

CATALOG '08-'09



# JOB*S*

**INSIDE**

IMAGE IS EVERYTHING



SHARPEN YOURS HERE

PIKES PEAK COMMUNITY COLLEGE

CATALOG 2008/2009

# Thanks for your interest in Pikes Peak Community College.

From start to finish this catalog will be your guidebook.  
It contains everything you need to know about PPCC.

If you would like to know more about the college or would like a tour  
of any of our three campuses, just give our Enrollment Services Center  
a call at 540-PPCC (7722) or toll free at 866-411-PPCC.

## LOCATIONS

### CENTENNIAL CAMPUS

5675 South Academy Boulevard  
Colorado Springs, CO 80906

### DOWNTOWN STUDIO CAMPUS

100 West Pikes Peak Avenue  
Colorado Springs, CO 80903

### RAMPART RANGE CAMPUS

11195 Highway 83  
Colorado Springs, CO 80921

### OTHER COLORADO SITES

Fort Carson • (719) 502-4200  
Peterson Air Force Base • (719) 502-4300  
U.S. Air Force Academy • (719) 333-0919

**(719) 502-2000 OR (800) 456-6847**

**TTY [for hearing impaired] (719) 502-3333**



## DEAR STUDENTS:

Welcome to Pikes Peak Community College! I am delighted that you have chosen to continue your education at PPCC, and I believe that you will find you have made an excellent choice. Your success is our top priority, and we make a solid commitment to provide you with the highest quality education and best customer service experience available.

Whether you plan to transfer to a university to earn a higher degree or pursue career technical training to achieve a rewarding career, PPCC is a great place to get a top-notch education. Because we believe that people are our most important asset, we put a strong emphasis on hiring and nurturing the best and brightest faculty. At PPCC, 100% of our Arts and Sciences courses are taught by qualified faculty with a Master's Degree or Doctorate, and our career and technical courses are taught by fully credentialed faculty with extensive field experience "in the trenches" in their industry.

The results are apparent in the classroom, where they will spark your fascination, challenge you to stretch your limits and discover more, and ignite your passion and enthusiasm for learning. Plus, our small classes give you the personalized attention you need to truly excel, and provide greater learning opportunities through direct interaction with your instructor and fellow classmates. This all translates into a better quality education for you, and great preparation for your future achievements.

The proof our academic excellence can be seen in the success of our graduates. Business and industry leaders support our career and technical programs through curriculum development, equipment donations, mentoring and student internships, and they compete to hire our graduates. At the university level, our graduates are actively sought after for transfer, because the records show that our students do as well or better than students who begin their education at a four-year school. In fact, more than 25% of the students at the University of Colorado at Colorado Springs are PPCC transfers.

You are our number one priority, and your academic success is a shared goal of the entire faculty and staff. Our aim is for you to achieve the lifelong goals that you have set for yourselves. Best wishes for a successful year.

Sincerely,

A handwritten signature in black ink that reads "Anthony G. Kinkel". The signature is written in a cursive style with a large, looping initial "A".

Anthony G. "Tony" Kinkel, Ed.D.  
President



# 8 Easy Steps to Registration

## It's As Easy As One...Two...Well, You Get The Idea.

**IMPORTANT:** Every student who receives public benefits MUST prove their lawful presence in the United States. There are three ways this can be done:

1. by signing up and being verified by the Colorado Opportunity Fund (COF)
  2. by verifying citizenship through the financial aid application process,
  3. or through the affidavit process.
- See Colorado House Bill 1023, pg. 15.

**1. COLLEGE OPPORTUNITY FUND (COF).** Colorado has changed the way it funds Higher Education. To qualify for affordable in-state tuition, you must sign up for the College Opportunity Fund. It's an easy one-time thing. Just go to [www.collegeincolorado.org](http://www.collegeincolorado.org), and you can sign up in just minutes. Don't have a computer? All of our Enrollment Services Centers have computers set up for your convenience. **IMPORTANT:** If you don't have Colorado driver's license or a Colorado ID you may not qualify. See pgs. 6 & 14 for more details.

**2. APPLY.** It's simple. You get an application, you fill it out and send it in. No fuss, no muss, no messy cleanup. Application forms are available at any location, and online at [www.pgcc.edu](http://www.pgcc.edu). You can also get one through the mail if you call 719-540-PPCC. Admission is open to anyone 16 or older, and the best part is, there's no fee.

**3. FINANCIAL AID.** Getting help is easier than you think. The trick is getting your paperwork in early. All it takes to apply for financial aid, including grants, loans, scholarships and work study programs, is a single application form. But the earlier you get your application in, the better your chances to be considered for all available sources of financial assistance. So get started today at [www.fafsa.ed.gov](http://www.fafsa.ed.gov). For more information, contact your Financial Aid Advisor or call Enrollment Services at 719-540-PPCC.

**4. PLACEMENT.** This is one test everybody aces. It's a quick evaluation of your basic skills that helps your advisor, and you, know where your college education should start. If you have ACT or SAT scores already, or if you've taken college classes before, you might not need a placement test. But to be on the safe side, contact the Testing Center at 719-502-3370.

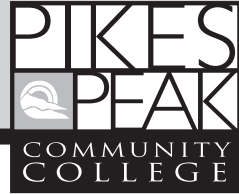
**5. ORIENTATION.** Sound familiar? Here's where you learn all about the programs, services, and other resources that'll help you succeed on campus. All students are encouraged to participate. If you are seeking an AA or AS degree, you are required to attend an orientation before you register. Because we schedule our orientation sessions for specific times and places, reservations are a must. Call 719-540-PPCC for your best availability. Orientation is also available online at [www.pgcc.edu/orientation](http://www.pgcc.edu/orientation).

**6. CAREER PLANNING & ADVISING.** And now for the big question: "Why are you here?" Come to Career Planning & Advising for help figuring out your career goals and mapping them to the PGCC academic plan that fits you best. Check out career counseling to learn about your career options, and then get help with choosing your classes. If you're a new student enrolled in a degree/certificate program, you'll also be assigned your personal faculty program advisor. He or she can be your new best friend as you head toward graduation – they know all the ins and outs of your major, and will help guide your choice of classes in future semesters. For more information, call 719-502-3232.

**7. REGISTER.** Your application's on file, you've completed your placement test, and you've spoken to an advisor at the Career Planning & Advising Center. What's next? Registration! To register, visit us online at [www.pgcc.edu](http://www.pgcc.edu), or stop by any campus location. Questions? Call 719-540-PPCC.

**8. PAY.** Financing your future. When the only thing standing between you and a college degree is your wallet, you'll be surprised how good it feels to write out your first tuition check and complete your registration. Payments may be made by check, money order, or credit card, and you can pay in person, online, or on the telephone registration system. For information, call 719-502-2444.

# Three Convenient Locations



**Centennial Campus**  
5675 S. Academy Boulevard

**Downtown Studio Campus**  
100 West Pikes Peak Avenue

**Rampart Range Campus**  
11195 Highway 83

Map not to scale

Pikes Peak Community College has three campuses to serve the north, central, and south areas of the Pikes Peak Region. Each of the three full-service campuses offers a full array of academic programs, and enrollment and student services. Rampart Range Campus, the newest facility, houses health profession educational programs. The Downtown Studio Campus is a center for the fine arts and dance, and Centennial Campus offers all academic disciplines as well as the occupational and technical programs.

866.411.PPCC  
Toll-Free

540.PPCC

502.2000  
General Information

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

# CONTENTS

Campus Maps .....	4
All About PPCC.....	7
Getting Started (Admission) .....	11
Academic Standards (Policies) .....	17
Student Conduct .....	22
Services for Students .....	31
Services for the Community .....	38
Educational Programs .....	40
Degree and Programs Requirements .....	47
Course Descriptions .....	115
College Administrative Staff .....	203
Faculty and Staff .....	204
Campus Directory .....	211
Index.....	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 all three campuses and on the PPCC website. 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, national origin, sex, age, sexual orientation, or disability in admissions to, access to, treatment of persons, or employment in its educational programs or activities. Pursuant to Title IX of the Educational Amendments of 1972 (Title IX), Section 504 of the Rehabilitation Act of 1973 (Section 504), the Americans with Disabilities Act of 1990 (ADA), Title VI of the Civil Rights Act of 1964 (Title VI), and The Age Discrimination Act of 1975 (Age Discrimination) the college has established grievance procedures for students and employees. Specific complaints of alleged discrimination under Section 504 or the ADA (disability) or Title IX (sex, gender, or sexual harassment) or Title VI (race, color, or national origin), or Age Discrimination (age) should be referred to the Compliance Officer, 5675 South Academy Boulevard, Room C-204, Colorado Springs, Colorado 80906, (719) 502-2600 or TTY (719) 502-3333; or the Office for Civil Rights, U.S. Department of Education, 1961 Stout Street, Denver, Colorado 80294, (303) 844-5695.

# COLORADO HAS CHANGED THE WAY IT FUNDS HIGHER EDUCATION

YOU MUST APPLY FOR THE COLLEGE OPPORTUNITY FUND NOW,  
OR YOU'LL PAY MORE OF YOUR TUITION BILL.



## USE IT. DON'T LOSE IT.

**What is it?** The College Opportunity Fund or "stipend" is money that the state has set aside to invest in your education. In the past, the state gave this money directly to the colleges. Now, you authorize the stipend to be paid by the state on your behalf to a Colorado public or participating private college or university of your choice.

**What if you don't apply?** Then, you'll actually pay your total in-state tuition bill. The stipend will reduce the share of in-state tuition that you pay. If you don't use it, you will end up paying more tuition than other in-state students who take advantage of the stipend.

**Who is eligible?** Undergraduate students who are eligible for in-state tuition, and who apply, are admitted, and enrolled at a state or participating private institution of higher education beginning in the 2005-2006 academic year.

**How much is the stipend?** It will vary. The amount will be determined each year by the Colorado Legislature. Currently it is estimated to be \$2,600 per year\* for full-time undergraduate students at public institutions.

\*Currently estimated at \$89 per semester credit hour. Students at private colleges must be Pell-eligible. Funding for private colleges varies.

To apply, go to

# [www.ppcc.edu](http://www.ppcc.edu)

Or for more information, call 540-PPCC  
or 1 (866) 411-PPCC  
TTY (for hearing impaired) (719) 502-3333

# ALL ABOUT PPCC

History of the College .....	8
Vision Statement .....	8
Mission Statement.....	8
Required Disclosures .....	8
Transfer Programs .....	8
Career and Technical Education Programs.....	8
Locations and Facilities .....	8
Come See Us.....	8
Use of College Facilities .....	8
College Calendar .....	10



# ALL ABOUT PPCC

## History of the College

Pikes Peak Community College was established by a legislative act in 1968 and was then called El Paso Community College. When the college opened its doors in September, 1969, more than 800 students attended classes in rented buildings in Old Colorado City on the west side of town. Enrollment grew rapidly, and the need for permanent facilities soon became apparent. The full-service Centennial Campus was built at the south end of Colorado Springs in 1978. In that same year, the name of the college was officially changed to Pikes Peak Community College.

The Pikes Peak Region has experienced significant population growth during the last several decades, driving the community need for expanded educational services. This demand resulted in the opening of The Downtown Studio Campus in central Colorado Springs in 1986, and the Rampart Range Campus in the north end of the city in 1998.

Today, PPCC has grown and expanded to become the largest postsecondary educational institution in Colorado Springs and offers the most widely accessible and affordable education in the region. Serving the residents of El Paso, Teller, and Elbert Counties, PPCC offers more than 125 programs of study in transfer liberal arts and sciences areas and career and technical training.

Currently, Pikes Peak Community College helps over 16,000 people each year begin their education, advance their careers, and enrich their lives.

## Vision Statement

At Pikes Peak Community College, we will unite in our focus on individual student success. Students will choose our College because of our supportive learning environment, enthusiastic and respected faculty and staff, and our ability to meet our diverse community's varied educational needs.

## Mission Statement

Our mission is to provide high quality educational opportunities accessible to all, with a focus on student success and community needs, including

- occupational programs for youth and adults in career and technical fields,
- two-year transfer educational programs to qualify students for admission to the junior year at other colleges and universities, and
- a broad range of personal, career, and technical education for adults.

## 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 page 29
- the consequences of drug and alcohol violations listed on page 26
- the manner in which the College calculates refunds and repayments listed on page 15 and as stated in the Financial Aid Handbook available in the Enrollment Services Centers or online at [www.pcc.edu](http://www.pcc.edu).
- the graduation rates for the College are available by request through the Office of Strategy Management at 502-2023.

## Transfer Programs

Students can complete the first two years of a four-year bachelor's degree at Pikes Peak Community College and then transfer to a four-year public institution as a junior by adhering to the Colorado Community College System 60+60 Bachelor's Transfer Program. Additionally, Pikes Peak Community College has transfer agreements with a variety of private four-year institutions. Students should consult with their faculty advisors during their first semester or as early as possible for detailed information about transfer.

## 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 established three full-service campuses in Colorado Springs. The Centennial Campus, the Downtown Studio Campus, and the Rampart Range Campus provide educational services to the south, central, and north areas of the city.

Each full-service campus is a one-stop center for students, and includes an Enrollment Services Center, providing admissions, financial aid, records, Veterans affairs, and cashier services. Each campus offers a bookstore, library services, student life and student government offices. Additionally, each campus provides Student Support Services, including student scheduling and academic advising, Learning Assistance Center/Tutoring, career services, and services for students with disabilities. Each campus also includes a Testing Center. Public bus service reaches the Downtown and Centennial campuses from all parts of the city. There is currently no bus service to Rampart Range Campus.

Other sites around the region include education centers at Fort Carson, Peterson Air Force Base, and the U.S. Air Force Academy.

## Come See Us

We welcome visitors to Pikes Peak Community College, and we are happy to show prospective students around our campuses. To arrange for a tour of any of our locations, call us at (719) 540-PPCC or toll free at (800) 456-6847, ext. 3000.

## Use of College Facilities

Outside groups that want to use a college facility should contact the Campus Director at Centennial Campus at 502-2333. Facilities used by in-house clubs and groups are scheduled on a space-available basis at no charge unless special security or maintenance service is required.

**CENTENNIAL CAMPUS**

5675 South Academy Boulevard  
 Colorado Springs, CO 80906  
 (719) 502-2000, (800) 456-6847  
 TTY (for hearing impaired) (719) 502-3333

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, bookstore, financial aid, records, testing, Veterans affairs, tutoring, disabled student services, and career services.

The Centennial Campus provides a library, theatre, lecture halls, 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, tennis courts, soccer field, and running track. The Campus Center houses the Campus Life Office, Student Government, the Grove, meeting rooms and more.

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 Office of Accommodative Services and Instructional Support (OASIS) by calling 502-3333.

**DOWNTOWN STUDIO CAMPUS**

100 West Pikes Peak Avenue  
 Colorado Springs, CO 80903

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, bookstore, cashier, career services, financial aid, records, registration, testing, tutoring, campus life and activities, and other services for students. The Downtown Studio Campus includes art and dance studios, an art gallery, and a performance area.

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 Paralegal/Legal Assistant, Interior Design, Architecture, Music and Dance Programs make their home at the Downtown Studio Campus. Courses are conveniently scheduled from 8 a.m. to 10 p.m. Monday through Friday and from 8:30 a.m. to 4:00 p.m. on Saturday.

The Gallery at the Downtown Studio Campus has 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. The garage's entrance is just across the street from the Downtown Studio Campus beneath the Antlers Hilton Hotel. Campus users validate parking on campus in the first floor, north building, Student Commons area. Parking is also available at metered spaces on the street.

**RAMPART RANGE CAMPUS**

11195 Highway 83  
 Colorado Springs, CO 80921

The newest location of Pikes Peak Community College, Rampart Range Campus, is conveniently located in northern Colorado Springs. The campus provides convenient access via the InterQuest Parkway Exit (153) off I-25.

A full array of support services and programs is available to students, including admissions, bookstore, career services, cashier, accommodative services and instructional support, financial aid, food services, library, new student scheduling center, placement testing, records, student government, child development center, and campus 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. Computerized lab equipment, a CD ROM library, and a fiber optic network are part of the instructional technology offered at this 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.

**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 those of 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) 502-4200

**Peterson Air Force Base**

Education Center  
 301 West Stewart, Building 1141, Room 112  
 PAFB, CO 80914  
 (719) 502-4300

**U.S. Air Force Academy**

Education Services Center  
 Lower Level – Community Center  
 5136 Red Tail Drive  
 USAFA, CO 80840  
 (719) 333-0919

# COLLEGE CALENDAR

## Summer 2008

### Standard Session (10 weeks)

April	7	M	Early Registration Begins
April	14	M	Registration Begins
May	26	M	Closed–Holiday
May	27	T	Classes Begin
July	4	F	Closed–Holiday
August	3	U	Classes End

### Bi-semester (5 weeks)

May	27	T	Classes Begin
June	29	U	Classes End
June	30	M	Classes Begin
July	4	F	Closed–Holiday
August	3	U	Classes End

## Fall 2008

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

April	7	M	Early Registration Begins
April	14	M	Registration Begins
August	18	M	Classes Begin
September	1	M	Closed–Holiday
September	2	T	Open–No Classes
November	26	W	Open–No Classes
November	27	R	Closed–Holiday
November	28–30	FSU	Open–No Classes
December	7	U	Classes End
December	8–10	M–W	Optional Make-Up/Finals
December	25–Jan. 1		Campus Closed–Holidays

### Bi-semester (7 1/2 weeks)

August	18	M	Classes Begin
September	1	M	Closed–Holiday
September	2	T	Open–No Classes
October	10	F	Classes End
October	13	M	Classes Begin
December	7	U	Classes End

### Tri-semester (5 weeks)

August	18	M	Classes Begin
September	1	M	Closed–Holiday
September	2	T	Open–No Classes
September	23	T	Classes End
September	24	W	Classes Begin
October	28	T	Classes End
October	29	W	Classes Begin
December	7	U	Classes End

## Spring 2009

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

November	3, 2008		Early Registration Begins
November	10, 2008		Registration Begins
December	25–Jan. 1		Closed–Holiday
January	19–20	MT	Open–No Classes
January	21	W	Classes Begin
March	23–29		Open–No Classes (Spring Break)
May	12	T	Classes End
May	13–15	W–F	Optional Make-Up/Finals
May	16	S	Graduation Ceremony

### Bi-semester (7 1/2 weeks)

January	19–20	M	Open–No Classes
January	21	M	Classes Begin
March	16	W	Classes End
March	17	R	Classes Begin
May	12	S	Classes End

### Tri-semester (5 weeks)

January	19–20	MT	Open–No Classes
January	21	W	Classes Begin
February	24	T	Classes End
February	25	W	Classes Begin
April 7	7	T	Classes End
April	8	W	Classes Begin
May	12	S	Classes End

# GETTING STARTED

## Getting Started

Class Schedule .....	12
New Students .....	12
Readmit Students.....	12
Transfer Students.....	12
International Students.....	12
Placement Testing.....	12
Career Planning & Advising .....	14
Registration .....	14

## Tuition and Fees

Tuition .....	14
College Opportunity Fund.....	14
Tuition and Fees .....	14
Student Activity Fees .....	14
Residency Classification Appeals .....	15
Refunds/Adjustments .....	15
Books .....	15

## Financial Aid

Hope Tax Credit .....	16
Programs .....	16
Scholarships.....	16
Grants.....	16
Loans.....	16
Employment Opportunities.....	16

## 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, 7½ week, or other scheduling options. Open-entry/open-exit sections allow students to enter and complete the course at their own pace. Distance learning (Internet or interactive television) 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 Career Planning and Advising Center and on the PPCC website at [www.ppcc.edu](http://www.ppcc.edu).

### New Students

The first step toward enrollment is to complete the College Opportunity Fund application, available online at [www.CollegeinColorado.org](http://www.CollegeinColorado.org). This application ensures that resident students receive the State higher education stipend. Failure to register will result in higher tuition costs for the resident student.

The next step is to complete an application for admission. Potential students are encouraged to apply online at [www.ppcc.edu](http://www.ppcc.edu). A paper application is available on page 223 of this catalog. Students should apply early to get the best possible start in college.

### Readmit Students

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

### 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. (See Academic Standards, page 17.)

### International (F1) or Vocational (M1) Students

Anyone may attend Pikes Peak Community College regardless of immigration status. PPCC defines an International Student as anyone who will attend with or apply for an F1 or M1 student visa. Students with F1 or M1 visas should download the application and the Affidavit of Support from [www.ppcc.edu](http://www.ppcc.edu) or apply in person at the Enrollment Services Center on the Centennial Campus.

Prior to applying for the F1 or M1 visa, international students must submit the following information:

- Proof of financial ability to pay all expenses associated with attending school full time for 12 months
- Proof of high school completion
- Transcripts from college courses taken in the United States
- Demonstrate English proficiency by submitting a TOEFL score or equivalent. Transfer students who have completed English I and II with a B or better do not need a TOEFL score.

A minimum TOEFL score of 450 (paper and pencil test) or 133 (computer test) is necessary for admission to Pikes Peak Community College. Students scoring between 450-550 (written) and 133-213 (computer) or an IBT score of 40 on the TOEFL will see an advisor upon arrival at PPCC. Students may need classes in English as a Second Language (ESL) before enrolling in an academic program. Please contact the English Language Institute (ELI) office at 502-3535 for more information regarding ESL courses.

All International Students take an English assessment prior to registration regardless of TOEFL score. Please call 719-502-2037 for more information.

### Placement Testing

Determining the appropriate level of academic coursework is mandatory in Colorado; therefore, taking a college skills placement test is required of all

- First-time, degree-seeking undergraduates
- Non-degree seeking undergraduates who change to degree-seeking status; and
- Non-degree seeking first-time undergraduates who have graduated from a Colorado public or private high school (or its equivalent) during the previous academic year.
- Students who have completed a college-level transfer mathematics and college-level transfer writing courses or a remedial course (if required) in mathematics, writing, and reading are exempt from assessment. Other students exempted from assessment include those who:
  - Earned a baccalaureate degree; or
  - Earned a transfer-oriented associate degree (i.e., A.A. or A.S.); excludes A.G.S. and A.A.S. graduates; or
  - Are pursuing a vocational certificate. (Institutions may be more stringent and require assessment of certificate-seekers); or
  - Are a concurrently enrolled high school students until they are matriculated by the institution as a degree-seeking undergraduate by an institution; or
  - Are non-degree seeking undergraduates (unless recent high school graduates referenced above) until they become degree-seeking.

Students will be tested on Reading, Math, and Writing Skills. The PPCC Testing Centers are located in A-117 at Centennial campus, S-101 at Rampart Range Campus, and room S-102 at the Downtown Studio Campus. College skills placement tests may be taken during Testing Center hours on a walk-in basis at any of the three campus locations above, as well as Ft. Carson, Bldg. 1117 and Peterson AFB, Bldg. 1141. Test results have no effect on acceptance to PPCC; college skills placement test scores will be available a few minutes after the tests are completed so that students can take them to Career Planning and Advising Center for assistance in selecting classes.



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

All new students entering the English Language Institute (ELI) must take a placement test. This test will place new students into one of three levels; basic, intermediate, or advanced. The test is available on computer at all three campuses. ELI students should call 502-3535 for further information.

Accommodations are available for students with documented disabilities.

The Ability to Benefit test (ACCUPLACER) is for individuals who have neither a High School Diploma nor their High School Equivalency Diploma and are requesting Financial Aid. These ACCUPLACER scores must be evaluated by the Testing Center. If an individual does not pass all three sections, the complete test must be retaken. It is not an option to test individual sections.

Please call any of the Testing Centers for additional information: Centennial Campus Testing Center, 502-3370; Rampart Range Campus Testing Center, 502-3380; or Downtown Studio Campus Testing Center, 502-3390.

## COMMUNITY COLLEGES OF COLORADO

### Basic Skills Assessment Matrix

### Reading, English, & Mathematics Courses

#### Reading Courses

ACCUPLACER READING COMPREHENSION	REQUIRED COURSES
0 – 24	Refer to literacy or adult basic ed program
25 – 39	REA 030 Basic Reading Skills
40 – 61	REA 060 Foundations of Reading
62 – 79	REA 090 College Preparatory Reading
80 – 120	No Basic Skills Placement

**ACT READING SCORE OF 17 OR SAT VERBAL SCORE OF 430 PLACES IN COLLEGE LEVEL**

#### English Courses

ACCUPLACER SENTENCE SKILLS	REQUIRED COURSES
0 – 24	Refer to literacy or adult basic ed program
25 – 49	ENG 030 Basic Writing Skills
50 – 69	ENG 060 Writing Fundamentals
70 – 94	ENG 090 Basic Composition
95 – 120	ENG 121 English Composition I ENG 131 Technical Writing

**ACT ENGLISH SCORE OF 18 OR SAT VERBAL SCORE OF 440 PLACES INTO ENG 121**

#### Math Courses

ACCUPLACER MATH TESTS	ACT SCORE	REQUIRED COURSE
0 – 23		Refer to literacy or adult basic ed program
24 – 56 (AR)		MAT 030 Fundamentals of Math
57 – Above (AR)		MAT 060 Pre-Algebra
45 – 60 (EA) If EA < 45 use AR		MAT 090 Introductory Algebra
61 – 84 (EA)		MAT 106 Survey of Algebra
85 – 120 (EA)	19	MAT 120 Math for Liberal Arts
85 – 120 (EA)	23	MAT 121 College Algebra
85 – 120 (EA)	23	MAT 123 Finite Math
85 – 120 (EA)	21	MAT 135 Intro to Statistics
85 – 120 (EA)	19	MAT 155 Integrated Math I
85 – 120 (EA)	19	MAT 156 Integrated Math II

**SCORE OF 460 PLACES INTO A COLLEGE-LEVEL MATH COURSE.**

KEY TO MATH TESTS: AR = Arithmetic EA = Elementary Algebra

## Career Planning and Advising Centers

The Career Planning and Advising Centers guide students as they answer the fundamental question, "Why are you here?" Career Planning assists students with clarifying their career goals, choosing the PCC educational program that fits their needs best, and mapping their path for the chosen major. Once the major is selected, students are helped to choose the appropriate classes that will meet their goals. Advising is required for new students in degree or certificate programs, and is strongly recommended for all other students. The Career Planning and Advising centers are located at Centennial Campus, the Downtown Studio Campus, and the Rampart Range Campus. First semester advising is done in the Career Planning and Advising centers; advising for continuing students is done by the student's assigned faculty advisor (with services provided by Career Planning and Advising if the faculty advisor is not available). The following services are provided at the centers:

- Career counseling (individual and group) to help with decision-making, goal setting, and choosing a college major
- Career assessments to match personal characteristics with occupational options
- Explanation of basic skills (placement test) results, and assistance in selecting classes to resolve any academic deficiencies
- Help in choosing and registering for classes for the first semester of enrollment
- Information on course sequence and prerequisites
- Help in adding or dropping classes
- Assignment of a faculty advisor for guidance in future semesters
- Assistance with changing a major or faculty advisor
- Advising on classes when a faculty advisor is not available
- Employment services to help students market themselves and find a job

## 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, or on-site at the Centennial Campus, the Downtown Studio Campus, or the Rampart Range Campus. 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. A non-refundable registration fee is assessed at the time you register.

## TUITION AND FEES

### Tuition

For tuition purposes, students are considered either in-state or out-of-state when they apply for admission. 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 form on page 215.

Active Duty Military and their dependents. The Education Services Office on the student's base will certify his or her eligibility by completing the military resident classification "green form." A separate "green form" must be submitted to the Enrollment Services Centers **prior to the census date** each term for which the in-state tuition rate is requested. Failure to submit form each term will result in loss of in-state tuition. There is no appeal after a term is completed.

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 form must be submitted to the Enrollment Services Centers prior to the census date 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.

### College Opportunity Fund (COF)

The State of Colorado historically subsidized higher education for in-state students by giving money directly to the colleges. In 2004 the Colorado Legislature enacted a new law establishing the College Opportunity Fund ("COF"). Under this new law, the State will give this money for the subsidy to students by sending it to the institution the student designates. This money, known as College Opportunity Fund stipends, will be applied to an in-state student's tuition if the student applies for and authorizes the use of the stipend. The college you are attending will receive the money and it will appear as a credit on your tuition bill. Currently the College Opportunity Fund (COF) stipend is estimated to be worth \$89.00 per credit hour.

Failure to sign up and authorize COF will result in the loss of this stipend. There is no appeals process. To sign up go to <https://cofweb.cslp.org/cofapp/>.

### Estimated Per Credit Hour Base Tuition Calculation

Total estimated base in-state tuition .....	\$166.15
Minus estimated "College Opportunity Fund Stipend" .....	\$89.00
Student's estimated share of in-state tuition .....	\$77.15

### Tuition and Fees (2007-08)\*

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

The in-state tuition rate for 2007-08 was \$77.15 per credit hour after COF (see above). The out-of-state tuition rate for 2007-08 was \$357.25 per credit hour.

#### Student fees.

The student fee rates for 2007-08 were \$7.40 per credit hour plus a \$10.75 registration fee. Other rates, such as those for Distance Education, are available in the current class schedule.

#### Course fees.

Some courses have extra fees ranging from \$5.70 per credit hour to \$388.00 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 2008-09 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. The fees also support school activities, concerts, recreation, clubs and organizations, and special events for students. The fees also support Student Government and the Campus Center at Centennial Campus, student spaces at Rampart Range and the Downtown Studio Campuses, and student activities at all three campuses, and the Child Development Centers.

Student Government is responsible for allocating their portion of your Student Activity Fees. The Budget Hearing Committee of Student Government meets annually in the spring to hear budget requests from recognized student clubs and organizations and to allocate those monies. Organizations included in this disbursement are Student Government, Student Activities, the Campus Center, recognized clubs who submit a budget request with justification (such as PTK, PBL, BSU, etc), special projects and others. For further information you may contact the Campus Life Office in room A-210 or Student Government in room C-206 at the Centennial Campus.

Part of the student activity fee (the parking bond fee) is used to provide and maintain parking areas. A free hang tag for the Downtown Studio Campus parking garage is available for vehicles at the Public Safety Office.

Upon first enrolling at PPCC, students must get a student ID card from the Campus Life Office. This ID is good for the student's entire PPCC career. If lost or stolen, a replacement ID will cost \$10. Students must have a valid ID to use the 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. 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.

The general requirements for Colorado residency are as follows:

- 12 months of continuous domicile in the state of Colorado
- Have filed Colorado state income tax returns
- Have Colorado drivers license

For the entire Colorado policy regarding residency, go to <http://higher.ed.colorado.gov/Finance/Residency/default.html>. All information used to prove Colorado residency must be submitted to Enrollment Services Center by the first day of class for the full term.

## House Bill 1023

Colorado House Bill 1023 requires all students receiving public benefits (i. e. in-state residency or other reduced tuition rates) to prove their lawful presence in the U.S. Students may comply by applying for COF or Financial Aid. Students who choose not to complete these steps must show a Colorado drivers license or Colorado identification card

and sign an affidavit in the presence of a PPCC Enrollment Services Center staff member. Failure to comply will result in the loss of the reduced tuition benefits. For more information go to [www.ppcc.edu/AdmissionsEnrollment/FAQ.cfm](http://www.ppcc.edu/AdmissionsEnrollment/FAQ.cfm) or stop by any PPCC Enrollment Services Center.

Failure to sign up for House Bill 1023 will result in the loss of public benefits. There is no appeal process once these benefits are lost.

## Refunds/Adjustments

To receive a tuition refund, less the non-refundable registration fee, or an 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 on the Internet. Appeals for past school years cannot be considered. Contract programs may have different refund procedures.

## Books

The bookstores at Centennial Campus, the Downtown Studio Campus, and the Rampart Range Campus stock books and supplies needed for courses offered at that campus. A wide variety of other school supplies and PPCC insignia items are also available at the bookstores.

Textbooks may also be purchased from our bookstore website address: [www.ppccbookstore.com](http://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 as well as daily buyback options on our website [www.ppccbookstore.com](http://www.ppccbookstore.com). The bookstores also honor walk-in buy back requests on a daily basis. Look for the dates posted at the campuses, on our website, or call 502-2665 for information.

## FINANCIAL AID

There are numerous financial resources available for students who attend Pikes Peak Community College. Students should start the process by applying for the Free Application for Federal Student Aid (FAFSA). The application will explain which tax return students need for reference. This application is available at all three campus locations or on the Internet at [www.FAFSA.ed.gov](http://www.FAFSA.ed.gov). This process may take three to four weeks, so students are encouraged to apply as soon as possible. Applications for the next academic year (beginning in late August) are available January 2. To avoid delays, please complete the FAFSA using care and do so as soon as a decision is made to apply for admission to the college.

No other documentation is necessary until the U.S. Department of Education processes the request. If it is necessary for the school to request more information after the results have been received, notifications are made by mail.

Students without a high school diploma or GED must prove Ability to Benefit (ATB) before they are eligible to receive financial aid. ATB can be met by taking and earning a passing score on the ATB test. Please contact the testing center to schedule your test.

To learn more about financial aid programs, how aid is distributed, student rights and responsibilities, or policies and procedures, please contact the Enrollment Services Center or review this information online at [www.ppcc.edu](http://www.ppcc.edu).

## 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

[www.irs.gov/faqs/faq-kw52.html](http://www.irs.gov/faqs/faq-kw52.html)

### American Association of Community Colleges

[www.aacc.nche.edu](http://www.aacc.nche.edu)

### Pikes Peak Community College

540-PPCC/[www.pgcc.edu](http://www.pgcc.edu)

## Earned Income Credit

The Earned Income Credit (EIC) is a refundable federal income tax credit for low-income working individuals and families. Congress originally approved the tax credit legislation in 1975 in part to offset the burden of social security taxes and to provide an incentive to work. When the EITC exceeds the amount of taxes owed, it results in a tax refund to those who claim and qualify for the credit.

To qualify, taxpayers must meet certain requirements and file a tax return, even if they did not earn enough money to be obligated to file a tax return. The EITC payments will not be used to determine eligibility for Medicaid, Supplemental Security Income (SSI), food stamps, low-income housing or most Temporary Assistance for Needy Families (TANF) payments.

For more information including help in determining whether individuals and their families qualify, go to <http://www.irs.gov>. Please consult this website before you file your taxes. It is estimated that 25% of all eligible individuals do not take advantage of this program.

## 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, or online at [www.pgcc.edu/AdmissionsEnrollment/FinancialAid/Handbook.cfm](http://www.pgcc.edu/AdmissionsEnrollment/FinancialAid/Handbook.cfm) describes each of these programs.

## Scholarships

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

## Grants

- Academic Competitiveness Grant
- Colorado Student Grants
- Colorado Leveraging Educational Assistance Partnerships Grants
- Federal Pell Grants
- Federal Supplemental Educational Opportunity Grants

## Loans

- Federal Stafford Student Loans (subsidized and unsubsidized)
- Federal Parent Loans (PLUS)
- [www.studentloanonline.com](http://www.studentloanonline.com) allows students and parents meeting federal eligibility requirements to apply for a Stafford and/or PLUS loan online.

## Employment Opportunities

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

# ACADEMIC STANDARDS

Maximum Course Load .....	18
Change of Major/Program.....	18
Credit by Examination .....	18
Transfer to PPCC.....	18
Grading System .....	18
Grading Options .....	19
Grade Changes .....	20
Repeated Courses.....	20
Academic Fresh Start .....	20
Academic Probation/Suspension/Dismissal ....	20
Term Academic Honors .....	21
Graduation Honors .....	21
Application for Certificate or Degree .....	21
Assessment for Student Success .....	21



## ACADEMIC STANDARDS

Students are expected to attend all classes, laboratories, and shops as scheduled unless there is a compelling reason to be absent.

### Maximum Course Load

A course load, determined by the student and the advisor, may not exceed 18 credit hours per semester without the approval of the instructional division dean. The standard student load of a full-time student is 15 credit hours per semester although twelve (12) credit hours are considered full-time. 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 places students under the academic and curriculum requirements of their new program as published in the current college catalog.

### Credit by Examination

Students may take a comprehensive examination for credit if they are enrolled in a course and have the approval of their instructor and dean. Students must complete the examination by the census date for the course and will receive the grade earned on the examination as a final grade for the course. Students may attempt a test-out only once per course.

