corequisite: NUR 221

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.

### NUR 227 Mental Health Nursing

8 Credit Hours •

Lecture/Lab Combination, 90 Clinical) Prerequisite: NUR 174 or NUR 187 or program coordinator

185 Contact Hours (50 Lecture, 45

consent Corequisite: NUR 224

Introduction to mental health nursing concepts including therapeutic relationship, principles of mental health nursing, theoretical models, therapeutic environment, and stress/adaptation. Nursing process is applied to clients with the following disorders: thought, mood, personality, anxiety, childhood/adolescent, and substance-related. Addresses special therapies including psychopharmacology, family therapy, group therapy, milieu therapy, psychotherapy, crisis intervention, and behavioral therapy.

### 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.

### Pharmacy Technician

### PHT 105 Orientation to Pharmacy

4 Credit Hours • 60 Contact Hours (Lecture)

This introductory course is a general overview of pharmaceutical care in the scheme of health care and the role of the pharmacist and the pharmacy technician in its delivery. Discussion includes the value of obtaining certification, state and national pharmacy organizations, and opportunities available to the certified technician. The student is introduced to the pharmaceutical industry, standards of practice, and drug development. Covers surveying of laws, regulations, and standards at the Federal and State level as they govern the practice of pharmacy, so that the student is able to identify duties technicians can legally perform. Discussion includes legal and ethical responsibilities of the pharmacy technician. Also introduced are pharmacy terminology, symbols, and abbreviations. Professionalism in appearance and demeanor, telephone skills, and communication skills stressing interactions with patients and health care professionals are discussed.

### PHT 106 Community Pharmacy Operations

3 Credit Hours • 67.5 Contact Hours (Lecture Lab Combination)

Pharmacy administration and operations are covered to prepare the student to work in the outpatient setting. This course includes receiving and checking drug orders, storage of drugs, pricing, purchasing, inventory management, returning merchandise, stocking, handling outdated items, record keeping, customer service, sales, and identification of taxable and nontaxable items. Students develop skills in receiving, interpreting, screening, preparing, labeling prescriptions, selecting the appropriate drug, recognizing inconsistencies or missing information, maintaining patient profiles, and prescription renewals. Includes legal requirements for prescriptions and the importance of obtaining essential patient information. Students experience pharmacy computer operations, including the entry of patient information, prescription processing, maintenance of patient profiles, and recognition of warnings for drug interactions and allergies. Communication with patients and health care personnel is discussed. Other topics include customer service, answering patient questions, recognizing lack of compliance, record keeping, drug information resources, third party insurance companies, billing procedures, reimbursement, and drug formularies.

### PHT 110 Pharmacology I

4 Credit Hours • 60 Contact Hours (Lecture)

This course is an introduction to the pharmacological basis for medication action. Included are classification of drugs, dosages, concepts of dosage forms, routes of administration, indications, medication interactions with the body, actions, effects, side effects, toxicity, and incompatibilities. System therapies coincide with those taught in Applied Anatomy, Physiology, and Disease Processes I: integumentary, musculo-skeletal, nervous, sensory, and endocrine.

### PHT 111 Pharmacology II

4 Credit Hours • 60 Contact Hours (Lecture)

Continuation of Pharmacology I. Covers therapies for the cardiovascular system; hematological, immune, lymphatic, respiratory, digestive, urinary, and reproductive systems will be covered.

### PHT 205 Certification Review and Career Preparation

.5 Credit Hours • 8 Contact Hours (Lecture)

This course is developed to prepare the student for the National Pharmacy Technician Certification Examination.

#### PHT 206 Employment Preparation

.5 Credit Hours • 8 Contact Hours (Lecture)

Preparation for entering the profession will include writing resumes and interviewing.

### PHT 207 Drug Classification

3 Credit Hours • 45 Contact Hours (Lecture)

Students will study the drug classes, such as over-the-counter vs. prescription drugs, scheduled drugs, and the laws pertaining to each. Topics include the different pregnancy classifications and the degree of potential harm for each class, the commonly used drugs that can be addictive, abused, and potentially lethal. The student will learn dosage forms, routes of administration, selection and recommendation of OTC drugs and natural products, and memorize trade and generic names and common dosages.

### PHT 215 Community Pharmacy Clinical

5 Credit Hours • 150 Contact Hours (Lab)

Practical experience in a community pharmacy under the supervision of a pharmacist. Areas of instruction include interpretation of prescriptions, entering prescriptions into computer, patient profiles, correctly filing and labeling prescriptions, billing patients and third party insurances, customer service, over-the-counter medications, purchasing, checking in deliveries, inventory control, compounding and patient confidentiality. The preceptor will evaluate student's performance.

### PHT 220 Pharmacology and Pathophysiology I

5 Credit Hours • 75 Contact Hours (Lecture)

A course in the study of disease states and the pharmacological basis for medication action. Students obtain an understanding of the normal functioning and the major disorders of integumentary, musculo-skeletal, nervous, sensory, and endocrine systems. Therapies for these systems are taught in conjunction with the pathophysiology, covering the drug classes, dosages, indications, actions, effects, side effects, toxicity, and incompatibilities.

### PHT 221 Pharmacology and Pathophysiology II

5 Credit Hours • 75 Contact Hours (Lecture)

Continuation of Pharmacology and Pathophysiology I. Students study normal and abnormal physiology, and corresponding therapies for the cardiovascular system, hematological, immune, lymphatic, respiratory, digestive, urinary, and reproductive systems.

### PHT 225 Hospital Pharmacy Clinical

5 Credit Hours • 150 Contact Hours (Lab)

Practical experience in a hospital pharmacy under the supervision of a pharmacist. Instruction includes preparing intravenous admixtures, filling unit dose drawers, floor stock, maintaining patient records, purchasing, and inventory control. The preceptor will evaluate student's performance.

### PHT 226 Hospital Pharmacy Operations

3 Credit Hours • 67.5 Contact Hours (Lecture Lab Communication)

This course is designed to prepare the student to work in the inpatient setting. Daily pharmacy operations are discussed, along with hospital and pharmacy organization, workflow, and personnel. Students learn safety techniques, proper disposal, aseptic technique, drug distribution systems, unit dose packaging systems, inventory control, drug storage, ward stocks, quality assurance, and parenteral and enteral nutrition. Students experience receiving, screening, filling, labeling, and distributing medication orders. Also included are setting up and maintaining patient profiles, record keeping, pharmacy computer systems, and drug information resources.

## PHT 235 Pharmaceutical Calculations and Compounding Techniques

#### 4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

This course develops the skills necessary for performing calculations in pharmacy practice and the compounding of sterile and nonsterile products. A review of basic mathematical skills is included. Taught are the metric, apothecary, avoirdupois, and household measuring systems, and conversion between these systems. Conversion between fractions, decimals, percents and ratios is taught. The student learns to solve problems involving enlarging and reducing formulas, proportions, dilutions, percentages, ratios, milliequivalents, IV flow rates, and other calculations pertinent to the preparations of pharmaceuticals. These skills are put to practical use in the compounding portion of this course. Preparation of sterile products, parenteral admixtures, TPN solutions and chemotherapeutics, and using proper aseptic techniques is taught. The safe handling of antineoplastics and other hazardous drug products, as well as special drug storage requirements is learned. The importance of accuracy, quality and infection control are emphasized. Use and maintenance of equipment such as Laminar Flow Hoods, autoinjectors, and pumps is discussed. Accuracy is stressed.

### Philosophy

### 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	5, 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 090

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."

# 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 (PED)

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 l

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 133 Technical Physics**

5 Credit Hours • 105 Contact Hours (60 Lecture, 45 Lab) Prerequisite: MAT 109 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: ENG 090, REA 115

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: ENG 090, REA 115

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: ENG 090, REA 115

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: ENG 090, REA 115

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 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 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: ENG 090. REA 115

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

5 Contact Hours (Lacture)

3 Credit Hours • 45 Contact Hours (Lecture) Prerequisite: ENG 090, REA 115

Scientific study of behavior including cognition, language, intelligence, psychological assessment, personality, abnormal psychology, therapy, life span development, and social psychology.