### 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 C or above were earned will be accepted in transfer when the courses are applicable to PPCC programs and in accordance with PPCC requirements. 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

### INVENTORY OF COMMON GRADING SYMBOLS

Grade	Quality Points	Interpretation
A	4	Excellent or Superior
B	3	Good
C	2	Average
D	1	Deficient
F	0	Failure
I		Incomplete
S		Satisfactory
U		Unsatisfactory
S/A		Satisfactory (A-level) work in a developmental course
S/B		Satisfactory (B-level) work in a developmental course
S/C		Satisfactory (C-level) work in a developmental course
U/D		Unsatisfactory (D-level) work in a developmental course
U/F		Unsatisfactory (F-level) work in a developmental course
W		Withdrawal
AU		Audit
AW		Administrative Withdrawal
*		Transfer Grade
<b>Place Holders</b>		
SP		Satisfactory Progress
Z		Grade not yet reported
CPL		Credit awarded through Credit for Prior Learning

### AU – Audit

By auditing a course, a student may participate in course activities, but does not receive a formal transcript grade. Students must indicate intent to audit a course at registration or by the deadline listed in the course schedule. Audited courses are not eligible for the College Opportunity Fund stipend. Students will be responsible for the full in-state or out-of-state tuition. Audited courses do not meet the credit hour requirements for financial aid or veteran benefits and may not be applied to certificates or degrees.

### AW – Administrative Withdrawal

This “withdrawal” grade is assigned by the college when a student has been withdrawn administratively for administrative reasons. No academic credit is awarded. The course will count in attempted hours.

### I – Incomplete

The Incomplete grade is a temporary grade and is designed for students who because of documented illness or circumstances beyond their control are unable to complete their course work within the semester, but have completed a majority of the course work (defined as at least 75% of all course assignments and tests) in a satisfactory manner (grade C or better).

If circumstances beyond the student's control prevent the student from completing a test or assignments at the end of the term, then it is the student's responsibility to initiate the request for an Incomplete

grade from the instructor. The instructor will determine whether the student has a reasonable chance of satisfactorily completing the remaining course activities in a timely manner.

In requesting an Incomplete grade the student must present to the instructor the documentation of circumstances justifying an Incomplete grade.

The instructor will complete and sign an "Incomplete Grade Contract" and will submit it to Student Services with final grades for the semester. Student Services will send a copy of the "Incomplete Grade Contract" to the student. Instructor must assign an incomplete grade on the regular grade roster in a timely fashion.

Incomplete Grade Contract must include the following information:

1. Student Name (F, MI, L):
2. Student ID #:
3. Course Number and Section:
4. Reason for assigning a grade of incomplete (statement of extenuating circumstances):
5. Work to be completed for removal of incomplete grade (instructor should be very specific including the work to be done and how the final grade is to be calculated):
6. Evidence of completion of 75% of the semester course work:
7. Completion of a work plan that includes the following:
  - What, when and how assignments and tests will be submitted to complete the course,
  - The time period in which the work must be completed.
8. Instructor Signature and Date:
9. Student Signature and Date:

Students are encouraged to let instructors know, as soon as possible, if they are having difficulties with any part of the course. In the event that a student and instructor cannot reach resolution concerning an Incomplete, then the student should contact the Chief Instructional Officer of the college.

Military personnel and emergency management officials who are required to go TDY in the middle of a term should contact their instructor for special consideration. Documentation of official TDY assignment is required and must be approved by the Chief Instructional Officer.

Incomplete grades which are not converted to a letter grade by the instructor after one subsequent semester (not including summer semester) will revert to an F grade. If the student would have earned a letter grade higher than an F without completing the work, faculty should be encouraged to submit that higher grade before the automatic conversion to F.

### **S–Satisfactory**

The satisfactory grade is equivalent to a grade of "C or better". The course will count in attempted and earned credits, but will not carry quality points.

### **U–Unsatisfactory**

The unsatisfactory grade is equivalent to a "D" or "F" grade. The course will count in attempted credits, but will not carry earned credits or quality points.

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

These are satisfactory grades awarded only for developmental courses. The A, B, and C indicate the level of satisfactory performance. These grades are not included in the GPA calculation. The course will count for attempted and earned credits.

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

These are unsatisfactory grades awarded only for developmental courses. The D and F indicate the level of unsatisfactory performance. These grades are not included in the GPA calculation. The course will count in attempted credits, but will not carry earned credits.

### **W–Withdrawal**

The "Withdrawal" grade is assigned when a student officially withdraws from a course. A withdrawal can only be processed during the first 80 percent of the course. No academic credit is awarded. The course will count in attempted hours.

### **Last Date of Attendance**

Faculty are required to provide the last date of attendance for each student who is awarded an F or U/F grade.

### **Place Holders**

#### **SP–Satisfactory Progress**

This symbol is limited to certain approved courses that extend beyond the end of a normal semester. No academic credit is awarded until the course is completed.

#### **Z–No Grade Submitted**

The grade of "Z" is a temporary grade entered by the Registrar when a grade is not received from the course instructor. This "Z" grade is replaced and credit is awarded upon the Registrar's receipt of the grade.

#### **CPL–Prior Learning Credit**

A symbol of "CPL" indicates that the course and credits to which it is attached were awarded according to BP 9-42, Credit for Prior Learning.

#### **Repeat Field**

The Repeat Field on the transcript will be marked I–Include in hours and GPA calculation, A–Exclude from earned hours and GPA calculation, or A Exclude from earned hours but count in GPA calculation.

NOTE: Courses with a grade of D or F are not generally transferable and will not transfer to other institutions under GT Pathways or 60+60 Bachelors Degree Transfer program.

## **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. Pikes Peak Community College considers a grade of C or better to be 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. Grades of D or F will be considered unsatisfactory, will affect the GPA, and will increase 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 audit option is not available online or with the telephone. The regular tuition rate applies. After the posted drop date, 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 and are not eligible for the COF stipend.

## Grade Changes

A change of grade (other than from 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 or satisfactory explanation given, then:

Review by department chair. If no resolution or satisfactory explanation, then:

Review by division dean or assistant dean. If no resolution is reached or satisfactory explanation given, then:

Review by the Vice President for Educational Services or the appointed Assistant to the Vice President for final resolution.

An Incomplete (I) grade may be removed when the remaining class objectives are completed by the date indicated on the "Incomplete Course Agreement" 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 instructional division dean. Course work not completed within the allotted time will be assigned a Failing (F) grade. Students may not re-enroll in a class in which an incomplete grade is pending, since according to the college's definition of enrollment, they are still enrolled.

## Repeated Courses

When a course is repeated, regardless of initial grade earned, the highest 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 Fresh Start

All course work taken at Pikes Peak Community College appears on a permanent transcript. Academic Fresh Start allows for a one-time exclusion of failed credits (grades of D, F, or U) from the calculation of the grade point average. A maximum of 30 credits failed at PPCC may be removed from the GPA calculation. To be considered for a Fresh Start the following conditions need to be met:

- Two calendar years have elapsed since the student's last attendance at PPCC.
- During previous attendance at PPCC, the student earned 30 credit hours or less with a cumulative grade point average (CGPA) less than 2.00.
- Upon re-enrolling, student successfully completes a minimum of 6 credit hours with a term GPA of 2.00 or better.
- Student has met with the Instructional Dean for approval of a Fresh Start.

- Applications for Academic Fresh Start must be submitted no later than the end of the semester following the successful return semester.

Students applying for a Fresh Start are responsible for investigating the potential impact of a 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 granted, an Academic Fresh Start is not reversible. Credit excluded from the GPA calculation cannot be used to satisfy the requirements for completion of a degree or certificate. Forms are available in the Enrollment Services Centers.

Students who are on Financial Aid will continue to have all hours that they have attempted, to include original grades earned, taken into consideration for Financial Aid Satisfactory Academic Progress as required by statutes and regulatory requirements.

## Academic Probation and Suspension

Pikes Peak Community College defines satisfactory academic progress as completion of the semester with a 2.0 grade point average (GPA) or higher. In order to remain in good standing at PPCC, students must maintain at least a 2.0 cumulative GPA.

The office of the Assistant to the Vice President for Educational Services will provide written notification to a student placed on academic probation or suspension.

**Probation:** Students who do not earn at least a 2.0 GPA will be placed on academic probation for the following semester. Students who are placed on academic 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.

**Suspension:** Students who do not earn at least a 2.0 GPA in their probationary semester will be suspended. The level of suspension is dependent on the previous semester's academic standing.

Suspension (Initial) – Student was previously on probation. Last Term Grade Point Average (TGPA) was less than 2.00. Student is suspended for one semester.

Suspension (Second) – Student was previously on suspension. Last Term Grade Point Average (TGPA) was less than 2.00. Student is suspended for two semesters.

Suspension (Third) – Student was previously placed on suspension for two terms. Last Term Grade Point Average (TGPA) was less than 2.00. Student is suspended from the college and may not register for two (2) calendar years.

Suspended students may not register for the next term (fall, spring, or summer) following the suspension term. Upon satisfactorily meeting the terms of the suspension students may register for the following subsequent semester after meeting with their academic advisor and instructional dean.

Students with unusual circumstances of a compelling nature may appeal their suspension. Approval of the student's appeal may allow, but does not guarantee, that the student will be allowed to register without a break in enrollment. Students returning from a suspension will be on Probation (continuing).

## Term Academic Honors

CCCS Colleges provide an opportunity for students to be recognized with Academic Honors, on a term-by-term basis. Each CCCS College may choose from among the three recognized Honors—Dean's List, Vice President's List, and/or President's List. Each College will identify in its catalog and other official documents, the Honors that are achievable at that College. Students who qualify will receive a notation for that term on their official transcripts.

Term Grade Point Averages required to qualify for these Term Academic Honors, are as follows:

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

S/U grades and grades for Developmental Education coursework are not included in the Grade Point Average Calculation. Students must complete a minimum of 12 eligible credit hours in the term to be considered for Term Academic Honors.

## Graduation Honors

Graduation honors recognize outstanding academic achievement throughout a student's academic career at the home institution. The honors are awarded to students who complete the requirements for an associate degree and earn a 3.5 or better cumulative grade point average at the institution. Only college level courses completed at the institution will be included in the GPA calculation. The three levels of recognition are defined as follows and will be posted on the student's transcript.

Cum Laude (with honor) .....	3.50 to 3.749 Cumulative GPA
Magna Cum Laude (with great honor) .....	3.75 to 3.99 Cumulative GPA
Summa Cum Laude (with highest honor) .....	4.00 Cumulative GPA

## Application for Certificate or Degree

To receive a certificate or degree, students must file an application for graduation with the Enrollment Services Center no later than February 15 for Spring semester, July 15 for summer semester, and November 15 for fall semester.

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

## Assessment for Student Success

The assessment of student learning at Pikes Peak Community College is an ongoing, evolving process that involves the entire college community. The College Outcomes Assessment Team (COAT) is charged with developing and implementing an assessment plan to gather evidence about what students know and can do as a result of their respective courses of study. This evidence is then used to improve teaching, learning, and overall program quality, enabling the College to meet the needs of students and the community it serves. The assessment process, with its focus on student learning and success, reflects the vision and values of Pikes Peak Community College as stated in the Strategic Plan. Assessment activities are formally documented in an annual report, copies of which are available for review.

Assessment of student learning in the Associate of Arts and Associate of Science degree programs involves identifying and measuring General Education Student Learning Outcomes across all content areas. The following outcomes were identified by faculty as instrumental to student success:

- Communication ( Reading, Writing, Speaking, Listening)
- Critical Thinking
- Information/Literacy
- Math Skills

Assessment of student learning in Career and Technical Education degree programs is conducted by individual programs. Each program identified outcomes based on the career objectives of its students. Successful learning outcomes assessment depends on the active participation of students. Among the roles that students can assume in assessment are:

- Participating in both direct and indirect assessment activities such as test, portfolios, interviews, and surveys
- Helping to publicize assessment activities
- Participating in pilot studies
- Providing feedback and comments on activities

## **STUDENT CONDUCT**

Student Disciplinary Procedure.....	23
Standards of Conduct.....	23
Student Complaints/Grievances .....	25
Academic Honesty .....	25
Classroom Attendance Procedure .....	26
Conduct in College Buildings .....	26
Restricted Attendance .....	26
Drugs and Alcohol .....	26
Sexual Harassment .....	26
AIDS Policy .....	27
Firearms on Campus .....	27
Smoking in College Buildings.....	27
Parking and Traffic Regulations.....	27
Days of Enforcement .....	28
Emergencies and Crime Reporting.....	28
Reporting Criminal Offenses.....	28
Rioting Offenses.....	28
Sex Offender Registration .....	28
Campus Crime and Security Report .....	28



# STUDENT CONDUCT

## Student Disciplinary Procedure

### Basis:

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

### Definitions:

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

**6. Day:** Refers to calendar day unless otherwise noted below.

## Standards of Conduct

The mission of Pikes Peak Community College is to provide high-quality educational opportunities accessible to all. Therefore, it is expected that all students will act with civility, respect, and appropriate behavior in support of a positive and safe learning environment for the entire College community. Violations of this expected conduct include, but are not limited to, the following:

### Violation of others' rights:

1. Engaging in any disruptive behavior which negatively affects or impedes the instructor's ability to teach or the students' ability to learn (regardless of the mode of educational delivery or class setting); or disrupts the general operations of the college, to include teaching, research, administration, disciplinary procedures, or other authorized activities.
2. Using rude, degrading or abusive language (written or spoken) to any person, or harassing any person with gesture or language, including cursing.
3. Engaging in behavior which may constitute sexual harassment. Any possible violations will be referred to the Pikes Peak Community College Executive Director of Human Resource Services for investigation of all credible allegations of sexual harassment in accordance with the official complaint investigation procedure.
4. 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.
5. Knowingly falsifying with malicious intent, publishing or distributing, in any form, material that tends to impeach the honesty integrity, virtue or reputation of another person; or knowingly pursuing malicious, frivolous or fraudulent charges against a student, instructor, or staff member without cause.
6. Violating the Student Standards of Conduct when representing the College as a member of a student organization participating in College-sponsored travel and development opportunities off-campus. The student organization and its officers may be held collectively or individually responsible when such violation of the Student Standards of Conduct has received the tacit or overt consent or encouragement of the organization members, leaders, or officers.
7. Aiding or encouraging others in committing or inciting others to commit any act of misconduct which violates the Pikes Peak Community College Student Standards of Conduct.
8. 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 that student, any other student or employee of the college; will substantially disrupt the legitimate functions and activities of the college; or will infringe on the rights of others.

### Violation of honesty and academic integrity:

9. Dishonesty such as cheating, plagiarism, or knowingly furnishing false information to the college in the classroom, laboratory, or any college testing situation.
10. Forgery, alteration, or misuse of college documents, records, identification, educational materials, or college property.

**Violation of safety and property:**

11. The threat to, or physical abuse of any person on college-owned or controlled property or at college-sponsored or supervised functions; this includes any conduct which endangers one's own or another person's welfare or safety.
12. Board Policy states that no person may have on his or her person any unauthorized firearm, ammunition, explosive device, or illegal weapon on campus or any facility used by a college. Persons authorized to carry firearms and other equipment defined in the policy are those persons conducting and participating in an approved program of
  - instruction in the college's curriculum which requires access to such equipment as an integral part of the instructional program;
  - peace officers; and
  - those persons granted permission at the discretion of the college president for specific purposes from time to time.
13. Theft of or damage to property on the college premises or at authorized college functions.
14. Unauthorized entry to or use of college facilities, materials, or equipment.
15. Use of, being under the influence of, possession of, or distribution of alcohol or illegal or dangerous drugs on campus or at a college-sponsored function, except as expressly permitted by law and college regulations.
16. Leaving children or pets unattended in campus buildings or on campus grounds (including in parked vehicles).

**Violation of College policies and administrative functions:**

17. Failure to comply with the verbal or written directions of college employees acting in the performance of their duties.
18. 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.
19. Interfering with the judicial/grievance procedures or outcomes, including falsification or misrepresentation of information; failure to comply with the sanction(s) imposed by the disciplinary officer; or retaliation in any form against any person involved in a judicial/grievance action.
20. Violation of college rules regarding the operation and parking of motorized vehicles on college property.

At Pikes Peak Community College, interpretation of the disciplinary and grievance procedures is the responsibility of the Dean of Students.

## 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.
5. If the grievance is against the Chief Student Services Officer, the Chief Academic Officer or other person designated by the president shall perform the duties of the Chief Student Services Officer.

## Academic Honesty

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

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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

## Classroom Attendance Procedure

Individuals not enrolled in a class are not permitted to sit in the classroom while the class is in session. Faculty members are required to take attendance and anyone not on the class list will be asked to leave the classroom. The only exception to this procedure is for specially trained interpreters necessary for disabled students.

## 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, and the gymnasium, except when permission is granted by the person immediately responsible for supervision of the affected area.

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

Leaving children unattended or unsupervised in campus buildings or on campus grounds can constitute child abuse or child neglect (as outlined in the Colorado Child Protection Act of 1975). Children are not permitted in classrooms during class meeting times.

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

## Restricted Attendance

Faculty may suspend students from one class period if their conduct is obstructive, disruptive, or unacceptable in an instructional setting. Students may return to class after the faculty member has identified the conditions to allow continued attendance. If students return and these conditions are violated, the appropriate dean will review the circumstances and provide information to the Dean of Students. This information shall state the appropriate administrative action, which may include continued attendance or permanent dismissal from the class as outlined in the Student Disciplinary Procedure.

## 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 Campus Life Office at the Centennial Campus.

## Sexual Harassment

Pikes Peak Community College is firmly committed to maintaining a work and learning environment where students, faculty, and staff are treated with dignity and respect. Sexual harassment and acts of discrimination are illegal, often demeaning for the individual student or employee, and can disrupt the College's positive learning and working environment. As such, all members of the College community have a responsibility to be aware of what behaviors constitute sexual harassment, to be responsible for their own actions, and to help create an environment free of sexual harassment.

Pikes Peak Community College defines sexual harassment as unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature when one or more of the following criteria are met:

- Submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment or of academic status in a course, program, or activity.
- Submission to or rejection of such conduct by an individual is used as a basis for employment or academic educational decisions affecting such individual.
- Such conduct is sufficiently severe, persistent, or pervasive so as to have the purpose or effect of unreasonably interfering with an individual's work and/or academic educational performance or creating an intimidating, hostile, or offensive work and/or learning environment.

Furthermore, retaliation against any person for filing a complaint, participating in, or cooperating in an investigation is prohibited.

If you believe that you have been sexually harassed or that you have been retaliated against by anyone in your work and/or academic activities at Pikes Peak Community College, you should report this conduct immediately so that an inquiry into your complaint may commence without delay. You may report this conduct to an officer of the college, instructional dean, division/department director, or a Human Resource Services representative. Substantiated complaints may result in disciplinary action up to and including expulsion from the College.



The College has designated the Director of Human Resource Services as its Equal Opportunity Education/Employment Compliance Officer. Inquiries and/or complaints may be referred to the Human Resource Services office by e-mail, hrs@ppcc.edu, or by calling (719) 502-2600. The EEO Compliance Officer or designate will investigate all credible allegations of sexual harassment in a timely manner and in accordance with its official complaint investigation procedure.

Complaints may also be referred to the Office for Civil Rights, U.S. Department of Education, 1961 Stout Street, Denver, Colorado 80294, (303) 844-5695.

## 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-Lymphotropic Virus Type III (HTLV-III/HIV) do not pose a health risk to others in a non-laboratory 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 are or 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

State Board Policy states that no person may have on his or her person any unauthorized firearm, ammunition, explosive device, or illegal weapon on campus or any facility used by a college. Persons authorized to carry firearms and other equipment defined in the policy are:

- those persons conducting and participating in an approved program of instruction in the college's curriculum which requires access to such equipment as an integral part of the instructional program;
- peace officers; and
- those persons granted permission at the discretion of the college president for specific purposes from time to time.

It **shall not** be an offense if the weapon is unloaded and remains inside a motor vehicle while upon the real estate of the college. There is no concealed carry permit exception.

Violations of the college firearms policy may result in criminal prosecution. Questions should be directed to the Department of Public Safety.

## Smoking in College Buildings

Consistent with State of Colorado statute, smoking is NOT PERMITTED in any PPCC building or facility. Smoking is allowed in designated areas of the courtyard between the Aspen and Breckenridge buildings on the Centennial campus. Smoking is prohibited near the Campus Life outdoor seating area.

## Parking and Traffic Regulations

The Pikes Peak Community College Centennial Campus and Rampart Range Campus will provide OPEN parking in all general lots, supported by a student fee paid at registration. These include C, D, and E lots at Centennial and lots one through five at Rampart Range. At Centennial Campus only, motorcycles may be parked in the designated marked areas in lots D, and E. At Rampart Range Campus, motorcycles may park in the designated area in lot 2.

Those wishing to obtain a "hang tag" must do so by bringing student/staff identification to the Campus Public Safety office at the Centennial and Rampart Range Campuses. Those wishing to obtain a "hang tag" at the Downtown Studio Campus (DTSC) must bring student/staff identification to the Student Life Office at the DTSC. It provides the following benefits:

- Easy notification in case of an emergency involving the vehicle.
- The hang tag is valid for the student's entire career at PPCC.

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

**Enforcement Authority:** By Colorado Revised Statutes 23-5-107. Authority of Governing Boards, Parking.

**Handicap Parking:** Vehicles bearing state issued handicapped placards, state issued handicapped license plates, or state issued temporary handicapped passes may park in the handicapped areas in lots A, the designated all handicap lot, and on South Service Drive at the Centennial Campus and in the handicapped areas in lots one, two and three at the Rampart Range Campus. Only vehicles identified as belonging to handicapped persons displaying the state issued handicapped placards/license plates may park in the handicapped areas.

**At the Centennial Campus only: Wheelchair Only:** These spaces are reserved for use by those persons confined to wheelchairs. Parking spaces are marked for "Wheelchair Only."

**At the Centennial Campus only: Metered and Visitor Parking:** Metered and Visitor Parking, for those on short-term business with the college, is available in lot A. These parking meters and visitor parking spots are for the convenience of college visitors and not for use by students, faculty, or staff. Those who park at the meter can receive a ticket if the meter expires, even if they do have a service decal. Those who park at the one hour visitor parking spots can receive a ticket if they are parked there for more than one hour. Visitors whose business will take longer than the meters or visitor parking allow should use the parking spaces in C, D, and E lots.)

**Traffic Violations:** The Department of Public Safety (DPS) will issue citations which may include fines and/or vehicle impoundment for both parking and moving violations occurring on college property. Summons and Penalty Assessments must be answered in El Paso County Court. College Citations for parking violations will result in a fine which must be paid to the college cashier in A-101 at Centennial Campus or S-102 at Rampart Range Campus, 8:00 a.m. to 5:00 p.m., Monday–Thursday and 8:00 a.m. to 3:00 p.m. on Friday.

The registered owner of the vehicle or identified user of the vehicle shall be held liable for all violations.

**Appeals:** If a person wants to appeal a parking citation, he or she 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 a person disagrees with the decision of the Director of Public Safety, he or she may then appeal the citation to the Appeals Committee. A person who objects to the decision of the Appeals Committee may request a review by the President of the College or the President's designee (Vice President of Administrative Services).

**Mopeds and Bicycles:** 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, by A-121, 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 Department of Public Safety for safekeeping.

**Accidents:** Colorado law requires that all accidents be reported to the proper authorities. Accidents occurring on PPCC Campuses must be reported to the Department of Public Safety (DPS) at 502-2911.

Information concerning PPCC vehicle regulations may be obtained from Department of Public Safety in A-100, or by calling ext. 2900 at the Centennial Campus and in N-106 at the Rampart Range Campus.

**Safety Escort Service:** Safety Escort Service is available through the Department of Public Safety contact 502-2911.

## Days of Enforcement

Parking and traffic regulations are enforced on all college properties. Metered Parking in A Lot at the Centennial Campus is enforced Monday through Saturday; 8:00 a.m. to 8:00 p.m. Handicapped parking violations are enforced at all times.

## Emergencies and Crime Reporting

For emergencies dial 911.

The emergency number 9-1-1 should only be used in emergency situations when a police officer, fire fighter, or paramedic is needed right away. If you are ever in doubt, call 9-1-1. 9-1-1 should not be used for non-emergencies.

Call ext. 2911 to report any of the following: illness, lost and found items, or to request an officer for non-emergency situations and/or purposes.

All emergencies and suspected criminal actions must be promptly reported 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 Federal and State 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. Operation Identification and 911 Readiness are offered for children at the Child Development Centers. Operation Identification kits may be picked up at any Public Safety office.

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 local law enforcement agencies.

## Reporting Criminal Offenses

To report any emergency, dial campus extension 2911; from an off-campus telephone dial (719) 502-2911 or pick-up any Emergency phone located through-out campus buildings and parking lots.

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

## Rioting Offenses

Prohibition against enrollment in state-supported institutions of higher education of persons convicted of rioting offenses.

Under Colorado law, no person shall be enrolled in a state-supported institution of higher education for a period of twelve months following the date of a guilty verdict, guilty plea, no contest plea, or a deferred judgment and sentence for inciting riot, arming rioters, or engaging in a riot.

## Sex Offender Registration

In accordance with the Campus Sex Crimes Prevention Act, the Public Safety Office shall maintain a list of all sex offenders who are currently enrolled or employed at Pikes Peak Community College and make said list available to students and employees. As of October 27, 2002, all convicted sex offenders are obligated to notify the state when the offender enrolls at, is employed at, or carries on a vocation at an institution of higher education. Said offender must notify the state of any change in enrollment or employment.

## Campus Crime and 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.



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## Report of Criminal Offenses

### Centennial Campus

Offense	2004	2005	2006
Murder & Non-negligent Manslaughter	0	0	0
Negligent Manslaughter	0	0	0
Forcible Sex Offenses	1	0	0
Non-forcible Sex Offenses	0	0	0
Robbery	0	0	0
Aggravated Assault	0	0	0
Burglary	5	0	0
Motor Vehicle Theft	0	0	0
Arson	0	0	0

#### Arrests Made

Liquor Law Violations	2	0	0
Drug Violations	3	7	0
Weapons Violations	5	2	0

No crimes were determined to be hate related.

### The Downtown Studio Campus

Offense	2004	2005	2006
Murder & Non-negligent Manslaughter	0	0	0
Negligent Manslaughter	0	0	0
Forcible Sex Offenses	0	0	0
Non-forcible Sex Offenses	0	0	0
Robbery	0	0	0
Aggravated Assault	0	0	1
Burglary	1	0	1
Motor Vehicle Theft	0	0	0
Arson	0	0	0

#### Arrests Made

Liquor Law Violations	0	0	0
Drug Violations	0	1	0
Weapons Violations	0	0	0

No crimes were determined to be hate related.

### Rampart Range Campus

Offense	2004	2005	2006
Murder & Non-negligent Manslaughter	0	0	0
Negligent Manslaughter	0	0	0
Forcible Sex Offenses	0	0	0
Non-forcible Sex Offenses	0	0	0
Robbery	0	0	0
Aggravated Assault	1	0	0
Burglary	4	0	0
Motor Vehicle Theft	0	0	0
Arson	0	0	0

#### Arrests Made

Liquor Law Violations	0	0	0
Drug Violations	0	0	0
Weapons Violations	1	0	0

No crimes were determined to be hate related.

# \$ave on Tuition

## FACTS

About the HOPE Tax Credit and other education tax benefits

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

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

### 2. Who is eligible?

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

### 3. When does it take effect?

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

### 4. How long is it available?

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

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

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

### 6. Are there any restrictions?

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

### 7. How do I apply?

Eligible individuals will claim the credit when they file their federal income tax forms. A 1098-T will be mailed to your current address of record at PPCC.

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

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

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

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

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

- ▲ **Financial Aid Office**  
Pikes Peak Community College  
540-PPCC or 1-800-456-6847,  
extension 3000
- ▲ **[www.ppcc.edu](http://www.ppcc.edu)**  
(Pikes Peak Community College website)
- ▲ **[www.aacc.nche.edu](http://www.aacc.nche.edu)**  
(American Association of Community Colleges website)
- ▲ **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.

# SERVICES FOR STUDENTS

Career Planning & Advising Center .....	32
Child Development Centers .....	32
Copy Center .....	32
Crisis Counseling.....	32
Department of Public Safety.....	33
Disability Services, Student (OASIS).....	33
Information Technology Support Services .....	33
Learning Assistance Center/Tutoring .....	34
Library .....	34
Math Labs .....	35
Men’s Multicultural Retention Program.....	35
Ombudsman .....	35
Orientation Program for New Students.....	35
Pikes Peak News .....	35
Records .....	35
Southern Colorado Educational Opportunity Center (SCEOC).....	35
Testing Center .....	36
TRiO– Student Support Services .....	36
Veterans Affairs Office .....	36
Veterans Upward Bound.....	36
Visitation Program (Four-year Colleges/ Universities).....	36
Writing Center.....	36
<b>Campus Life</b>	
Activities .....	37
Athletics .....	37
Campus Center .....	37
ID Cards .....	37
Fitness Center .....	37
Recreation/Sports Clubs .....	37
Student Government .....	37
Student Clubs and Organizations .....	37

## SERVICES FOR STUDENTS

### Career Planning and Advising Center

Centennial Campus • A-119 • 502-3232

Downtown Studio Campus • DO-S102 • 502-3232

Rampart Range Campus • S-101 • 502-3232

The Career Planning and Advising centers guide students as they answer the fundamental question, "Why are you here?" Career Planning assists students with clarifying their career goals, choosing the PPCC educational program that best fits their needs, and mapping their path for the chosen major. Once the major is selected, students are helped to choose the appropriate classes that will meet their goals. Advising is required for new students in degree or certificate programs, and is strongly recommended for all other students. The Career Planning and Advising centers are located at Centennial Campus, the Downtown Studio Campus, and the Rampart Range Campus. First semester advising is done in the Career Planning and Advising centers; advising for continuing students is done by the student's assigned faculty advisor (with services provided by Career Planning and Advising if the faculty advisor is not available). The following services are provided at the centers:

#### Career Planning

- Career counseling (individual and group) to help with decision-making, goal setting and choosing a college major
- DISCOVER Career Guidance and Information System, a comprehensive planning tool which includes career inventories and career information databases
- Career maps for all Pikes Peak Community program areas

#### Advising

- Explanation of basic skills (placement test) results, and assistance in selecting classes to resolve any academic deficiencies
- Help in choosing and registering for classes for the first semester enrollment
- Information on course sequence and prerequisites
- Help in adding or dropping classes
- Assignment of a faculty advisor for guidance in future semesters
- Assistance with changing a major or faculty advisor
- Advising on classes when faculty advisor is not available

#### Employment Services

- Individual and group training for job-seeking skills, including resume writing and interviewing
- Résumé production service for current PPCC students and graduates
- Information on the local labor market and planning a job search
- EASE online employment services system (available for current PPCC students and graduates)
- Internet access to job banks

### Child Development Centers

Centennial Campus • 502-2323

Rampart Range Campus • 502-2424

The Child Development Centers (child care) located at the Centennial Campus and the Rampart Range Campus offer comprehensive educational child care services for children age six weeks to five years in infant, toddler, and preschool programs. Children participate in art activities, science, math, music, creative play, language arts, computers, and outdoor play.

The CDC's are licensed by the Colorado Department of Human Services and accredited by the National Association for the Education of Young Children. The Centers are staffed by certified early childhood teachers who are assisted by student staff teacher aides. The Centers serve as a practicum site for students enrolled in the Early Childhood Education Program and the Area Vocational Program.

Children of Pikes Peak Community College students, staff, and faculty are eligible to enroll. The CDC's are open when college classes are in session. Cost of child care is on an income-based sliding scale. Advance registration is required for all programs. Some classrooms may have a waiting list.

Both facilities have a Parent Resource Room where family community resources and parenting materials are available to all students. Workshops, meetings, and support services for parents and families are offered.

### Copy Center

Centennial Campus • B-234 • 502-2111

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.

### Crisis Counseling

The Student Crisis Counseling Office provides referral resources for counseling, treatment, rehabilitation, and re-entry programs; however, traditional mental health counseling services are not available through Pikes Peak Community College.

If you are in need of a referral during normal business hours (8am-5pm Monday through Friday), our campus crisis counselor may be able help you define available options for problem resolution and provide referrals to community agencies for services not provided on campus by calling (719) 502-4782. If you are experiencing a mental health crisis or emergency outside of normal business hours, you should contact the community mental health crisis line at (719) 635-7000 or dial 911.

Online resources are also available at [www.ulifeline.org/schools/ppcc/](http://www.ulifeline.org/schools/ppcc/). ULifeline is an anonymous, internet-based resource that provides students with non-threatening and supportive links to college and community resources. It enables students to retrieve information regarding anxiety, bipolar disorder, depression, stress, pressures of college life, and more. Notably, ULifeline was created by students for students and is maintained by the highly supervised involvement of the most respected professionals in the mental health fields (adapted from the JED Foundation, [www.jedfoundation.org/programs\\_colleges\\_ulifeline.php](http://www.jedfoundation.org/programs_colleges_ulifeline.php), retrieved January 2007).

**Important Note:** By acting as a resource broker for the aforementioned services (i.e. counseling, treatment, re-entry programs and rehabilitation services), the State of Colorado, the State Board for Community Colleges and Occupational Education (SBCCOE), Pikes Peak Community College and its former and current employees assume no responsibility/liability for the services (or lack thereof) provided by the referred agency or agencies.

Pikes Peak Community College, the State of Colorado, the State Board for Community Colleges, SBCCOE and its former and current employees are not responsible for any content on Ulifeline's website that is posted outside of PPCC's dedicated web space.

## Department of Public Safety

Centennial Campus • A-100 • 502-2900

Downtown Studio Campus • DO-S101 • 502-2900

Rampart Range Campus • N-106 • 502-2900

The Department of Public Safety is located at all three campuses. The officers at all three campuses can be reached via telephone at (719) 502-2900. **Emergency calls should be directed to (719) 502-2911.** The Department of Public Safety is staffed by 15 state certified peace officers. All PPCC Campus Police officers are commissioned State peace/police officers. They have full police authority and function the same as any other law enforcement agency in the State of Colorado and on college property.

## Disability Services, Student (OASIS)

Centennial Campus • A-115 • 502-3333 V/TTY

Downtown Studio Campus • DO-S126 • 502-3333 V/TTY

Rampart Range Campus • S-101 • 502-3333 V/TTY

The Office of Accommodative Services and Instructional Support (OASIS) strives to create an accessible environment by providing reasonable and appropriate services and accommodations for students with documented disabilities. 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 in alternate formats
- scribes
- “Smart Start” preparation-for-college seminar
- interpreting services.

OASIS is available to the PPCC community—students, faculty, and staff—for consultation and collaboration on disability issues.

It is the responsibility of students requesting an accommodation due to a qualifying disability to self-identify by registering with OASIS, to apply for supportive services, and to 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. Students must meet with their disability specialist **prior to the beginning of each semester** to discuss arrangements for needed accommodations. The college is not obligated to provide or continue to provide non-OASIS approved accommodations.

**Please note:** An Individualized Education Plan (IEP), Summary of Performance (SOP), 504 Plan, or General Education Initiative from a secondary school may NOT provide thorough information for the documentation of disability and needed accommodations. Please refer to the documentation guidelines, available in OASIS, for the required information.

Informing other staff or faculty does not constitute registering with OASIS. Accommodation requests are evaluated individually to make a determination regarding the provision of reasonable accommodations based on a review and analysis of documentation and circumstances.

Determination of accommodations can be an involved and lengthy process; therefore, students are encouraged to begin the OASIS registration process and submit required documentation as soon as possible. For incoming students, this should be done six to eight weeks prior to arriving on campus. For current OASIS students, this should be done at least four weeks prior to each semester to allow time to provide supported accommodations in a timely manner.

It is OASIS' practice to NOT support accommodations on a provisional basis. However, OASIS may, at its discretion, support accommodations on a provisional basis (one semester only) in the absence of adequate required documentation but in the presence of circumstances that indicate an obvious qualifying disability (i.e. Blind/Low Vision or Deaf). However, students who receive provisional accommodations must provide the required documentation in order to continue receiving accommodations beyond the one semester of provisional accommodations. This is the case even if an undocumented qualifying disability is present.

Please note that accommodations will not be provided even on a provisional basis if there is no indication of a qualifying disability as determined by an OASIS Accommodation Request Determination review. Also, required course Standard Competencies, required essential job duties of an internship or practicum, or degree requirements may not permit the implementation of any supported accommodation(s).

It is the student's responsibility to self-advocate for approved accommodations that are not being provided since accommodations cannot be provided retroactively.

All students, with or without a documented disability, must adhere to the Student Code of Conduct.

**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.

**Learning Disabilities Support Services.** Assistance is provided for students with learning disabilities through a partnership with OASIS. 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.

**Interpreting Services.** Interpreter, Oral, and Transliteration services are available for Deaf and hard of hearing students who have documented need. Call 502-3026 for more information.