### **PSY 105 Psychology of Workplace Relationships**

3 Credit Hours • 45 Contact Hours (Lecture) Prerequisite: ENG 060, REA 090

This course focuses on interactions among people-their conflicts, cooperative efforts, and group relationships. It will examine why our beliefs, attitudes, and behaviors cause relationship problems in our personal lives and in work related situations. It will emphasize the analysis of human behavior, the application of prevention strategies, and the resolution of behavior problems. This course is designed for career and technical students.

### **PSY 106 Human Relations**

3 Credit Hours • 45 Contact Hours (Lecture) Prerequisite: ENG 090, REA 115

This course emphasizes the development and practice of effective interpersonal communication skills on and off the job.

### PSY 115 Psychology of Adjustment

3 Credit Hours • 45 Contact Hours (Lecture) Prerequisite: ENG 090, REA 115

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: ENG 090, REA 115

This course covers emotional, cognitive, interpersonal, and cultural contributions to female identity and gender role.

### **PSY 217 Human Sexuality**

3 Credit Hours • 45 Contact Hours (Lecture) Prerequisite: ENG 090, REA 115

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: ENG 090, REA 115

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: ENG 090, REA 115

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: ENG 090, REA 115, 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 247 Child Abuse and Neglect**

3 Credit Hours • 45 Contact Hours (Lecture) Prerequisite: ENG 090, REA 115

This course examines the causes and effects of physical, sexual, and psychological abuse and neglect. Intervention and prevention strategies are emphasized.

### **PSY 249 Abnormal Psychology**

3 Credit Hours • 45 Contact Hours (Lecture) Prerequisite: ENG 090, REA 115

This course is a study of abnormal behavior and its classification, causes, prevention, and treatment.

### PSY 265 Psychology of Personality

3 Credit Hours • 45 Contact Hours (Lecture) Prerequisite: ENG 090, REA 115, 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.

### 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. Covers sports casting 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. Includes 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)

Covers 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 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.

### 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. Includes 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)

Covers 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 • 120 Contact Hours (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. Includes 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 nonlinear 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 Fundamentals of Reading**

3 Credit Hours • 45 Contact Hours (Lecture)

Students will be taught reading strategies for vocabulary development, improved reading comprehension, and enrichment.

### **REA 090 College Preparatory Reading**

3 Credit Hours • 45 Contact Hours (Lecture) Prerequisite: COMPASS placement or 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. Covers analytical reading and reasoning, and intensive vocabulary training at a more advanced level. Includes computer-assisted instruction and speed training.

### **Real Estate**

### **RES 105 Residential Property Management**

.5 Credit Hours • 8 Contact Hours (Lecture) Grading: S/U only

This real estate course enables practitioners of residential property management to perform this function more professionally and consistently with Colorado statues as well as the Colorado Real Estate Commission suggestions and position statements. Course is designed to meet the continuing education requirements set forth by the Colorado Real Estate Commission.

### **RES 106 Required 8-Hour**

.5 Credit Hours • 8 Contact Hours (Lecture) Grading: S/U only

This real estate course covers new laws, Commission rules, recent court decisions, changing standards of practice, and other areas of concern to the public, Commission, and industry. Course is designed to meet the continuing education requirements set forth by the Colorado Real Estate Commission.

### **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 • 48 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 • 48 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 • 48 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 • 48 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 090

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 090, 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 090

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.

### 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

45 Contact Hours (Lecture) 3 Credit Hours •

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

45 Contact Hours (Lecture) 3 Credit Hours ٠

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)

### Prereguisite: 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

240 Contact Hours (15 Lecture, 225 6 Credit Hours Work Experience)

Prerequisite: SSE 192 Continuation of SSE 192.

### SSE 205 Social Work Case Management

3 Credit Hours 45 Contact Hours (Lecture) ٠

This course is designed to prepare students for work in the area of social services case management. Topics students will study include client assessment, resource identification, interventions with diverse client populations, counseling, NASW Code of Ethics, linkage, and outcome evaluation.

### 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

45 Contact Hours (Lecture) 3 Credit Hours •

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)

Prereguisite: SSE 193

Continuation of SSE 193.

### Sociology

### SOC 101 Introduction to Sociology I

3 Credit Hours . 45 Contact Hours (Lecture) Prerequisite: ENG 090, REA 115

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: ENG 090, REA 115

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 105 Principles of Practical Sociology

3 Credit Hours • 45 Contact Hours (Lecture) Prerequisite: ENG 060, REA 090

This course focuses on the practical application of sociology in enhancing human interactions and understandings in the workplace as well as in personal relationships. This course is designed for career and technical students.

### Marriage and Family

3 Credit Hours • 45 Contact Hours (Lecture) Prereauisite: ENG 090. REA 115

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 218 Sociology of Minorities**

3 Credit Hours • 45 Contact Hours (Lecture) Prerequisite: ENG 090, REA 115

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: ENG 090, REA 115

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: ENG 090, REA 115

This course covers juvenile behavior and causes, treatment, and prevention of delinquency, including legal processing of juveniles.

### SOC 237 Sociology of Death and Dying

3 Credit Hours • 45 Contact Hours (Lecture) Prerequisite: ENG 090, REA 115

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.

### 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.

### Spanish

### \*SPA 101 Conversational Spanish I

3 Credit Hours • 45 Contact Hours (Lecture) Prerequisite: REA 090, ENG 090

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 090, 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 090 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 090

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 090, 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 115 Foreign Language for the Professional

3 Credit Hours • 45 Contact Hours (Lecture) Prerequisite: SPA 101 or SPA 111 or faculty consent

This course is designed as an introduction to a working knowledge of the target language, cultural behaviors and values used in various professional fields such as healthcare, law enforcement, bilingual teaching, business, and others.

### \*SPA 201 Conversational Spanish III

3 Credit Hours • 45 Contact Hours (Lecture) Prerequisite: REA 090, ENG 090, 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 090, 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 090, 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 090, 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 090* 

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 (See Advancing Academic Achievement)

### 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 - 45 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 090, 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 090, 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 simulated. 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 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 pillowtype 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 Restoration 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)

Includes an introduction to typography, its history, type families, letter form, and face design. Covers 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

Covers 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 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 116 Interface Design

2 Credit Hours • 45 Contact Hours (Vocational Lab)

Students will study and learn human user interface strategies and design. The types of strategies include practical application, creation for intuitive use, usability, content flow, and accessibility.

### VIC 117 Introduction to Multimedia

2 Credit Hours • 45 Contact Hours (Vocational Lab)

This course is an introduction to Multimedia in the Visual Communications Program. Students will learn vector versus rastor graphics, importance of design and digital storytelling. The course additionally includes a familiarization with the Macintosh computer platform, a brief history of Multimedia, a basic understanding of digital design, and overview of input/output devices, an introduction to the software currently in demand in this industry and a first look at portfolios and self-promotion for the student in the multimedia program. Multimedia is a computer presentation that combines the use of different media, including text, graphics, video, and sound and that is interactive, for the purpose of advertising, education, or entertainment.

### 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 126 Creative Composition for Multimedia

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

This course focuses on the nature and principles of design and composition for multimedia. Students will learn both traditional and digital photography and specifically, the effect lighting has on objects. Storytelling, content, design, and composition along with the principles and variety of applications in order to maximize effectiveness in design will also be covered.

### VIC 127 Design Styles and Branding

2 Credit Hours • 45 Contact Hours (Vocational Lab)

This course offers students an overview in design trends, including arts and architecture throughout history. We will uncover the essence in design that has remained prominent and important in current design styles today. Students will learn how to design for clients with a visual understanding in many rich and diverse styles. In addition, students will understand the cultural, societal, and political influences that have impacted design and how we view it in American culture. Students will design and create graphics and web pages from particular design eras using Adobe Illustrator, Macromedia Dream weaver, and Adobe Photoshop, or current industry standards.

### 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 area 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 135 Digital Audio for Multimedia

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

This course introduces the student to editing sound. Students will focus on the principles of recording sound and study sound characteristics, acoustics, and field recording techniques. The role of storytelling in sound for media production will be explored and studied. Various methods and techniques for digital sound composition will be covered.

### VIC 136 Digital Illustration

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

This course uses Adobe Illustrator or the industry standard software application for art production using vector graphics. This art production tool for multimedia, print, and online graphics will be covered. Students will focus on precision and control over their artwork whether it be small designs or larger, complex projects. In addition to software skills, the emphasis will include design, composition, and good use of zymology and metaphors.

### VIC 141 Digital Imaging I

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

Photo enhancement and manipulation techniques using Photoshop or current industry standard will be covered in this course. Students will be taught layers, selections, paths, type, and layer masks. Design, composition, and storytelling are emphasized.

### VIC 142 Digital Imaging II

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

This course is an advanced exploration of Adobe Photoshop or current industry standard software. The student will learn channel, color correction, complex composite techniques, and re-touching. Students will continue to study and learn design, composition, and digital storytelling.

### 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. Covers 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

3 Credit Hours • 67.5 Contact Hours (Vocational Lab) Prerequisite: VIC 101 or faculty consent

Students will work with industry standard non-linear video editing software in order to make movies. Digital video converges video and computer technology. Students will learn how to capture, edit, and manipulate video images. Assembly techniques include media management, editing tools, titles, and motion control, transitions, audio editing, tools, transitions, filters, and special affects. Creative digital storytelling will be emphasized.

### 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 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

3 Credit Hours • 67.5 Contact Hours (Vocational Lab) Prerequisite: VIC 101, VIC 109, VIC 141 or faculty consent

Using Macromedia Director or current industry standard software, students will learn fundamentals of authoring for multimedia programs. Basic functions including buttons, menus, branching, variables and navigation structures, and creating simple sequences and interactions will be covered. Students will create an interactive computer-based presentation.

#### VIC 217 Multimedia Authoring II

3 Credit Hours • 67.5 Contact Hours (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 threedimensional 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 219 Digital 2-D Animation

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

This course will cover Adobe After Effects, or the industry standard, a powerful special effects and 2-D animation software tool for digital editing. Students will gain the knowledge necessary to produce dynamic video projects, from commercials and documentaries, to DVD storytelling and title development. This video tool will provide the students with capabilities such as multiple layering, animating objects, and applying special effects. Knowledge of Adobe Photoshop and digital video editing is strongly recommended before taking this course.

#### VIC 225 Multimedia for the Internet

3 Credit Hours • 67.5 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 228 Web Authoring and Design

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

This courses teaches professional visual editing for creating and managing web pages. Students will use Macromedia Dreamweaver or the industry standard software. Dynamic HTML gadgets and pages will be covered. This software supports cascading style sheets, layers, and JavaScript behavior. Additional specialties include DHTML animation tool. Completing VIC 225 with a passing grade is highly recommended before taking this course.

### VIC 229 DVD Authoring

2 Credit Hours • 45 Contact Hours (Vocational Lab)

This course covers interactive media and digital video to author for DVDs. Industry standard software to create dynamic media content for DVD will be covered.

### VIC 235 Animation for Web and Interactive Media

3 Credit Hours • 67.5 Contact Hours (Vocational Lab)

Students will learn how to use digital animation for the web and interactive media. Macromedia Flash software or industry standard will be taught. Students will create powerful, band-width friendly, animated, and interactive media projects. This tool is designed for artists who want to work digitally to fulfill their creative visions for interactive media and to show their works to a global audience.

### VIC 236 Multimedia Storytelling I - Web

2 Credit Hours • 45 Contact Hours (Vocational Lab)

Students will continue to use all of the web skills and develop, design, and produce advanced web pages. The course will cover constructing web pages with dynamic media content, apply interface design principles, share files on networks, and identify, collect, and organize existing assets appropriate to client standards.

### VIC 237 Multimedia Storytelling II - Interactive Media

2 Credit Hours • 45 Contact Hours (Vocational Lab)

Using Macromedia Director or current industry standard software, students will create interactive media projects using the skills learned in Authoring I and II. Students will use advanced techniques for authoring multimedia presentations. Advanced functions including branching and navigational structures, scaled animations, reading and writing to external files, building subroutines, libraries, and models are emphasized. Students will construct their digital portfolio in this course.

### VIC 238 Multimedia Storytelling III – DVD

2 Credit Hours • 45 Contact Hours (Vocational Lab)

Students will continue authoring advanced projects in DVD using skills in digital video, imaging, and authoring. Students will be shown how to develop their own style and create work for their portfolio. Real work experience may be involved.

### VIC 245 Visual Communication Exit Portfolio and Career Development

1 Credit Hours • 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 246 Portfolio, Self-Promotion and Professionalism

3 Credit Hours • 45 Contact Hours (Vocational Lab) Prerequisite: Sophomore standing in program or faculty consent

This course will cover portfolio development, job preparation and personal assessment, as well as a final portfolio review by department faculty. Interviewing, self-promotion, creative strategies, and marketing will also be addressed in preparation for a multitude of career options.

### 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 ecommerce 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 ecommerce 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.



## FACULTY &

College Administrative Staff	. 204
Faculty and Staff	. 205
State Board for Community Colleges and Occupational Education	211
Community Colleges of Colorado	211
PPCC Advisory Council	211
PPCC Catalog Team	211



### COLLEGE ADMINISTRATIVE STAFF

### Officers of the College

President	Joseph Garcia
Vice President for Educational Services	Edwin Ray
Vice President for Administrative Services	Dirk Howard

### **President's Staff**

Executive Director of Human Resource Services	
and Planning	Jeff Olson
Executive Director of Marketing	
and Communications	. George Sanchez
Executive Director of Institutional	
Advancement and Development	Debbie Sagen
Director of Institutional Grants	Michele Hanley

### Educational Services

Associate Vice President for Educational	
Services	Kathryn G. Lehner
Assistant to the VPES for Educational	
Services	Lia Howard
Assistant to the VPES for Educational	
Services	Lois Kline
Assistant to the VPES for Occupational	
Education	Robert Jager
Assistant to the VPES for Technology	Roman Hidrogo

### Educational Services Division Deans:

Business Assistant Deans, Business	
	Russell Flora
Communications and Humanities	
Assistant Dean, Communications and	
Humanities	Annette Lyttle
Developmental Studies	
Assistant Deans, Developmental Studies	Richard Harms
	Sandra Miller
	Michael Parcha
Mathematics, Sciences, and Health	
Sciences	Judy Baros
Assistant Dean, Mathematics, Sciences	
and Health Sciences	
Social and Behavioral Sciences	Wayne Artis (Interim)
Technical, Industrial and Service	
Occupations	argarette Goodwin Dahl
Assistant Deans, Technical, Industrial,	
and Service Occupations	
	Bob Smith
Directors:	

Lia Howard
John di Stasio
Nancy Meiklejohn
Julie Witherow

Downtown Studio Campus	
Operations	Malcolm McCollum
Programs	Nancy McCollum
Instructional Support Services	
Integrated Circuit Fabrication	Phil Myers
International Education	Wally Astor
Learning Resource Center	Mary Jo Berger
Multimedia Production	
Military Programs	Bart Guthrie
Rampart Range Campus	Wally Astor
School Partnership Program	Robert Jager
Assistant Director, School	
Partnership Program	Dave Potts
Program Administrators:	
En alla ha ha anno ann ha ailteach	La sua 🗖 de su suado

### English Language Institute ...... Jean Echevarria Pikes Peak Regional Law Enforcement

Academy	Dan Dirscher	I

### Managers

Bookstore	Lia Howard
Assistant Managers	Connie Bryan
	Michael McCullough
Publications and Printing/Copy Center .	Mark Day