## Information Technology Support Services

Centennial Campus Main Office • A-111 • 502-2438

Centennial Campus Computer Lab • A-300 • 502-2443

Downtown Studio Campus Computer Lab • DO-N106 • 502-2408

Rampart Range Campus Computer Lab • E-203 • 502-2408

The division of Information Technology Support Services (ITSS) provides a wide variety of technology services to the college, as well as limited service to the Colorado Community College System and other State entities. Our services span desktop-to-server-to-mainframe computing, networks, telecommunications, Internet connectivity, administrative and academic systems, security, instructional technology, computer labs, plus many support services.

ITSS works with college divisions and departments to develop and implement new systems and technologies. At the same time, we provide quality service and support to all members of the college community.

ITSS provides current students with an account on the instructional network and an e-mail address accessible via the Internet.

Classroom and lab computers are networked with access to the Internet and the instructional network. Each full service campus has its own local area network (LAN). All campus LANs are connected via high-speed connections to provide students, faculty, and staff with the ability to seamlessly access data from any campus. Regular backups are performed to ensure that coursework and other data are recoverable in the event of a disaster.

ITSS computer labs at the Downtown Studio, Rampart Range, and Centennial campuses are available to students, faculty, and staff. ITSS computer labs are also open evenings and weekends to provide students with extended access to technology resources. Hours of operation vary by semester and by campus, so please call for current lab hours or visit [www.pccinst.net](http://www.pccinst.net).

Installed software includes Windows XP Professional, Office products, Visual Studio, and many other common business applications. Macintosh computers are also available in the Centennial Campus Computer lab. Software used in classrooms is also available on lab computers.

Lab staff is available to assist students, faculty, and staff with questions and/or problems in the computer labs. Students seeking tutoring services should contact the Learning Assistance Center/Tutoring at 502-3444 (Centennial).

**Centennial Campus Computer Lab.** Located in room A-300, the computer lab at Centennial campus has over 85 computers including both PCs and Macs. Equipment available for student, faculty, and staff checkout includes digital cameras, video cameras, and headphones. Faculty and staff may also checkout LCD projectors, laptops, TV/VCR combo units for a period of up to 24 hours. Please call in advance to reserve this equipment.

The Centennial Campus computer lab includes a multimedia area available for students emphasizing Multimedia Graphic Design (MGD) and Computer Aided Drafting (CAD) programs. This area of the lab is available for all students, faculty, and staff with preference given to those students currently enrolled in MGD and CAD classes.

**Rampart Range Computer Lab.** Located in room E-203, this computer lab is equipped with 33 computers. Each computer has access to the Internet, as well as the instructional network, to assist students with the completion of coursework.

**Downtown Studio Campus Computer Lab.** Located in room DO-N106a, the lab is equipped with 19 computers. Access to the Internet, as well as the instructional network, is provided to assist students with their coursework.

**Wireless Access.** Wireless access to the Internet is available in the student commons areas of the Centennial, Downtown, and Rampart Range Campuses.

## Learning Assistance Center/Tutoring

Centennial Campus • A-212 • 502-3444

Downtown Studio Campus • DO-S126 • 502-3444

Rampart Range Campus • S-101 • 502-3444

The Learning Assistance Center/Tutoring is available to assist you in achieving your learning goals and helping you reach your fullest academic potential at PPCC. We offer:

- College Success workshops
- Learning Styles Inventories
- Placement test and Finals workshops
- Success Planning
- Supplemental Instruction (SI) sessions
- Tutor Training
- Tutoring (Individual and Group)

Free tutoring services are available to all PPCC students. Group sessions are available on a drop-in basis; however, students in need of individual tutoring must complete and submit an Application for Tutoring. Tutoring is dependent upon available resources; instructor referrals do not guarantee tutoring assignments.

In addition, students seeking tutoring services must:

- Follow the course sequence outlined by their academic advisor (tutoring does not take the place of prerequisites).
- Be enrolled in the class for which tutoring is requested
- Attend class, participate, and make reasonable academic progress
- Utilize college resources (i.e. Math Lab and/or Writing Center)

Individual tutoring is limited to two subjects per semester. Individual tutoring is also limited to two completed semesters for the same course.

## Library

Centennial Campus • A-201 • 502-2400

Rampart Range Campus • N-201 • 502-2440

The Library provides a supportive learning environment at both the Centennial and the Rampart Range Campuses. Services provided at both locations include the online catalog, circulation and reference librarian assistance, computers including laptop checkouts (in-library use only), DVD & video cassette players, group study rooms, and interlibrary loan. Resource materials include electronic databases, e-books, online resource links, over 46,000 print books, plus print journals, magazines, newspapers, DVD's, CD's, audio books, maps, and archived materials. A small children's library is available at both locations.

## 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 library staff consults with faculty to develop the library's collection and investigate various online databases to determine the most useful for the college community. The reference staff also provides library instruction to classes, and compiles bibliographies, help sheets, and other written materials.



## Math Labs

**Centennial Campus • A-316 • 502-3250**

**Downtown Studio Campus • DO-S212 • 502-3270**

**Rampart Range Campus • N-204 • 502-3260**

The Math Labs offer a pleasant environment where students can drop in without an appointment to do their homework and receive free tutoring by math faculty. Tutoring is available at virtually all levels of mathematics. The math tutors are able to sit down with students having questions and assist them in understanding the mathematical concepts they are attempting to learn. The Math Lab tutor schedule will be posted during the first week of class. Please check the appropriate campus for posted hours.

In conjunction with the Learning Assistance Center, the math labs often have supplemental instructors available. Supplemental instructors (SIs) are students approved and trained by the Learning Assistance Center (A-212 on the Centennial Campus) to tutor specific levels of mathematics. Supplemental instructors work either individually with students or with groups of students.

The math labs also have available videos and DVDs for many math courses. The videos can be viewed on the televisions in the math labs. The DVDs can be used with the computers in the math labs.

MyMathLab is also available in the Math Labs and computer labs on each of the campuses. MyMathLab can be used by any student for further study in Math 030, 060, 090, or 106.

## Men's Multicultural Retention Program

**Centennial Campus • A-118 • 502-2265**

The Men's Multicultural Retention Office will provide advocacy for students of diverse cultural backgrounds. This office will strive to connect students with opportunities to enhance their educational goals and personal success. Some of the opportunities available include academic coaching and mentoring, referrals to campuses and community resources, and events that support multicultural students in their efforts to persist in and graduate from college.

## Ombudsman

A student Ombudsman is available in room A-324 on Centennial Campus. The Ombudsman can help students define available options for problem resolution and provide referrals to community agencies for services not provided on campus. For additional information, call (719) 502-2012.

## Orientation Program for New Students

New Student Orientation is MANDATORY for first time college students seeking an AA or AS degree. This includes students who attended either PSEO or AVP college classes. Orientation can be completed in person or on-line at [www.pccc.edu/orientation](http://www.pccc.edu/orientation). New students who are not AA or AS degree seeking are also encouraged to attend. The Orientation Program for New Students consists of open group sessions before each semester, or students may choose to log on to a virtual New Student Orientation. Admissions, Student Life, Public Safety, and Financial Aid staff explain more about their services at the group orientation, but the same valuable information is available in the online delivery format. Due to limited seating, contact the Enrollment Services Center at 502-3000 to reserve your seat. Additional information can be found at [www.pccc.edu](http://www.pccc.edu).

## 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 502-3450 or check out our website at [www.pccc.edu](http://www.pccc.edu).

## Records

**Centennial Campus • A-107 • 502-3000**

**Downtown Studio Campus • DO-S100 • 502-3000**

**Rampart Range Campus • S-102 • 502-3000**

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 (three working days) when requested in person, with a written request, or via the web. The fee will be \$5.00 for immediate (on demand, issued to student) over the counter requests. 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. The form is located at: [www.pccc.edu/AdmissionsEnrollment/Forms/R\\_StudentConsentforReleaseofRecords.pdf](http://www.pccc.edu/AdmissionsEnrollment/Forms/R_StudentConsentforReleaseofRecords.pdf).

All students attending classes at PPCC are assumed to be independent, and therefore, information, other than directory information, is not provided to parents or other persons or agencies unless the student authorizes the release of data 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 and online at <http://www.ed.gov/policy/gen/guid/fpco/ferpa/index.html>.

All application/records materials become property of PPCC when submitted to the institution.

## Southern Colorado Educational Opportunity Center (SCEOC)

**Centennial Campus • A-115 • 502-3028**

**Downtown Studio Campus • DO-S126 • 502-3028**

The SCEOC helps low-income or first-generation college students. Services include help with completion of financial aid and admission applications, guidance in selecting a college, and information about current scholarships as well as online scholarship searches, federal tax preparation, career counseling, testing, and workshops. All services are free.

## Testing Center

Centennial Campus • A-117 • 502-3370

Downtown Studio Campus • DO-S102 • 502-3390

Rampart Range Campus • S-101 • 502-3380

In addition to the college skills placement testing, the Testing Center offers the following services:

- CLEP and DSST (DANTES) testing for college credit
- GED testing for the Colorado High School Equivalency Diploma
- Independent Study, Telecourse, and classroom make-up testing
- Test proctoring for other colleges
- Various certification exams
- LSAT on national test dates

For additional information regarding College Skills Placement Testing, please see page 13.

All new students entering the English Language Institute (ELI) must take a placement test. This test will place new students into one of three levels; basic, intermediate, or advanced. The test is available on computer at all three campuses or in paper/pencil format for those students who are not comfortable with computerized tests. ELI students should call 502-3535 for further information.

Accommodations are available for students with documented disabilities.

Please call any of the Testing Centers for additional information.

## TRiO-Student Support Services

Centennial Campus • A-117 • 502-3222

Student Support Services (SSS) is a federal program that helps low income, first generation and disabled students achieve college goals.

### Eligibility

To be eligible to participate in the TRiO-Student Support Services Program, individuals must meet the following requirements:

- Be enrolled in an Associates Degree program at PPCC (full time students have priority).
- Have a need for academic support to successfully complete a PPCC degree or transfer to a four-year college.
- Be a low income individual and/or first generation and/or a student with a documented disability.
- Be motivated

### Available Services for Students

TRiO-Student Support Services offers the following to program participants:

- Individual and small group tutoring
- Academic and career planning
- Four-year college/university campus tours
- Peer Academic Mentoring
- Scholarship and financial aid searches
- Pre-semester conferences and workshops
- Learning and study strategies inventories
- Help with transfer decisions

## Veterans Affairs Office

Centennial Campus • A-107 • 502-2060

The Veterans Affairs (VA) Office will help eligible veterans and/or dependents apply for veterans' education benefits. The VA Office will also help with VA tutoring, vocational rehabilitation, and advising. For information and forms go to [www.ppcc.edu/AdmissionsEnrollment/VeteransAffairs/](http://www.ppcc.edu/AdmissionsEnrollment/VeteransAffairs/) or e-mail [va@ppcc.edu](mailto:va@ppcc.edu).

## Veterans Upward Bound

Centennial Campus • A116 • 502-4545

The Veterans Upward Bound (VUB) program offers free classes and tutoring to qualified veterans and active duty military members. The classes offered are English, Math, Spanish, Basic Science, Computer Skills and Career Counseling. All class materials are provided by VUB. Additionally, VUB pays a \$40 per month stipend to students completing both English and Math in the same semester.

Free tutorial assistance is also offered. VUB staff members are VA certifying officials and provide assistance for financial aid, scholarships, and admission applications. Emphasis is on low-income and first-generation students.

Courses do not count for college credit but prepare the student for college. The free English and Math classes can be taken in lieu of remedial classes at PPCC to assist students in their basic skills. Classes may be repeated as often as needed.

## Visitation Program (Four-year Colleges & Universities)

All Campuses • 502-3237

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.

## Writing Centers

Centennial Campus • A-311 • 502-3510

Downtown Studio Campus • DO-S212 • 502-3530

Rampart Range Campus • N-202 • 502-3520

Pikes Peak Community College offers students personal instruction in the areas of critical thinking, critical reading, English as a Second Language, and effective writing at our three campus locations. We offer one-to-one conferencing, online tutoring, and computer assisted instruction for students enrolled in any course, not just English Composition.

Writing Center instructors can help with the writing process, topic focus, content development, organization, research strategies and documentation; and we can help students develop skill with self-editing (principles of grammar and mechanics). While we do not simply copy-edit (proofread) papers for students, we will help students learn to identify patterns of errors in their own writing, and we will help students find ways to correct those errors.

Please drop-in (or call) to make an appointment or to browse our collection of handouts covering common writing concerns. You may also e-mail us at [owl@ppcc.edu](mailto:owl@ppcc.edu). And please do check us out on the world wide web at [www.ppcc.edu/StudentServices/WritingCenter](http://www.ppcc.edu/StudentServices/WritingCenter).

## CAMPUS LIFE

### Activities

The Campus Activities Office directs a full schedule of cultural, wellness, arts, and topical events aimed at enriching student life on campus. Lunch hour concerts, make-overs, horoscope readings, juggling, and novelties typify activities between classes, while monthly Open Mic poetry nights, occasional music jams, and read-ins promote student self expression. Wellness and lifestyle activities include the Fitness Fair, Smoke-out, blood drives, flu shots, and personal growth focused programs. Multi-cultural events include heritage focuses on African Americans, Native Americans, and women, with special events offerings of Cinco de Mayo activities, Mariachi music, and West African dance. Current events are covered with a wide range of speakers, panels and forums. The Campus Activities office invites your ideas and participation. Please call 502-2091 for more information.

Discounted tickets and selected city and state events are available to students. PPCC also has a membership to the Colorado Springs Fine Arts Center, making admission to the gallery and access to the art library free to students as well as offering discounts in the FAC gift shop. Through the Campus Life Office, students can also rent lockers and reserve meeting room space in the Campus Center at the Centennial, Rampart Range, and the Downtown Studio Campuses.

### Athletics

PPCC has three independent sports teams. Co-ed soccer, karate, and volleyball teams compete on recreation leagues. The club team programs are 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 502-2555.

Limited scholarship assistance is available for eligible participants.

### Campus Center

Centennial Campus houses a Campus Center where students can relax and meet other students. This facility is “home away from home” where students can find lounge areas, meeting rooms, study space, TV and music, and billiard tables. Campus Life, Student Government, and some student club offices are also located here. Rampart Range Campus and the Downtown Studio Campus each houses student space for lounges, study areas, activities, vending machines, and the Campus Life Office.

### ID Cards

Every PPCC student needs a photo Student Identification Card. A properly validated Student ID Card enables students to use the library to check out materials or use the computer lab or other services. It also entitles students to free or reduced admission to student plays, dances, events, and other activities.

Students may obtain a Student ID Card their first semester at PPCC at the Campus Center Info Desk at Centennial Campus, the Downtown Studio Campus, or Rampart Range Campus. This ID is valid for the student's entire career at PPCC. If the ID Card is lost, students can obtain a replacement ID for a charge. Proof of identification such as a driver's license, photo ID, etc., is required for all new and replacement IDs.

Other Photo ID's. The Campus Life office will also produce special ID's for nursing practicum students, Fitness Center members, etc. upon special arrangement for a nominal charge.

### 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 and treadmills; a 12-station Super Circuit; elliptical trainers; AMTs; stair-stoppers; 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 either PED 110, 111, 113, 115, 116, 210, or 211 or join 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, and soccer field. Club sports such as skiing, basketball, volleyball, karate, soccer, cycling, and others are available. For information, call 502-2555.

### Student Government

Participation in Student Government is a great way to strengthen leadership skills. Student leaders work on 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 senate seats are held during fall term. The executive officers are elected during spring term. All elections are now done via an online ballot, watch your student e-mail accounts for information.

### 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), 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 Asian Culture Club, Pride Alliance (GLBTA), Black Student Union, 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 called “The Nobody Told Me Book,” or visit the Campus Life Office on any campus for more information about how to get involved with clubs and organizations.

## **SERVICES FOR THE COMMUNITY**

Services for the Community .....	39
Activities and Events .....	39
The Downtown Studio Gallery .....	39
Economic and Workforce Development .....	39
International and Multicultural Education .....	39
KEPC Radio - 89.7 FM .....	39

## 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 campus activities and events to the public, many free of charge. A sampling of public activities and events are as follows:

- African American History Month
- Native American Heritage Events
- Swing Dance Lessons
- Spanish Art Market
- Living History Series
- Veteran's Day Observance
- Women's History Month

For more information, call the Campus Life Office at 502-2522.

### 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 502-4040.

### Economic and Workforce Development Division

The Economic and Workforce Development Division provides Continuing Education courses for individuals and Customized Training programs for business and industry. Continuing Education offerings include occupational skill upgrade and personal enrichment courses. The workforce development unit provides quality training at competitive rates to companies that will enrich employee skills and lead to a more productive workforce. We offer the following services:

- Total training packages including customized curriculum, materials, evaluations, certificates, and pre/post testing
- Hundreds of courses in technology, business, manufacturing, construction, safety, communications, etc.
- In many cases, the ability to apply training toward a certificate or degree option
- Flexible delivery options which allow training on the employer's site, at the college, or another offsite location.
- Reasonably priced meeting, lab, and training rooms
- Official site for administration of Colorado First and Existing Industry Grants

For more information, call the Economic and Workforce Development office at 502-3452.

### International and Multicultural Education

Our faculty, staff, and administration place a strong emphasis on the importance of international and multicultural education, and we believe it is our responsibility to meet the needs of a changing world by expanding student knowledge and experience in international perspectives. We believe that it is imperative to help develop globally and multi-culturally competent students and citizenry. The College's year 2002-2007 Strategic Plan notes the importance of "academic programs and activities that reflect the diversity of our society and encourage an understanding of global interdependence."

Pikes Peak Community College has been the recipient of six major Department of Education grants since 1992. These awards, totaling over \$800,000, coupled with substantial College support have allowed the college to pursue exceptionally strong efforts in international curriculum and international professional development for faculty; international activities for the community; and international business, industry, and educational partnerships. Pikes Peak Community College is the only community college in the United States to be twice awarded the American Council on International Intercultural Education's Achievement Award for extensive contributions to global education, in 1993 and again in 2001.

### KEPC Radio

Students in the Radio, Television program at Pikes Peak Community College can be heard in Colorado Springs on 89.7 FM, 101.5 in Pueblo and 89.1 in Manitou Springs. Broadcasting in high definition (HD) with nearly 10,000 watts of power, KEPC programs provide a wide variety of music and other programming.

Throughout the semester, PPCC Radio and Television 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](http://www.ppcc.edu).

For more information, call 502-3166.

# EDUCATIONAL PROGRAMS

Degree and Certificate Criteria .....	41
Degree Eligibility .....	41
<b>Options for Current High School Students</b>	
Area Vocational Program (AVP) .....	41
Post Secondary Enrollment Option (PSEO).....	42
Articulation Agreements .....	42
High School Student Records .....	42
<b>College Preparatory Programs</b>	
Purpose and Goals .....	42
Advancing Academic Achievement.....	42
English Preparatory Program .....	42
Mathematics Preparatory Program .....	42
Reading Preparatory Program .....	43
Deaf Preparatory Program (Deaf Prep).....	43
English as a Second Language Preparatory Program.....	43
<b>Alternative Delivery Methods/Distance Learning Options</b>	
Interactive Television .....	44
Video-Conference Classes .....	44
PPCC Online Courses .....	44
PPCC Hybrid Courses .....	44
CCC Online Courses .....	44
Weekend College.....	44
Independent Study Courses .....	44
Open-Entry/Open-Exit Courses.....	44
Military Programs.....	45
Credit for Prior Learning .....	45



## Degree and Certificate Criteria

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 students have not attended for two semesters (excluding the summer term), they must meet the program requirements published in the catalog in effect 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 students 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.

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.

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 GT Pathways Curriculum project, a statewide articulation process among all state community colleges, four-year colleges, and universities. Academic advising is available if students wish to transfer to another school after graduating from PPCC. Pikes Peak Community College has special transfer arrangements with many public and private four-year colleges and universities. Visit [www.pccc.edu/academics/transfereinformation](http://www.pccc.edu/academics/transfereinformation) to learn more.

AA and AS students must complete all required courses with a grade of C or better in order to apply for a degree or certificate. Remedial courses and elective credits that are not required by the applicable program are not included in this requirement.

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 learned in the other. The course description for each of these paired courses refers to the concurrent enrollment requirements.

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

College preparatory 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.

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

Students who receive 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.

PPCC will accept 45 applicable credits toward a second degree or certificate.

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.

## 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.

### Occupational Programs Available

- Auto Collision Technology
- Automotive Service Technology
- Computer Aided Drafting
- Computer Information Systems/Gaming
- Criminal Justice
- Culinary Arts
- Diesel Power Technology
- Early Childhood Professions
- Fire Science Technology
- Med-Prep/Skills
- Med-Prep/Careers
- Multimedia Graphic Design
- Public Utilities Technology
- Radio, Television
- Welding
- Zookeeping

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

All area vocational programs operated at Pikes Peak Community College are approved by the State Board for Community Colleges and Occupational Education. All AVP instructors are occupationally experienced and vocationally credentialed to teach in their area of expertise. Enrollment in AVP is completed at the high school level. Contact your high school counselor or call 502-3111 for more information.

### 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 developmental courses.

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. PSEO students must also enroll in the College Opportunity Fund (COF). Contact your high school counselor for more information or to enroll. At PPCC, call 502-3111 for more information.

### 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 most 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, electronics, early childhood education, culinary arts, computer aided drafting, auto service, auto collision, and marketing. 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 502-3111.

### High School Student Records

All students attending courses at PPCC are assumed to be independent, and therefore, 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.

For additional information on options available for current high school students, visit [www.ppcc.edu/academics/highschoolprograms](http://www.ppcc.edu/academics/highschoolprograms).

## COLLEGE PREPARATORY PROGRAMS

### Purpose and Goals

In accordance with state policy and in order to maximize student success, PPCC provides placement testing and college prep courses so students can be assured they are prepared to begin their course of study. Students enroll in college prep courses in mathematics, reading, English, and study skills (Advancing Academic Achievement courses) as prerequisites for college courses as well as for personal enrichment. Research indicates that students who need and take these courses do better in their college-level courses than they would have without them. Refer to the basic skills assessment matrix on page 13.

### Advancing Academic Achievement

For students who have concerns about meeting the challenges of college academic requirements or for students who want to improve the study skills they may have learned in previous educational settings, Pikes Peak Community College provides the Academic Achievement Program. Courses in this program are designed to help students develop personalized learning strategies in the areas of time management, goal setting, note-taking, test-taking, textbook reading, memory development, and critical thinking. Students are encouraged to enroll in the appropriate study skills course prior to starting their degree or certificate programs. Students who score into two or more developmental level courses (mathematics, reading, and/or English) should select an Academic Achievement course in their first or second semester at PPCC. To enter the program, students need to take the placement test. Course placement is determined by the student's placement test scores.

AAA 050 Semester Survival

AAA 090 Academic Achievement Strategies  
(introduction to college study skills)

AAA 109 Advanced Academic Achievement (college study skills)

For further information about the AAA Program, please call 502-3500.

### English Preparatory Program

College preparatory English courses cover basic writing and grammar. These courses are a good refresher for students who have not written college reports or essays. The writing courses, assigned according to placement test scores, 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) prerequisite for a number of general education classes.

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 and for

ENG 131 Technical Writing I

### Mathematics Preparatory Program

College preparatory mathematics courses prepare students for college-level mathematics courses or entry into many occupational programs. Enrollment is based on placement test scores or successful completion of the course prerequisite.

MAT 030 Fundamentals of Math  
(vocabulary, basic operations, and applications of whole numbers, fractions, and decimals)

MAT 060 Pre-Algebra (vocabulary, basic operations, and applications of fractions, ratio, proportion, percent, signed numbers, algebraic expressions, first-degree equations, and word problems)

MAT 090 Introductory Algebra (solution and application of first-degree equations, inequalities, and formulas; polynomials; factoring polynomials and solving equations by factoring; linear equations; and applications)

## Reading Preparatory Program

College preparatory reading courses cover phonics, vocabulary, comprehension, rate improvement, critical thinking, and reasoning skills. Enrollment in various reading course levels is based on placement test scores.

REA 030	Basic Reading Skills (word attack strategies, vocabulary development, and comprehension)
REA 060	Foundations of Reading (vocabulary development, comprehension, skill transfer reading, rate improvement)
REA 090	College Preparatory Reading (application of basic reading comprehension skills to high-level reading, critical and analytical reading strategies, and rate improvement)

## Deaf Prep

The Deaf Prep Program is a four-semester college preparatory program for deaf students who need an accessible and supportive learning environment where they are allowed to perform and progress at their own pace. This program is designed to make it possible for students to go on to college level classes. Instruction is individualized according to need and placement level in English, mathematics, American Sign Language, and reading. All faculty are deaf or native-like signers, and classes are taught in American Sign Language. The program has four levels of instruction in remedial English, mathematics, critical thinking, American Sign Language, resource management, and two levels of study skills. During the second year of Deaf Prep, and in certain cases, during the first year, depending on placement test scores, students are encouraged to take classes in a major or interest area in addition to or instead of Prep classes.

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

### Semester One – Fall

DEP 011	Deaf Prep American Sign Language I	3
DEP 021	Deaf Prep Critical Thinking I	2
DEP 031	Deaf Prep English I	5
DEP 041	Deaf Prep Math I	3
DEP 051	Deaf Prep Resource Management I	2
DEP 061	Deaf Prep Study Skills I	2

### Semester Two – Spring

DEP 012	Deaf Prep American Sign Language II	3
DEP 022	Deaf Prep Critical Thinking II	2
DEP 032	Deaf Prep English II	5
DEP 042	Deaf Prep Math II	3
DEP 052	Deaf Prep Resource Management II	2
DEP 062	Deaf Prep Study Skills II	2

### Semester Three – Fall

DEP 013	Deaf Prep American Sign Language III	3
DEP 023	Deaf Prep Critical Thinking III	2
DEP 033	Deaf Prep English III	5
DEP 043	Deaf Prep Math III	3
DEP 053	Deaf Prep Resource Management III	2

### Semester Four – Spring

DEP 014	Deaf Prep American Sign Language IV	3
DEP 024	Deaf Prep Critical Thinking IV	2
DEP 034	Deaf Prep English IV	5
DEP 044	Deaf Prep Math IV	3
DEP 054	Deaf Prep Resource Management IV	2

## English as a Second Language Preparatory Program

The English Language Institute (ELI) is located at the Centennial Campus, room A-229. It is a semi-intensive English as 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 placement level is below English 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 ELI include grammar, pronunciation, composition, reading, and conversation. Full-time students may complete coursework in the ELI in three semesters.

For more information about the English Language Institute at Pikes Peak Community College, visit our website at [www.ppcc.edu](http://www.ppcc.edu) or call 502-3535.

### Basic Level

ESL 021	Basic Grammar	5
ESL 031	Basic Conversation	4
	or	
ESL 041	Basic Reading	(4)
		9

### Intermediate Level

ESL 022	Intermediate Grammar	5
ESL 032	Intermediate Conversation	4
	or	
ESL 042	Intermediate Reading	(4)
ESL 052	Intermediate Composition	4
		13

### Advanced Level

ESL 023	Advanced Grammar	5
ESL 043	Advanced Reading	4
ESL 053	Advanced Composition	4
		13

Additional electives can be taken at any time after Basic level. These electives do not count toward level completion in the English Language Institute.

ESL 011	Basic Pronunciation	3
ESL 012	Intermediate Pronunciation	3

## ALTERNATIVE DELIVERY METHODS/DISTANCE LEARNING OPTIONS

PPCC offers a variety of non-traditional learning options for students who cannot or do not wish to take courses in a traditional classroom setting. The Distance Education program includes a wide variety of interactive television and Internet classes. Go to [www.ppcc.edu](http://www.ppcc.edu) and click on Distance Learning to review the options for learning from home or work.

Students who need to set their own schedules for coming to campus can take open entry/open exit courses in business and occupational areas. They can also arrange to complete coursework in specific classes through Independent Study by Division.

### Interactive Television (Section 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. 1TV students use the same syllabus as "in-class" students.

### PPCC Online (Sections 1N1, 2N1, 3N1, etc.)

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.

### Video-Conference Classes (Sections VC1, VC2, VC3, VC4)

Students from all PPCC campuses take classes together over a video-conferencing system that allows participants to see and talk to one another at different sites. Instructors make syllabi and other handouts available on a web site so that students can download and print materials as necessary.

### PPCC Hybrid Classes (Sections 1H\*/2H\*/3H\*)

Hybrid, or blended, classes combine on-campus class sessions with Internet-based course work. In most cases students will meet once a week for lecture, hands-on learning, and face-to-face group activities. Remaining assignments will be completed online. Students can access online activities from any computer connected to the Internet, including those in campus computer labs.

### CCC Online (Sections C11, C21)

Courses are offered through a consortium of thirteen community colleges in Colorado. Students will register as a PPCC student, but an instructor may teach the classes from any of the thirteen schools. Check the website for complete information. Students may also apply appropriate CCC Online classes toward degrees at PPCC. For more information go to [www.cconline.org](http://www.cconline.org).

Alternative delivery classes meet the same course outcomes as their traditional counterparts and are subject to the same transfer agreements. In addition, there are transfer agreements with colleges both in-state and out-of-state that offer Baccalaureate completion programs using distance/electronic technology. 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 502-3555 or e-mail at Distance.Ed@ppcc.edu.

Students on active military duty, please call 502-4100 or e-mail [mil.programs@ppcc.edu](mailto:mil.programs@ppcc.edu).

### Weekend College

It is possible to earn an Associate of Arts degree at Pikes Peak Community College in two years by attending college only on the weekends. PPCC Weekend College at the Downtown Studio Campus offers a variety of classes for the student who wants to earn a degree but can only attend on the weekends or for the student who just wants to pick up an extra class or two. Classes are offered Fridays in the afternoon and evening, and Saturdays throughout the day. The Weekend College experience can also be enhanced with online classes. Internet and Hybrid offerings, blended classes that allow you the flexibility of combining a traditional classroom experience with at home internet learning, are a perfect complement to Weekend College. For more information, call 502-3000.

### Independent Study Courses

Extended learning options may be 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 independent study.

College credit is awarded for these courses.

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

### 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 in the open-entry/open-exit format so that students can begin a course at three different times each semester. These courses are offered at all three campuses. For more information, contact the Division of Mathematics and Technology at 502-3600.

Military Programs offers a number of computer courses in an open-entry/open-exit format. For more information, call the Peterson AFB Education Center at 502-4300 or the Fort Carson Education Center at 502-4200.

## 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 Service members Opportunity Colleges (SOC), a group of over 1,800 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, facilitates the transfer of relevant course credits, and provides flexible academic residency requirements.

Service members Opportunity Colleges, developed jointly by representatives of the Armed Services, the Office of the Secretary of Defense, and a consortium of leading national higher educational associations, is co-sponsored by the American Association of Community Colleges (AACC). PPCC also has been selected by the Defense Activity for Non-Traditional Education Support (DANTES) as one of the approved colleges and is listed in the DANTES Guide to External Degree Programs. The Associate of General Studies (AGS) degree is offered in conjunction with the Credit for Prior Learning (CPL) program.

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

Veterans may be certified for educational benefits at several of the above locations.

Students on active military duty should call either the Ft. Carson office (Army) at 502-4200 or the Peterson AFB office (all other branches) at 502-4300. Please see our website at [www.ppcc/military.edu](http://www.ppcc/military.edu) for more information.

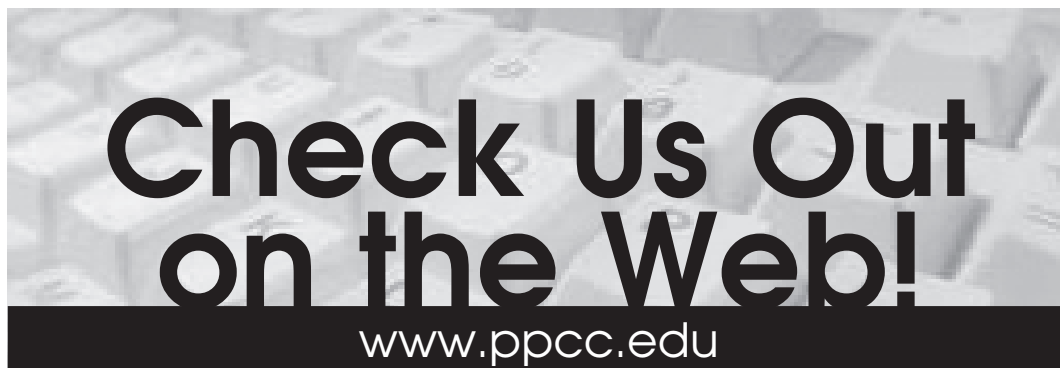
## Credit for Prior Learning (CPL)

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 Credit for Prior Learning program (CPL). 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 502-3000.

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



**on the PPCC website, you can:**

- \_\_\_\_\_ **register for** classes
- \_\_\_\_\_ **print your** schedule
- \_\_\_\_\_ **order** books
- \_\_\_\_\_ **find out about** campus events
- \_\_\_\_\_ **listen to** KEPC radio online
- \_\_\_\_\_ **make** payments on your account
- \_\_\_\_\_ **change** your class schedule: add, drop, or waitlist classes  
mailing address • phone  
email address and personal  
identification number (PIN)
- \_\_\_\_\_ **check** course availability • your grades •  
your email
- \_\_\_\_\_ **see** an unofficial transcript • order an  
official transcript • department home  
pages
- \_\_\_\_\_ **search** the PPCC Library and Pikes Peak  
Library District's online catalogs
- \_\_\_\_\_ **look up** lab hours • faculty and staff phone  
numbers



**Don't have a computer? Use ours! Stop by any of the Computer Labs Today.**



# DEGREE & PROGRAM REQUIREMENTS

Program Directory .....	48
Associate of Arts Degree–General .....	50
Associate of Arts Electives .....	51
AA Degrees and Recommended Tracks.....	54
Associate of Science Degree–General.....	72
Associate of Science Electives .....	72
AS Recommended Tracks .....	73
Associate of General Studies–General.....	77
Associate of General Studies Electives.....	78
AGS Recommended Tracks .....	78
Associate of Applied Science Degrees and Certificate Programs–General .....	79
AAS General Education Electives .....	79
AAS Degrees and Certificates .....	80
Other Programs and Courses of Study .....	114

.....

**PROGRAM DIRECTORY**

	AA	AS	AGS	AAS	Cert.	Course Work
<b>Business, Social &amp; Behavioral Sciences</b>						
<b>502-3300</b>						
Accounting				p. 80	p. 81	
Administrative Assistant					p. 86	
Anthropology	p. 54					
Business Foundations					p. 87	
Business Transfer	p. 56					
Customer Service				p. 85	p. 87	
Criminal Justice				p. 91	p. 92	
Culinary Arts				p. 93	p. 94	
Culinary Arts: Baking and Pastry				p. 93		
Culinary Arts: Basic Skills					p. 94	
Culinary Arts: Food Service Management				p. 94	p. 94	
Early Childhood [Teacher] Education	p. 58			p. 96	p. 96	
Entrepreneurship				p. 85	p. 87	
Environmental Studies	p. 60					
Executive Assistant				p. 86		
Finance						p. 158
Fire Science Technology				p. 99	p. 100	
Homeland Security/Emergency Management				p. 100	p. 101	
International Business				p. 86	p. 88	
Management				p. 86	p. 88	
Marketing				p. 86	p. 88	
Paralegal/Legal Assistant				p. 107	p. 108	
Pikes Peak Regional Law Enforcement Academy					p. 109	
Political Science	p. 66					
Psychology	p. 67					
Real Estate					p. 88	
Social Services Technician				p. 111	p. 112	
Social Work Transfer	p. 68					
Sociology	p. 68					
Supervision				p. 86	p. 88	
<b>Communications, Humanities, &amp; Technical Studies</b>						
<b>502-3200</b>						
American Culture Studies	p. 54					
Architectural Drafting					p. 81	
Architecture & Construction Technology				p. 81	p. 82	
Art/Photography	p. 55					
Automotive Collision Technology				p. 82	p. 83	
Automotive Technology/Diesel				p. 83	p. 84	
Communication	p. 56					
Computer Aided Drafting (CAD)				p. 89	p. 89	
Dance	p. 57					
Facilities Maintenance Technology/HVAC				p. 98	p. 99	
Farrier Science					p. 99	
History	p. 62					
Humanities	p. 62					
Interior Design				p. 101		
Multimedia Graphic Design				p. 103	p. 104	
Music	p. 65					
Philosophy	p. 65					

	AA	AS	AGS	AAS	Cert.	Course Work
Radio & Television				p. 109	p. 110	
Southwest Studies	p. 69					
Theatre	p. 71					
Welding				p. 113	p. 113	
<b>Health, Environmental, Natural, &amp; Physical Sciences</b>						
<b>502-3400</b>						
Adventure Guide					p. 105	
Biological Sciences		p. 73				
Chemistry		p. 73				
Clinical Office Assistant					p. 102	
Dental Assisting				p. 95	p. 96	
Emergency Medical Services				p. 97	p. 98	
Geographic Information Systems					p. 100	
Geography	p. 61					
Geology		p. 74				
Health Information Technology				p. 100		
Medical Assistant				p. 102		
Medical Office Technology				p. 102	p. 104	
Medical Receptionist					p. 103	
Medical Transcriptionist					p. 103	
Natural Resource Management			p. 78			
Natural Resources				p. 105		
Nursing				p. 106	p. 107	
Pharmacy Technician				p. 108	p. 109	
Phlebotomy					p. 103	
Physics		p. 75				
Pre-Allied Health		p. 76				
Pre-Med Professions		p. 76				
Water & Wastewater Management				p. 112	p. 112	
Zookeeping				p. 114		
<b>Languages</b>						
<b>502-3500</b>						
Elementary Education Teacher Preparation	p. 58					p. 114
English	p. 59					
Foreign Languages	p. 61					
Journalism	p. 63					
Literature	p. 64					
Sign Language Interpreter Preparation				p. 111	p. 111	
Technical Writing & Communication	p. 70					
<b>Mathematics &amp; Technology</b>						
<b>502-3600</b>						
Cisco Certified Network Associate					p. 88	
Computer Information Systems				p. 90	p. 90	
Computer Networking Technology				p. 90	p. 91	
Computer Science		p. 74				
Electronics Technology				p. 97	p. 97	
Integrated Circuit Fabrication						p. 167
Machining Technology						p. 172
Mathematics		p. 75				
Pre-Engineering						p. 114

## ASSOCIATE OF ARTS (AA)

The Associate of Arts degrees and recommended tracks are designed for students who want a traditional liberal arts education and who intend to transfer to a four year college or university. They provide a basis of study in the areas of arts and humanities, communication, or social sciences.