### **Administrative Services**

Assistant to the VPAS, Dean of Students ..... Beth Lebsock

### Directors:

Enrollment Services
Assistant Director of Facilities and Procurement Rampart Range Campus
Assistant Director of Facilities and Procurement, Centennial CampusJohn Smith Information Technology Support ServicesJ. Michael Young Assistant Director – ITSSCyrille Parent Manager of Technical SupportChris Orth Manager of Communication and DistributionKenneth Rubel Public SafetyJohn Fisher Assistant Director of Public SafetyWes Walter Student LifeColette Berge
Coordinators: Career Services

### Managers:

Financial Services/Controller	Marianne Berdon
Purchasing	Eva Reynolds



### FACULTY & STAFF

ABBOTT, Jane, Ph.D. (Colorado State University, 1995) Dean, Communications and Humanities ALINSUNURIN, Jinn General Labor I, Facilities and Procurement ALIRE, Arlene Ann Administrative Assistant II, Downtown Studio ALLISON, Mark, B.A. (Western State College, 1996) Police Intern, Public Safety ALVARAN, Reginald LTC Trainee II, Facilities and Procurement 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, Information Technology Support Services ARCHULETA, Lawrence LTC Trainee, Facilities and Procurement 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 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, Marni, M.S. (Johns Hopkins University, 1977) School to Career Technology Coordinator ARTIS, W. Wayne, M.A. (University of Delaware, 1977) Interim Dean, Social and Behavioral 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 Director of the Office of International Education BACA, Flora, A.A.S. (Pueblo Community College) Administrative Assistant II, Bookstore BANEY, Eileen Administrative Assistant II, Enrollment Services BARNETT, Barbara, A.A.S. (Pikes Peak Community College, 1991) Administrative Assistant I, Military Programs BARNETT, Kimberly R., A.G.S. (Pikes Peak Community College, 1991) Program Assistant II, Presidents Office BARTA, Tim Custodian II, Facilities and Procurement 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 **BAUER**, Patricia Administrative Assistant I, Learning Enterprises 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, B.A. (University of Northern Iowa, 1983) Fitness Center Coordinator, Student Life BEEN, Laurin A. Administrative Assistant III, Financial Aid/Veterans Affairs

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, Developmental Studies Division; Director of Learning Resources 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 Procurement BIRKHEAD, Kathryn, M.A. (University of Arkansas, Fayetteville, 1977) Faculty of Spanish BOLLING. Linda Library Technician II, Learning Resources Center BOLTE, Carol Laboratory Coordinator I, Computer Access Center BONK, John, A.A.S. (Central Texas College, 1994) Police Officer I, Public Safety BOURGEOIS, Linda Corporate Info Specialist, Learning Resources Center BOWEN, Karen S., M.Ed. (University of Pittsburgh, 1970) Faculty of English and Study Skills BOWERS. William Custodian II, Facilities and Procurement BOWLES, Charles F., M.B.A. (Pacific Lutheran University, 1977) Faculty of Business Management

BEGGS, Kathleen, M.Ed (Drury College, 1973)

BRICKER, Robert R., M.A. (University of Northern Colorado, 1973) Vocational Credentials: Faculty Professor of Marketing Management

BROOKS, C.R.J., M.P.A. (Colorado University, 1992) General Professional I (H.R. Specialist), Human Resource Services 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

BUCHANAN, Francine, B.S. (University of Calgary, 1993) Math Specialist/Learning Services Coordinator, Student Support Services

BUCKLEY, Cynthia, B.A. (California State University, 1980) Vocational Credentials: Early Childhood Education Faculty of Early Childhood Education

BURGESS, Marla Early Childhood Educator, Child Development Center BURKE, Barbara, M.S.N. AHI. R.M.A. (University of Phoenix, 1999) Program Coordinator

Faculty of Medical Assisting

BURKHART-NERO, Gloria

Library Technician II, Communication and Humanities

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., B.S. (Regis University, 2001) Telecommunications/Electronics Specialist II, Information Technology Support Services CASIAS, Helen Library Technician II, Learning Resources Center CAVIN, Jinny, M.A. (Western Kentucky University, 1982) SIS Coordinator, Enrollment Services CHASE, Richard, B.S. (Regis College, 1987) Faculty of Radio, Television, Telecommunications CLASSEN, Suzanne, B.A. (Goshen College, 1994) Transfer/Transition Coordinator, Student Success Services CLEMENT, Lee, B.S. (Regis University, 1983) Faculty of Networking Technology CLENDENIN, Chris L., M.A. (Louisiana State University, 1976) Faculty of English COLLINS, Stephen, Ph.D. (Northwestern University, 2001) 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, 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 DAVENPORT, Tani, A.S. (University of New York, 1995) Paramedic Clinical Coordinator, Learning Enterprises DAVIS, Timothy, M.A. (Ohio University, 1971) Faculty of Spanish DAY, Kimberly G. Customer Support Coordinator I, Information Technology Support Services DAY, Mark, B.A. (Rockmont College, 1974) General Professional III, Publications and Printing DECH, Debra Administrative Assistant III, Learning Enterprises DEESE, Barry, M.B.A. (Central Michigan University, 1997) Recruitment Officer, Enrollment Services 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 di STASIO, John, M.B.A. (St. Mary's University, 1972) Vocational Credentials: Administrator/Faculty, Local Director, Supervisor Director of the Centennial Campus Di TULLIO, Regina (Gina) IT Professional II, Information Technology 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 DORK, Thomas LTC, Facilities and Procurement DREW, Alysa, B.A. (University of Colorado, 1992) Interpreter Coordinator, Interpreting Services

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 ELLARD, Cheryl, B.A. (Iowa Wesleyan College, 1975) Administrative Assistant II, Enrollment Services ELTHORP. Michele A. Early Childhood Educator I, Child Development Center EMERY, Eura C., B.A. (University of Colorado, 1997) Administrative Assistant III, 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 ESPINOZA, Merlinda, M.A. (New Mexico Highlands University, 1980) Director Student Support Services, Student Success Services ESQUIBEL, Trisha, B.S. (University of Colorado, 1997) Office Manager I, Technical, Industrial and Service Occupations and Math, Sciences, and Health Sciences EUREK, Diana Faculty of American Sign Language EVANS, Sharron, A.S. (El Paso Community College, 1974) General Professional II, Purchasing FAMBROUGH, Scott Faculty of Electronics 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. Administrative Assistant III, Bookstore 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 FURAUS, Vicki M. Administrative Assistant III, Prior Learning Services GADPAILLE. Delnita M. Administrative Assistant III, Technical, Industrial and Services Occupations GAMBRELL, Pamela, B.S.N. (Metropolitan State College, 1985) Faculty of LPN Nursing GARCIA, Joseph, Juris Doctor (Harvard Law School, 1983) President GARRETT, Susan Administrative Assistant III, IC Fab Institute GARRETT-GRAUL, Ruth, B.A. (Georgia State University, 1976) Faculty of Interior Design GARZA, Marie Administrative Assistant II, Math, Sciences, and Health Sciences 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 GERTH, Carolynn Sales Assistant II, Bookstore GERTH, Michael, A.S. (Pikes Peak Community College, 2001) Administrative Assistant II, Enrollment Services GERVELL, Patricia, B.S.-Accounting (Regis University, 1997) Accounting Technician III, Financial Services

206

GETZ, Christine M., M.S. (Indiana State University, 1969) Associate Professor, Developmental Studies English Lab GIDDINGS, Larry A., M.A. (Humboldt State University, 1988) Faculty of Developmental English GOMEZ, Andrew LTC Trainee II, Facilities and Procurement 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, Technical, Industrial and Service Occupations GRAVES, Barbara, M.A. (University of Maryland, 1982) Faculty of English GREENE, Mary Administrative Assistant I, Facilities and Procurement 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 of Military Programs GUTIERREZ, Cynthia L., A.A.S. (Pueblo Community College, 1992) Administrative Assistant III, Enrollment Services HALLAM, Amy, B.A. (Campbell University, 2001) Administrative Assistant II, Distance Education HAMILTON, Will Police Intern, Public Safety HANENBERGER, Deborah Library Technician I, Learning Resources Center HANLEY, Michele, M.P.A. (University of Colorado, 1986) Director of Institutional Grants, Learning Enterprises 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 Procurement HAYDEN, Mary, M.A. (University of Colorado, 1992) Faculty of Geography HAZEL, Julie, B.A. (University of Colorado, 2000) Administrative Assistant III, Office of Vice President for Educational Services HEFLIN, Nanette General Professional II, Public Information HEGG, Carole Administrative Assistant II, Enrollment Services HEIM, Diane Accounting Tech I, Financial 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, Information Technology Support Services HENDERSON, Robert, M.A. (University of California at Los Angeles, 1970) Professor of Biology HENRICHS, 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, Office of Vice President for Administrative Services

HICKS, Rebecca, Masters (Marymount University, 1995) Faculty of English Language Institute HIDROGO, Laura Account Technician I, Financial Services 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, B.S. (Colorado Technical University, 2001) 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 III, Enrollment Services HOUGHTON. Carl Custodial I, Facilities and Procurement HOWARD, Dirk, M.B.A. (University of Denver, 1981) Vice President for Administrative Services Director of Business Services, Administrative Services HOWARD, Lia P., M.B.A. (University of Colorado, 1994) Assistant to the Vice President for Educational Services Director of Auxiliary Services HUDSON, Robert, A.A.S. (Pikes Peak Community College, 1990) Director of Culinary Program, Technical, Industrial and Service Occupations HUGHES, Anthony T. Sales Assistant III, Bookstore HUGHES, Ernest Computer Assisted Instruction Lab Coordinator, Information Technology Support Services HULSEY, Michelle, B.A. (University of Colorado, 1997) Administrative Assistant III, Office of the Vice President for Educational Services HURRELL, Dennis Materials Handler II, Bookstore HURRELL, Rockie General Professional II, Facilities and Procurement HUMPHREY. Twila Administrative Assistant III, Enrollment Services INZER, Lonnie D., B.S. (Colorado State, 1981) Co-coordinator of Fire Science Technology IVERSON, Larry W., M.E. (Colorado State University, 1987) Vocational Credentials: Faculty, Colorado Type C Certificate Faculty of Criminal Justice IZOLD, Mark, M.S. (Ohio State University, 1993) Faculty of Geology/Astronomy JAGER, Judith, M.B.A. (University of Colorado, 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 for Educational Services for Occupational Education, Director of the School Partnership Program JENKINS, Ronald, A.A.S. (Pikes Peak Community College, 1982) General Professional II, Non-Traditional Programs JENT, Tom Production IV, Publications and Printing JIROUS, Jennifer, M.B.A. (University of Wisconsin, 2000) 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

JONES, Floyd Pipe/Mechanic Trades I, Facilities and Procurement 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, Learning Enterprises 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 to the Vice President for Educational Services 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 KNUDSEN, Kay, M.A. (University of Denver, 1975) Technical Services Librarian, Learning Resources Center KRATHY, Christine Administrative Assistant II, Enrollment Services KRAUS, Marilyn A.A.S. (Central Community College, 1994) Custodial Intern, Facilities and Procurement KRAUSE, Steven Auto Service Technician I, Facilities and Procurement KROUGH, Cynthia D. Administrative Assistant I, Facilities and Procurement 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 Procurement 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 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 Administrative Services Dean of Student Success Services LEE, Rick, B.S. (Metropolitan State College, 1983) **Director of Enrollment Services** 

Vocational Credentials: Business Education Associate Vice President for Educational Services 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 Procurement 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 Resources Center LONG, Stephanie, A.A.S. (Pueblo Community College, 1993) Accounting Technician III, Financial Services LOPEZ. Arthur Grounds and Nursery I, Facilities and Procurement 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 Procurement LYLE, Nanette Administrative Assistant II, Facilities and Procurement I YONS, Geraldine Accounting Technician III, Financial Services LYTTLE, Annette B., M.A. (University of Michigan, 1988) Faculty of English MACIAS. Joe LTC Trainee, Facilities and Procurement 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 MAEZ. Robert LTC Trainee, Facilities and Procurement 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 MALONE, William, M.M. (New Zealand Conservatory of Music, 1980) Faculty of Music MALUIA, Vaalele Police Intern, Public Safety MARTINEZ, Nancy Office Manager I, Enrollment Services MCADAMS, Rieko, M.A., (University of Colorado, 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 State University, 1991)

LEHNER, Kathryn, M.B.A. (University of New Mexico, 1981)

Site Coordinator, Military Programs - Ft. Sill, Oklahoma

MCCULLOUGH, Michael, B.A. (Regis University, 2000) Sales Manager III, Bookstore MCCULLOUGH, Sherri, M.A. (Regis University, 2001) General Professional IV, Financial Aid MCDONNELL, Alicia Administrative Assistant II, School Partnership Program MCGOVERN, William IT Technician I, Information Technology 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 & Humanities and Social & **Behavioral Sciences** MCPHERSON, Fred W., A.S. (Pikes Peak Community College, 1981) Pipe/Mechanic Trades III, Facilities and Procurement MCUNE, Matthew, B.A. (San Jose State University, 1997) Multimedia Designer, Multimedia Center MEHLHOSE, Greg, B.S. (University of Missouri, 1999) IT Technician, Information Technology Support Services MEIKLEJOHN, Nancy, B.S. (University of Southern Colorado, 1980) Director of Pikes Peak Training and Consulting, Learning Enterprises MENDOZA, Tracy, B.A. (University of Southern Colorado, 1994) Administrative Assistant II, Admissions Center 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, 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) Faculty of Developmental English 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 MONAGHAN, Joanne Administrative Assistant III, Military Programs MORRISON, Karlene Administrative Assistant III, Enrollment Services MOYER. Junior LTC Trainee II, Facilities and Procurement MULLEN, Judv Administrative Assistant III, Communication & Humanities and Social & **Behavioral 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 III, Math, Sciences, and Health Sciences 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 Coordinator of Child Development Center NELSON, Troy, B.A. (Colorado College, 1989)

Assistant Director of Enrollment Services for Admissions

NEWMAN, Forrest, A.A.S. (Pikes Peak Community College, 1998) Pipe/Mechanic Trades I, Facilities and Procurement NUFER, Kenneth, B.S., B.M. (University of Phoenix, 1999) General Professional II (H.R. Specialist II), Human Resource Services OLGUIN, Danny Custodian I, Facilities and Procurement OLSEN, Richard J., A.A.S. (Pikes Peak Community College, 1986) Pipe/Mechanic Trades I, Facilities and Procurement 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, Center for Students with Disabilities ORNDORFF, John A., Jr. Police Officer I, Public Safety ORNDORFF. Laura Administrative Assistant III, Student Success Services ORTH, Christian IT Professional IV, Information Technology 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, 1995) Assistant Director, Information Technology 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 II, Math, Sciences, and Health Sciences 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 Procurement PRESHUN, Jennifer R. B.A. (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, 1986) Tutoring Coordinator, Instructional Support Services RANDALL, Margaretta LTC Trainee, Facilities and Procurement 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 RESZEL, Mary Administrative Assistant II, Enrollment Services REYNOLDS, Eva, B.S. (Regis University, 1974) General Professional VI, Facilities and Procurement 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, Information Technology Support Services RIDDLE, Ken, M.S. (Colorado Technical University, 2000) Faculty of Computer Information Systems