Pikes Peak Community College partners with other Colorado community colleges and four-year universities to guarantee transfer of the Associate of Arts degrees and recommended tracks. Adherence to the Colorado Community College System 60+60 Bachelor's Transfer Program guarantees that at least 60 hours will transfer completely, upon admission, to a Bachelor of Arts major in Colorado's public four-year institutions, where students are guaranteed to be able to finish the Bachelor of Arts degree with an additional 60 credit hours of study.

In addition to the recommended tracks, Pikes Peak Community College participates in a statewide articulation agreement for the guaranteed transfer of an Associate of Art in Business, Elementary Teacher Education, and Early Childhood Teacher Education. Students should review the degree requirements of the four-year university of interest and work with their PPCC faculty advisor to ensure a smooth transfer.

To earn an Associate of Arts Degree, students must complete Colorado Community College System 60+60 Bachelor's Transfer Program outlined below. The course requirements total 60 semester credit hours, at least 35 of which must be Colorado State-Guaranteed Courses, and students must earn a C or better in each class.

### I. Communication

Nine (9) credit hours

GT-C01: ENG 121

GT-C02: ENG 122

COM 115 or COM 125\*

\*This requirement is a Colorado Community College System requirement and is in addition to the State Guaranteed General Education Transfer Courses.

### II. Art and Humanities

Nine (9) credit hours

Select three (3) courses, with no more than two (2) courses from any one (1) of the following categories:

GT-AH1: ART 110, ART 111, ART 112, ART 207, MUS 120, MUS 121, MUS 122, THE 105, THE 211, THE 212

GT-AH2: HUM 121, HUM 122, HUM 123, LIT 115, LIT 201, LIT 202, LIT 205, LIT 211, LIT 212, LIT 221, LIT 222

GT-AH3: PHI 111, PHI 112, PHI 113, PHI 114, PHI 214

GT-AH4: FRE 211, FRE 212, GER 211, GER 212, JPN 211, JPN 212, RUS 211, RUS 212, SPA 211, SPA 212

### III. Mathematics

Three (3) credit hours minimum (credit hours over three (3) will be applied to the electives category).

GT-MA1: MAT 120, MAT 121, MAT 122, MAT 123, MAT 125, MAT 135, MAT 155, MAT 156, MAT 166, MAT 201, MAT 202, MAT 203, MAT 215, MAT 265

\*Students must take both MAT 155 and MAT 156 to satisfy this requirement.

### IV. Social and Behavioral Sciences

Nine (9) credit hours

Select 3 courses, at least 1 of which must be History, with no more than 2 courses from any 1 category.

GT-HI1: HIS 101, HIS 102, HIS 111, HIS 112, HIS 201, HIS 202, HIS 247

GT-SS1: ECO 201, ECO 202, POS 105, POS 111, POS 205, POS 225

GT-SS2: GEO 105, GEO 106

GT-SS3: ANT 101, ANT 111, ETH 200, PSY 101, PSY 102, PSY 205, PSY 217, PSY 226, PSY 227, PSY 235, PSY 238, PSY 249, SOC 101, SOC 102, SOC 205, SOC 215, SOC 216, SOC 231

### V. Physical and Life Sciences

Eight (8) credit hours: select two (2) courses (credits over eight (8) will be applied to the electives category).

GT-SC1: AST 101, AST 102, BIO 105, BIO 111, BIO 112, BIO 201, BIO 202, BIO 204, CHE 101, CHE 102, CHE 105, CHE 111, CHE 112, GEY 111, GEY 121, MET 150, PHY 105, PHY 111, PHY 112, PHY 211, PHY 212, SCI 155, SCI 156

\*Students must take both SCI 155 and SCI 156 to satisfy this requirement.

### VI. Fine Arts/Communications\*

One to three (1-3) credit hours

Select one (1) to three (3) credit hours from the approved list on page 53.

\*This requirement does not apply to transfer programs with state-approved articulation agreements.

### VII. Computer Communication

Three (3) credit hours

CSC 105 or CSC 120

Students entering with strong computer skills have three options for meeting this requirement:

- Challenge and receive credit for CSC 105 by enrolling in an Open Entry/ Open Exit section and successfully completing with a C or higher.
- Meet the requirement through Credit for Prior Learning.
- Waive the requirement by applying to the Division of Mathematics and Technology. Waiving will require proof of competency via completion of a self test and a structured interview with a faculty member from the CIS or CSC department. Waiver also requires the credits be replaced by another elective from the approved elective course list.

### VIII. Electives

Sixteen to eighteen (16-18) credit hours selected from the AA approved course list.

### Other 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.
- Only 6 elective credits are allowed in any combination of PED 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.
- Career and technical courses, whether taken at another institution or at PPCC, are not accepted toward this degree without approval of the Vice President for Educational Services. Approval is given only when it is appropriate to the educational objectives of a student.
- Courses numbered below 100 do not apply toward degrees.

Foreign Language Note: It is advisable to verify the foreign language admissions requirements for the university/four-year college you are planning to attend. For example, many of the Colorado four-year institutions require foreign languages for admission; the CU system requires 2-3 years of high school foreign language (or equivalent 2-3 semesters at Pikes Peak Community College). Students planning to attend a Colorado four-year institution who do not have the prerequisite foreign language requirement from high school should consider enrolling in these courses in addition to the degree requirements.

## Approved Elective Course List for AA Degrees and Recommended Tracks

These courses are guaranteed to transfer as part of the 60+60 Bachelor's Degree Transfer Program. State-wide and individual college transfer agreements prescribe electives which transfer as part of those programs. Students who transfer prior to completing the AA degree are responsible for checking transfer of individual courses with the receiving four-year institution.

### Communications

COM 115	Public Speaking	3
COM 125	Interpersonal Communication	3
COM 216	Principles of Speech II	3
COM 217	Group Communications	3
COM 220	Intercultural Communication	3
COM 225	Organizational Communication	3
ENG 121	English Composition I: CO1	3
ENG 122	English Composition II: CO2	3
ENG 131, 132	Technical Writing I, II	3,3
ENG 221, 222	Creative Writing I, II	3,3
ENG 226	Fiction Writing	3
ENG 227	Poetry Writing	3
ENG 230	Creative Non-Fiction	3
ENG 231	Literary Magazine	3

### Arts and Humanities

ART 110	Art Appreciation: AH1	3
ART 111	Art History I: AH1	3
ART 112	Art History II: AH1	3,3
ART 115, 116	East Asian Painting I, II	3,3
ART 121, 122	Drawing I, II	3,3
ART 123, 124	Watercolor I, II	3,3
ART 131	2-D Design	3
ART 132	3-D Design	3
ART 135	Fiber Design I	3
ART 138	Photography I	3
ART 139	Photography II	3
ART 141, 142	Jewelry & Metal Work I, II	3,3
ART 143	Digital Photography I	3
ART 146, 147	Stained Glass I,II	3,3
ART 150	Digital Art Foundations	3
ART 152	Mixed Media I: Digital Fine Art Techniques	3
ART 154, 155	Sculpture I, II	3,3
ART 156	Figure Drawing I	3
ART 157	Figure Painting I	3
ART 161, 162	Ceramics I, II	3,3
ART 163, 164	Handbuilt Clay I, II	3,3
ART 207	Art History - 1900 to Present: AH1	3
ART 211, 212	Painting I, II	3,3
ART 225	Printmaking I	3
ART 226	Advanced Printmaking I	3
ART 243	Digital Photography II	3
ART 244	Digital Photo Studio	3
ART 248	Digital Darkroom	3
ART 251	Portrait Photography	3
ART 252	Landscape Photography Workshop	3
ART 264	Marketing for the Visual Arts	3
ASL 121, 122	American Sign Language I,II	5,5
DAN 105	Hip Hop Dance	1
DAN 111, 112, 113	Modern Dance I-III	1,1,1
DAN 121, 122, 123	Jazz Dance I-III	1,1,1
DAN 125	History of Dance I	3
DAN 129	Introduction to Dance	1
DAN 130	Dance Sampler	1
DAN 131, 132, 133	Ballet I-III	1,1,1

DAN 141	Ballroom Dance I	1
DAN 142	Ballroom Dance II	1
DAN 151, 152	Belly Dance I, II	1,1
DAN 211	Dance Composition	3
DAN 221	Dance Performance	2
DAN 224	Dance for Musical Theatre	3
FRE 111, 112	French Language I, II	5,5
FRE 211	French Language III: AH4	3
FRE 212	French Language IV: AH4	3
GER 111, 112	German Language I, II	5,5
GER 211	German Language III: AH4	3
GER 212	German Language IV: AH4	3
HUM 103	Introduction to Film Art	3
HUM 115	World Mythology	3
HUM 121	Early Civilizations: AH2	3
HUM 122	From Medieval to Modern: AH2	3
HUM 123	The Modern World: AH2	3
HUM 131	The Arts and Cultures of Mexico	3
HUM 163	Film Criticism	3
HUM 201	Twentieth Century American Arts	3
HUM 236	North American Indian Arts	3
HUM 237	Hispanic Arts of the Southwest	3
HUM 238	Sacred Images, Sacred Spaces: Southwestern U.S.	3
HUM 241	Asian Arts and Cultures	3
ITA 111	Italian Language I	5
ITA 211	Italian Language III: AH4	3
ITA 212	Italian Language IV: AH4	3
JPN 111, 112	Japanese Language I, II	5,5
JPN 211	Japanese Language III: AH4	3
JPN 212	Japanese Language IV: AH4	3
LIT 115	Introduction to Literature: AH2	3
LIT 125	Study of the Short Story	3
LIT 201	Masterpieces of Literature I: AH2	3
LIT 202	Masterpieces of Literature II: AH2	3
LIT 205	Ethnic Literature: AH2	3
LIT 211	Survey of American Literature I: AH2	3
LIT 212	Survey of American Literature II: AH2	3
LIT 221	Survey of British Literature: AH2	3
LIT 222	Survey of British Literature II: AH2	3
LIT 235	Science Fiction	3
LIT 246	Literature of Women	3
LIT 248	Native American Literature	3
LIT 255	Children's Literature	3
LIT 257	Literature and Film	3
LIT 268	Celtic Literature	3
MUS 100	Fundamentals of Music Theory	3
MUS 110, 111	Music Theory I, II	3,3
MUS 112	Ear Training/Sight-singing I Lab	1
MUS 113	Ear Training/Sight-singing II Lab	1
MUS 120	Music Appreciation: AH1	3
MUS 121	Introduction to Music History I: AH1	3
MUS 122	Introduction to Music History II: AH1	3
MUS 125	History of Jazz Music	3
MUS 126	History of American Popular Music	3
MUS 131, 132, 133, 134	Music Class I-IV	2,2,2,2
MUS 141, 142, 143, 144	Private Instruction I-IV	1,1,1,1
MUS 151, 152, 153, 154	Ensemble I-IV	1,1,1,1
MUS 210, 211	Music Theory III, IV	3,3
MUS 212, 213	Advanced Ear Training/Sight Lab I, II	1,1
MUS 232, 233, 234	Music Class I-IV	2,2,2
MUS 241, 242, 243, 244	Private Instruction I-IV	2,2,2,2
MUS 251, 252, 253, 254	Ensemble I-IV	1,1,1,1
PHI 111	Introduction to Philosophy: AH3	3
PHI 112	Ethics: AH3	3



PHI 113	Logic: AH3	3	ETH 200	Introduction to Ethnic Studies	3
PHI 114	Comparative Religion: AH3	3	GEO 105	World Regional Geography: SS2	3
PHI 142	New Testament	3	GEO 106	Human Geography: SS2	3
PHI 214	Philosophy of Religion: AH3	3	GEO 111	Physical Geography – Landforms	4
PHI 201	Social and Political Philosophy	3	GEO 112	Physical Geography – Weather and Climate	4
RUS 111, 112	Russian Language I, II	5,5	HIS 101	History of Western Civilization I: HI1	3
RUS 211	Russian Language III: AH4	3	HIS 102	History of Western Civilization II: HI1	3
RUS 212	Russian Language IV: AH4	3	HIS 111	World Civilization I: HI1	3
SPA 111, 112	Spanish Language I, II	5,5	HIS 112	World Civilization II: HI1	3
SPA 211	Spanish Language III: AH4	3	HIS 201	United States (U.S.) History I: HI1	3
SPA 212	Spanish Language IV: AH4	3	HIS 202	United States (U.S.) History II: HI1	3
THE 105	Introduction to the Theatre Arts: AH1	5	HIS 206	U.S. Family History and Genealogy	3
THE 111, 112	Acting I, II	3,3	HIS 207	American Environmental History	3
THE 115	Stage Movement for Actors	3	HIS 208	Native American Experience	3
THE 116	Technical Theatre	3	HIS 209	History of the American Southwest	3
THE 120	Drafting for the Performing Arts	3	HIS 215	Women in U.S. History	3
THE 126	Auditioning for Musical Theater	3	HIS 225	Colorado History	3
THE 130	Safety, Tools and Materials	3	HIS 235	History of the American West	3
THE 131, 132	Theatre Production I, II	3,3	HIS 236	Contemporary U.S. History	3
THE 135, 136	Stage Makeup I, II	2,2	HIS 241	History of the Pikes Peak Area	3
THE 140	Stage Dialects	1	HIS 247	Contemporary World History: HI1	3
THE 144	Scene Study	1	HIS 249	History of Islamic Civilization	3
THE 152, 153	Production Stage Management I, II	3,3	POS 105	Introduction to Political Science: SS1	3
THE 200	Paint, Draw, Render, Model Techs	3	POS 111	American Government: SS1	3
THE 204, 205	Voice and Articulation I, II	2,2	POS 125	American State and Local Government	3
THE 211	Development of Theatre I: AH1	3	POS 205	International Relations: SS1	3
THE 212	Development of Theatre II: AH1	3	POS 215	Current Political Issues	3
THE 213, 214	Intermediate Acting I, II	3,3	POS 225	Comparative Government: SS1	3
THE 215	Playwriting	3	PSY 101	General Psychology I: SS3	3
THE 216	Theatre Lighting and Design	3	PSY 102	General Psychology II: SS3	3
THE 220, 230	Directing I, II	3,3	PSY 106	Human Relations	3
THE 231, 232	Theatre Production III, IV	3,3	PSY 112	Psychology of Adjustment	3
THE 242	Set Dressings: Theory and Practice	2	PSY 205	Psychology of Gender: SS3	3
THE 245	Basic Costume Design and Construction	3	PSY 217	Human Sexuality: SS3	3
THE 246, 247, 248	Rehearsal and Performance I	1,2,3	PSY 226	Social Psychology: SS3	3
<b>Mathematics</b>			PSY 227	The Psychology of Death and Dying: SS3	3
MAT 120	Mathematics for the Liberal Arts: MA1	4	PSY 235	Human Growth and Development: SS3	3
MAT 121	College Algebra: MA1	4	PSY 238	Child Development: SS3	3
MAT 122	College Trigonometry: MA1	3	PSY 245	Educational Psychology	3
MAT 123	Finite Mathematics: MA1	4	PSY 247	Child Abuse and Neglect	3
MAT 125	Survey of Calculus: MA1	4	PSY 249	Abnormal Psychology: SS3	3
MAT 135	Introduction to Statistics: MA1	3	PSY 265	Psychology of Personality	3
MAT 155*	Integrated Mathematics I: MA1	3	SOC 101	Introduction to Sociology I: SS3	3
MAT 156*	Integrated Mathematics II: MA1	3	SOC 102	Introduction to Sociology II: SS3	3
*Both courses, MAT 155 & MAT 156, must be completed (grade of C or better) for guaranteed transfer.			SOC 201	Introduction to Gerontology	3
MAT 166	Pre-Calculus: MA1	5	SOC 205	Sociology of Family Dynamics: SS3	3
MAT 201	Calculus I: MA1	5	SOC 212	Research in Social Sciences	3
MAT 202	Calculus II: MA1	5	SOC 215	Contemporary Social Problems: SS3	3
MAT 203	Calculus III: MA1	4	SOC 216	Sociology of Gender: SS3	3
MAT 215	Discrete Mathematics: MA1	4	SOC 218	Sociology of Diversity	3
MAT 255	Linear Algebra: MA1	3	SOC 223	Chicanos in a Changing Society	3
MAT 265	Differential Equations: MA1	3	SOC 231	The Sociology of Deviant Behavior: SS3	3
<b>Social and Behavioral Sciences</b>			SOC 237	Sociology of Death and Dying	3
ANT 101	Cultural Anthropology: SS3	3	<b>Physical and Life Sciences</b>		
ANT 107	Introduction to Archaeology: SS3	3	AST 101	Astronomy I: SC1	4
ANT 111	Physical Anthropology: SS3	3	AST 102	Astronomy II: SC1	4
ANT 211	Cultural Resource Management	3	BIO 105	Science of Biology: SC1	4
ANT 215	Indians of North America	3	BIO 111, 112	General College Biology with Lab I, II	5,5
ANT 221, 222	Exploring Other Cultures I, II	3,3	BIO 148	Ecology	4
ANT 225	Anthropology of Religion	3	BIO 150	Animal Biology	4
ANT 263	Anthropology of Folklore	3	BIO 154	Plant Biology	4
ECO 201	Principles of Macroeconomics: SS1	3	BIO 201	Human Anatomy and Physiology I: SC1	4
ECO 202	Principles of Microeconomics: SS1	3	BIO 202	Human Anatomy and Physiology II: SC1	4
			BIO 204	Microbiology: SC1	4

BIO 205	Microbiology: SC1	4	DAN 111, 112, 113	Modern Dance I-III	1,1,1
BIO 216	Pathophysiology	4	DAN 121, 122, 123	Jazz Dance I-III	1,1,1
CHE 101	Introduction to Chemistry I w/Lab: SC1	5	DAN 125	History of Dance	3
CHE 102	Introduction to Chemistry II w/Lab: SC1	5	DAN 131, 132, 133	Ballet I-III	1,1,1
CHE 105	Chemistry in Context: SC1	5	DAN 141	Ballroom Dance I	1
CHE 111	General College Chemistry I w/Lab: SC1	5	DAN 142	Ballroom Dance II	1
CHE 112	General College Chemistry II w/Lab: SC1	5	DAN 151, 152	Belly Dance I, II	1,1
CHE 211, 212	Organic Chemistry with Lab I, II	5,5	DAN 211	Dance Composition	3
CSC 126	Game Design and Development	3	DAN 224	Dance for Musical Theatre	3
CSC 154	Introduction to MS Visual Basic.NET (OOP)	3	ENG 221, 222	Creative Writing I, II	3,3
CSC 160, 161	Computer Science I, II: (Language)	4,4	ENG 226	Fiction Writing	3
CSC 200	Game Programming I	3	ENG 227	Poetry Writing	3
CSC 216	Computer Game Logic and Design	3	ENG 230	Creative Nonfiction	3
CSC 230	C Programming: Unix	3	ENG 231	Literary Magazine	3
CSC 150	Visual Basic Programming	3	JOU 105	Introduction to Mass Media	3
CSC 160, 161	Computer Science I, II: (Language)	3	JOU 106	Fundamentals of Reporting	3
CSC 240	Java Programming	4,4	JOU 111	Principles of Advertising	3
ENV 101	Introduction to Environmental Science	4	JOU 121	Photojournalism	3
GEO 111	Physical Geography: Landforms	4	JOU 206	Intermediate Newswriting and Editing	3
GEO 112	Physical Geography: Weather and Climate	4	JOU 215	Publications Production and Design	3
GEY 111	Physical Geology: SC1	4	JOU 221	Newspaper Design I	3
GEY 121	Historical Geology: SC1	4	JOU 222	Newspaper Design II	3
GEY 135	Environmental Geology	3	JOU 241	Magazine Article Writing	3
HWE 100	Human Nutrition	3	MUS 100	Fundamentals of Music Theory	3
MET 150	General Meteorology: SC1	4	MUS 110	Music Theory I	3
PHY 105	Conceptual Physics: SC1	4	MUS 120	Music Appreciation: AH1	4
PHY 111	Physics: Algebra Based I w/Lab: SC1	5	MUS 121	Introduction to Music History I: AH1	4
PHY 112	Physics: Algebra Based II w/Lab: SC1	5	MUS 122	Introduction to Music History II: AH1	4
PHY 211	Physics: Calculus Based I w/Lab: SC1	5	MUS 141, 142, 143	Private Instruction I-III	1,1,1
PHY 212	Physics: Calculus Based II w/Lab: SC1	5	MUS 151, 152, 153	Ensemble I-III	1,1,1
SCI 155	Integrated Science I: SC1	4	THE 105	Introduction to the Theatre Arts	3
SCI 156	Integrated Science II: SC1	4	THE 111	Acting I	3
<b>AA Fine Art/Communication</b>			THE 131	Theater Production I	3
ART 110	Art Appreciation: AH1	3	THE 204	Voice and Articulation I	4
ART 111	Art History I: AH1	3	THE 211	Development of Theatre I: AH1	4
ART 112	Art History II: AH1	3	THE 212	Development of Theatre II: AH1	4
ART 115, 116	East Asian Painting I, II	3,3	THE 215	Playwriting	3
ART 121, 122	Drawing I, II	3,3	<b>Other Approved Electives</b>		
ART 123, 124	Watercolor I, II	3,3	EDU 221	Introduction to Education	3
ART 131	2-D Design	3	PED 102	Volleyball	1
ART 132	3-D Design	3	PED 105	Basketball	1
ART 135	Fiber Design I	3	PED 106	Tennis	1
ART 138	Photography I	3	PED 110, 111	Fitness Center Activity I, II	1,1
ART 139	Photography II	3	PED 114	Walking and Jogging	1
ART 141, 142	Jewelry & Metal Work I, II	3,3	PED 115	Body Sculpturing and Toning	1
ART 143	Digital Photography I	3	PED 116	Weight Training	1
ART 146, 147	Stained Glass I,II	3,3	PED 121	Step Aerobics	1
ART 150	Digital Art Foundations I	3	PED 137	Varsity Sports	1
ART 152	Mixed Media I: Digital Fine Art Techniques	3	PED 138	Introduction to Winter Sports	1
ART 154, 155	Sculpture I, II	3,3	PED 143, 144	Tai Chi I, II	1,1
ART 156	Figure Drawing I	3	PED 146	Martial Arts	1
ART 157	Figure Painting I	3	PED 147, 148	Yoga I, II	1,1
ART 161, 162	Ceramics I, II	3,3	PED 153	Hiking	1
ART 163, 164	Handbuilt Clay I, II	3,3	PED 210, 211	Fitness Center Activity III, IV	1,1
ART 207	Art 1900 to the Present: AH1	3			
ART 211, 212	Painting I, II	3,3			
ART 225	Printmaking I	3			
ART 226	Advanced Printmaking I	3			
COM 115	Public Speaking	3			
COM 125	Interpersonal Communication	3			
COM 216	Principles of Speech II	3			
COM 217	Group Communications	3			
COM 220	Intercultural Communication	3			
COM 225	Organizational Communication	3			

# ASSOCIATE OF ARTS DEGREES AND RECOMMENDED TRACKS

## American Culture Studies

### Associate of Arts Recommended Track

Recommended basic skills standards are

- ENG 090
- REA 090

An Ethnic Studies Emphasis will explore and compare the experiences of American ethnic groups ( such as African Americans, Latino/as, Asian Americans, Native Americans, Arab Americans and European Americans) at the local and national level. This program will encourage students to think globally and reach beyond our American borders. It will also help us know more about the diverse sociocultural experiences of ethnic/ racial/ diverse minority and majority groups through the mediums of history, literature, art, culture, politics, and society in the U.S. and global contexts.

#### I. Communications

Nine (9) credit hours

See page 50 for complete list of required courses.

#### II. Art and Humanities

Nine (9) credit hours: select three (3) courses; with no more than two (2) courses from any one (1) of the categories. See page 50 for complete list of required courses.

#### III. Mathematics

Three (3) credit hours minimum (credit hours over three [3] will be applied to the electives category).

See page 50 for complete list of required courses.

#### IV. Social and Behavioral Sciences

Nine (9) credit hours: select three (3) courses; one (1) must be a HIS course with no more than two (2) courses from any one (1) category.

See page 50 for complete list of required courses.

#### V. Physical and Life Sciences

Eight (8) credit hours: select two (2) courses (credits over eight [8] will be applied to the electives category).

See page 50 for complete list of required courses.

#### VI. Communication Studies/Fine Arts

One to three (1-3) credit hours

See page 50 for complete list of required courses.

#### VII. Computer Communication

Three (3) credits

See page 50 for options to meet this requirement.

#### VIII. Electives

Sixteen-eighteen (16-18) credits selected from the AA approved course list. See page 51 for complete list of approved electives.

#### Suggested Courses

ANT 101	Cultural Anthropology: SS3	3
ANT 215	Indians of North America	3
ANT 221	Exploring Other Cultures I	3
ANT 222	Exploring Other Cultures II	3
ANT 225	Anthropology of Religion	3
COM 220	Intercultural Communication	3
EDU 232	Literacy in the Multicultural Classroom	3
ETH 200	Introduction to Ethnic Studies	3
FOL	Foreign Language	5
GEO 105	World Regional Geography: SS2	3
GEO 106	Human Geography: SS2	3
HIS 208	Native American Experience	3

HIS 249	History of Islamic Civilization	3
HUM 131	The Arts and Cultures of Mexico	3
HUM 236	North American Indian Arts	3
HUM 237	Hispanic Arts of the American Southwest	3
HUM 238	Sacred Images, Sacred Spaces: Southwestern U.S.	3
HUM 241	Asian Arts and Cultures	3
LIT 205	Ethnic Literature: AH2	3
LIT 248	Native American Literature	3
MUS 126	History of American Popular Music	3
PHI 114	Comparative Religion: AH3	3
PHI 115	Religions of the West	3
PHI 116	Religions of the East	3
PHI 250	Eastern Wisdom	3
POS 205	International Relations: SS1	3
SOC 218	Sociology of Diversity	3

### Total Credit Hours

60

## Anthropology

### Associate of Arts Recommended Track

Recommended basic skills standards are

- ENG 090
- REA 090

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 among others. In any professional career, it is increasingly important to have a concrete understanding of human behavior in a cultural context. Anthropology offers that understanding.

#### I. Communications

Nine (9) credit hours

See page 50 for complete list of required courses.

#### II. Art and Humanities

Nine (9) credit hours: select three (3) courses; with no more than two (2) courses from any one (1) of the categories. See page 50 for complete list of required courses.

#### III. Mathematics

Three (3) credit hours minimum (credit hours over three [3] will be applied to the electives category).

See page 50 for complete list of required courses.

#### Suggested Courses

MAT 120	Mathematics for the Liberal Arts: MA1	4
MAT 121	College Algebra: MA1	4
MAT 125	Survey of Calculus: MA1	4
MAT 135	Introduction to Statistics: MA1	3
MAT 201	Calculus I: MA1	5

#### IV. Social and Behavioral Sciences

Nine (9) credit hours: select three (3) courses; one (1) must be a HIS course with no more than two (2) courses from any one (1) category. See page 50 for complete list of required courses.

#### Suggested Courses

ANT 101	Cultural Anthropology: SS3	3
ANT 111	Physical Anthropology: SS3	3
HIS 101	History of Western Civilization I: HI1	3

HIS 102	History of Western Civilization II: HI1	3
HIS 201	United States (U.S.) History I: HI1	3
HIS 202	United States (U.S.) History II: HI1	3

#### V. Physical and Life Sciences

Eight (8) credit hours: select two (2) courses (credits over eight [8] will be applied to the electives category).

See page 50 for complete list of required courses.

##### Suggested Courses

AST 101	Astronomy I: SC1	4
AST 102	Astronomy II: SC1	4
BIO 111	General College Biology I w/Lab: SC1	5
BIO 112	General College Biology II w/Lab: SC1	5
CHE 101	Introduction to Chemistry I w/Lab: SC1	5
CHE 102	Introduction to Chemistry II w/Lab: SC1	5
CHE 111	General College Chemistry I w/Lab: SC1	5
CHE 112	General College Chemistry II w/Lab: SC1	5
GEY 111	Physical Geology: SC1	4
GEY 112	Historical Geology: SC1	4
PHY 111	Physics: Algebra Based I w/Lab: SC1	5
PHY 112	Physics: Algebra Based II w/Lab: SC1	5
PHY 211	Physics: Calculus Based I w/Lab: SC1	5
PHY 212	Physics: Calculus Based II w/Lab: SC1	5

#### VI. Communication Studies/Fine Arts

One to three (1-3) credit hours

See page 50 for complete list of required courses.

#### VII. Computer Communication

Three (3) credits

See page 50 for options to meet this requirement.

#### VIII. Electives

Sixteen (16) credits selected from the AA approved course list. See page 51 for complete list of approved electives.

##### Suggested Courses

ANT 101	Cultural Anthropology: SS3	3
ANT 107	Introduction to Archaeology: SS3	3
ANT 111	Physical Anthropology: SS3	3
ANT 211	Cultural Resource	3
ANT 215	Indians of North America: SS3	3
ANT 218	Archaeology of the Bible	3
ANT 221	Exploring Other Cultures I	3
ANT 222	Exploring Other Cultures II	3
ANT 280	AB Southwest Field Exploration	2
ECO 201	Principles of Macroeconomics: SS1	3
GEO 105	World Regional Geography: SS2	3
POS 105	Introduction to Political Science: SS1	3
PSY 101	General Psychology I: SS3	3
PSY 102	General Psychology II: SS3	3
SOC 101	Introduction to Sociology I: SS3	3
SOC 102	Introduction to Sociology II: SS3	3

#### Total Credit Hours

**60**

## Art/Photography

### Associate of Arts Recommended Track

Recommended basic skills standards are

- ENG 090
- MAT 030
- REA 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.

#### I. Communications

Nine (9) credit hours

See page 50 for complete list of required courses.

#### II. Art and Humanities

Nine (9) credit hours: select three (3) courses; with no more than two (2) courses from any one (1) of the categories. See page 50 for complete list of required courses.

##### Suggested Courses

**Category 1 (GT-AH1)** choose two

ART 111	Art History I: AH1	3
ART 112	Art History II: AH1	3
ART 207	Art History: 1900–Present: AH1	3

**Category 2 (GT-AH2)**

HUM 123	The Modern World: AH2	3
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#### III. Mathematics

Three (3) credit hours minimum (credit hours over three [3] will be applied to the electives category).

See page 50 for complete list of required courses.

##### Suggested Courses

MAT 120	Mathematics for the Liberal Arts	4
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#### IV. Social and Behavioral Sciences

Nine (9) credit hours: select three (3) courses; one (1) must be a HIS course with no more than two (2) courses from any one (1) category.

See page 50 for complete list of required courses.

#### V. Physical and Life Sciences

Eight (8) credit hours: select two (2) courses (credits over eight [8] will be applied to the electives category).

See page 50 for complete list of required courses.

##### Suggested Courses

AST 101	Astronomy I: SC1	4
GEY 111	Physical Geology: SC1	4

#### VI. Communication Studies/Fine Arts

One to three (1-3) credit hours

See page 50 for complete list of required courses.

##### Suggested Courses

ART 115	East Asian Painting I	3
ART 116	East Asian Painting II	3
ART 121	Drawing I	3
ART 122	Drawing II	3
ART 123	Watercolor I	3
ART 124	Watercolor II	3
ART 131	2-D Design	3
ART 132	3-D Design	3
ART 135	Fiber Design I	3
ART 138	Photography I	3
ART 139	Photography II	3
ART 141	Jewelry and Metal Work I	3
ART 142	Jewelry and Metal Work II	3
ART 143	Digital Photography I	3
ART 154	Sculpture I	3
ART 155	Sculpture II	3
ART 156	Figure Drawing I	3
ART 157	Figure Painting I	3
ART 161	Ceramics I	3
ART 162	Ceramics II	3
ART 163	Handbuilt Clay I	3
ART 164	Handbuilt Clay II	3
ART 211	Painting I	3

ART 212	Painting II	3
ART 225	Printmaking I	3
ART 226	Advanced Printmaking I	3
ART 252	Landscape Photography Workshop	2

**VII. Computer Communication**

Three (3) credits. See page 50 for options to meet this requirement.

**VIII. Electives**

Sixteen to eighteen (16-18) credits selected from the AA approved course list. See page 51 for complete list of approved electives.

**Suggested Courses**

ART 121	Drawing I	3
ART 122	Drawing II	3
	or	
ART 156	Figure Drawing I	(3)
ART 131	2D Design	3
ART 132	3D Design	3
ART 207	Art History – 1900 to Present: AH1	<u>3</u>

**Total Credit Hours** **60**

**Business Transfer****Associate of Arts Recommended Track**

Recommended basic skills standards are

- ENG 090
- MAT 090
- REA 090

The Associate of Arts Business Option is the result of a State wide articulation agreement between the Colorado Community College System and the four-year colleges and universities. Students completing the following 60 hours will transfer in 100% of their classes and start as an entering junior at the four-year school. Please consult with your faculty advisor for the proper sequence of classes.

**State Articulated Track****I. Communications**

Nine (9) credit hours

COM 115	Public Speaking	3
ENG 121	English Composition I: CO1	3
ENG 122	English Composition II: CO2	3

**II. Art and Humanities**

Six (6) credit hours: select two state guaranteed courses on page 50.

**III. Mathematics**

Eight (8) credit hours

MAT 121	College Algebra: MA1	4
	or	
MAT 123	Finite Mathematics: MA1	(4)
MAT 125	Survey of Calculus: MA1	4

**IV. Social and Behavioral Sciences**

Nine (9) credit hours

One state guaranteed History course listed on page 50 and

ECO 201	Principles of Macroeconomics: SS1	3
ECO 202	Principles of Microeconomics: SS1	3

**V. Physical and Life Sciences**

Eight (8) credit hours: select two (2) courses (credits over eight [8] will be applied to the electives category).

See page 50 for complete list of courses.

**VI. Business Requirements**

ACC 121	Accounting Principles I	4
ACC 122	Accounting Principles II	4
BUS 115	Introduction to Business	3
BUS 216	Legal Environment of Business	3
BUS 217	Business Communication and Report Writing	3
BUS 226	Business Statistics	<u>3</u>

**Total Credit Hours** **60**

**Communication****Associate of Arts Recommended Track**

Recommended basic skills standards are

- ENG 090
- MAT 030
- REA 090

The Communication 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, customer service and support, government, education, law, corporate communication/training, radio and television, sales, personnel, entertainment, and religious leadership.

**I. Communications**

Nine (9) credit hours

See page 50 for complete list of required courses.

**II. Art and Humanities**

Nine (9) credit hours: select three (3) courses; with no more than two (2) courses from any one (1) of the categories. See page 50 for complete list of required courses.