RILEY II, Leonard, M.P.A. (University of Colorado, 1991) Faculty of Political Science **ROBINSON**, Constance Administrative Assistant III, Math, Sciences, and Health Sciences 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 1972) Assistant Dean, Business Education ROHAN, Janet, M.S. (University of Northern Colorado, 1985) Faculty of Journalism ROLLINS, Diane Program Assistant I, Military Programs – Fort Carson ROSS, Paul O., A.A.S. (Pikes Peak Community College, 1997) Pipe/Mechanical Trades I, Facilities and Procurement RUACHO, Linda Custodian, Facilities and Procurement RUBEL, Kenneth W., B.A. (University of Colorado, 1992) IT Professional I, Information Technology Support Services RUSH, Chad E., A.A. (York College, 1990) Structural Trades I, Facilities and Procurement Sciences RUSSELL, Judith, B.A. (University of Northern Colorado, 1986) Early Childhood Educator I, Child Development Center RUYBALID, Andrew Custodian I, Facilities and Procurement SAGEN, Deborah A., M.P.A. (University of Texas at Austin, 1984) Executive Director of Institutional Advancement and Development SANCHEZ, George, B.S. (University of Southern Colorado, 2000) Executive Director of Marketing and Communications SANDERS, Myong S. Administrative Assistant I, Facilities and Procurement SANDOVAL, Virginia Administrative Assistant II, Facilities and Procurement SCHMIDT. Nick Administrative Assistant III, Bookstore SCHNEIDER, Larry L., A.A.S. (Southern Colorado State College, 1966) Vocational Credentials: Faculty, Colorado Type A Certificate Faculty of Diesel Power Mechanics 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) Coordinator, Career Services Center SHEARN, Jenna, B.A. (Cornell College, 1989) Faculty of Visual Communications SHIELDS, Ron, M.S. (University of Northern Colorado, 1997) Program Coordinator, Military Programs - Peterson Air Force Base SHELSTAD, Don Project Planner, Facilities and Procurement SHINN, Evelyn, M.A. (The Colorado College, 1981) Vocational Credentials: Type A Teaching Certificate Faculty of Health-Related Occupations, Area Vocational Program SIMCO, Cheryl, A.A. (Pikes Peak Community College, 1987) Administrative Assistant III, Learning Resources Center SIMPSON, Michael A., M.S. (University of Colorado, 1988) Faculty of Computer Science SINGELS, Michael G. Administrative Assistant II, Information Technology Support Services SMITH, Claudia Arts Professional I, Publications and Printing SMITH, Joann Administrative Assistant III, Financial Aid SMITH, John W., B.A. (Oklahoma State University, 1970) LTC Operations II, Facilities and Procurement 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 STANDRIDGE, Karen, Ph.D. (University of Denver, 1993) Professor of English STANSBERY, Michael, B.F.A. Theatre-Directing & Design (Ohio University, Department Chair of Performing Arts STEEN, Gordon Electrician I, Facilities and Procurement 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, 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; Social and Behavioral 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 Procurement TAYLOR, Kina, A.A. (Pikes Peak Community College, 1999) Administrative Assistant II, Enrollment Services TEAL, Jeanette, M.A. (Southern Illinois University of Carbondale, 1987) Coordinator, English Language Institute 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 Resources Center THEARD, Cynthia Administrative Assistant III, Testing Center THORSON, Kathleen M. Administrative Assistant II, Technical, Industrial and Service Occupations THRELFALL, Albert L., M.S. (University of Alabama at Birmingham, 1991) Professor of Biology TODD, Michael, A.S. (Pikes Peak Community College, 1985) Multimedia Technical Design Specialist, Multimedia Center TOLLE, Audrey, M.S. (University of North Texas, 1993) Head of Reference Librarian, Learning Resources Center TOLLIVER, Gary Pipe Mechanic Trades I, Facilities and Procurement TONER. Cici Administrative Assistant II, Enrollment 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 & Humanities and Social & Behavioral Sciences TRIPLETT, Jennifer, A.A. (Pikes Peak Community College, 1999) Administrative Assistant III, Career Services Center TRUJILLO, Raymond Custodian I, Facilities and Procurement 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 VETTER, Karla, B.S. (Eastern Kentucky University, 1980) Production Manager, Learning Enterprises VIGIL, Alfred General Labor I, Facilities and Procurement VIGIL. Garv General Labor II, Facilities and Procurement VIGIL. Glenda J. Administrative Assistant II, School Partnership Program 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 Procurement WATSON, Michael, A.A.S. (Pikes Peak Community College, 2000) IT Technician I, Information Technology Support Services WEIXELMAN, Susan, M.A. (University of Colorado, 1975) Vocational Credential: Faculty Faculty of Early Childhood Education WELLESLEY, Fay Accounting Technician III, Financial Services WELLS, David, B.S. (University of Colorado, 1999) Emergency Medical Services Coordinator, Math, Sciences, and Health Sciences WERMERS, Mary Ann, R.N., M.S.N. (St. Louis University, 1970) Nursing Program Coordinator, Math, Sciences, and Health Sciences WHITEMAN, Sylvia, A.A.S. (Pikes Peak Community College, 1993) Administrative Assistant III, Business Education WIDNER, Bryan Police Intern, Public Safety 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, Military Programs - Little Rock AFB WITHEROW, Julie F., M.A. (Ball State University, 1978) **Director of Distance Education** Faculty of English WITT-AGNEW. Sheila Administrative Assistant II, Distance Education 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, Information Technology Support Services

## State Board for Community Colleges and Occupational Education

Greg Romberg, Evergreen, Chair Jeannie G. Reeser, Thornton, First Vice Chair Lena A. Elliott, Grand Junction, Second Vice Chair Mary Buckley, Denver Patricia A. Erjavec, Pueblo Barbara McKellar, Castle Rock Leonel Silva, Centennial Robert E. Smith, Jr., Longmont Andrew B. "Andy" Wyatt, Lamar

### Advisory Members:

Ron Greenwell – SSAC Interim, Pueblo Esther Williams – SFAC, Pueblo

### Community Colleges of Colorado

Dr. Joe May, President

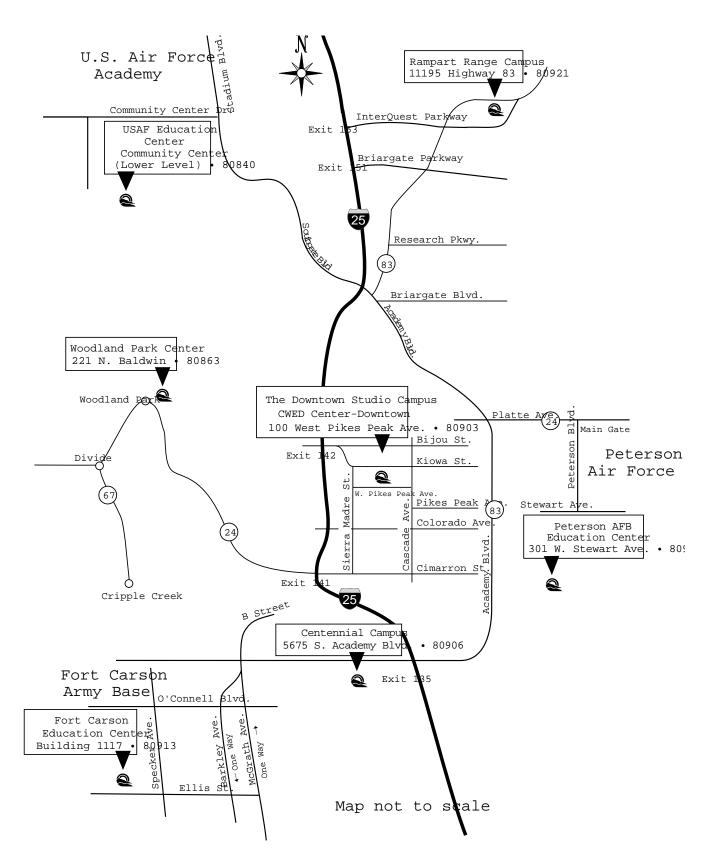
### Pikes Peak Community College Advisory Council

George Bolte, Chairperson Susan Campbell Terry R. Harris William H. Hudson Laurie L. Maxson James A. Null Bill Schuck

### Pikes Peak Community College Catalog Team

Editing Jane Abbott Curriculum Julie A. Gonzales Publication Coordination George Sanchez and Mark Day Layout and Graphic Design Claudia A. Smith Cover Design Dina Snow, Azteca Design