**III. Mathematics**

Three (3) credit hours minimum (credit hours over three [3] will be applied to the electives category).

See page 50 for complete list of required courses.

**Suggested Courses**

MAT 120	Mathematics for the Liberal Arts: MA1	4
MAT 121	College Algebra: MA1	4
MAT 135	Introduction to Statistics: MA1	3

**IV. Social and Behavioral Sciences**

Nine (9) credit hours: select three (3) courses; one (1) must be a HIS course with no more than two (2) courses from any one (1) category.

See page 50 for complete list of required courses.

**V. Physical and Life Sciences**

Eight (8) credit hours: select two (2) courses (credits over eight [8] will be applied to the electives category).

See page 50 for complete list of required courses.

**VI. Communication Studies/Fine Arts**

One to three (1-3) credit hours

See page 50 for complete list of required courses.

COM 115	Public Speaking	3
COM 125	Interpersonal Communication	3
COM 216	Advanced Public Speaking	3
COM 217	Group Communication	3
COM 220	Intercultural Communication	3
COM 225	Organizational Communication	3

**VII. Computer Communication**

Three (3) credits

See page 50 for options to meet this requirement.



**VIII. Electives**

Sixteen (16) credits selected from the AA approved course list. See page 51 for complete list of approved electives.

**Suggested Courses**

HIS 201	United States (U.S.) History I: HI1	3
HIS 202	United States (U.S.) History II: HI1	3
MUS 100	Fundamentals of Music	3
MUS 110	Music Theory I	3
MUS 111	Music Theory II	3
MUS 112	Ear Training/Sight-singing I Lab	1
MUS 113	Ear Training/Sight-singing II Lab	1

Any JOU prefix courses

Any THE prefix courses

**Total Credit Hours****60****Dance****Associate of Arts Recommended Track**

Recommended basic skills standards are

- ENG 090
- MAT 060
- REA 090

Dance is an art and a celebration. According to Colorado dancer Erick Hawkins, "Dance is a metaphor for existence. All body movement contributes to the moment-to-moment wonder of living." In dance classes, students become familiar with the customs of various national and world cultures by learning their dances. Students discover how to work within groups and how to express their own individuality. Students may study dance for enrichment, fitness and to complete an associate of arts degree with an emphasis on dance. Six forms of dance are offered in addition to courses in history, choreography and performance.

**I. Communications**

Nine (9) credit hours

See page 50 for complete list of required courses.

**II. Art and Humanities**

Nine (9) credit hours: select three (3) courses; with no more than two (2) courses from any one (1) of the categories. See page 50 for complete list of required courses.

**Suggested Courses****Category 1 (GT-AH1)**

MUS 120	Music Appreciation: AH1	3
MUS 121	Introduction to Music History I: AH1	3
MUS 122	Introduction to Music History II: AH1	3

**Category 2 (GT-AH2)**

HUM 122	From Medieval to Modern: AH2	3
HUM 123	The Modern World: AH2	3

**Category 3 (GT-AH3)**

PHI 111	Introduction to Philosophy: AH3	3
PHI 112	Ethics: AH3	3

**III. Mathematics**

Three (3) credit hours minimum (credit hours over three [3] will be applied to the electives category).

See page 50 for complete list of required courses.

**Suggested Courses**

MAT 120	Mathematics for the Liberal Arts: MA1	4
MAT 121	College Algebra: MA1	4
MAT 135	Introduction to Statistics: MA1	3

**IV. Social and Behavioral Sciences**

Nine (9) credit hours: select three (3) courses; one (1) must be a HIS course with no more than two (2) courses from any one (1) category. See page 50 for complete list of required courses.

**Suggested Courses****Category 3 (GT-SS3)**

ANT 101	Cultural Anthropology: SS3	3
ANT 111	Physical Anthropology: SS3	3
PSY 101	General Psychology I: SS3	3
PSY 102	General Psychology II: SS3	3

**Category 4 (GT-HI1)**

HIS 102	History of Western Civilization II: HI1	3
HIS 201	United States (U.S.) History I: HI1	3

**V. Physical and Life Sciences**

Eight (8) credit hours: select two (2) courses (credits over eight [8] will be applied to the electives category).

See page 50 for complete list of required courses.

**Required Courses**

BIO 111	General College Biology I w/Lab: SC1	5
BIO 112	General College Biology II w/Lab: SC1	5

**VI. Communication Studies/Fine Arts**

One to three (1-3) credit hours

See page 50 for complete list of required courses.

**Suggested Courses**

ART 121	Drawing I	3
DAN 111	Modern Dance I	1
DAN 112	Modern Dance II	1
DAN 113	Modern Dance III	1
DAN 121	Jazz I	1
DAN 122	Jazz II	1
DAN 123	Jazz III	1
DAN 125	History of Dance I	3
DAN 131	Ballet I	1
DAN 132	Ballet II	1
DAN 133	Ballet III	1
DAN 141	Ballroom Dance I	1
DAN 151	Belly Dance	1
DAN 211	Dance Composition	3
THE 111	Acting I	3

**VII. Computer Communication**

Three (3) credits

See page 50 for options to meet this requirement.

**VIII. Electives**

Sixteen-eighteen (16-18) credits selected from the AA approved course list. See page 51 for complete list of approved electives.

**Suggested Courses**

ART 121	Drawing I	3
ART 156	Figure Drawing I	3
DAN 111	Modern Dance I	1
DAN 112	Modern Dance II	1
DAN 113	Modern Dance III	1
DAN 121	Jazz I	1
DAN 122	Jazz II	1
DAN 123	Jazz III	1
DAN 125	History of Dance I	3
DAN 131	Ballet I	1
DAN 132	Ballet II	1
DAN 133	Ballet III	1
DAN 141	Ballroom Dance I	1
DAN 151	Belly Dance	1
DAN 152	Belly Dance II	1

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DAN 211	Dance Composition	3
DAN 221	Dance Performance I	2
PED 143	Tai Chi I	1
PED 147	Yoga I	1
THE 111	Acting I	<u>3</u>
<b>Total Credit Hours</b>		<b>60</b>

## Early Childhood [Teacher] Education

### Associate of Arts Recommended Track

Recommended basic skills standards are

- ENG 090
- MAT 090
- REA 090

The Associate of Arts Early Childhood [Teacher] Education option is the result of a State wide articulation agreement between the Colorado Community College System and the four-year colleges and universities. Students completing the following 60 hours will transfer in 100% of their classes and start as an entering junior at the following four-year schools: Colorado State University (Fort Collins), University of Northern Colorado, Metro State, Fort Lewis, Adams State, and Mesa State. Please consult with your faculty advisor for the proper sequence of classes.

### State Articulated Track

#### I. Communications

Nine (9) credit hours

COM 115	Public Speaking	3
ENG 121	English Composition I: CO1	3
ENG 122	English Composition II: CO2	3

#### II. Art and Humanities

Six (6) credit hours

ART 110	Art Appreciation: AH1	3
	or	
MUS 120	Music Appreciation: AH1	(3)
	and	
LIT 115	Introduction to Literature: AH2	3
	or	
LIT 255	Children's Literature	(3)

#### III. Mathematics

Six (6) credit hours

Choose one track below

##### Track 1

MAT 120	Mathematics for the Liberal Arts: MA1	4
	or	
MAT 121	College Algebra: MA1	(4)
MAT 135	Introduction to Statistics: MA1	3

##### Track 2

MAT 155	Integrated Mathematics I: MA1	3
MAT 156	Integrated Mathematics II: MA1	3

#### IV. Social and Behavioral Sciences

Nine (9) credit hours

GEO 105	World Regional Geography: SS2	3
HIS 201	United State (U.S.) History I: HI1	3
POS 111	American Government: SS1	3

#### V. Physical and Life Sciences

Eight (8) credit hours

Choose one track

#### Track 1

GEY 111	Physical Geology: SC1	4
	and	
BIO 105	Science of Biology: SC1	4
	or	
BIO 111	General College Biology I w/Lab: SC1	(5)

#### Track 2

CHE 101	Introduction to Chemistry I w/Lab: SC1	5
	or	
CHE 111	General College Chemistry I w/Lab: SC1	(5)
	or	
PHY 105	Conceptual Physics: SC1	(4)
	or	
PHY 111	Physics: Algebra Based I w/Lab: SC1	(5)
SCI 155	Integrated Science I: SC1	4
SCI 156	Integrated Science II: SC1	4

### VI. Early Childhood Requirements

Sixteen (16) credit hours

ECE 101	Introduction to Early Childhood Education	3
ECE 102	Intro to Early Childhood Education Lab Techniques	3
ECE 205	Nutrition, Health and Safety	3
ECE 238	Child Growth and Development	4
ECE 241	Administration: Human Relations for Early Childhood Education	3

### VII. Electives

Six (6) credit hours to be determined by home and transfer institution

### Total Credit Hours

**60**

## Elementary Education Teacher Preparation

### Associate of Arts Recommended Track

Recommended basic skills standards are

- ENG 090
- MAT 090
- REA 090

Elementary Education Teacher Preparation allows students to complete a transferable associate of arts degree preparing them for transfer to a four-year college or university in Colorado where they can complete their Bachelor's degree and teaching credential in two additional years. Students identify a major and transfer institution prior to enrolling for courses and must meet with their faculty advisor before registering for classes to insure transferability of courses to their chosen institution/major.

### State Articulated Track

#### I. Communications

Nine (9) credit hours

COM 115	Public Speaking	3
ENG 121	English Composition I: CO1	3
ENG 122	English Composition II: CO2	3

#### II. Art and Humanities

Three (3) credit hours

LIT 115	Introduction to Literature: AH2	3
	or	
LIT 201	Masterpieces of Literature I: AH2	(3)
	or	
LIT 202	Masterpieces of Literature II: AH2	(3)

**III. Mathematics**

Six (6) credit hours

MAT 155	Integrated Mathematics I: MA1	3
MAT 156	Integrated Mathematics II: MA1	3

**IV. Social and Behavioral Sciences**

Nine (9) credit hours

GEO 105	World Regional Geography: SS2	3
HIS 201	United States (U.S.) History I: HI1	3
POS 111	American Government: SS1	3

**V. Physical and Life Sciences**

Eight (8) credit hours

SCI 155	Integrated Science I: SC1	4
SCI 156	Integrated Science II: SC1	4

**VI. Education Requirements**

Six (6) credit hours

EDU 221	Introduction to Education	3
PSY 238	Child Development	3

**VII. Electives**

Nineteen (19) credit hours to be determined by discipline and transfer institution

**Total Credit Hours** **60****English****Associate of Arts Recommended Track**

Recommended basic skills standards are

- ENG 090
- REA 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.

English majors interested in education, literature, or journalism should contact their four-year transfer institution for recommendations concerning elective courses.

**I. Communications**

Nine (9) credit hours

See page 50 for complete list of required courses.

**II. Art and Humanities**

Nine (9) credit hours: select three (3) courses; with no more than two (2) courses from any one (1) of the categories. See page 50 for complete list of required courses.

**Suggested Courses****Category 1 (GT-AH1)**

ART 110	Art Appreciation: AH1	3
ART 111	Art History I: AH1	3
ART 112	Art History II: AH1	3
MUS 120	Music Appreciation: AH1	3
MUS 121	Introduction to Music History I: AH1	3
MUS 122	Introduction to Music History II: AH1	3
THE 105	Introduction to Theatre Arts: AH1	3
THE 211	Development of Theatre I: AH1	3
THE 212	Development of Theatre II: AH1	3

**Category 2 (GT-AH2)**

LIT 115	Introduction to Literature: AH2	3
LIT 201	Masterpieces of Literature I: AH2	3
LIT 202	Masterpieces of Literature II: AH2	3

**Category 3 (GT-AH3)**

PHI 111	Introduction to Philosophy: AH3	3
PHI 112	Ethics: AH3	3
PHI 113	Logic: AH3	3

**III. Mathematics**

Three (3) credit hours minimum (credit hours over three [3] will be applied to the electives category).

See page 50 for complete list of required courses.

**Suggested Courses**

MAT 120	Mathematics for the Liberal Arts: MA1	4
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**IV. Social and Behavioral Sciences**

Nine (9) credit hours: select three (3) courses; one (1) must be a HIS course with no more than two (2) courses from any one (1) category. See page 50 for complete list of required courses.

**Suggested Courses****Category 1 (GT-S1)**

ECO 201	Principles of Macroeconomics: SS1	3
ECO 202	Principles of Microeconomics: SS1	3
POS 105	Introduction to Political Science: SS1	3
POS 111	American Government: SS1	3

**Category 2 (GT-SS2)**

GEO 105	World Geography: SS2	3
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**Category 3 (GT-SS3)**

ANT 101	Cultural Anthropology: SS3	3
ANT 111	Physical Anthropology: SS3	3
PSY 101	General Psychology I: SS3	3
PSY 102	General Psychology II: SS3	3
SOC 101	Introduction to Sociology I: SS3	3
SOC 102	Introduction to Sociology II: SS3	3

**Category 4 (GT-HI1)**

HIS 101	History of Western Civilization I: HI1	3
HIS 102	History of Western Civilization II: HI1	3
HIS 201	United States (U.S.) History I: HI1	3
HIS 202	United States (U.S.) History II: HI1	3

**V. Physical and Life Sciences**

Eight (8) credit hours: select two (2) courses (credits over eight [8] will be applied to the electives category).

See page 50 for complete list of required courses.

**VI. Communication Studies/Fine Arts**

One to three (1-3) credit hours

See page 50 for complete list of required courses.

**VII. Computer Communication**

Three (3) credits

See page 50 for options to meet this requirement.

**VIII. Electives**

Sixteen-eighteen (16-18) credits selected from the AA approved course list. See page 51 for complete list of approved electives.

**Suggested Courses**

ENG 221	Creative Writing I	3
ENG 222	Creative Writing II	3
*FOL 211	Foreign Language III (as appropriate)	3
*FOL 212	Foreign Language IV (as appropriate)	3
HUM 115	World Mythology	3
HUM 121	Early Civilizations: AH2	3
HUM 122	From Medieval to Modern: AH2	3
HUM 123	The Modern World: AH2	3

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LIT 125	Study of the Short Story	3
LIT 211	Survey of American Literature I: AH2	3
LIT 212	Survey of American Literature II: AH2	3
LIT 221	Survey of British Literature I: AH2	3
LIT 222	Survey of British Literature II: AH2	3
LIT 246	Literature of Women	3
LIT 248	Native American Literature	3
LIT 257	Literature and Film	3
LIT 268	Celtic Literature	3

**Total Credit Hours** **60**

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

## Environmental Studies

### Associate of Arts Recommended Track

Recommended basic skills standards are

- ENG 090
- REA 090

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.

#### I. Communications

Nine (9) credit hours

See page 50 for complete list of required courses.

#### II. Art and Humanities

Nine (9) credit hours: select three (3) courses; with no more than two (2) courses from any one (1) of the categories. See page 50 for complete list of required courses.

#### Suggested Courses

##### Category 1 (GT-AH1)

ART 110	Art Appreciation: AH1	3
ART 111	Art History I: AH1	3
ART 112	Art History II: AH1	3
MUS 120	Music Appreciation: AH1	3

##### Category 2 (GT-AH2)

LIT 115	Introduction to Literature: AH2	3
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##### Category 3 (GT-AH3)

PHI 111	Introduction to Philosophy: AH3	3
PHI 112	Ethics: AH3	3

#### III. Mathematics

Three (3) credit hours minimum (credit hours over three [3] will be applied to the electives category).

See page 50 for complete list of required courses.

#### Suggested Courses

MAT 120	Mathematics for the Liberal Arts: MA1	4
MAT 121	College Algebra: MA1	4
MAT 125	Survey of Calculus: MA1	4
MAT 135	Introduction to Statistics: MA1	3
MAT 201	Calculus I: MA1	5

#### IV. Social and Behavioral Sciences

Nine (9) credit hours: select three (3) courses; one (1) must be a HIS course with no more than two (2) courses from any one (1) category.

See page 50 for complete list of required courses.

#### Suggested Courses

##### Category 1 (GT-S1)

POS 105	Introduction to Political Science: SS1	3
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##### Category 2 (GT-SS2)

GEO 105	World Geography: SS2	3
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##### Category 3 (GT-SS3)

ANT 101	Cultural Anthropology: SS3	3
ANT 111	Physical Anthropology: SS3	3

##### Category 4 (GT-HI1)

HIS 201	United States (U.S.) History I: HI1	3
HIS 202	United States (U.S.) History II: HI1	3

#### V. Physical and Life Sciences

Eight (8) credit hours: select two (2) courses (credits over eight [8] will be applied to the electives category).

See page 50 for complete list of required courses.

BIO 105	Science of Biology: SC1	4
BIO 111	General College Biology I w/Lab: SC1	5
BIO 112	General College Biology II w/Lab: SC1	5
CHE 101	Introduction to Chemistry I w/Lab: SC1	5
GEY 111	Physical Geology: SC1	4
GEY 121	Historical Geology: SC1	4
PHY 111	Physics: Algebra Based I w/Lab: SC1	5
PHY 112	Physics: Algebra Based II w/Lab: SC1	5
PHY 211	Physics: Calculus Based I w/Lab: SC1	5

#### VI. Communication Studies/Fine Arts

One to three (1-3) credit hours

See page 50 for complete list of required courses.

#### VII. Computer Communication

Three (3) credits

See page 50 for options to meet this requirement.

#### VIII. Electives

Sixteen-eighteen (16-18) credits selected from the AA approved course list. See page 51 for complete list of approved electives.

#### Suggested Courses

ANT 101	Cultural Anthropology: SS2	3
ANT 107	Introduction to Archaeology: SS3	3
ANT 111	Physical Anthropology: SS3	3
ANT 211	Cultural Resource Management	3
ANT 215	Indians of North America: SS3	3
ANT 218	Archaeology of the Bible	3
ANT 221	Exploring Other Cultures I	3
ANT 222	Exploring Other Cultures II	3
ANT 222	Cultural Studies II	3
ANT 280	Southwest Field Exploration	2
ART 121	Drawing I	3
BIO 148	Basic Ecology	4
BIO 149	Plant Taxonomy	4
BIO 150	Animal Biology	4
BIO 204	Microbiology: SC1	4
COM 214	Natural Resource Interpretation	3
GEO 111	Physical Geography - Landforms	4
HIS 207	American Environmental History	3
HIS 208	The Native American Experience	3
HIS 209	History of the American Southwest	3
HIS 225	Colorado History	3
HIS 235	History of the American West	3
HIS 241	History of the Pikes Peak Region	3
JOU 121	Photojournalism	3
LIT 211	Survey of American Literature I: AH2	3
LIT 212	Survey of American Literature II: AH2	3
POS 125	American State and Local Government	3

**Total Credit Hours**

**60**

## Foreign Language

### Associate of Arts Recommended Track

Recommended basic skills standards are

- ENG 090
- REA 090

PPCC's foreign language programs are built around the standards put forth by the American Council on the Teaching of Foreign Languages (ACTFL). The goals of those standards are that students communicate with others in the language they are studying, both in and outside the classroom; that they learn about and experience the cultures of other languages; that they make connections between the language they are learning and other disciplines; that they make comparisons between their native language and culture and the language and culture they are learning; and that they become active in communities of speakers of the language they are learning. Foreign language study is compatible with study in all other disciplines, especially law enforcement, health professions, education, social and behavioral sciences, business, journalism, and art history.

Students who have studied French, German, or Spanish in high school or who have lived in a country where one of those languages is spoken should take a placement test before enrolling in a course in that language. All native speakers of a language other than English must have permission of a full-time foreign language faculty member before enrolling in a course in their native language.

Students considering a major in a foreign language should be aware that first-year language courses do not count toward credit-hour requirements for a major or minor in most four-year institutions.

#### I. Communications

Nine (9) credit hours

See page 50 for complete list of required courses.

#### II. Art and Humanities

Nine (9) credit hours: select three (3) courses; with no more than two (2) courses from any one (1) of the categories. See page 50 for complete list of required courses.

#### III. Mathematics

Three (3) credit hours minimum (credit hours over three [3] will be applied to the electives category).

See page 50 for complete list of required courses.

#### IV. Social and Behavioral Sciences

Nine (9) credit hours: select three (3) courses; one (1) must be a HIS course with no more than two (2) courses from any one (1) category.

See page 50 for complete list of required courses.

#### V. Physical and Life Sciences

Eight (8) credit hours: select two (2) courses (credits over eight [8] will be applied to the electives category).

#### VI. Communication Studies/Fine Arts

One to three (1-3) credit hours

See page 50 for complete list of required courses.

#### VII. Computer Communication

Three (3) credits

See page 50 for options to meet this requirement.

#### VIII. Electives

Sixteen-eighteen (16-18) credits selected from the AA approved course list.

See page 51 for complete list of approved electives.

#### Suggested Courses

FOL 111	Foreign Language I*	5
FOL 112	Foreign Language II*	5
FOL 211	Foreign Language III*	3
FOL 212	Foreign Language IV*	3
		<hr/>
		60

#### Total Credit Hours

60

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

## Geography

### Associate of Arts Recommended Track

Recommended basic skills standards are

- ENG 090
- MAT 090
- REA 090

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.

#### I. Communications

Nine (9) credit hours

See page 50 for complete list of required courses.

#### II. Art and Humanities

Nine (9) credit hours: select three (3) courses; with no more than two (2) courses from any one (1) of the categories. See page 50 for complete list of required courses.

#### III. Mathematics

Three (3) credit hours minimum (credit hours over three [3] will be applied to the electives category).

See page 50 for complete list of required courses.

MAT 135 Introduction to Statistics: MA1

3

#### IV. Social and Behavioral Sciences

Nine (9) credit hours: select three (3) courses; one (1) must be a HIS course with no more than two (2) courses from any one (1) category.

See page 50 for complete list of required courses.

#### V. Physical and Life Sciences

Eight (8) credit hours: select two (2) courses (credits over eight [8] will be applied to the electives category).

GEY 111 Physical Geology: SC1

4

GEY 121 Historical Geology: SC1

4

MET 150 General Meteorology: SC1

4

#### VI. Communication Studies/Fine Arts

One to three (1-3) credit hours

See page 50 for complete list of required courses.

#### VII. Computer Communication

Three (3) credits

See page 50 for options to meet this requirement.

#### VIII. Electives

Sixteen-eighteen (16-18) credits selected from the AA approved course list. See page 51 for complete list of approved electives.



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**Suggested Courses**

ANT 111	Physical Anthropology: SS3	3
GEO 106	Human Geography: SS2	3
GEO 111	Physical Geography – Landforms	4
GEO 112	Physical Geography – Weather and Climate Science Elective	4
		<u>2</u>

**Total Credit Hours****60**

## History

**Associate of Arts Recommended Track**

Recommended basic skills standards are

- ENG 090
- REA 090

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?

**I. Communications**

Nine (9) credit hours

See page 50 for complete list of required courses.

**II. Art and Humanities**

Nine (9) credit hours: select three (3) courses; with no more than two (2) courses from any one (1) of the categories. See page 50 for complete list of required courses.

**III. Mathematics**

Three (3) credit hours minimum (credit hours over three [3] will be applied to the electives category).

See page 50 for complete list of required courses.

**Suggested Courses**

MAT 120	Mathematics for the Liberal Arts: MA1	4
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**IV. Social and Behavioral Sciences**

Nine (9) credit hours: select three (3) courses; one (1) must be a HIS course with no more than two (2) courses from any one (1) category.

See page 50 for complete list of required courses.

**V. Physical and Life Sciences**

Eight (8) credit hours: select two (2) courses (credits over eight [8] will be applied to the electives category).

**Suggested Courses**

AST 101	Astronomy I: SC1	4
AST 102	Astronomy II: SC1	4
GEY 111	Physical Geology: SC1	4
GEY 121	Historical Geology: SC1	4

**VI. Communication Studies/Fine Arts**

One to three (1-3) credit hours

See page 50 for complete list of required courses.

**VII. Computer Communication**

Three (3) credits

See page 50 for options to meet this requirement.

**VIII. Electives**

Sixteen-eighteen (16-18) credits selected from the AA approved course list. See page 51 for complete list of approved electives.

**Suggested Courses**

Also especially recommended are any electives in ANT, GEO, LIT, PHI, POS, or SOC

GEO 105	World Regional Geography: SS2	3
HIS 101	History of Western Civilization I: HI1	3
HIS 102	History of Western Civilization II: HI1	3
HIS 111	World Civilization I: HI1	3
HIS 112	World Civilization II: HI1	3
HIS 201	United States (U.S.) History I: HI1	3
HIS 202	United States (U.S.) History II: HI1	3
HIS 206	U.S. Family History and Genealogy	3
HIS 207	American Environmental History	3
HIS 208	Native American Experience	3
HIS 209	History of the American Southwest	3
HIS 215	Women in U.S. History	3
HIS 225	Colorado History	3
HIS 235	History of the American West	3
HIS 236	Contemporary U.S. History	3
HIS 241	History of the Pikes Peak Region	3
HIS 247	Contemporary World History: HI1	3
HIS 249	History of Islamic Civilization	3
HUM 121	Early Civilizations: AH2	3
HUM 122	From Medieval to Modern: AH2	3
HUM 123	The Modern World: AH2	3
		<u>3</u>

**Total Credit Hours****60**

## Humanities

**Associate of Arts Recommended Track**

Recommended basic skills standards are

- ENG 090
- MAT 030
- REA 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 reassess 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 not meeting a course prerequisite must have instructor permission to enroll.

**I. Communications**

Nine (9) credit hours

See page 50 for complete list of required courses.

**II. Art and Humanities**

Nine (9) credit hours: select three (3) courses; with no more than two (2) courses from any one (1) of the categories. See page 50 for complete list of required courses.

**Required Courses****Category 2 (GT-AH2)**

HUM 122	From Medieval to Modern: AH2	3
HUM 123	The Modern World: AH2	3

**Category 3 (GT-AH3)**

PHI 111	Introduction to Philosophy: AH3	3
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**III. Mathematics**

Three (3) credit hours minimum (credit hours over three [3] will be applied to the electives category).

See page 50 for complete list of required courses.

**Suggested Courses**

MAT 120	Mathematics for the Liberal Arts: MA1	4
MAT 121	College Algebra: MA1	4
MAT 135	Introduction to Statistics: MA1	3

**IV. Social and Behavioral Sciences**

Nine (9) credit hours: select three (3) courses; one (1) must be a HIS course with no more than two (2) courses from any one (1) category. See page 50 for complete list of required courses.

**V. Physical and Life Sciences**

Eight (8) credit hours: select two (2) courses (credits over eight [8] will be applied to the electives category). See page 50 for complete list of required courses.

**VI. Communication Studies/Fine Arts**

One to three (1-3) credit hours

See page 50 for complete list of required courses.

**Suggested Courses**

ART 121	Drawing I	3
ART 138	Photography I	3
DAN 111	Modern Dance I	1
DAN 121	Jazz I	1
DAN 125	History of Dance I	3
DAN 131	Ballet I	1
DAN 151	Belly Dance	1
DAN 224	Dance for Musical Theatre I	3
THE 111	Acting I	3

**VII. Computer Communication**

Three (3) credits

See page 50 for options to meet this requirement.

**VIII. Electives**

Sixteen-eighteen (16-18) credits selected from the AA approved course list. See page 51 for complete list of approved electives.

**Suggested Courses**

ANT 101	Cultural Anthropology: SS3	3
DAN 111	Modern Dance I	1
DAN 125	History of Dance I	3
DAN 131	Ballet I	1
HUM 121	Early Civilizations: AH2	3
HUM 131	Arts and Cultures of Mexico	3
HUM 236	North American Indian Arts	3
HUM 238	Sacred Images, Sacred Places: Southwestern U. S.	3
LIT 115	Introduction to Literature: AH2	3
LIT 201	Masterpieces of Literature I: AH2	3
LIT 205	Ethnic Literature: AH2	3
PED 143	Tai Chi Chuan	1
PED 147	Yoga I	1

**Total Credit Hours** **60**

# Journalism

**Associate of Arts Recommended Track**

Recommended basic skills standards are

- ENG 090
- REA 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 for those pursuing 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 for future generations.

Students have access to a black-and-white photo lab, as well as a Journalism-Tech Writing lab using digital photography with a PC format. Students can learn how to retrieve information; develop, print and edit photos; conduct computer-assisted reporting; edit copy; interview; design and lay out news pages on a computer; and produce newsletters. They also learn to write news releases, features, newspaper and magazine 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.

**I. Communications**

Nine (9) credit hours

See page 50 for complete list of required courses.

**II. Art and Humanities**

Nine (9) credit hours: select three (3) courses; with no more than two (2) courses from any one (1) of the categories. See page 50 for complete list of required courses.

**Required Courses****Category 1 (GT-AH1)**

ART 111	Art History I: AH1	3
ART 112	Art History II: AH1	3
MUS 120	Music Appreciation: AH1	3
MUS 121	Introduction to Music History I: AH1	3
MUS 122	Introduction to Music History II: AH1	3
THE 105	Introduction to Theatre Arts: AH1	3

**Category 2 (GT-AH2)**

HUM 121	Early Civilizations: AH2	3
HUM 122	From Medieval to Modern: AH2	3
HUM 123	The Modern World: AH2	3
LIT 115	Introduction to Literature: AH2	3
LIT 201	Masterpieces of Literature I: AH2	3
LIT 202	Masterpieces of Literature II: AH2	3

**Category 3 (GT-AH3)**

PHI 111	Introduction to Philosophy: AH3	3
PHI 113	Ethics: AH3	3

**III. Mathematics**

Three (3) credit hours minimum (credit hours over three [3] will be applied to the electives category).

See page 50 for complete list of required courses.

**Suggested Courses**

MAT 120	Mathematics for the Liberal Arts: MA1	4
MAT 135	Introduction to Statistics: MA1	3

**IV. Social and Behavioral Sciences**

Nine (9) credit hours: select three (3) courses; one (1) must be a HIS course with no more than two (2) courses from any one (1) category. See page 50 for complete list of required courses.

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**Suggested Courses****Category 1 (GT-SS1)**

ECO 201	Principles of Macroeconomics: SS1	3
ECO 202	Principles of Microeconomics: SS1	3
POS 105	Introduction to Political Science: SS1	3
POS 111	American Government: SS1	3

**Category 2 (GT-SS2)**

GEO 105	World Regional Geography: SS2	3
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**Category 3 (GT-SS3)**

SOC 102	Introduction to Sociology II: SS3	3
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**Category 4 (GT-HI1)**

HIS 101	History of Western Civilization I: HI1	3
HIS 102	History of Western Civilization II: HI1	3
HIS 201	United States (U.S.) History I: HI1	3
HIS 202	United States (U.S.) History II: HI1	3

**V. Physical and Life Sciences**

Eight (8) credit hours: select two (2) courses (credits over eight [8] will be applied to the electives category).

See page 50 for complete list of required courses.

**Suggested Courses**

AST 101	Astronomy I: SC1	4
AST 102	Astronomy II: SC1	4
BIO 105	Science of Biology: SC1	4
BIO 111	General College Biology I w/Lab: SC1	5
CHE 101	Introduction to Chemistry I w/Lab: SC1	5
CHE 111	General College Chemistry I w/Lab: SC1	5
CHE 112	General College Chemistry II w/Lab: SC1	5
GEY 111	Physical Geology: SC1	4
GEY 121	Historical Geology: SC1	4
PHY 111	Physics: Algebra Based I w/Lab: SC1	5
PHY 211	Physics: Calculus Based I w/Lab: SC1	5

**VI. Communication Studies/Fine Arts**

One to three (1-3) credit hours

See page 50 for complete list of required courses.

**Suggested Courses**

ART 143	Digital Photography I	3
COM 125	Interpersonal Communication	3
COM 220	Intercultural Communication	3
COM 225	Organizational Communication	3
ENG 221	Creative Writing I	3
ENG 222	Creative Writing II	3
ENG 226	Fiction Writing	3
ENG 230	Creative Nonfiction	3
ENG 231	Literary Magazine	3
JOU 121	Photojournalism	3
JOU 206	Intermediate Newswriting and Editing	3
JOU 215	Publications Production and Design	3
JOU 222	Newspaper Design II	3
JOU 241	Magazine Article Writing	3

**VII. Computer Communication**

Three (3) credits

See page 50 for options to meet this requirement.

**VIII. Electives**

Sixteen-eighteen (16-18) credits selected from the AA approved course list. See page 51 for complete list of approved electives.

**Suggested Courses**

JOU 105	Introduction to Mass Media	3
JOU 106	Fundamentals of Reporting	3
JOU 111	Principles of Advertising	3
JOU 221	Newspaper Design I	3

JOU 222	Newspaper Design II	3
JOU 241	Magazine Article Writing	3

**Total Credit Hours** 3  
**60**

**Literature****Associate of Arts Recommended Track**

Recommended basic skills standards are

- ENG 090
- REA 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.

**I. Communications**

Nine (9) credit hours

See page 50 for complete list of required courses.

**II. Art and Humanities**

Nine (9) credit hours: select three (3) courses; with no more than two (2) courses from any one (1) of the categories. See page 50 for complete list of required courses.

**Suggested Courses****Category 2 (GT-AH2)**

LIT 201	Masterpieces of Literature I: AH2	3
LIT 202	Masterpieces of Literature II: AH2	3

**Category 3 (GT-AH3)**

PHI 111	Introduction to Philosophy: AH3	3
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**III. Mathematics**

Three (3) credit hours minimum (credit hours over three [3] will be applied to the electives category).

See page 50 for complete list of required courses.

**Suggested Courses**

MAT 120	Mathematics for the Liberal Arts: MA1	4
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**IV. Social and Behavioral Sciences**

Nine (9) credit hours: select three (3) courses; one (1) must be a HIS course with no more than two (2) courses from any one (1) category. See page 50 for complete list of required courses.

**Suggested Courses****Category 1 (GT-S1)**

POS 111	American Government: SS1	3
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**Category 2 (GT-SS2)**

GEO 105	World Geography: SS2	3
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**Category 3 (GT-SS3)**

ANT 101	Cultural Anthropology: SS3	3
PSY 101	General Psychology I: SS3	3

**Category 4 (GT-HI1)**

HIS 101	History of Western Civilization I: HI1	3
HIS 102	History of Western Civilization II: HI1	3
HIS 201	United States (U.S.) History I: HI1	3
HIS 202	United States (U.S.) History II: HI1	3

**V. Physical and Life Sciences**

Eight (8) credit hours: select two (2) courses (credits over eight [8] will be applied to the electives category).

See page 50 for complete list of required courses.

**VI. Communication Studies/Fine Arts**

One to three (1-3) credit hours

See page 50 for complete list of required courses.

**VII. Computer Communication**

Three (3) credits

See page 50 for options to meet this requirement.

**VIII. Electives**

Sixteen-eighteen (16-18) credits selected from the AA approved course list. See page 51 for complete list of approved electives.

**Suggested Courses**

HUM 115	World Mythology	3
HUM 121	Early Civilizations: AH2	3
HUM 122	From Medieval to Modern: AH2	3
HUM 123	The Modern World: AH2	3
LIT 115	Introduction to Literature: AH2	3
LIT 125	Study of the Short Story	3
LIT 205	Ethnic Literature: AH2	1
LIT 211	Survey of American Literature I: AH2	3
LIT 212	Survey of American Literature II: AH2	3
LIT 221	Survey of British Literature I: AH2	3
LIT 222	Survey of British Literature II: AH2	3
LIT 246	Literature of Women	3
LIT 248	Native American Literature	3

**Total Credit Hours** **60**

**Music****Associate of Arts Recommended Track**

Recommended basic skills are:

- ENG 090
- MAT 030
- REA 090

Music, as all of the arts, is an expression and transcendence of the human experience. Music courses serve as an introduction into the examination of sound as a vibrant art form as well as to provide training in performance and composition. The Music Department's offerings of humanities and performance classes are open to all students beginning through advanced. Consultation with the program director is recommended for course placement while consultation with the program director is required for applied music study.

**I. Communications**

Nine (9) credit hours

See page 50 for complete list of required courses.

**II. Art and Humanities**

Nine (9) credit hours: select three (3) courses; with no more than two (2) courses from any one (1) of the categories. See page 50 for complete list of required courses.

**III. Mathematics**

Three (3) credit hours minimum (credit hours over three [3] will be applied to the electives category).

See page 50 for complete list of required courses.

**IV. Social and Behavioral Sciences**

Nine (9) credit hours: select three (3) courses; one (1) must be a HIS course with no more than two (2) courses from any one (1) category. See page 50 for complete list of required courses.

**V. Physical and Life Sciences**

Eight (8) credit hours: select two (2) courses (credits over eight [8] will be applied to the electives category).

See page 50 for complete list of required courses.