### CAMPUS MAP



212

## CAMPUS DIRECTORY

CAMPUS DIRECTORY	Centennial 576-7711	Downtown Studio 527-6000	Rampart Range 538-5000
	A = Aspen Bldg. B = Breckenridge Bldg. C = Student Center F = Faculty Bldg.		N = North S = South E = East W = West
	Room • Phone:	Room • Phone:	Room • Phone:
Aardvark's Pantry	A-211 • 540-7281		
Administrative Services	B-309 • 540-7568		
Administrative Services, Vice President	A-216 • 540-7566		S-202 • 538-5551
Area Vocational Program (AVP)	A-220 • 540-7240		
Art Gallery		123a • 527-6000	
Bookstore	B-205 • 540-7569		N-101 • 538-5569
Breckenridge Conference Center	B-205d • 540-7218		
Business Education Division	F-200 • 540-7258		E-213 • 538-5200
Campus Directors	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-101 • 540-7608	Front Desk • 527-6000	S-102 • 538-5126
Catering	(all campuses) 262	2-4485 • email: catering@ma	il.uccs.edu
Child Development Center	A-205 • 540-7215		
Child Welfare Training Institute		202 • 527-6054	
Communications and Humanities Division	F-200 • 540-7300		W-119 • 538-5300
Computer Access Center	A-119a • 540-7673		
Computer Laboratory	A-300 • 540-7502	116 • 527-6009	E-203 • 538-5280
Credit for Prior Learning	A-106 • 540-7227		E-213 • 538-5277
Deaf Studies Division	A-312 • 540-7180		
Developmental Studies Division	F-200 • 540-7339		W-119 • 538-5340
Developmental Studies Lab	A-316 • 540-7337		
Disabilities, Center for Students with	A-115 • 540-7128		N-204 • 538-5075
Distance Education	A-209 • 540-7538		
Educational Services, Vice President	A-229 • 540-7218		S-202 • 538-5551
Emergencies	A-100 • 540-7111	Front Desk • 527-6000	N-106 • 538-5111
English Language Institute	A-324 • 540-7047		
Enrollment Services Center	A-106 • 540-7119	Front Desk • 527-6000	S-102 • 538-5119
Admissions Center	A-107 • 540-7113	Front Desk • 527-6000	S-102 • 538-5113
Financial Aid	A-107 • 540-7089		S-102 • 538-5120
Records/Registrar	A-106 • 540-7119	Front Desk • 527-6000	S-102 • 538-5119
Veterans Affairs	A-105 • 540-7121		S-102 • 538-5121
Ethnic Student Enrichment Program	A-107 • 540-7132		
Facilities and Procurement	B-229 • 540-7628		N-107 • 538-5528
Financial Services	A-101 • 540-7600		S-102 • 538-5125
First Aid Room	A-100 • 540-7111	Front Desk • 527-6000	N-104 • 538-5112
Fitness Center	A-262 • 540-7443		
Food Services	B-205 • 540-7072		W-103 • 538-5362
Foundation Office	A-216 • 540-7554		
Gymnasium	A-262 • 540-7447		
Human Resource Services	A-118 • 540-7557		
Information Center	C-202 • 540-7108	Front Desk • 527-6000 V	Vest area, first floor
Institutional Advancement and Development	A-216 • 540-7554		
Institutional Research	B-309 • 540-7623		

## CAMPUS DIRECTORY

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:
Information Technology Support Services	A-111 • 540-7584		W-108 • 538-5360
Integrated Circuit Fabrication (IC Fab) Institute	B-208 • 540-7061		
International Education	A-229 • 540-7202		S-202 • 538-5551
Interpreter Preparation	A-312 • 540-7180		
KEPC Radio	A-153 • 540-7489		
Language and Culture Laboratory		115 • 527-6000	E-115 • 538-5300
Leadership Suite			S-202 • 538-5551
Learning Enterprises		Suite 200 • 527-6060	
Learning Resources Center (LRC)	A-201 • 540-7500		N-201 • 538-5500
Learning Resources Center (LRC) Computer Lab	A-201 • 540-7502		N-201 • 538-5502
Mailroom	B-229 • 540-7645	Front Desk	N-105 • 538-5532
Marketing and Communications	A-216 • 540-7617		
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		
New Student Scheduling Center	A-117 • 540-7216	121 • 527-6026	S-101 • 538-5510
NewsLetter	A-216 • 540-7566		
Pikes Peak News	A-307 • 540-7480		
Pikes Peak Regional Law Enforcement Academy	F-300 • 540-7347		
Post-Secondary Enrollment Options	A-220 • 540-7234		
President's Office	A-216 • 540-7551		S-202 • 538-5551
Public Safety - Emergencies	A-100 • 540-7111	Front Desk • 527-6000	N-106 • 538-5111
Public Safety - Administration	A-100 • 540-7162	Front Desk • 527-6095	N-106 • 538-5112
Publications and Printing	B-234 • 540-7643		
Purchasing	B-229 • 540-7661		
Rampart Range Room			W-101/102 • 538-5364
Recreation and Sports	A-262 • 540-7445		
Re-Entry Program	A-107 • 540-7113		
School Partnership Program	A-220 • 540-7238		
Seminar Room			W-107 • 538-5366
Social and Behavioral Sciences Division	F-200 • 540-7300		W-119 • 538-5300
Student Government	C-206 • 540-7163		S-207 • 538-5164
Student Life	C-202 • 540-7105		S-207 • 538-5162
Student Center Meeting Room	C-211 • 540-7105		S-205 • 538-5166
Student Services Administrative Office	A-115 • 540-7095		
Technical, Industrial and Service Occupations Division	F-300 • 540-7348		
Television Station-ITFS (WLX-245)	A-209 • 540-7538		
Testing Center	A-117 • 540-7115	115 • 527-6000	S-101 • 538-5115
Theatre (Box Office)	A-112 • 540-7418		
Tutoring Program	A-308 • 540-7129		N-204 • 538-5075
Videoconference Room	A-201j • 540-7342		W-106 • 538-5370
Videoconferencing Services	A-111 • 540-7516		
Writing Center	A-300a • 540-7769	113 • 527-6000	N-202 • 538-5521

214

## INDEX

A

Academic Fresh Start 18
Academic Honesty 22
Academic Probation/Suspension/
Dismissal 17
Academic Requirements 37
Academic Standards 16
Academic Subjects and Programs 36
Academies, Institutes and 38
Accountability and Assessment 18
Accounting 60,123,127
Accreditation 3
Activities and Events 34
Administrative Services Staff, College 204
Admission Application 13
Admission Information 10
Advancing Academic Achievement 38,128
Advising/New Student Scheduling Center 28
Advisory Council
AIDS Policy
Alternative Delivery Methods 40
American Sign Language
Animals on Campus
Anthropology
Application for Admission
Application for Certificate or Degree
Architectural Drafting
Architecture and Construction
Technology
Area Vocational Program
Art
Art for Artisans
Articulation Agreements
Articulation Agreements
Assessment (testing) 10,42 Associate of Applied Science Degree
Associate of Applied Science Degree
(AAS)
Associate of Arts Degree (AA) 44,122 Associate of Arts Degree - Business Option
(AA)
Associate of General Studies Degree
(AGS)
Associate of Science Degree (AS) 47,122
Astronomy
Athletics
Audit
Auto Collision Repair 64,133
Automotive Technology 65,134

## B

Baking (Culinary Arts)
Biology
Books
Broadcasting - See Radio, Television,
Telecommunications
Business AA Option 49
Business Administration
Business Education 123,138
Business Management - See Management
Business Foundations 67,71



Community College of Colorado	211
CCC-Online Degree Programs	
Calendar, College	8
Campus Directory	213
Career Planning	
Career Services Center	
Career & Technical Education Programs.	
Catalog Production Team	211