**VI. Communication Studies/Fine Arts**

One to three (1-3) credit hours

See page 50 for complete list of required courses.

**VII. Computer Communication**

Three (3) credits

See page 50 for options to meet this requirement.

**VIII. Electives**

Sixteen-eighteen (16-18) credits selected from the AA approved course list. See page 51 for complete list of approved electives.

**Suggested Courses**

JOU 105	Introduction to Mass Media	3
LIT 115	Introduction to Literature: AH2	3
MUS 100	Fundamentals of Music	3
MUS 110	Music Theory I	3
MUS 111	Music Theory II	3
MUS 112	Ear Training/Sight – Singing I Lab	1
MUS 113	Ear Training/Sight – Singing II Lab	1
MUS 120	Music Appreciation: AH1	3
MUS 121	Introduction to Music History I: AH1	3
MUS 122	Introduction to Music History II: AH1	3
MUS 125	History of Jazz Music	3
MUS 126	History of American Popular Music	3
MUS 131	Music Class I	2
MUS 132	Music Class II	2
MUS 141	Private Instruction I	1
MUS 142	Private Instruction II	1
MUS 151	Ensemble I	1
MUS 152	Ensemble II	1
MUS 241	Private Instruction I	2
MUS 242	Private Instruction II	2
MUS 251	Ensemble I	1
MUS 252	Ensemble II	1
PHI 111	Introduction to Philosophy: AH3	3
THE 111	Acting I	3
THE 112	Acting II	3

**Total Credit Hours** **60**

**Philosophy****Associate of Arts Recommended Track**

Recommended basic skills standards are:

- ENG 121
- REA 090

People are selling more than consumer goods in the world today. The market place of ideas contains competing political ideologies, religious beliefs and different value systems. Philosophy equips individuals to make lucid choices amid this ever-changing world, and gives them the intellectual strength to defend what they do and what they believe.

Philosophy fearlessly explores the big questions. What is the meaning of life? What is my purpose in living? What is the nature of happiness? Is there a God? How do I decide what is right and wrong? What is the nature of reality and of human consciousness? Are there limits to what can be known? Will a machine ever duplicate the mind? Why do we need government and what should be its role?

Fields that usually require philosophy are law, economics, government, politics, environmental policy, and theology.

**I. Communications**

Nine (9) credit hours

See page 50 for complete list of required courses.

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**II. Art and Humanities**

Nine (9) credit hours: select three (3) courses; with no more than two (2) courses from any one (1) of the categories. See page 50 for complete list of required courses.

**Suggested Courses****Category 1 (GT-AH1)**

ART 110	Art Appreciation: AH1	3
ART 111	Art History I: AH1	3
ART 112	Art History II: AH1	3
MUS 120	Music Appreciation: AH1	3
THE 211	Development of Theatre I: AH1	3
THE 212	Development of Theatre II: AH1	3

**Category 2 (GT-AH2)**

HUM 121	Early Civilizations: AH2	3
HUM 122	From Medieval to Modern: AH2	3
HUM 123	The Modern World: AH2	3
LIT 201	Masterpieces of Literature I: AH2	3
LIT 202	Masterpieces of Literature II: AH2	3

**Category 3 (GT-AH3)**

PHI 111	Introduction to Philosophy: AH3	3
PHI 113	Logic: AH3	3

**III. Mathematics**

Three (3) credit hours minimum (credit hours over three [3] will be applied to the electives category).

See page 50 for complete list of required courses.

**Suggested Courses**

MAT 120	Mathematics for the Liberal Arts: MA1	4
MAT 135	Introduction to Statistics: MA1	3

**IV. Social and Behavioral Sciences**

Nine (9) credit hours: select three (3) courses; one (1) must be a HIS course with no more than two (2) courses from any one (1) category.

See page 50 for complete list of required courses.

**Suggested Courses****Category 1 (GT-SS1)**

ECO 201	Principles of Macroeconomics: SS1	3
ECO 202	Principles of Microeconomics: SS1	3
POS 111	American Government: SS1	3

**Category 2 (GT-SS2)**

GEO 105	World Geography: SS2	3
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**Category 3 (GT-SS3)**

ANT 101	Cultural Anthropology: SS3	3
ANT 111	Physical Anthropology: SS3	3
PSY 101	General Psychology I: SS3	3
PSY 102	General Psychology II: SS3	3
SOC 101	Introduction to Sociology I: SS3	3
SOC 102	Introduction to Sociology II: SS3	3

**Category 4 (GT-HI1)**

HIS 101	History of Western Civilization I: HI1	3
HIS 102	History of Western Civilization II: HI1	3

**V. Physical and Life Sciences**

Eight (8) credit hours: select two (2) courses (credits over eight [8] will be applied to the electives category).

See page 50 for complete list of required courses.

**Suggested Courses**

AST 102	Astronomy II: SC1	4
BIO 105	Science of Biology: SC1	4
BIO 111	General College Biology I w/Lab: SC1	5
GEY 121	Historical Geology: SC1	4

**VI. Communication Studies/Fine Arts**

One to three (1-3) credit hours

See page 50 for complete list of required courses.

**VII. Computer Communication**

Three (3) credits

See page 50 for options to meet this requirement.

**VIII. Electives**

Sixteen-eighteen (16-18) credits selected from the AA approved course list. See page 51 for complete list of approved electives for remaining course options in this category.

**Suggested Courses**

LIT 115	Introduction to Literature: AH2	3
PHI 112	Ethics: AH3	3
PHI 114	Comparative Religion: AH3	3
PHI 214	Philosophy of Religion: AH3	3
POS 105	Introduction to Political Science: SS1	3

**Total Credit Hours****60****Photography—see Art****Political Science****Associate of Arts Recommended Track**

Recommended basic skills standards are

- ENG 090
- REA 090

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.

**I. Communications**

Nine (9) credit hours

See page 50 for complete list of required courses.

**II. Art and Humanities**

Nine (9) credit hours: select three (3) courses; with no more than two (2) courses from any one (1) of the categories. See page 50 for complete list of required courses.

**Suggested Courses****Category 2 (GT-AH2)**

HUM 121	Early Civilizations: AH2	3
LIT 115	Introduction to Literature: AH2	3

**Category 3 (GT-AH3)**

PHI 111	Introduction to Philosophy: AH3	3
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**III. Mathematics**

Three (3) credit hours minimum (credit hours over three [3] will be applied to the electives category).

See page 50 for complete list of required courses.

**Suggested Courses**

MAT 120	Mathematics for the Liberal Arts: MA1	4
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**IV. Social and Behavioral Sciences**

Nine (9) credit hours: select three (3) courses; one (1) must be a HIS course with no more than two (2) courses from any one (1) category.

See page 50 for complete list of required courses.



**Suggested Courses****Category 1 (GT-SS1)**

POS 105	Introduction to Political Science: SS1	3
POS 111	American Government: SS1	3

**Category 4 (GT-HI1)**

HIS 101	History of Western Civilization I: HI1	3
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**V. Physical and Life Sciences**

Eight (8) credit hours: select two (2) courses (credits over eight [8] will be applied to the electives category).

See page 50 for complete list of required courses.

**Suggested Courses**

GEY 111	Physical Geology: SC1	4
GEY 121	Historical Geology: SC1	4

**VI. Communication Studies/Fine Arts**

One to three (1-3) credit hours

See page 50 for complete list of required courses.

**Suggested Courses**

JOU 105	Introduction to Mass Media	3
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**VII. Computer Communication**

Three (3) credits

See page 50 for options to meet this requirement.

CSC 105	Computer Literacy	3
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**VIII. Electives**

Sixteen-eighteen (16-18) credits selected from the AA approved course list. See page 51 for complete list of approved electives.

**Suggested Courses**

POS 125	State and Local Government	3
POS 205	International Relations: SS1	3
POS 215	Current Political Issues: SS1	3
Plus 10 hours of any approved elective		<u>10</u>

**Total Credit Hours****60**

## Psychology

**Associate of Arts Recommended Track**

Recommended basic skills standards are

- ENG 090
- REA 090

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.

**I. Communications**

Nine (9) credit hours

See page 50 for complete list of required courses.

**II. Art and Humanities**

Nine (9) credit hours: select three (3) courses; with no more than two (2) courses from any one (1) of the categories. See page 50 for complete list of required courses.

**Suggested Courses****Category 2 (GT-AH2)**

LIT 115	Introduction to Literature: AH2	3
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**Category 3 (GT-AH3)**

PHI 111	Introduction to Philosophy: AH3	3
PHI 112	Ethics: AH3	3

**III. Mathematics**

Three (3) credit hours minimum (credit hours over three [3] will be applied to the electives category).

See page 50 for complete list of required courses.

**Suggested Courses**

MAT 121	College Algebra: MA1	4
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**IV. Social and Behavioral Sciences**

Nine (9) credit hours: select three (3) courses; one (1) must be a HIS course with no more than two (2) courses from any one (1) category.

See page 50 for complete list of required courses.

**Suggested Courses****Category 3 (GT-SS3)**

PSY 101	General Psychology I: SS3	3
PSY 102	General Psychology II: SS3	3
PSY 205	Psychology of Gender: SS3	3
PSY 217	Human Sexuality: SS3	3
PSY 226	Social Psychology: SS3	3
PSY 227	Psychology of Death and Dying: SS3	3
PSY 235	Human Growth & Development: SS3	3
PSY 238	Child Development: SS3	3
PSY 249	Abnormal Psychology: SS3	3

**V. Physical and Life Sciences**

Eight (8) credit hours: select two (2) courses (credits over eight [8] will be applied to the electives category).

See page 50 for complete list of required courses.

**Suggested Courses**

BIO 111	General College Biology I w/Lab: SC1	5
BIO 112	General College Biology II w/Lab: SC1	5

**VI. Communication Studies/Fine Arts**

One to three (1-3) credit hours

See page 50 for complete list of required courses.

**VII. Computer Communication**

Three (3) credits

See page 50 for options to meet this requirement.

**VIII. Electives**

Sixteen (16) credits selected from the AA approved course list. See page 51 for complete list of approved electives.

**Suggested Courses**

ANT 101	Cultural Anthropology: SS3	3
PSY 112	Psychology of Adjustment	3
PSY 205	Psychology of Gender: SS3	3
PSY 217	Human Sexuality: SS3	3
PSY 226	Social Psychology: SS3	3
PSY 227	The Psychology of Death and Dying: SS3	3
PSY 235	Human Growth and Development: SS3	3
PSY 238	Child Development: SS3	3
PSY 245	Educational Psychology	3
PSY 247	Child Abuse and Neglect	3
PSY 249	Abnormal Psychology: SS3	3
PSY 265	Psychology of Personality	3
SOC 101	Introduction to Sociology I: SS3	3
SOC 102	Introduction to Sociology II: SS3	<u>3</u>

**Total Credit Hours****60**

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## Social Work Transfer

### Associate of Arts Recommended Track

Recommended basic skills standards are

- ENG 090
- MAT 060
- REA 090

This program provides the first two years for transfer students who wish to pursue a career in social work or the human services field. Because of different requirements at four-year institutions, it is important that students work with advisors.

NOTE: Colorado State University–Pueblo has specific program requirements for transfer; consult your program advisor for specifics.

NOTE: To be employed in the social work field it is expected that you will be able to pass background checks. This will include fingerprinting for the Colorado Bureau of Investigation and a Central Registry Inquiry.

#### I. Communications

Nine (9) credit hours

See page 50 for list of required courses.

#### II. Art and Humanities

Nine (9) credit hours: select three (3) courses; with no more than two (2) courses from any one (1) of the categories. See page 50 for complete list of required courses.

#### III. Mathematics

Three (3) credit hours minimum (credit hours over three [3] will be applied to the electives category).

See page 50 for complete list of required courses.

#### Suggested Courses

MAT 135 Introduction to Statistics: MA1 3

#### IV. Social and Behavioral Sciences

Nine (9) credit hours: select three (3) courses; one (1) must be a HIS course with no more than two (2) courses from any one (1) category. See page 50 for complete list of required courses.

#### Suggested Courses

##### Category 3 (GT-SS3)

PSY 101 General Psychology I: SS3 3

SOC 101 Introduction to Sociology I: SS3 3

#### V. Physical and Life Sciences

Eight (8) credit hours: select two (2) courses (credits over eight [8] will be applied to the electives category).

See page 50 for complete list of required courses.

#### Suggested Courses

BIO 105 Science of Biology: SC1 4

#### VI. Communication Studies/Fine Arts

One to three (1-3) credit hours

See page 50 for complete list of required courses.

#### VII. Computer Communication

Three (3) credits

See page 50 for options to meet this requirement.

#### VIII. Electives

Sixteen-eighteen (16-18) credits selected from the AA approved course list. See page 51 for complete list of approved electives.

#### Suggested Courses

SWK 100 Introduction to Social Work 3

SWK 205 Social Welfare in the U.S. 3

SWK 222 Introduction to Social Work Practice 3

SWK 202 Human Behavior in the Social Environment II 3

SWK 201 Human Behavior in the Social Environment I 3

**Total Credit Hours 60**

SWK courses must be taken for the Colorado State University - Pueblo Social Work Program and count toward electives. SWK courses require paperwork from your advisor to be used in an AA degree. SWK courses transfer to Colorado State University–Pueblo Social Work Program.

In addition to the SWK courses, you must select one to three (1-3) credits from the AA Approved Course electives list on page 51.

## Sociology

### Associate of Arts Recommended Track

Recommended basic skills standards are

- ENG 090
- REA 090

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.

#### I. Communications

Nine (9) credit hours

See page 50 for complete list of required courses.

#### II. Art and Humanities

Nine (9) credit hours: select three (3) courses; with no more than two (2) courses from any one (1) of the categories. See page 50 for complete list of required courses.

#### III. Mathematics

Three (3) credit hours minimum (credit hours over three [3] will be applied to the electives category).

See page 50 for complete list of required courses.

#### Suggested Courses

MAT 120 Mathematics for the Liberal Arts: MA1 4

MAT 121 College Algebra: MA1 4

#### IV. Social and Behavioral Sciences

Nine (9) credit hours: select three (3) courses; one (1) must be a HIS course with no more than two (2) courses from any one (1) category. See page 50 for complete list of required courses.

#### Suggested Courses

##### Category 1 (GT-SS1)

POS 105 Introduction to Political Science: SS1 3

POS 111 American Government: SS1 3

##### Category 2 (GT-SS2)

GEO 105 World Geography: SS2 3

##### Category 3 (GT-SS3)

ANT 101 Cultural Anthropology: SS3 3

SOC 101 Introduction to Sociology I: SS3 3

SOC 102 Introduction to Sociology II: SS3 3

**Category 4 (GT-HI1)**

HIS 247	Contemporary World History: HI1	3
HIS 201	United States (U.S.) History I: HI1	3
HIS 202	United States (U.S.) History II: HI1	3

**V. Physical and Life Sciences**

Eight (8) credit hours: select two (2) courses (credits over eight [8] will be applied to the electives category).  
See page 50 for complete list of required courses.

**VI. Communication Studies/Fine Arts**

One to three (1-3) credit hours  
See page 50 for complete list of required courses.

**VII. Computer Communication**

Three (3) credits  
See page 50 for options to meet this requirement.

**VIII. Electives**

Sixteen-eighteen (16-18) credits selected from the AA approved course list. See page 51 for complete list of approved electives.

**Suggested Courses**

ANT 101	Cultural Anthropology	3
ETH 200	Introduction to Ethnic Studies	3
PSY 101	General Psychology I: SS3	3
PSY 102	General Psychology II: SS3	3
SOC 201	Introduction to Gerontology	3
SOC 205	Sociology of Family Dynamics: SS3	3
SOC 212	Research in Social Sciences	3
SOC 215	Contemporary Social Problems: SS3	3
SOC 216	Sociology of Gender: SS3	3
SOC 218	Sociology of Diversity	3
SOC 223	Chicanos in a Changing Society	3
SOC 231	The Sociology of Deviant Behavior: SS3	3
SOC 237	Sociology of Death and Dying	3
Any Foreign Language		5

**Total Credit Hours** **60**

**Southwest Studies****Associate of Arts Recommended Track**

Recommended basic skills standards are

- ENG 090
- MAT 030
- REA 090

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

**I. Communications**

Nine (9) credit hours  
See page 50 for complete list of required courses.

**II. Art and Humanities**

Nine (9) credit hours: select three (3) courses; with no more than two (2) courses from any one (1) of the categories. See page 50 for complete list of required courses.

**III. Mathematics**

Three (3) credit hours minimum (credit hours over three [3] will be applied to the electives category).  
See page 50 for complete list of required courses.

**Suggested Courses**

MAT 120	Mathematics for the Liberal Arts: MA1	4
MAT 121	College Algebra: MA1	4
MAT 135	Introduction to Statistics: MA1	3

**IV. Social and Behavioral Sciences**

Nine (9) credit hours: select three (3) courses; one (1) must be a HIS course with no more than two (2) courses from any one (1) category. See page 50 for complete list of required courses.

**Suggested Courses****Category 2 (GT-SS2)**

GEO 105	World Geography: SS2	3
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**Category 3 (GT-SS3)**

ANT 101	Cultural Anthropology: SS3	3
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**Category 4 (GT-HI1)**

HIS 102	History of Western Civilization II: HI1	3
HIS 201	United States (U.S.) History I: HI1	3

**V. Physical and Life Sciences**

Eight (8) credit hours: select two (2) courses (credits over eight [8] will be applied to the electives category).  
See page 50 for complete list of required courses.

**Suggested Courses**

BIO 105	Science of Biology: SC1	4
BIO 111	General College Biology I w/Lab: SC1	5
GEY 111	Physical Geology: SC1	4
GEY 121	Historical Geology: SC1	4

**VI. Communication Studies/Fine Arts**

One to three (1-3) credit hours  
See page 50 for complete list of required courses.

ART 121	Drawing I	3
ART 138	Photography I	3
DAN 125	History of Dance I	3
DAN 141	Ballroom Dance I	1

**VII. Computer Communication**

Three (3) credits  
See page 50 for options to meet this requirement.

**VIII. Electives**

Sixteen-eighteen (16-18) credits selected from the AA approved course list. See page 51 for complete list of approved electives.

**Suggested Courses**

ANT 101	Cultural Anthropology: SS3	3
ANT 107	Introduction to Archeology: SS3	3
ANT 111	Physical Anthropology: SS3	3
HIS 209	History of the American Southwest	3
HIS 225	Colorado History	3
HUM 131	Arts and Cultures of Mexico	3
HUM 236	North American Indian Arts	3
HUM 237	Hispanic Arts of Southwest	3
HUM 238	Sacred Images, Sacred Spaces	3
LIT 205	Ethnic Literature: AH2	3
SPA 111	Spanish I	5
SPA 112	Spanish II	5
SPA 211	Spanish III: AH4	3
SPA 212	Spanish IV: AH4	3

**Total Credit Hours** **60**

**Speech—see Communication**

# Technical Writing & Communication

## Associate of Arts Recommended Track

Recommended basic skills standards are

- ENG 060
- MAT 030
- REA 090

Technical Writing is the integration of creativity, technology, and problem solving. The Technical Writing program offers a certificate and an AA degree. The certificate is designed for individuals with a bachelor degree, individuals who may already be in the Technical Writing field and need additional job-specific training, or individuals interested in making a career change. The degree is appropriate for individuals who are interested in entering the field of Technical Writing and/or positions that require a substantial amount of writing, and/or transferring the Technical Writing degree to a four-year university. Technical writers play a vital role in the development and dissemination of information in many organizations. Technical writers employ a talent for devising novel solutions to complex problems and an aptitude for computer technology and written and verbal communication. Some of the many titles that technical writers hold are documentation specialist, content developer, research associate, and editor. Technical writers help make information comprehensible.

Please contact 502-3278 to learn more about the education, tools, and training available at PPCC for career development in the Technical Writing field.

### I. Communications

Nine (9) credit hours

See page 50 for complete list of required courses.

### II. Art and Humanities

Nine (9) credit hours: select three (3) courses; with no more than two (2) courses from any one (1) of the categories. See page 50 for complete list of required courses.

#### Suggested Courses

##### Category 1 (GT-AH1)

ART 110	Art Appreciation: AH1	3
ART 111	Art History I: AH1	3
ART 112	Art History II: AH1	3

##### Category 2 (GT-AH2)

HUM 121	Early Civilizations: AH2	3
HUM 122	From Medieval to Modern: AH2	3
HUM 123	The Modern World: AH2	3
LIT 115	Introduction to Literature: AH2	3
LIT 201	Masterpieces of Literature I: AH2	3
LIT 202	Masterpieces of Literature II: AH2	3

##### Category 3 (GT-AH3)

PHI 111	Introduction to Philosophy: AH3	3
PHI 112	Ethics: AH3	3
PHI 113	Logic: AH3	3

### III. Mathematics

Three (3) credit hours minimum (credit hours over three [3] will be applied to the electives category).

See page 50 for complete list of required courses.

#### Suggested Courses

MAT 125	Survey of Calculus: MA1	4
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### IV. Social and Behavioral Sciences

Nine (9) credit hours: select three (3) courses; one (1) must be a HIS course with no more than two (2) courses from any one (1) category. See page 50 for complete list of required courses.

### Suggested Courses

#### Category 1 (GT-SS1)

ECO 201	Principles of Macroeconomics: SS1	3
ECO 202	Principles of Microeconomics: SS1	3

#### Category 3 (GT-SS3)

PSY 101	General Psychology I: SS3	3
PSY 102	General Psychology II: SS3	3
SOC 101	Introduction to Sociology I: SS3	3
SOC 102	Introduction to Sociology II: SS3	3

#### Category 4 (GT-HI1)

HIS 101	History of Western Civilization I: HI1	3
HIS 102	History of Western Civilization II: HI1	3
HIS 201	United States (U.S.) History I: HI1	3
HIS 202	United States (U.S.) History II: HI1	3

### V. Physical and Life Sciences

Eight (8) credit hours: select two (2) courses (credits over eight [8] will be applied to the electives category).

See page 50 for complete list of required courses.

#### Suggested Courses

AST 101	Astronomy I: SC1	4
AST 102	Astronomy II: SC1	4
GEY 111	Physical Geology: SC1	4
GEY 121	Historical Geology: SC1	4

### VI. Communication Studies/Fine Arts

One to three (1-3) credit hours

See page 50 for complete list of required courses.

#### Suggested Courses

COM 115	Public Speaking	3
COM 125	Interpersonal Communication	3
COM 217	Group Communications	3
COM 220	Intercultural Communication	3
COM 225	Organizational Communication	3
ENG 221	Creative Writing I	3
ENG 222	Creative Writing II	3
ENG 230	Creative Nonfiction	3
ENG 231	Literary Magazine	3
JOU 111	Principles of Advertising	3
JOU 215	Publications Production and Design	3

### VII. Computer Communication

Three (3) credits

See page 50 for options to meet this requirement.

### VIII. Electives

Sixteen-eighteen (16-18) credits selected from the AA approved course list. See page 51 for complete list of approved electives.

#### Suggested Courses

ENG 116	Designing Print Documentation	3
ENG 117	Grammar, Usage, & Style for the Professional Writer	3
ENG 118	Designing Online Documentation	3
ENG 131	Technical Writing I	3
ENG 132	Technical Writing II	3
ENG 205	Technical Editing	3

### Total Credit Hours

**60**

# Theatre

## Associate of Arts Recommended Track

Recommended basic skills standards are

- ENG 090
- MAT 030
- REA 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.

### I. Communications

Nine (9) credit hours

See page 50 for complete list of required courses.

### II. Art and Humanities

Nine (9) credit hours: select three (3) courses; with no more than two (2) courses from any one (1) of the categories. See page 50 for complete list of required courses.

#### Suggested Courses

##### Category 1 (GT-AH1)

ART 112	Art History II: AH1	3
THE 211	Development of Theatre I: AH1	3
THE 212	Development of Theatre II: AH1	3

### III. Mathematics

Three (3) credit hours minimum (credit hours over three [3] will be applied to the electives category).

See page 50 for complete list of required courses.

#### Suggested Courses

MAT 120	Mathematics for the Liberal Arts: MA1	4
MAT 135	Introduction to Statistics: MA1	3

### IV. Social and Behavioral Sciences

Nine (9) credit hours: select three (3) courses; one (1) must be a HIS course with no more than two (2) courses from any one (1) category. See page 50 for complete list of required courses.

#### Suggested Courses

##### Category 3 (GT-SS3)

ANT 101	Cultural Anthropology: SS3	3
PSY 101	General Psychology I: SS3	3
PSY 102	General Psychology II: SS3	3
SOC 101	Introduction to Sociology I: SS3	3
SOC 102	Introduction to Sociology II: SS3	3

##### Category 4 (GT-HI1)

HIS 101	History of Western Civilization I: HI1	3
HIS 102	History of Western Civilization II: HI1	3
HIS 201	United States (U.S.) History I: HI1	3
HIS 202	United States (U.S.) History II: HI1	3

### V. Physical and Life Sciences

Eight (8) credit hours: select two (2) courses (credits over eight [8] will be applied to the electives category).

See page 50 for complete list of required courses.

### VI. Communication Studies/Fine Arts

One to three (1-3) credit hours

See page 50 for complete list of required courses.

### VII. Computer Communication

Three (3) credits

See page 50 for options to meet this requirement.

### VIII. Electives

Sixteen-eighteen (16-18) credits selected from the AA approved course list. See page 51 for complete list of approved electives.

#### Suggested Courses

HUM 121	Early Civilizations: AH2	3
HUM 122	From Medieval to Modern: AH2	3
HUM 123	The Modern World: AH2	3
MUS 120	Music Appreciation: AH1	3
THE 105	Introduction to Theatre Arts: AH1	3
THE 111	Acting I	3
THE 112	Acting II	3
THE 115	Stage Movement for Actors	3
THE 116	Technical Theatre	3
THE 120	Drafting for the Performing Arts	3
THE 126	Auditioning for Musical Theater	3
THE 130	Safety, Tools and Materials	3
THE 131	Theatre Production I	3
THE 132	Theatre Production II	3
THE 135	Theatre Makeup	2
THE 140	Stage Dialects	1
THE 144	Scene Study	1
THE 152	Production Stage Management I	3
THE 153	Production Stage Management II	3
THE 181	Internship	1-3
THE 182	Internship	1-3
THE 183	Internship	1-3
THE 200	Paint, Draw, Render, Model Techs	3
THE 204	Voice and Articulation I	2
THE 205	Voice and Articulation II	2
THE 211	Development of Theatre I: AH1	3
THE 214	Intermediate Acting II	3
THE 215	Playwriting	3
THE 216	Theatre Lighting and Design	3
THE 218	Readers Theatre	3
THE 220	Set Design for Film and Theatre	3
THE 230	Directing II	3
THE 231	Theatre Production III	3
THE 232	Theatre Production IV	3
THE 242	Set Dressings: Theory and Practice	2
THE 245	Basic Costume Design and Construction	3
THE 246	Rehearsal and Performance I	1
THE 247	Rehearsal and Performance II	2
THE 248	Rehearsal and Performance III	3

#### Total Credit Hours

**60**



# ASSOCIATE OF SCIENCE DEGREE (AS)

The Associate of Science degree is designed for students who want an emphasis in natural sciences, mathematics, computer science, pre-engineering, and allied health and 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, at least 36 of which must be Colorado State-Guaranteed Courses.

## I. Communication

Nine (9) credit hours

GT-CO1: ENG 121

GT-CO2: ENG 122

COM 115 or COM 125\*

\*This requirement is a Colorado Community College System requirement and is in addition to the State Guaranteed General Education Transfer Courses.

## II. Art and Humanities

Nine (9) credit hours

Select three (3) courses, with no more than two (2) courses from any one (1) of the following categories:

GT-AH1: ART 110, ART 111, ART 112, ART 207, MUS 120, MUS 121, MUS 122, THE 105, THE 211, THE 212

GT-AH2: HUM 121, HUM 122, HUM 123, LIT 115, LIT 201, LIT 202, LIT 205, LIT 211, LIT 212, LIT 221, LIT 222

GT-AH3: PHI 111, PHI 112, PHI 113, PHI 114, PHI 214

GT-AH4: FRE 211, FRE 212, GER 211, GER 212, JPN 211, JPN 212, RUS 211, RUS 212, SPA 211, SPA 212

## III. Mathematics

Four (4) credit hours minimum (credit hours over four (4) will be applied to the electives category).

GT-MA1: MAT 121, MAT 122, MAT 125, MAT 166, MAT 201, MAT 202, MAT 203, MAT 215, MAT 265

## IV. Social and Behavioral Sciences

Nine (9) credit hours

Select 3 courses, at least 1 of which must be History, with no more than 2 courses from any 1 category.

GT-HI1: HIS 101, HIS 102, HIS 111, HIS 112, HIS 201, HIS 202, HIS 247

GT-SS1: ECO 201, ECO 202, POS 105, POS 111, POS 205, POS 225

GT-SS2: GEO 105, GEO 106

GT-SS3: ANT 101, ANT 111, PSY 101, PSY 102, PSY 205, PSY 217, PSY 226, PSY 227, PSY 235, PSY 238, PSY 249, SOC 101, SOC 102, SOC 215, SOC, 216

## V. Physical and Life Sciences

Eight (8) credit hours: select two (2) courses (credits over eight (8) will be applied to the electives category).

GT-SC1: AST 101, AST 102, BIO 111, BIO 112, BIO 201, BIO 202, BIO 205, CHE 111, CHE 112, GEY 111, GEY 121, MET 150, PHY 111, PHY 112, PHY 211, PHY 212

## VI. Computer Communication (3 credits)

Choose three (3) credits from CSC 105, CSC 120, or any generally transferable CSC course.

Students entering with strong computer skills have three options for meeting this requirement:

- Challenge and receive credit for CSC 105 by enrolling in an Open Entry/ Open Exit section and successfully completing with a C or higher.
- Meet the requirement through Credit for Prior Learning.

- Waive the requirement by applying to the Division of Mathematics and Technology. Waiving will require proof of competency via completion of a self test and a structured interview with a faculty member from the CSC department. Waiver also requires the credits be replaced by another elective from the approved elective course list.

## VII. Electives

Eighteen (18) credits selected from the AS approved course list.

## Other 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.
- Only 6 elective credits are allowed in any combination of PED courses.
- Students may concentrate their study in a specialized area such as biological sciences, chemistry, or pre-engineering. Many "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 vice president for educational services. Approval is given only when it is appropriate to the educational objectives of a student.
- Courses numbered below 100 do not apply toward degrees.

**Foreign Language Note:** It is advisable to verify the foreign language admissions requirements for the university/four-year college you are planning to attend. For example, many of the Colorado four-year institutions require foreign languages for admission; the CU system requires 2-3 years of high school foreign language (or equivalent 2-3 semesters at Pikes Peak Community College). Students planning to attend a Colorado four-year institution who do not have the prerequisite foreign language requirement from high school should consider enrolling in these courses in addition to the degree requirements.

## Approved Elective Course List for AS Degrees

These courses are guaranteed to transfer as part of the 60+60 Bachelor's Degree Transfer Program. State-wide and individual college transfer agreements prescribe electives which transfer as part of those programs. Students who transfer prior to completing the AS degree are responsible for checking transfer of individual courses with the receiving four-year institution.

Eighteen (18) credits must be selected from the following list of Mathematics and Science courses to complete the Associate of Science Degree

### Mathematics

MAT 121	College Algebra: MA1	4
MAT 122	College Trigonometry: MA1	3
MAT 125	Survey of Calculus: MA1	4
MAT 166	Pre-Calculus: MA1	5
MAT 201	Calculus I: MA1	5
MAT 202	Calculus II: MA1	5
MAT 203	Calculus III: MA1	4
MAT 215	Discrete Math: MA1	4
MAT 255	Linear Algebra: MA1	3
MAT 265	Differential Equations: MA1	3

### Science

AST 101	Astronomy: SC1	4
BIO 111, 112	General College Biology with Lab I, II: SC1	5,5
BIO 201	Human Anatomy and Physiology I: SC1	4
BIO 202	Human Anatomy and Physiology II: SC1	4
BIO 204	Microbiology: SC1	4
BIO 216	Pathophysiology	4
CHE 111, 112	General Chemistry with Lab I, II: SC1	5,5

CHE 211, 212 Organic Chemistry with Lab I, II: SC1	5,5
CSC 120 Problem Solving with (Software Package)	3
CSC 126 Game Design and Development	3
CSC 150 Visual Basic Programming	3
CSC 154 Introduction to MS Visual Basic.NET (OOP)	3
CSC 160, 161 Computer Science I, II (Language)	4,4
CSC 165 Discrete Structures	3
CSC 200 Game Programming I	3
CSC 216 Computer Game Logic and Design	3
CSC 225 Computer Organization/Assembly Language Programming	4
CSC 230 C Programming: Unix	3
CSC 240 Java Programming	3
GEO 111 Physical Geography – Landforms	4
GEO 112 Physical Geography – Weather and Climate	4
GEY 111 Physical Geology: SC1	4
GEY 121 Historical Geology: SC1	4
PHY 111 Physics: Algebra Based I w/Lab: SC1	5
PHY 112 Physics: Algebra Based II w/Lab: SC1	5
PHY 211 Physics: Calculus Based I w/Lab: SC1	5
PHY 212 Physics: Calculus Based II w/Lab: SC1	5

## ASSOCIATE OF SCIENCE RECOMMENDED TRACKS

### Biological Sciences

#### Associate of Science Recommended Track

Recommended basic skills standards are

- ENG 060
- MAT 090
- REA 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.

#### I. Communications

Nine (9) credit hours

See page 72 for complete list of required courses.

#### II. Art and Humanities

Nine (9) credit hours

See page 72 for complete list of required courses.

#### III. Mathematics

Four (4) credit hours minimum (credit hours over four [4] will be applied to the electives category).

See page 72 for complete list of required courses.

#### Suggested Courses

MAT 121 College Algebra: MA1 4

#### IV. Social and Behavioral Sciences

Nine (9) credit hours: select one (1) HIS course and two (2) courses out of two (2) categories. See page 72 for complete list of required courses.

#### V. Physical and Life Sciences

Eight (8) credit hours: select two (2) courses (credits over eight [8] will be applied to the electives category).

See page 72 for complete list of required courses.

#### Suggested Courses

BIO 111 General College Biology I w/Lab: SC1	5
BIO 112 General College Biology II w/Lab: SC1	5

#### VI. Computer Communication

Three (3) credits

See page 72 for complete list of required courses and options to meet this requirement.

#### Suggested Courses

CSC 120 Problem Solving with (Software Package)	3
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#### VII. Electives

Eighteen (18) credits selected from the AS approved course list. See page 72 for complete list of approved electives.

#### Suggested Courses

BIO 200-Level Science Elective	5
CHE 111 General College Chemistry I w/Lab: SC1	5
CHE 112 General College Chemistry II w/Lab: SC1	5
Science Elective	1

#### Total Credit Hours

**60**

## Chemistry

### Associate of Science Recommended Track

Recommended basic skills standards are

- ENG 060
- MAT 090
- REA 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.

#### I. Communications

Nine (9) credit hours

See page 72 for complete list of required courses.

#### II. Art and Humanities

Nine (9) credit hours

See page 72 for complete list of required courses.

#### III. Mathematics

Four (4) credit hours minimum (credit hours over four [4] will be applied to the electives category).

See page 72 for complete list of required courses.

#### Suggested Courses

MAT 201 Calculus I: MA1	4
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#### IV. Social and Behavioral Sciences

Nine (9) credit hours: select one (1) HIS course and two (2) courses out of two (2) categories. See page 72 for complete list of required courses.

#### V. Physical and Life Sciences

Eight (8) credit hours: select two (2) courses (credits over eight [8] will be applied to the electives category).

See page 72 for complete list of required courses.

#### Suggested Courses

CHE 111 General College Chemistry I w/Lab: SC1	5
CHE 112 General College Chemistry II w/Lab: SC1	5

#### VI. Computer Communication

Three (3) credits

See page 72 for complete list of required courses and options to meet this requirement.

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**Suggested Courses**

CSC 120 Problem Solving with (Software Package) 3

**VII. Electives**

Eighteen (18) credits selected from the AS approved course list.  
See page 72 for complete list of approved electives.

**Suggested Courses**

CHE 211 Organic Chemistry I w/Lab: SC1 5

CHE 212 Organic Chemistry II w/Lab: SC1 5

PHY 211 Physics: Calculus Based I w/Lab: SC1 5

**Total Credit Hours 60**

## Computer Science

**Associate of Science Recommended Track**

Recommended basic skills standards are

- ENG 060
- MAT 090
- REA 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.

**I. Communications**

Nine (9) credit hours

See page 72 for complete list of required courses.