Centennial Campus       7,212         Center for Students with Disabilities       26         Certificate of Achievement       55         Certificate Requirements       55         Change of Major/Program       16         Changes to Catalog       32         Chemistry       71,138         Child Development Center       26         Cisco Networking Academy       39         Cisco Certified Network Associate       72         Class Schedule       10         Clubs       31         College Advisory Council       211         College Suidlings, Use of Facilities       6         College Level Equivalency Program       41         College Study Skills-See Advancing Academic       41	8558888920118
Achievement Common Course Descriptions 126	3
Communications and Humanities	, ,
Community Services	,
Complaints, Student 22	<u>'</u>
Computer Access Center 28	3
Computer Aided Drafting 72	2
Computer Information Systems 72,139	)
Computer Networking 123,143	3
Computer Science 73.143	3
Conduct in College Buildings	3
Conduct, Standards of 20	)
Copy Center	ì
CORE Curriculum $(\Box)$ $44.126$	ś
CORE Curriculum (□) 44,126 Corporate and Business Services	, ,
Corporate and Business Services	) 
Costs	
Course Descriptions 126	)
Course Fees11	
Course Numbering System 126	5
Course Considerations 37	7
Credit by Examination 16	5
Credit for Prior Learning 41	
Criminal Justice 74,123,144	ł
Culinary Arts 75,147	
Customer Service	3



Dance	148
Days of Enforcement	
Deaf Prep	38 149
Deaf Studies	58 213
Degree & Certificate Criteria	. 00,210
Degree Eligibility	
Degree Requirements	45
Dental Assisting	76 150
Developmental Courses	126
Developmental English,	120
Mathematics, Reading	38
Developmental Studies	
Diesel Power Mechanics	65 151
Disciplinary Actions	20
Disclosures, Required	23
Dismissal	
Distance Education Independent Study	40
Distance Learning Options	40
Downtown Studio, The	7 212
Downtown Studio Gallery	,_12
Drafting	151
Drug and Alcohol Policy	23
- the second	

Early Childhood Professions 77,1	23,152
Eating or Drinking	23
Economics	

Education	79 154
Educational Programs	10,101 60
Educational Services Staff	00
	204
Electives - See Degree Requirements	
Electronic Commerce	
Electronics Technology	79,154
Emergency Medical Services	30,81,155
Emergency Medical Technician-Basic	
Emergency Medical Technician	
-Basic Refresher	81
Emergency Medical Services	
-First Responder	01
	01
Emergency Medical Technology	
-Paramedic	81
Employment Opportunities	
Energy Management and Control Syst	ems
Technology	81
English	82.156
English, Developmental	156
English Language Institute	
Entrepreneurial	60 92
	09,02
Environmental Studies Track	
Ethnic Student Enrichment Program	26,29



Facilities Maintenance Technology	
Facilities, Use of College	6
Faculty and Staff	203
Farrier Science	. 85,159
Fees	
Financial Aid	12
Financial Services	69,85
Firearms on Campus	24
Fire Science Technology	
Fitness Center	31
Food Management - See Culinary Arts	
Foreign Language	86
Fort Carson 8	,41,212
Four-Year Colleges/Universities (Visitati	
Program)	31
Franklin University	124
French	161



General Education - See Degree	
Requirements	
Geography	
Geology	87,162
German	162
Grade Changes	
Grading Options	17
Grading System	16
Graduation, Application for	18
Grants	12
Grievances, Student	22



High School Partnership	35
High School Students, Current	35
High School Student Records	35
History	
History of the College	6
Honor Rolls	
HOPE Tax Credit	12,32
Hospitality	. 69,88,163
Humanities	89,164
_	



Identification Cards, Student	31
Independent Study	40,126
Information Technology Education	164
Information Technology	
Support Services	29
Institutes and Academies	
Insurance and Risk Management	
ő	



Integrated Circuit Fabrication	
Interior Design	
Interlibrary Loan Service	
International and Multicultural	
Education	34
International Business	
International Students	10
Internet Courses	40
Internet Degree Programs	
Interpreter Preparation	91,167
Italian	168

#### CO D

Japanese 168	
Job Placement/Self Marketing 28	
Journalism	
and a start of the	

### K.

. 34

KEPC Radio - 89.7 ..... Korean ..... 170

### 

Landscaping Technician	93,170
Latin American Studies	
Law Enforcement Academy	39,105
Learning Assistance Center	30
Learning Disabilities Support Services	
Learning Enterprises	7,34,212
Learning Resources Center	
Legal Assistant	94,171
Library	29
Literature	
Load, Maximum Course	16
Loans	12
Locations and Facilities	6
LPN	102
LPN Advanced Placement	103

## M

Machining Technology	95,172
Major, Change of	
Management 70	
Maps, Campus	212
Marketing 70	),96,174
Math Lab	37
Mathematics	. 97,176
Mathematics, Developmental	
Mathematics, Sciences and Health Scie	
Programs	58
Maximum Course Load	
Medical Office Technology	. 97,177
Memory	178
Military Active Duty (tuition)	
Military Programs	29,41
Military Sites	8,212
Mission Statement	
Multimedia Instructional Design Center.	
Music	179

## N

Natural Resource Technology	99,180	
Networking Technology		
New Student Scheduling Centers	10	
New Students		
Nondiscrimination Statement	3	
Nursing	102,184	
Nutrition	186	

## 0

Office Administration	70,104,186
Office Training Fast Track	104

Officers of the College	204
Off-Campus Courses	
Olympic Training Center	11
Online Courses	40
Open Entry/Open Exit Courses	40
Organizations, Student	31
Orientation Program for New Students	30
Outreach Locations	6



## R

Radio, Television,
Telecommunications
Rampart Range Campus 7,212
Reading, Developmental 193
Readmit Students 10
Real Estate Institute 39
Real Estate Program 70,110,193
Records
Recreation/Sports Clubs 31
Re-Entry Program 30
Reference and Research Service
Refunds 11
Registration
Report of Criminal Offenses 25
Required Disclosures 23
Residency Classification Appeals11
Restricted Attendance 23
Running Start Program-See Post-Secondary
Enrollment Options
Russian 193



S/U (grade)	16,17
Schedule, Class	
Scholarships	12
School Partnership Program	35
Security Report	23
Selected Topics Courses	
Seniors (senior citizens' tuition)	11
Services for the Community	33
Services for Students	
Sexual Harassment	23
Small Business Development Center	r 35
Smoking (policy)	24

Social Sciences Programs Social Services Technician Social Work	. 110,194
Sociology	112 194
Southern Colorado Educational	,
Opportunity Center	30
Southwest Studies	112
Space Science	
Spanish	195
Specialized Courses	37
Speech	114,196
Sports Clubs	
Staff and Faculty	203
Standards of Conduct	
State Board for Community Colleges a	
Occupational Education	
State-Wide Common Course	
Descriptors	126
Student Activities	
Student Activity Fees	
Student Center	
Student Clubs and Organizations	
Student Complaints/Grievances	22
Student Conduct	17
Student Disciplinary Procedure	20
Student Government	31
Student Life	
Student Records	
SWEEP - See Credit for Prior Learnin	q
Study Skills-See Advancing Academic	
Áchievement	
Supervision	71,114
Support Programs (for students)	
Suspension	17
·	

## Ţ

Teacher Education Preparation	56	
Technical, Industrial, and Service		
Occupations Programs	59	
Technical Writing	115	
Telecourses	40	
Telelearning	40	
Television Čourses	40	
Testing - See Assessment		
Testing Center	30	
Theatre 35,1	16,196	
Traffic Regulations	24	
Transfer to PPCC	16	
Transfer Programs	6	
Transfer Students	10	
Travel Industry	198	
Tuition and Fees	11	
Tutoring Services-See Learning Assistant	се	
Center		

## U

Upholstery	. 116,198	
U.S. Air Force Academy	8,41,212	

## V

Vehicle Registration - See Student Activity
Vehicle Regulations - See Parking
Veterans Affairs
Vision Statement
Visitation Program (Four-Year Colleges/
Universities 31
Visual Communications 117,198
Vocational Programs 6
W

Web Technology	201	
Welcome		
Welding	119,202	
Work Experience Courses	126	
Workforce Center, PPCC	28	