**II. Art and Humanities**

Nine (9) credit hours

See page 72 for complete list of required courses.

**III. Mathematics**

Four (4) credit hours minimum (credit hours over four [4] will be applied to the electives category).

See page 72 for complete list of required courses.

**Suggested Courses**

Note: It is recommended that transfer students take MAT 201.

MAT 121 College Algebra: MA1 4

MAT 201 Calculus I: MA1 4

**IV. Social and Behavioral Sciences**

Nine (9) credit hours: select one (1) HIS course and two (2) courses out of two (2) categories. See page 72 for complete list of required courses.

**V. Physical and Life Sciences**

Eight (8) credit hours: select two (2) courses (credits over eight [8] will be applied to the electives category).

See page 72 for complete list of required courses.

**Suggested Courses**

Note: It is recommended that transfer students take PHY 211

BIO 111 General College Biology I w/Lab: SC1 5

BIO 112 General College Biology II w/Lab: SC1 5

CHE 111 General College Chemistry I w/Lab: SC1 5

CHE 112 General College Chemistry II w/Lab: SC1 5

PHY 111 Physics: Algebra Based I w/Lab: SC1 5

PHY 112 Physics: Algebra Based II w/Lab: SC1 5

PHY 211 Physics: Calculus Based I w/Lab: SC1 5

PHY 212 Physics: Calculus Based II w/Lab: SC1 5

**VI. Computer Communication**

Three (3) credits

See page 72 for complete list of required courses and options to meet this requirement. CSC 105 Computer Literacy cannot be applied toward the Computer Science degree.

**Suggested Courses**

CSC 120 Problem Solving with (Software Package) 3

CSC 150 Visual Basic Programming 3

**VII. Electives**

Eighteen (18) credits selected from the AS approved course list.

See page 72 for complete list of approved electives.

**Suggested Courses**

CSC 160 Computer Science I: (Language) 4

CSC 161 Computer Science II: (Language) 4

CSC 225 Computer Architecture/Assembly Language Programming 4

CSC 230 C Programming: UNIX 3

CSC 233 Object Oriented Programming in C++ 3

**Total Credit Hours 60**

## Geology

**Associate of Science Recommended Track**

Recommended basic skills standards are

- ENG 060
- MAT 090
- REA 090

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.

**I. Communications**

Nine (9) credit hours

See page 72 for complete list of required courses.

**II. Art and Humanities**

Nine (9) credit hours

See page 72 for complete list of required courses.

**III. Mathematics**

Four (4) credit hours minimum (credit hours over four [4] will be applied to the electives category).

See page 72 for complete list of required courses.

**Suggested Courses**

MAT 125 Survey of Calculus: MA1 4

**IV. Social and Behavioral Sciences**

Nine (9) credit hours: select one (1) HIS course and two (2) courses out of two (2) categories. See page 72 for complete list of required courses.

**V. Physical and Life Sciences**

Eight (8) credit hours: select two (2) courses (credits over eight [8] will be applied to the electives category).

See page 72 for complete list of required courses.

**Suggested Courses**

GEY 111 Physical Geology: SC1 4

GEY 121 Historical Geology: SC1 4

**VI. Computer Communication**

Three (3) credits

See page 72 for complete list of required courses and options to meet this requirement.

**Suggested Courses**

CSC 120	Problem Solving with (Software Package)	3
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**VII. Electives**

Eighteen (18) credits selected from the AS approved course list. See page 72 for complete list of approved electives.

**Suggested Courses**

CHE 111	General College Chemistry I w/ Lab: SC1	5
CHE 112	General College Chemistry II w/ Lab: SC1	5
GEO 111	Physical Geography–Landforms	4
GEO 112	Physical Geography–Weather and Climate	4

**Total Credit Hours****60**

## Mathematics

**Associate of Science Recommended Track**

Recommended basic skills standards are

- ENG 090
- MAT 090
- REA 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.

**I. Communications**

Nine (9) credit hours

See page 72 for complete list of required courses.

**II. Art and Humanities**

Nine (9) credit hours

See page 72 for complete list of required courses.

**III. Mathematics**

Four (4) credit hours minimum (credit hours over four [4] will be applied to the electives category).

See page 72 for complete list of required courses.

**Suggested Courses**

MAT 201	Calculus I: MA1	5
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**IV. Social and Behavioral Sciences**

Nine (9) credit hours: select one (1) HIS course and two (2) courses out of two (2) categories. See page 72 for complete list of required courses.

**V. Physical and Life Sciences**

Eight (8) credit hours: select two (2) courses (credits over eight [8] will be applied to the electives category).

See page 72 for complete list of required courses.

**Suggested Courses**

PHY 211	Physics: Calculus Based I w/Lab: SC1	5
PHY 212	Physics: Calculus Based II w/Lab: SC1	5

**VI. Computer Communication**

Three (3) credits

See page 72 for complete list of required courses and options to meet this requirement.

**Suggested Courses**

CSC 160	Computer Science I: (Language)	4
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**VII. Electives**

Eighteen (18) credits selected from the AS approved course list. See page 72 for complete list of approved electives.

**Suggested Courses**

MAT 202	Calculus II: MA1	5
MAT 203	Calculus III: MA1	4
MAT 255	Linear Algebra: MA1	3
MAT 215	Discrete Mathematics: MA1	4
or		
MAT 265	Differential Equations: MA1	3

**Total Credit Hours****60**

## Physics

**Associate of Science Recommended Track**

Recommended basic skills standards are

- ENG 090
- MAT 106
- REA 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.

**I. Communications**

Nine (9) credit hours

See page 72 for complete list of required courses.

**II. Art and Humanities**

Nine (9) credit hours

See page 72 for complete list of required courses.

**III. Mathematics**

Four (4) credit hours minimum (credit hours over four [4] will be applied to the electives category).

See page 72 for complete list of required courses.

**Suggested Courses**

MAT 201	Calculus I: MA1	5
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**IV. Social and Behavioral Sciences**

Nine (9) credit hours: select one (1) HIS course and two (2) courses out of two (2) categories. See page 72 for complete list of required courses.

**V. Physical and Life Sciences**

Eight (8) credit hours: select two (2) courses (credits over eight [8] will be applied to the electives category).

See page 72 for complete list of required courses.

**Suggested Courses**

PHY 211	Physics: Calculus-Based I w/Lab: SC1	5
PHY 212	Physics: Calculus Based II w/Lab: SC1	5

**VI. Computer Communication**

Three (3) credits

See page 72 for complete list of required courses and options to meet this requirement.

**Suggested Courses**

CSC 160	Computer Science I: (Language)	4
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**VII. Electives**

Eighteen (18) credits selected from the AS approved course list. See page 72 for complete list of approved electives.

**Suggested Courses**

CHE 111	General College Chemistry I w/ Lab: SC1	5
CSC 161	Computer Science II: (Language)	4
MAT 202	Calculus II: MA1	5
MAT 203	Calculus III: MA1	4

**Total Credit Hours****60**

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## Pre-Allied Health

### Associate of Science Recommended Track

Recommended basic skills standards are

- ENG 060
- MAT 090
- REA 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.

#### I. Communications

Nine (9) credit hours

See page 72 for complete list of required courses.

#### II. Art and Humanities

Nine (9) credit hours

See page 72 for complete list of required courses.

#### III. Mathematics

Four (4) credit hours minimum (credit hours over four [4] will be applied to the electives category).

See page 72 for complete list of required courses.

#### Suggested Courses

MAT 121 College Algebra: MA1 4

#### IV. Social and Behavioral Sciences

Nine (9) credit hours: select one (1) HIS course and two (2) courses out of two (2) categories. See page 72 for complete list of required courses.

#### V. Physical and Life Sciences

Eight (8) credit hours: select two (2) courses (credits over eight [8] will be applied to the electives category).

See page 72 for complete list of required courses.

#### Suggested Courses

BIO 111 General College Biology I w/Lab: SC1 5

PHY 111 Physics: Algebra Based I w/Lab: SC1 5

#### VI. Computer Communication

Three (3) credits

See page 72 for complete list of required courses and options to meet this requirement.

#### Suggested Courses

CSC 120 Problem Solving with (Software Package) 3

#### VII. Electives

Eighteen (18) credits selected from the AS approved course list. See page 72 for complete list of approved electives.

#### Suggested Courses

BIO 201 Human Anatomy and Physiology I: SC1 4

BIO 202 Human Anatomy and Physiology II: SC1 4

BIO 204 Microbiology: SC1 4

CHE 111 General College Chemistry I w/ Lab: SC1 5

**Total Credit Hours 60**

## Physical Therapy Emphasis

### VI. Electives

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

BIO 201 Human Anatomy and Physiology I: SC1 4

BIO 202 Human Anatomy and Physiology II: SC1 4

CHE 111 General College Chemistry I w/ Lab: SC1 5

CSC 120 Problem Solving with (Software Package) 3

Science Elective 3

**Total Credit Hours 60**

## Pre-Nursing Emphasis

### VI. Electives

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

BIO 201 Human Anatomy and Physiology I: SC1 4

BIO 202 Human Anatomy and Physiology II: SC1 4

BIO 204 Microbiology: SC1 4

CSC 120 Problem Solving with (Software Package) 3

Science Elective 1

**Total Credit Hours 60**

## Pre-Med Professions

### Associate of Science Recommended Track

Recommended basic skills standards are

- ENG 090
- MAT 090
- REA 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.

#### I. Communications

Nine (9) credit hours

See page 72 for complete list of required courses.

#### II. Art and Humanities

Nine (9) credit hours

See page 72 for complete list of required courses.

#### III. Mathematics

Four (4) credit hours minimum (credit hours over four [4] will be applied to the electives category).

See page 72 for complete list of required courses.

#### Suggested Courses

MAT 201 Calculus I: MA1 5

#### IV. Social and Behavioral Sciences

Nine (9) credit hours: select one (1) HIS course and two (2) courses out of two (2) categories. See page 72 for complete list of required courses.

#### V. Physical and Life Sciences

Eight (8) credit hours: select two (2) courses (credits over eight [8] will be applied to the electives category).

See page 72 for complete list of required courses.

#### Suggested Courses

BIO 111 General College Biology I w/Lab: SC1 5

PHY 111 Physics: Algebra Based I w/Lab: SC1 5

#### VI. Computer Communication

Three (3) credits

See page 72 for complete list of required courses and options to meet this requirement.



**Suggested Courses**

CSC 120	Problem Solving with (Software Package)	3
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**VII. Electives**

Eighteen (18) credits selected from the AS approved course list. See page 72 for complete list of approved electives.

**Suggested Courses**

CHE 111	General College Chemistry I w/ Lab: SC1	5
CHE 112	General College Chemistry II w/Lab: SC1	5
PHY 112	Physics: Algebra Based II w/Lab: SC1	5
	Science Elective	3

**Total Credit Hours****60**

## ASSOCIATE OF GENERAL STUDIES DEGREE (AGS)

The Associate of General Studies degree provides an educational plan for the student to create a personalized program. It allows the blending of both career and technical and transfer courses without the constraints of specialization. Transferability of the AGS depends upon the courses taken and the receiving institution. Courses must not be developmental.

**Requirements**

- 60 credit hours of course work acceptable toward the degree.
- 30 credits of general education with 15 credits from State-guaranteed courses.
- A cumulative grade point average of 2.0 (a C average).
- At least 15 of these credit hours must be earned from PPCC.
- Students consult with an advisor and select 30 semester hours of open electives. Electives may include general education courses and/or career and technical courses.

**I. Communications (minimum 3 credit hours)**

ENG 121	English Composition I: CO1	3
	or	
ENG 131	Technical Writing I	3

**II. Art and Humanities (minimum 3 credit hours)**

ART 110	Art Appreciation: AH1	3
ART 111	Art History I: AH1	3
ART 112	Art History II: AH1	3
FRE 111,112	French Language I,II	5,5
FRE 211	French Language III: AH4	3
FRE 212	French Language IV	3
GER 111,112	German Language I,II	5,5
GER 211	German Language III: AH4	3
GER 212	German Language IV: AH4	3
HUM 121	Early Civilizations: AH2	3
HUM 122	From Medieval to Modern: AH2	3
HUM 123	The Modern World: AH2	3
JPN 111,112	Japanese Language I, II: AH4	5,5
LIT 115	Introduction to Literature: AH2	3
LIT 125	Study of the Short Story	3
LIT 201	Masterpieces of Literature I: AH2	3
LIT 202	Masterpieces of Literature II: AH2	3
LIT 211	Survey of American Literature I: AH2	3
LIT 212	Survey of American Literature II: AH2	3
LIT 221	Survey of British Literature I: AH2	3
LIT 222	Survey of British Literature II: AH2	3
MUS 120	Music Appreciation: AH1	3
MUS 121	Introduction to Music History I: AH1	3
MUS 122	Introduction to Music History II: AH1	3
PHI 111	Introduction to Philosophy: AH3	3

PHI 112	Ethics: AH3	3
PHI 113	Logic: AH3	3
PHI 114	Comparative Religions	3
PHI 214	Philosophy of Religion	3
RUS 111,112	Russian Language I,II	5,5
SPA 111,112	Spanish Language I,II	5,5
SPA 211	Spanish Language III: AH4	3
SPA 212	Spanish Language IV: AH4	3
THE 105	Introduction to the Theatre Arts	3
THE 211	Development of Theatre I: AH1	3
THE 212	Development of Theatre II: AH1	3

**III. Mathematics (minimum 3 credit hours)**

MAT 106	Survey of Algebra	4
MAT 107	Career Mathematics	3
MAT 108	Technical Mathematics	4
MAT 112	Financial Math	3
MAT 121	College Algebra: MA1	4
MAT 123	Finite Mathematics: MA1	3
MAT 125	Survey of Calculus: MA1	4
MAT 135	Introduction to Statistics: MA1	3
MAT 120	Mathematics for Liberal Arts: MA1	4
MAT 201	Calculus I: MA1	5
MAT 202	Calculus II: MA1	5

**IV. Social and Behavioral Sciences (minimum 3 credit hours)**

ANT 101	Cultural Anthropology	3
ANT 111	Physical Anthropology: SS3	3
COM 115	Public Speaking	3
COM 125	Interpersonal Communication	3
COM 217	Group Communications	3
COM 225	Organizational Communication	3
ECO 201	Principles of Macroeconomics: SS1	3
ECO 202	Principles of Microeconomics: SS1	3
FIN 106	Consumer Economics	3
GEO 105	World Regional Geography: SS2	3
GEO 106	Human Geography: SS2	3
GEO 111	Physical Geography – Landforms	4
GEO 112	Physical Geography – Weather and Climate	4
HIS 101	History of Western Civilization I: HI1	3
HIS 102	History of Western Civilization II: HI1	3
HIS 201	United States (U.S.) History I: HI1	3
HIS 202	United States (U.S.) History II: HI1	3
HIS 236	Contemporary U.S. History	3
HIS 247	Contemporary World History: HI1	3
POS 105	Introduction to Political Science: SS1	3
POS 111	American Government: SS1	3
POS 125	American State and Local Government	3
POS 205	International Relations	3
PSY 101	General Psychology I: SS3	3
PSY 102	General Psychology II: SS3	3
PSY 105	Psychology of Workplace Relationships	3
PSY 106	Human Relations	3
PSY 215	Psychology of Adjustment	3
PSY 226	Social Psychology	3
SOC 100	Principles of Practical Sociology	3
SOC 101	Introduction to Sociology I: SS3	3
SOC 102	Introduction to Sociology II: SS3	3
SOC 205	Sociology of Family Dynamics: SS3	3
SOC 218	Sociology of Diversity	3

**V. Physical and Life Sciences (minimum 3 credit hours)**

AST 101	Astronomy I: SC1	4
AST 102	Astronomy II: SC1	4
BIO 105	Science of Biology: SC1	4
BIO 111,112	General College Biology with Lab I,II: SC1	5,5

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BIO 201	Human Anatomy and Physiology I: SC1	4
BIO 202	Human Anatomy and Physiology II: SC1	4
CHE 101	Introduction to Chemistry I w/Lab: SC1	5
CHE 102	Introduction to Chemistry II w/Lab: SC1	5
CHE 111	General College Chemistry I w/Lab: SC1	5
CHE 112	General College Chemistry II w/Lab: SC1	5
GEY 135	Environmental Geology	3
GEY 111	Physical Geology: SC1	4
GEY 121	Historical Geology: SC1	4
HWE 100	Human Nutrition	3
PHY 111	Physics: Algebra Based I w/Lab: SC1	5
PHY 112	Physics: Algebra Based II w/Lab: SC1	5
PHY 211	Physics: Calculus Based I w/Lab: SC1	5
PHY 212	Physics: Calculus Based II w/Lab: SC1	5

**Additional General Education Electives**

BUS 115	Introduction to Business	3
CIS 115	Introduction to Computer Information Systems	3
CIS 118	Introduction to PC Applications	3
CSC 105	Computer Literacy	3
ENG 122	English Composition II: CO2	3
MAT 112	Financial Mathematics	3
Electives (30 credit hours)		

These may include courses from general education courses, AA or AS electives, and/or career and technical courses. The selected courses must not be developmental.

**Physical and Life Sciences**

BIO 111	General College Biology with Lab I: SC1	5
BIO 148	Basic Ecology	4
CHE 101	Introduction to Chemistry I w/Lab: SC1	5

**General Education**

CSC 105	Computer Literacy	3
or		
CSC 120	Problem Solving with (Software Package)	3
Electives Choose twelve (12) credit hours from following list		<u>12</u>

**Total Credit Hours****60****Natural Resource Management Electives**

AGY 240	Introduction to Soil Science	4
BIO 150	Animal Biology	4
BIO 154	Biology of Plants	4
GEY 111	Physical Geology: SC1	4
NRE 100	Foundation of Forestry	3
NRE 205	Wildlife and Fisheries Principles	3
NRE 204	Range Management and Restoration	4
NRE 211	Environmental Policies and Economics	3
NRE 212	Ecosystem Management	3

## ASSOCIATE OF GENERAL STUDIES RECOMMENDED TRACKS

### Natural Resource Management

#### Associate of General Studies Degree

Recommended basic skills standards are

- ENG 090
- MAT 090
- REA 090

This recommended track offers the student the basic two years of coursework for a Natural Resource or Wildlife Biology major. Because these majors vary at the university level, it is important that the student coordinate courses with the four year institution to which they plan to transfer.

**Communications**

COM 115	Public Speaking	3
ENG 121	English Composition I: CO1	3
ENG 122	English Composition II: CO2	3

**Art and Humanities**

Choose nine (9) credit hours from AA or AS approved courses 9

Mathematics		3
MAT 121	College Algebra: MA1	4

**Social and Behavioral Sciences**

ECO 202	Principles of Microeconomics: SS1	3
Choose six (6) credit hours from AA or AS approved courses		6

# ASSOCIATE OF APPLIED SCIENCE DEGREE (AAS) AND CERTIFICATES OF ACHIEVEMENT

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

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.

## AAS Requirements

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

## Certificates of Achievement 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 certificate.

## General Education Electives for AAS Degrees and Certificates

These courses are approved as meeting the general education electives requirements for the AAS degree.

### I. Communication

COM 115	Public Speaking	3
COM 125	Interpersonal Communication	3
COM 217	Group Communications	3
COM 225	Organizational Communication	3
ENG 115	Technical English and Communication	3
ENG 121	English Composition I: CO1	3
ENG 122	English Composition II: CO2	3
ENG 131, 132	Technical Writing I, II	3,3

### II. Art and Humanities

ARA 111	Arabic Language I	5
ART 110	Art Appreciation: AH1	3
ART 111	Art History I: AH1	3
ART 112	Art History II: AH1	3,3
ASL 121, 122	American Sign Language I, II	5,5
FRE 101	Conversational French	3
FRE 111, 112	French Language I, II	5,5
FRE 211	French Language III: AH4	3
GER 111, 112	German Language I, II	5,5
GER 211	German Language III: AH4	3
GER 212	German Language IV: AH4	3
HUM 103	Introduction to Film Art	3
HUM 115	World Mythology	3
HUM 121	Early Civilizations: AH2	3
HUM 122	From Medieval to Modern: AH2	3
HUM 123	The Modern World: AH2	3
ITA 111, 112	Italian Language I, II	5,5
ITA 211	Italian Language III: AH4	3
ITA 212	Italian Language IV: AH4	3
JPN 101	Conversational Japanese I	3
JPN 111, 112	Japanese Language I, II: AH4	5,5
JPN 211	Japanese Language III: AH4	3
JPN 212	Japanese Language IV: AH4	3
LIT 115	Introduction to Literature: AH2	3
LIT 125	Study of the Short Story	3
LIT 201, 202	Masterpieces of Literature I, II: AH2	3,3
LIT 205	Ethnic Literature: AH2	3
LIT 205	Ethnic Literature: AH2	3
LIT 211	Survey of American Literature I: AH2	3
LIT 211	Survey of American Literature I: AH2	3
LIT 212	Survey of American Literature II: AH2	3
LIT 212	Survey of American Literature II: AH2	3
LIT 221	Survey of British Literature: AH2	3
LIT 222	Survey of British Literature II: AH2	3
MUS 100	Fundamentals of Music	3
MUS 105	Introduction to Electronic/Computer Music	3
MUS 120	Music Appreciation: AH1	3
MUS 121	Introduction to Music History I: AH1	3
MUS 122	Introduction to Music History II: AH1	3
PHI 111	Introduction to Philosophy: AH3	3
PHI 112	Ethics: AH3	3
PHI 113	Logic: AH3	3
PHI 114	Comparative Religions: AH3	3
PHI 214	Philosophy of Religion: AH3	3
RUS 111, 112	Russian Language I, II	5,5
RUS 211	Russian Language III: AH4	3
RUS 212	Russian Language IV: AH4	3
SPA 101, 102	Conversational Spanish I, II	3,3
SPA 109	Spanish for Travelers	2
SPA 111, 112	Spanish Language I, II	5,5
SPA 115	Spanish for the Professional I	3
SPA 211	Spanish Language III: AH4	3
SPA 212	Spanish Language IV: AH4	3
THE 105	Introduction to Theatre Arts: AH1	3

### III. Mathematics and Physical and Life Sciences

AST 101	Astronomy I: SC1	4
AST 102	Astronomy II: SC1	4
BIO 105	Science of Biology: SC1	4
BIO 106	Basic Anatomy and Physiology	4
BIO 110	Foundations of College Biology	5
BIO 111, 112	General College Biology with Lab I, II: SC1	5,5
BIO 148	Basic Ecology	4
CHE 101	Introduction to Chemistry I w/Lab: SC1	5

CHE 102	Introduction to Chemistry II w/Lab: SC1	5
CHE 111	General College Chemistry I w/Lab: SC1	5
CHE 112	General College Chemistry II w/Lab: SC1	5
ENV 101	Introduction to Environmental Science	4
GEY 111	Physical Geology: SC1	4
GEY 121	Historical Geology: SC1	4
GEY 135	Environmental Geology	3
HWE 100	Human Nutrition	3
HWE 103	Community First Aid and CPR	1
MAT 106	Survey of Algebra	4
MAT 107	Career Math	3
MAT 108	Technical Mathematics	4
MAT 109	Geometry	3
MAT 111	Technology Lab for Algebra	1
MAT 112	Financial Mathematics	3
MAT 121	College Algebra: MA1	4
MAT 135	Introduction to Statistics: MA1	3
MAT 155	Integrated Mathematics I: MA1	3
MAT 156	Integrated Mathematics II: MA1	3
PHY 101	Basic Physics	4
PHY 111	Physics: Algebra Based I w/Lab: SC1	5
PHY 112	Physics: Algebra Based II w/Lab: SC1	5

#### IV. Social and Behavioral Sciences

ANT 101	Cultural Anthropology: SS3	3
ANT 107	Introduction to Archaeology: SS3	3
ANT 111	Physical Anthropology: SS3	3
ANT 215	Indians of North America	3
ANT 221, 222	Exploring Other Cultures I, II	3,3
ANT 225	Anthropology of Religion	3
ECO 201	Principles of Macroeconomics: SS1	3
ECO 202	Principles of Microeconomics: SS1	3
GEO 105	World Regional Geography: SS2	3
GEO 106	Human Geography: SS2	3
GEO 111	Physical Geography – Landforms	4
HIS 101	History of Western Civilization I: HI1	3
HIS 102	History of Western Civilization II: HI1	3
HIS 201	United States (U.S.) History I: HI1	3
HIS 202	United States (U.S.) History II: HI1	3
HIS 208	Native American Experience	3
HIS 236	Contemporary U.S. History	3
HIS 247	Contemporary World History: HI1	3
POS 105	Introduction to Political Science: SS1	3
POS 111	American Government: SS1	3
POS 125	American State and Local Government	3
POS 205	International Relations: SS3	3
POS 215	Current Political Issues	3
PSY 100	Psychology of Workplace Relationships	3
PSY 101	General Psychology I: SS3	3
PSY 102	General Psychology II: SS3	3
PSY 106	Human Relations	3
PSY 215	Psychology of Adjustment	3
PSY 235	Human Growth and Development: SS3	3
SOC 100	Principles of Practical Sociology	3
SOC 101	Introduction to Sociology I: SS3	3
SOC 102	Introduction to Sociology II: SS3	3
SOC 205	Sociology of Family Dynamics: SS3	3
SOC 218	Sociology of Diversity	3
SOC 223	Chicanos in a Changing Society	3
SOC 231	The Sociology of Deviant Behavior: SS3	3

#### Other General Electives

CIS 115	Introduction to Computer Information Systems	3
CIS 118	Introduction PC Applications	3
PER 128	Introduction to Recreation	2

## ASSOCIATE OF APPLIED SCIENCES DEGREE PROGRAMS AND CERTIFICATES

### Accounting

#### Associate of Applied Science Degree

Recommended basic skills standards are

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

#### General Education Courses

CIS 118	Introduction to PC Applications	3
	or	
CSC 105	Computer Literacy	(3)
COM 115	Public Speaking	3
ECO 201	Principles of Macroeconomics: SS1	3
ENG 121	English Composition I: CO1	3
	or	
ENG 131	Technical Writing I	(3)
MAT 112	Financial Mathematics	3
		<u>15</u>

#### Other Course Requirements

ACC 115	Payroll Accounting	3
ACC 121	Accounting Principles I	4
ACC 122	Accounting Principles II	4
ACC 125	Computerized Accounting	3
ACC 131	Income Tax	3
ACC 135	Spreadsheet Applications for Accounting	3
	or	
CIS 155	Spreadsheet Excel Concepts	(3)
ACC 211	Intermediate Accounting I	4
ACC 226	Cost Accounting	3
BUS 215	Introduction to Business	3
BUS 216	Legal Environment of Business	3
BUS 217	Business Communications and Report Writing	3
		<u>36</u>

#### Other Electives

Choose 9-10 hours from the following courses

ACC 212	Intermediate Accounting II	4
ACC 216	Governmental and not-for-profit Accounting	3
BUS 226	Business Statistics	3
CIS 135	Complete PC Word Processing	3
CWB 221	Technology Foundations for E-Commerce	3
ECO 202	Principles of Microeconomics: SS1	3
FIN 201	Principles of Finance	3
MAN 226	Principles of Management	3
MAR 216	Principles of Marketing	3

#### Total Credit Hours

**60-61**

## 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.

### Required Courses

ACC 115	Payroll Accounting	3
ACC 121	Accounting Principles I	4
ACC 122	Accounting Principles II	4
ACC 125	Computerized Accounting	3
ACC 135	Spreadsheet Applications for Accounting	3
	or	
CIS 155	Spreadsheet Excel Concepts	(3)
BUS 115	Introduction to Business	3
CIS 118	Introduction to PC Applications	3
	or	
CSC 105	Computer Literacy	(3)
MAT 112	Financial Mathematics	3
	Elective Choose three to four (3-4)	3-4

### Electives

Choose 3-4 hours from the following courses

ACC 131	Income Tax	3
BTE 100	Computer Keyboarding	1
BTE 108	Ten-Key by Touch	1
BUS 217	Business Communication & Report Writing	3
CIS 135	Complete PC Word Processing	3
COM 115	Public Speaking	3
ENG 121	English Composition I: CO1	3
	or	
ENG 131	Technical Writing I	(3)
FIN 106	Consumer Economics	3
MAN 116	Principles of Supervision	3

**Total Credit Hours** **29-30**

## Architectural Drafting

### Certificate

Recommended basic skills standards are

- ENG 090
- MAT 090
- REA 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 discuss remedying 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.

ARC 101	Introduction to Architectural Drawing	5
ARC 102	Residential Architecture	5
ARC 104	Architectural Drawing Theory	4
ARC 105	Architectural Building Materials I	2
ARC 111	Architectural Technology Theory	2
ARC 114	Building Service Systems I	2
ARC 117	Presentation Drawings and Models	3

ARC 235	Contemporary Architectural Theory II	2
CAD 101	Computer Aided Drafting I	3
MAT 108	Technical Mathematics	4

**Total Credit Hours** **32**

## Architecture & Construction Technology

### Associate of Applied Science Degree

Recommended basic skills standards are

- ENG 090
- MAT 090
- REA 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.

### General Education Courses

CIS 118	Introduction to PC Applications	3
ENG 121	English Composition I: CO1	3
	or	
ENG 131	Technical Writing I	(3)
MAT 107	Career Math	3
	or	
MAT 121	College Algebra: MA1	(4)
MAT 108	Technical Mathematics	4
	or	
MAT 122	College Algebra: MA1	(4)
	General Education Electives from approved list on page 79	<u>2</u>
		15

### Course requirements for all emphasis areas

ARC 101	Introduction to Architectural Drawing*	5
ARC 102	Residential Architecture**	5
ARC 104	Architectural Drawing Theory	4
ARC 105	Architectural Building Materials I	2
ARC 111	Architectural Technology Theory	2
ARC 114	Building Service Systems I	2
ARC 117	Presentation Drawings and Models	3
ARC 223	Introduction to Building Codes	3
ARC 224	Construction Contracts and Management	3
ARC 235	Contemporary Architectural Theory II	2
CAD 101	Computer Aided Drafting I	<u>3</u>
		34

\*Evening students may substitute ARC 151 and ARC 152

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

### Emphasis Areas

#### Architectural Emphasis

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.

ARC 201	Architectural Drawing III	5
ARC 202	Architectural Drawing IV	5
ARC 208	Architectural Building Materials II	3



ARC 211	Building Service Systems II	2
ARC 227	Architectural Structures	5
CAD 102	Computer Aided Drafting II	3
		<u>23</u>

**Total Hours for Architectural Degree Emphasis 72**

### Construction Emphasis

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

ARC 218	Surveying	3
ARC 208	Architectural Building Materials II	3
ARC 211	Building Service Systems II	2
ARC 222	Estimating and Print Reading	5
ARC 226	Construction Scheduling	3
ARC 227	Architectural Structures	5
		<u>21</u>

**Total Hours for Construction Degree Emphasis 70**

### Product Representative Emphasis

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.

ARC 208	Architectural Building Materials II	3
ARC 211	Building Service Systems II	2
ARC 222	Estimating and Print Reading	5
BUS 115	Introduction to Business	3
BUS 216	Legal Environment of Business	3
BUS 217	Business Communication and Report Writing	3
MAR 111	Principles of Sales	3
MAR 216	Principles of Marketing	3
		<u>25</u>

**Total Hours for Product Rep. Degree Emphasis 74**

### Certificates

#### Basic Drafting (Day Students)

ARC 101	Introduction to Architectural Drawing	5
ARC 104	Architectural Drawing Theory	4
		<u>9</u>

#### Basic Drafting (Evening Students)

ARC 104	Architectural Drawing Theory	4
ARC 151	Architectural Drafting I	3
ARC 152	Architectural Drafting II	2
		<u>9</u>

#### CAD Professional Upgrade

CAD 101	Computer Aided Drafting I	3
CAD 102	Computer Aided Drafting II	3
		<u>6</u>

#### Construction Professional Upgrade

ARC 218	Surveying	3
ARC 222	Estimating and Print Reading	5
ARC 226	Construction Scheduling	3
		<u>11</u>

#### Intermediate Drafting (Day Students)

ARC 101	Introduction to Architectural Drawing	5
ARC 102	Residential Architecture	5
ARC 104	Architectural Drawing Theory	4
CAD 101	Computer Aided Drafting I	3
		<u>17</u>

#### Intermediate Drafting (Evening Students)

ARC 104	Architectural Drawing Theory	4
ARC 151	Architectural Drafting I	3
ARC 152	Architectural Drafting II	2
ARC 153	Architectural Drafting III	3
ARC 154	Architectural Drafting IV	2
CAD 101	Computer Aided Drafting I	3
		<u>17</u>

## Automotive Collision Technology

### Associate of Applied Science Degree

Recommended basic skills standards are

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

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

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

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

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

#### General Education Courses

CIS 118	Introduction to PC Applications	3
COM 225	Organizational Communication	3
MAT 107	Career Math	3
	General Education Electives from approved list on page 79	6
		<u>15</u>

#### Automotive Collision Technology Courses

ACT 101	Intro to Auto Collision Technology	4
ACT 111	Metal Welding and Cutting I	3
ACT 121	Non-Structural Repair Preparation	3
ACT 122	Panel Repair and Replacements	3
ACT 123	Metal Finishing and Body Filling	3
ACT 131	Structural Damage Diagnosis	3
ACT 132	Structural Damage Repair	3
ACT 142	Surface Preparation I	2
ACT 143	Spray Equipment Operation	2
ACT 144	Refinishing I	2
ACT 151	Plastics and Adhesives I	1
ACT 180	Automotive Collision Repair Internship Level I	4
ACT 181	Automotive Collision Repair Level II Internship	4
ACT 211	Metal Welding and Cutting II	2
ACT 221	Movable Glass and Hardware	2
ACT 231	Advanced Structural Damage Diagnosis and Repair	3

ACT 232	Fixed Glass	2
ACT 241	Paint Defects – Causes and Cures	3
ACT 242	Surface Preparation II	2
ACT 243	Refinishing II	2
ACT 244	Final Detail	2
ACT 251	Plastics and Adhesives II	1
		<u>56</u>

**Total Credit Hours****71****Certificates****Non-Structural Repair Technician**

ACT 101	Intro to Auto Collision Technology	4
ACT 111	Metal Welding and Cutting I	3
ACT 121	Non-Structural Repair Preparation	3
ACT 122	Panel Repair and Replacements	3
ACT 123	Metal Finishing and Body Filling	3
ACT 180	Automotive Collision Repair Internship Level I	4
ACT 211	Metal Welding and Cutting II	2
ACT 221	Movable Glass and Hardware	2
		<u>24</u>

**Total Credit Hours****24****Refinish Prep Technician**

ACT 101	Intro to Automotive Collision Technology	4
ACT 142	Surface Preparation I	2
ACT 143	Spray Equipment Operation	2
ACT 144	Refinishing I	2
ACT 244	Final Detail	2
		<u>12</u>

**Total Credit Hours****12****Refinish Technician**

ACT 181	Auto Collision Repair Level II Internship	4
ACT 241	Paint Defects – Causes and Cures	3
ACT 242	Surface Preparation II	2
ACT 243	Refinishing II	2
		<u>11</u>

**Total Credit Hours****11****R & I Technician**

ACT 101	Introduction to Auto Collision Technology	4
ACT 121	Non-Structural Repair Preparation	3
ACT 221	Movable Glass & Hardware	2
		<u>9</u>

**Total Credit Hours****9****Structural Repair Technician**

ACT 131	Structural Damage Diagnosis	3
ACT 132	Structural Damage Repair	3
ACT 231	Advanced Structural Damage Diagnosis & Repair	3
ACT 232	Fixed Glass	2
		<u>11</u>

**Total Credit Hours****11****Automotive Plastics Repair Technician**

ACT 101	Intro to Automotive Collision Technology	4
ACT 121	Non-Structural Repair Preparation	3
ACT 151	Plastics and Adhesives I	1
ACT 242	Surface Preparation II	2
ACT 243	Refinishing II	2
ACT 251	Plastics and Adhesives II	1
		<u>13</u>

**Total Credit Hours****13**

## Automotive Technology

### Associate of Applied Science Degree

Recommended basic skills standards are:

- AAA 090
- ENG 060
- MAT 030
- REA 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 specializes in diesel and light truck service. The automotive option specializes in automotive service. Both options are compatible with each other. Additional advanced classes are offered in engine and diesel areas. Students may choose from several certificate options in Automotive, Diesel, and Motorsports Technology.

Students entering this program should exhibit the following qualities: mechanical aptitude, ability to read and follow instructions and specific 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 on an open-entry/open-exit self-paced basis.

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

**General Education Courses**

CIS 118	Introduction to PC Applications	3
COM 225	Organizational Communication	3
MAT 107	Career Math	3
	General Education Electives from approved list on page 79	6
		<u>15</u>

**Courses required for all emphasis areas**

ASE 110	Brakes I	3
ASE 120	Basic Automotive Electricity	2
ASE 123	Automotive Battery, Starting, & Charging Systems	2
ASE 132	Ignition System Diagnosis and Repair	2
ASE 140	Suspension and Steering I	3
ASE 151	Automotive Manual Transmission/Transaxles and Clutches	2
ASE 161	Engine, Disassembly Diagnosis and Assembly	5
ASE 210	Brakes II	3
ASE 231	Automotive Computers	2
ASE 233	Fuel Injection and Exhaust Systems	4
ASE 240	Suspension and Steering II	3
ASE 265	Automotive Heating and Air Conditioning	5
		<u>36</u>

\*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 Emphasis**

DPM 100	Introduction to Diesel Mechanics	2
DPM 101	Diesel Shop Orientation	2
DPM 103	Diesel Engines I	4
DPM 106	Fuel Injection	3
DPM 107	Fundamentals of Four-Wheel & Front-Wheel Drive	4
DPM 203	Diesel Engines II	4
DPM 210	Air Induction and Engine Analysis	1
DPM 222	H/D Lighting & Instrumentation	4
		<u>24</u>

**Total Hours for Diesel Degree Emphasis** **75**

**General Automotive Emphasis**

ASE 102	Introduction to the Automotive Shop	2
ASE 130	General Engine Diagnosis	2
ASE 134	Automotive Emissions	2
ASE 150	Automotive U-joint and Axle Shaft Service	2
ASE 152	Differentials and 4WD/AWD Service	2
ASE 160	Automotive Engine Removal and Installation	1
ASE 220	Specialized Electronics Training	2
ASE 221	Automotive Body Electrical	4
ASE 235	Driveability Diagnosis	1
ASE 250	Automatic Transmission/Transaxle Service	1
ASE 251	Automatic Transmission/Transaxle Diagnosis and Assemblies	5
		<u>24</u>

**Total Hours for General Automotive Degree Emphasis** **75**

**Certificates****Air Conditioning & Heating**

ASE 102	Introduction the Automotive Shop	2
ASE 120	Basic Automotive Electricity	2
ASE 123	Automotive Battery, Starting, & Charging Systems	2
ASE 265	Automotive Heating and Air Conditioning	5
		<u>11</u>

**Total Credit Hours** **11**

**Automotive Brakes**

ASE 102	Introduction the Automotive Shop	2
ASE 110	Brakes I	3
ASE 120	Basic Automotive Electricity	2
ASE 123	Automotive Battery, Starting, & Charging Systems	2
ASE 210	Brakes II	3
		<u>12</u>

**Total Credit Hours** **12**

**Automotive Electricity**

ASE 102	Introduction the Automotive Shop	2
ASE 120	Basic Automotive Electricity	2
ASE 123	Automotive Battery, Starting, & Charging Systems	2
ASE 220	Specialized Electronics Training	2
ASE 221	Automotive Body Electrical	4
ASE 231	Automotive Computers	2
		<u>14</u>

**Total Credit Hours** **14**

**Automotive Technology**

ASE 102	Introduction to the Automotive Shop	2
ASE 110	Brakes I	3
ASE 120	Basic Automotive Electricity	2
ASE 123	Automotive Battery, Starting, & Charging Systems	2
ASE 132	Ignition System Diagnosis and Repair	2
ASE 134	Automotive Emissions	2
ASE 140	Suspension and Steering I	3
ASE 150	Automotive U-joint and Axle Shaft Service	2

ASE 151	Automotive Manual Transmission/Transaxles and Clutches	2
ASE 152	Differentials and 4WD/AWD Service	2
ASE 160	Automotive Engine Removal and Installation	1
ASE 161	Engine, Disassembly Diagnosis and Assembly	5
ASE 210	Brakes II	3
ASE 220	Specialized Electronics Training	2
ASE 221	Automotive Body Electrical	4
ASE 231	Automotive Computers	2
ASE 233	Fuel Injection and Exhaust Systems	4
ASE 240	Suspension and Steering II	3
ASE 265	Automotive Heating and Air Conditioning	5
		<u>51</u>

**Total Credit Hours** **51**

**Automatic Transmissions**

ASE 102	Introduction the Automotive Shop	2
ASE 120	Basic Automotive Electricity	2
ASE 123	Automotive Battery, Starting, & Charging Systems	2
ASE 250	Automatic Transmission/Transaxle Service	1
ASE 251	Automatic Transmission/Transaxle Diagnosis and Assemblies	5
		<u>12</u>

**Total Credit Hours** **12**

**Diesel Engine Performance**

DPM 100	Introduction to Diesel Mechanics	2
DPM 101	Diesel Shop Orientation	2
DPM 106	Fuel Injection	3
DPM 210	Air Induction and Engine Analysis	1
DPM 222	H/D Lighting & Instrumentation	4
		<u>12</u>

**Total Credit Hours** **12**

**Diesel Engine Repair**

ASE 160	Engine Removal and Installation	1
DPM 100	Introduction to Diesel Mechanics	2
DPM 101	Diesel Shop Orientation	2
DPM 103	Diesel Engines I	4
DPM 203	Diesel Engines II	4
		<u>13</u>

**Total Credit Hours** **13**

**Diesel Fuel Injection**

ASE 120	Basic Automotive Electricity	2
DPM 100	Introduction to Diesel Mechanics	2
DPM 101	Diesel Shop Orientation	2
DPM 106	Fuel Injection	3
		<u>9</u>

**Total Credit Hours** **9**

**Engine Performance**

ASE 102	Introduction the Automotive Shop	2
ASE 120	Basic Automotive Electricity	2
ASE 123	Automotive Battery, Starting, & Charging Systems	2
ASE 130	General Engine Diagnosis	2
ASE 132	Ignition System Diagnosis and Repair	2
ASE 134	Automotive Emissions	2
ASE 160	Automotive Engine Removal and Installation	1
ASE 161	Engine, Disassembly Diagnosis and Assembly	5
ASE 220	Specialized Electronics Training	2
ASE 221	Automotive Body Electrical	4
ASE 231	Automotive Computers	2
ASE 233	Fuel Injection and Exhaust Systems	4
ASE 235	Driveability Diagnosis	1
		<u>31</u>

**Total Credit Hours** **31**

**Gasoline Engine Repair**

ASE 102	Introduction the Automotive Shop	2
ASE 120	Basic Automotive Electricity	2
ASE 123	Automotive Battery, Starting, & Charging Systems	2
ASE 160	Automotive Engine Removal and Installation	1
ASE 161	Engine, Disassembly Diagnosis and Assembly	5

**Total Credit Hours** **12**

**Manual Drivetrain**

ASE 102	Introduction the Automotive Shop	2
ASE 120	Basic Automotive Electricity	2
ASE 123	Automotive Battery, Starting, & Charging Systems	2
ASE 150	Automotive U-joint and Axle Shaft Service	2
ASE 151	Automotive Manual Transmission/Transaxles and Clutches	2
ASE 152	Differentials and 4WD/AWD Service	2

**Total Credit Hours** **12**

**Motorsports Technology**

ACT 111	Metal Welding and Cutting I	3
ACT 161	Automotive Graphics and Design	3
AUT 105	Introduction to Motorsports Technology	2
AUT 108	Racing Vehicle Systems	2
AUT 109	Suspension and Chassis Design	2
AUT 110	High Performance Suspension & Chassis Setup	4
AUT 116	High Performance Brake Systems	2
AUT 118	High Performance Power Trains	2
AUT 119	High Performance Electrical & Fuel Systems	2
AUT 127	High Performance Lubrication & Cooling Systems	2
AUT 128	High Performance Engine Design, Blueprinting and Testing	4
AUT 136	Introduction to Racecar Body Fabrication	2
AUT 137	Introduction to Racecar Chassis Fabrication	2

**Total Credit Hours** **32**

**Suspension and Steering**

ASE 102	Introduction the Automotive Shop	2
ASE 120	Basic Automotive Electricity	2
ASE 123	Automotive Battery, Starting, & Charging Systems	2
ASE 140	Suspension and Steering I	3
ASE 240	Suspension and Steering II	3

**Total Credit Hours** **12**

**Business Administration****Associate of Applied Science Degree**

Recommended basic skills standards are

- AAA 090
- ENG 090
- MAT 060
- REA 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 Administrative Assistant, Business Foundations, Customer Service, Entrepreneurship, International Business, Management, Marketing, Real Estate, and Supervision.

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. Business students interested in transferring to a four-year university should refer to the Associate of Arts Degree in Business on page 56.

Faculty advisors are available to assist students in evaluating the various options. Call 502-3300 at the Centennial Campus or 502-3215 at the Rampart Range Campus for program information or to schedule a personal appointment with a program faculty advisor.

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 BTE 100.

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

**General Education Requirements**

BUS 115	Introduction to Business	3
CIS 118	Introduction to PC Applications	3
COM 115	Public Speaking	3
FIN 106	Consumer Economics	3
MAT 112	Financial Mathematics	3
		<u>15</u>

**Business Foundation course requirements for all emphasis areas**

ACC 101	Fundamentals of Accounting	3
or		
ACC 121	Accounting Principles I	(4)
BUS 105	Business Orientation	.5
MAN 116	Principles of Supervision	3
MAN 117	Time Management	1
MAN 128	Human Relations in Organizations	3
MAR 111	Principles of Sales	3
MAR 160	Customer Service	3
		<u>16.5-17.5</u>

NOTE: Completion of the 31.5 / 32.5 hours in General Education and Business Foundation courses earns the student a Business Foundations Certificate.

**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, leading to customer satisfaction and the improved image of the organization.

BUS 181	Internship	3
BUS 216	Legal Environment of Business	3
BUS 217	Business Communication and Report Writing	3
COM 125	Interpersonal Communications	3
MAN 246	Critical Issues in Marketing and Management	3
MAR 216	Principles of Marketing	3
Elective	Choose twelve (12) hours from list below	<u>12</u>
		30

**Customer Service Emphasis Electives**

ANT 101	Cultural Anthropology: SS3	3
MAN 200	Human Resource Management	3
MAN 226	Principles of Management	3
PHI 113	Logic: AH3	3

NOTE: Program advisors may approve additional elective choices.

**Total Credit Hours**

**61.5 / 62.5**

**Entrepreneurship Emphasis**

The Entrepreneurship 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.

BUS 216	Legal Environment of Business	3
BUS 217	Business Communications and Report Writing	3
ECO 202	Principles of Microeconomics: SS1	3
FIN 201	Principles of Finance	3
MAN 200	Human Resource Management I	3
MAN 216	Small Business Management	3
MAN 226	Principles of Management	3
MAN 240	Strategic Management	3
MAR 216	Principles of Marketing	3
MAR 249	Strategic Marketing	3
		<u>30</u>

**Total Credit Hours 61.5-62.5**

### Executive Assistant Emphasis

The Executive Assistant 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.

BTE 102	Keyboarding Applications I	2
BTE 108	Ten-Key by Touch	1
BTE 111	Keyboarding Speedbuilding I	2
BTE 166	Business Editing Skills	3
BUS 217	Business Communications and Report Writing	3
CIS 107	Voice Recognition: Dragon	1
CIS 135	Complete PC Word Processing	3
CIS 155	PC Spreadsheets Concepts: Excel	3
CIS 165	Complete Presentation Graphics: PowerPoint	3
MAN 246	Critical Issues in Marketing and Management	3
Electives	Choose six (6) hours from list below	6
		<u>30</u>

### Executive Assistant Emphasis Electives

ACC 115	Payroll Accounting	3
ACC 125	Computerized Accounting	3
CIS 124	Introduction to Operating Systems	3
CIS 145	Complete PC Database Complete	3
CWB 110	Complete Web Authoring: HTML	3
MAN 116	Principles of Supervision	3
MAN 200	Human Resource Management	3
MAR 160	Customer Service	3

**Total Credit Hours 61.5-62.5**

### International Business Emphasis

The International Business Emphasis is designed for students who would like to become familiar with operating businesses in the international environment.

BUS 203	Introduction to International Business	3
BUS 216	Legal Environment of Business	3
BUS 217	Business Communication and Report Writing	3
BUS 226	Business Statistics	3
FOL 111	Foreign Language I	5
MAR 240	International Marketing	3
Electives	Nine (9) hours (see advisor)	9
		<u>29</u>

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

**Total Credit Hours 60.5-61.5**

### 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.

BUS 181	Internship	3
BUS 216	Legal Environment of Business	3
BUS 217	Business Communications and Report Writing	3
BUS 226	Business Statistics	3
FIN 201	Principles of Finance	3
MAN 200	Human Resource Management I	3
MAN 226	Principles of Management	3
MAN 240	Strategic Management	3
MAN 246	Critical Issues in Marketing and Management	3
MAR 216	Principles of Marketing	3
		<u>30</u>

**Total Credit Hours 61.5-62.5**

### Marketing Emphasis

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

BUS 181	Internship	3
BUS 182	Internship	3
BUS 216	Legal Environment of Business	3
BUS 217	Business Communication and Report Writing	3
MAN 226	Principles of Management	3
MAN 246	Critical Issues in Marketing and Management	3
MAR 216	Principles of Marketing	3
MAR 220	Principles of Advertising	3
Electives	Choose six (6) hours from list below	6
		<u>30</u>

### Marketing Emphasis Electives

BUS 281	Internship	3
MAN 216	Small Business Management	3
MAR 249	Strategic Marketing	3

NOTE: Program advisors may approve additional elective choices.

**Total Credit Hours 61.5-62.5**

### 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 181 Internship I is an integral part of this emphasis area.

BUS 181	Internship	3
BUS 216	Legal Environment of Business	3
BUS 217	Business Communication and Report Writing	3
MAN 200	Human Resource Management I	3
MAN 226	Principles of Management	3
MAN 246	Critical Issues in Marketing and Management	3
Electives	Choose twelve (12) hours from list below	12
		<u>30</u>



**Supervision Emphasis Electives**

BUS 182	Internship	3
BUS 281	Internship	3
COM 125	Interpersonal Communications	3
MAN 240	Strategic Management	3
MAR 249	Strategic Marketing	3
PSY 215	Psychology of Adjustment	3
SWK 100	Introduction to Social Work	3

NOTE: Program advisors may approve additional elective choices.

**Total Credit Hours** **61.5-62.5**

**Certificates**

Recommended basic skills standards are

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

**Administrative Assistant Certificate**

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.

BTE 102	Keyboarding Applications I	2
BTE 108	Ten-Key by Touch	1
BTE 111	Keyboarding Speedbuilding I	2
BTE 166	Business Editing Skills	3
BUS 217	Business Communications and Report Writing	3
CIS 107	Voice Recognition: Dragon	1
CIS 135	Complete PC Word Processing	3
CIS 155	PC Spreadsheets Concepts: Excel	3
CIS 165	Complete Presentation Graphics: PowerPoint	3
MAN 246	Critical Issues in Marketing and Management	3
Electives	Choose six (6) hours from list below	6

**Total Credit Hours** **30**

**Administrative Assistant Electives**

ACC 115	Payroll Accounting	3
ACC 125	Computerized Accounting	3
CIS 124	Introduction to Operating Systems	3
CIS 145	Complete PC Database Complete	3
CWB 110	Complete Web Authoring: HTML	3
MAN 116	Principles of Supervision	3
MAN 200	Human Resource Management	3
MAR 160	Customer Service	3

**Total Credit Hours** **27**

**Business Foundations Certificate**

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

ACC 101	Fundamentals of Accounting	3
or		
ACC 121	Accounting Principles I	(4)
BUS 105	Business Orientation	.5

BUS 115	Introduction to Business	3
CIS 118	Introduction to PC Applications	3
COM 115	Public Speaking	3
FIN 106	Consumer Economics	3
MAN 128	Human Relations in Organizations	3
MAR 111	Principles of Sales	3
MAR 160	Customer Service	3
MAT 112	Financial Mathematics	3

**Total Credit Hours** **31.5-32.5**

**Customer Service Certificate**

The certificate prepares the student for both internal and external Customer Service analysis in Industry and Governmental Agencies.

BUS 181	Internship	3
BUS 216	Legal Environment of Business	3
BUS 217	Business Communication and Report Writing	3
COM 125	Interpersonal Communications	3
MAN 246	Critical Issues in Marketing and Management	3
MAR 216	Principles of Marketing	3
Electives	Choose nine (9) hours from electives list below	9

**Customer Service Electives**

MAN 200	Human Resource Management	3
MAN 226	Principles of Management	3
PHI 113	Logic: AH3	3

NOTE: Program advisors may approve additional elective choices.

**Total Credit Hours** **27**

**Entrepreneurship Certificate**

This 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.

BUS 216	Legal Environment of Business	3
BUS 217	Business Communications and Report Writing	3
ECO 202	Principles of Microeconomics: SS1	3
FIN 201	Principles of Finance	3
MAN 200	Human Resource Management I	3
MAN 216	Small Business Management	3
MAN 226	Principles of Management	3
MAN 240	Strategic Management	3
MAR 216	Principles of Marketing	3
MAR 249	Strategic Marketing	3

**Total Credit Hours** **30**

### International Business Certificate

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.

BUS 181	Internship	3
BUS 216	Legal Environment of Business	3
BUS 217	Business Communication and Report Writing	3
BUS 203	Introduction to International Business	3
BUS 226	Business Statistics	3
FIN 210	International Finance	3
FOL 111	Foreign Language I	5
MAN 246	Critical Issues in Marketing and Management	3
MAR 240	International Marketing	3
		<u>3</u>

**Total Credit Hours 29**

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

### Management Certificate

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.

BUS 181	Internship	3
BUS 216	Legal Environment of Business	3
BUS 217	Business Communications and Report Writing	3
BUS 226	Business Statistics	3
FIN 201	Principles of Finance	3
MAN 200	Human Resource Management I	3
MAN 226	Principles of Management	3
MAN 240	Strategic Management	3
MAN 246	Critical Issues in Marketing and Management	3
MAR 216	Principles of Marketing	3
		<u>3</u>

**Total Credit Hours 30**

### Marketing Certificate

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.

BUS 181	Internship	3
BUS 182	Internship	3
BUS 216	Legal Environment of Business	3
BUS 217	Business Communications and Report Writing	3
MAN 226	Principles of Management	3
MAN 246	Critical Issues in Marketing and Management	3
MAR 216	Principles of Marketing	3
MAR 220	Principles of Advertising	3
	Electives Choose six (6) hours from electives list below	<u>6</u>

**Total Credit Hours 30**

### Marketing Electives

BUS 227	Principles of Purchasing	3
BUS 281	Internship	3
MAN 216	Small Business Management	3

### Real Estate Certificate

This certificate program prepares students to take the Colorado State Real Estate Brokers License Exam to become a Real Estate Associate Broker. Upon successful completion of the state exam, students can pursue employment as residential/commercial real estate agents or business brokerage agents.

Students not meeting a course prerequisite must have instructor permission to enroll.

REE 105	Colorado State Exam Review	1
REE 201	Real Estate Brokers I	6
REE 202	Real Estate Brokers II	6
		<u>13</u>

**Total Credit Hours 13**

### Supervision Certificate

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 181 Internship 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.

BUS 181	Internship	3
BUS 216	Legal Environment of Business	3
BUS 217	Business Communication and Report Writing	3
MAN 200	Human Resource Management I	3
MAN 226	Principles of Management	3
MAN 246	Critical Issues in Marketing and Management	3
	Electives Choose twelve (12) hours from electives list below	<u>12</u>

**Total Credit Hours 30**

### Supervision Electives

BUS 182	Internship	3
BUS 281	Internship	3
COM 125	Interpersonal Communications	3
MAN 240	Strategic Management	3
MAR 249	Strategic Marketing	3
PSY 215	Psychology of Adjustment	3
SWK 100	Introduction to Social Work	3

### Cisco Certified Network Associate Certificate

Recommended basic skills standards are

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

CNG 260	Cisco Network Associate I	5
CNG 261	Cisco Network Associate II	5
CNG 262	Cisco Network Associate III	5
CNG 263	Cisco Network Associate IV	5
<b>Total Credit Hours</b>		<b>20</b>

## Computer Aided Drafting (CAD)

### Associate of Applied Science Degree

Recommended basic skills standards are:

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

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

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

Students may complete deficiencies concurrently with the beginning courses in the program. Students not meeting a course prerequisite must have instructor permission to enroll. Students must have the ability to type 20 WPM or have completed BTE 100.

#### General Education Courses

CIS 118	Introduction to PC Applications	3
ENG 121	English Composition I: CO1	3
	or	
COM 125	Interpersonal Communications	(3)
ENG 131	Technical Writing I	3
	or	
BUS 217	Business Communication and Report Writing	(3)
MAT 108	Technical Mathematics	4
MAT 109	Geometry	3
PSY 100	Psychology of Workplace Relationships	3
	or	
COM 217	Group Communications	(3)
		19

#### Required Courses (all emphasis areas)

CAD 100	Blueprint Reading for CAD	3
CAD 101	Computer Aided Drafting I	3
CAD 102	Computer Aided Drafting II	3
CAD 151	Computer Aided Drafting/Technical Drafting Applications	4
CAD 202	Computer Aided Drafting / 3D	3
CAD 217	3D Studio VIZ	3
CAD 255	Solid Works Mechanical	3
		22

## Emphasis Areas

### Mechanical Emphasis

ARC 227	Architectural Structures	5
MAC 101	Introduction to Machine Shop	3
MAC 250	Advanced Inspection Techniques	3
MAC 252	Practical Metallurgy	3
TEC 205	Geometric Dimensioning and Tolerancing	3
One Technical Elective Course		3-4
		20-21

### Total Hours for Mechanical Degree Emphasis 61-62

### HVAC Emphasis

EGT 262	Sheet Metal Fabrication Drawings	3
HVA 102	Basic Refrigeration	4
HVA 105	Electricity for HVAC/R	4
WEL 106	Blueprint Reading for Welders & Fitters	4
One Technical Elective Course		4-5
		19-20

### Total Hours for HVAC Degree Emphasis 60-61

### Electronics Emphasis

ELT 106	Fundamentals of DC/AC	3
ELT 112	Advanced DC/AC	3
ELT 134	Solid State Devices I	3
ELT 135	Solid State Devices II	3
ELT 147	Digital Devices I	3
ELT 148	Digital Devices II	3
One Technical Elective Course		3-4
		21-22

### Total Hours for Electronics Degree Emphasis 62-63

#### Recommended Technical Electives

CAD 201	Computer Aided Drafting / Custom	3
CAD 218	3D Studio VIZ / Advanced	3
CAD 280	Internship	3
CSC 160	Computer Science I: (Language)	4
MAC 110	Introduction to Engine Lathe	3
MAC 120	Introduction to Milling Machine	3
MAC 240	CAD/CAM 2D	3
MAC 241	CAD/CAM 2D Lab	3
WEL 106	Blueprint Reading for Welders and Fitters	4

## Certificates

### Professional CAD

CAD 100	Blueprint Reading for Computer Aided Drafting	3
CAD 101	Computer Aided Drafting I	3
CAD 102	Computer Aided Drafting II	3
CAD 151	Computer Aided Drafting/Technical Drafting Applications	4
CIS 118	Introduction to PC Applications	3
MAT 108	Technical Mathematics	4
*12 Credit Hours of Guided Technical Electives		12

### Total Credit Hours 32

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

## Basic CAD Skills

CAD 101	Computer Aided Drafting I	3
CAD 102	Computer Aided Drafting II	3

### Total Credit Hours 6

**Advanced CAD Skills**

Prerequisite: Basic CAD Skills Certificate or equivalent

CAD 101	Computer Aided Drafting I	3
CAD 102	Computer Aided Drafting II	3
CAD 201	Computer Aided Drafting/Custom	3
CAD 202	Computer Aided Drafting/3D	3

**Total Credit Hours** **12**

**Parametric Modeling**

CAD 151	Computer Aided Drafting/Technical Drafting Applications	4
CAD 202	Computer Aided Drafting/3D	3
CAD 255	Solid Works Mechanical	3

**Total Credit Hours** **10**

**CAD–Quality Assurance**

CAD 100	Blueprint Reading for Computer Aided Drafting	3
MAC 250	Advanced Inspection Techniques	3
MAT 108	Technical Mathematics	4
TEC 205	Geometric Dimensioning and Tolerancing	3

**Total Credit Hours** **13**

**Computer Information Systems****Associate of Applied Science Degree**

Recommended basic skills standards are

- ENG 090
- MAT 090
- REA 090

The Associate of Applied Science Degree is designed for students who plan careers as information systems specialists. This program is designed for a student who plans to obtain an entry-level position in the information technology field. It provides a broad background that allows for free movement within the computer industry.

Students must have the ability to type 20 WPM or have completed BTE 100.

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.

**General Education Courses**

CIS 118	Introduction to PC Applications	3
	or	
CSC 105	Computer Literacy	(3)
COM 125	Interpersonal Communication	3
CSC 120	Problem Solving with Visual Basic	3
ENG 131	Technical Writing I	3
MAT 106	Survey of Algebra	(4)
	or	
MAT 112	Financial Mathematics	3

15

**Required Courses**

BUS 115	Introduction to Business	3
CIS 115	Introduction to CIS	3
CIS 120	Technology for Career Development	1
CIS 124	Introduction to Operating Systems	3
CIS 155	PC Spreadsheet Concepts: Excel	3
CIS 202	Automated Project Management	3
CIS 203	Technology for Career Success	2
CIS 267	Management of Information Systems	3
CIS 268	Systems Analysis and Design	3

CNG 101	Introduction to Networking	3
CWB 110	Complete Web Authoring	3
CWB 221	Technology Foundations of E-Commerce	3
Electives	Choose twelve (12) hours from electives list below	12
		45

**Computer Information System Electives**

Choose twelve (12) hours from courses below.

CIS 145	Complete PC Database: Access	3
CIS 243	Introduction to SQL	3
CIS 254	Oracle Forms 4	3
CIS 256	Oracle Reports	3
CIS 258	Oracle HTML DB	3
CIS 287	Cooperative Education	3
CIS 288	PC Help Desk Practicum	1
CNG 102	Intro to Local Area Networks	3
CSC 126	Game Design and Development	3
CSC 150	Visual Basic Programming	3
CSC 154	Introduction to MS Visual Basic .NET (OOP)	3
CSC 155	Introduction to C# Programming with MS.Net	3
CSC 160	Computer Science I: (Language)	4
CSC 161	Computer Science II: (Language)	4
CSC 200	Game Programming I	3
CSC 216	Computer Game Logic and Design	3
CWB 164	XML	3

**Total Credit Hours** **60**

**Certificates****Computer Application Specialist**

CIS 107	Voice Recognition: Dragon	1
CIS 124	Introduction to Operating Systems	3
CIS 135	Complete PC Word Processing	3
CIS 145	Complete PC Database: Access	3
CIS 155	PC Spreadsheet Concepts: Excel	3
CIS 165	Complete Presentation Graphics: PowerPoint	3
CWB 110	Complete Web Authoring	3

**Total Credit Hours** **19**

**Programming**

CSC 160	Computer Science I: (Language)	4
CSC 161	Computer Science II: (Language)	4
CIS 243	Introduction to SQL	3
CIS 254	Oracle Forms	4

**Total Credit Hours** **15**

**Computer Networking Technology****Associate of Applied Science Degree**

Recommended basic skills standards are

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

The Associate of Applied Science Degree provides students with practical and relevant skills in the field of Computer Networking and Information Technology. In addition to obtaining an Associate of Applied Science Degree, the program provides a foundation for students to further achieve industry certifications such as CompTIA Network+ and CCNA (Cisco Certified Network Associate). Students completing this program will be able to demonstrate knowledge of computer software, computer hardware, network operating systems, networking device configuration, and network administration. Students entering this

program should have a good foundation in math and reading, as well as basic familiarity with Microsoft Windows and internet browsers. Students may be advised to take additional courses to prepare them for the degree program.

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

### General Education Courses

BUS 115	Introduction to Business	3
COM 125	Interpersonal Communication	3
CIS 118	Introduction to PC Applications	3
or		
CSC 105	Computer Literacy	(3)
ENG 131	Technical Writing I	3
MAT 106	Survey of Algebra	4
or		
MAT 112	Financial Mathematics	(3)
		15-16

### Other Course Requirements

CIS 124	Introduction to Operating Systems	3
CIS 155	PC Spreadsheet Concepts: Excel	3
CIS 202	Automated Project Management	3
CIS 267	Management Information Systems	3
CSC 120	Problem Solving with (Software Package)	3
CNG 101	Introduction to Networking	3
and		
CNG 104	Introduction to TCP/IP	3
or		
CNG 260	Cisco Network Associate I	(5)
CWB 110	Complete Web Authoring	3
Electives	Choose nine (9) hours from electives listed below	9
		32-33

### Electives

Choose 9 hours from any courses within the disciplines of BUS, CIS, CNG, CSC, CWB, MAN, MAR, MGD except CIS 118, CNG 101, CSC 105, and MGD 104.

### Network+

CIS 223	Linux	3
CNG 102	Local Area Networks	3
CNG 103	Wide Area Networks	3
CNG 108	Network Analysis and Design	3
CWB 221	Technology Foundations for E-Commerce	3
		15

**Total Credit Hours for Network+Emphasis 62-64**

### CCNA

CNG 261	Cisco Network Associate II	5
CNG 262	Cisco Network Associate III	5
CNG 263	Cisco Network Associate IV	5
		15

**Total Credit Hours for CCNA-Emphasis 62-64**

### Certificates

The Computer Networking Technology Certificate provides students with practical and relevant skills in the field of Computer Networking and Information Technology. The Certificate program provides a foundation for students to further achieve industry certifications such as CompTIA Network+ and CCNA (Cisco Certified Network Associate). Students completing this program will be able to demonstrate knowledge of computer software, computer hardware, network operating systems, networking device configuration, and network administration. Students

entering this program should have a good foundation in math and reading, as well as basic familiarity with Microsoft Windows and internet browsers. Students may be advised to take additional courses to prepare them for the degree program.

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

### Network+

CIS 118	Introduction to PC Applications	3
or		
CSC 105	Computer Literacy	(3)
CIS 124	Introduction to Operating Systems	3
CIS 223	Linux	3
CIS 155	PC Spreadsheets Concept: Excel	3
CNG 101	Introduction to Networking	3
CNG 102	Local Area Networks	3
CNG 103	Wide Area Networks	3
CNG 104	Introduction to TCP/IP	3
CWB 110	Complete Web Authoring	3
CWB 221	Technology Foundations for E-Commerce	3

**Total Credit Hours 30**

### CCNA

CIS 118	Introduction to PC Applications	3
or		
CSC 105	Computer Literacy	(3)
CIS 124	Introduction to Operating Systems	3
CIS 155	PC Spreadsheets Concept: Excel	3
CNG 260	Cisco Network Associate I	5
CNG 261	Cisco Network Associate II	5
CNG 262	Cisco Network Associate III	5
CNG 263	Cisco Network Associate IV	5
CWB 110	Complete Web Authoring	3

**Total Credit Hours 32**

## Criminal Justice

### Associate of Applied Science Degree

Recommended basic skills standards are

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

The Criminal Justice Program at PPCC is designed to upgrade the skills and knowledge of employed criminal justice professionals, and to provide a pre-employment or transfer program to students interested in the field, or in continuing on to a four year school.

With a wide variety of emphasis areas, including Investigations/Management, Patrol, Corrections and Crime Scene Investigation, and corresponding certificates. The student seeking an AAS degree, or the professional employed in the field can upgrade their skills for hiring, advancement and promotion. PPCC offers one of the broadest ranges of course offerings in the nation.

An AAS degree from PPCC will open doors into many opportunities in law enforcement at the state, federal and local level. Our students have gone on to careers in Criminal Investigations, as Crime Scene Investigators, Corrections officers, State and Federal Probation and Parole officers, and many others. Several PPCC graduates have advanced to become chiefs of police and sheriffs.



Students should realize, however, that a degree from PPCC will not guarantee a position with an agency in the criminal justice field. Many agencies impose requirements other than education for employment. These requirements may be related to age, physical condition, height, weight and vision. The majority of employers in the criminal justice field will not hire persons with a felony conviction, or a lengthy history of drug use. Some arrests and/or convictions for certain crimes will also be disqualifiers. Employers in the field screen for certain psychological and personality traits, and many give pre-employment polygraph tests.

Prospective students with questions concerning the foregoing should consult with faculty advisors.

### General Education Courses

CIS 118	Introduction to PC Applications	3
	or	
CSC 105	Computer Literacy	(3)
ENG 121	English Composition I: CO1	3
	or	
ENG 131	Technical Writing I	(3)
ENG 122	English Composition II: CO2	3
	or	
COM 115	Public Speaking	(3)
MAT 107	Career Math	3
	or	
MAT 120	or higher	(3-4)
PSY 215	Psychology of Adjustment	3
		<u>15</u>

### Required Courses (all emphasis areas)

CRJ 110	Introduction to Criminal Justice	3
CRJ 111	Substantive Criminal Law	3
CRJ 112	Procedural Criminal Law	3
CRJ 118	Police Report Writing	3
CRJ 125	Law Enforcement Operations	3
CRJ 135	Judicial Function	3
CRJ 145	Correctional Process	3
CRJ 210	Constitutional Law	3
CRJ 216	Juvenile Law and Procedures	3
CRJ 220	Human Relations and Social Conflict	3
CRJ 230	Criminology	3
	Emphasis Area	<u>14</u>
		47

### Emphasis Areas

Choose fourteen (14) credit hours in one emphasis area

#### Investigations/Management

CRJ 209	Criminal Investigation I	3
CRJ 211	Criminal Investigation II	3
CRJ 212	Criminal Investigation III	2
CRJ 218	Drug Investigative Strategies	3
CRJ 219	Police Intelligence	2
CRJ 245	Interview and Interrogation	3
CRJ 250	Computer Crime Investigation	<u>3</u>

**Total Credit Hours for Investigations/Management Emphasis 62**

#### Patrol

CRJ 126	Police Patrol Procedures	3
CRJ 209	Criminal Investigation I	3
CRJ 219	Police Intelligence	3
CRJ 225	Crisis Intervention	3
CRJ 246	Traffic Investigation	3
CRJ 227	Law Enforcement Supervisory Training Program	2
CRJ 280	Internship: Patrol	<u>2</u>

**Total Credit Hours for Patrol Emphasis 62**

### Corrections

CRJ 146	Community Based Corrections	3
CRJ 215	Constitutional Rights of Inmates	3
CRJ 249	Penology	3
CRJ 255	Organizational Management of Correctional Inst	3
CRJ 280	Internship: Corrections	<u>2</u>

**Total Credit Hours for Corrections Emphasis 62**

### Crime Scene Investigations (CSI)

CRJ 127	Crime Scene Investigation	3
CRJ 167	Fingerprinting	3
CRJ 209	Criminal Investigation I	3
CRJ 260	Police Photography	3
CRJ 264	Practical Crime Scene Investigation	3
CRJ 275	Selected Topic	3
CRJ 280	Internship: CSI	<u>2</u>

**Total Credit Hours for CSI Emphasis 62**

### Certificates

#### Advanced Investigations

CRJ 211	Criminal Investigation II	3
CRJ 212	Criminal Investigation III	2
CRJ 245	Interview and Interrogation	3
CRJ 264	Practical Crime Scene Investigation	3
CRJ 260	Police Photography	<u>3</u>

**Total Credit Hours 14**

#### Basic Investigations

CRJ 118	Report Writing	3
CRJ 127	Crime Scene Investigation	3
CRJ 167	Fingerprinting	3
CRJ 209	Criminal Investigation I	3
CRJ 250	Computer Crime Investigations	<u>3</u>

**Total Credit Hours 15**

### Corrections

CIS 118	Intro to PC Applications	3
CRJ 118	Report Writing	3
CRJ 145	Correctional Process	3
CRJ 146	Community Based Corrections	3
CRJ 215	Constitutional Rights of Inmates	<u>3</u>

**Total Credit Hours 15**

### Patrol

CRJ 110	Intro to Criminal Justice	3
CRJ 118	Report Writing	3
CRJ 125	Law Enforcement Operations	3
CRJ 126	Police Patrol Procedures	3
CRJ 225	Crisis Intervention	<u>3</u>

**Total Credit Hours 15**

### Patrol Recertification

CRJ 106	Arrest Control Techniques	3
CRJ 107	Law Enforcement Driving	3
CRJ 108	Firearms	<u>3</u>

**Total Credit Hours 9**

## Culinary Arts

### Associate of Applied Science Degree

Recommended basic skills standards are

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

Culinary Arts continues to be one of the fastest growing career fields in the world. The culinary profession is a field different from most others, as it demands unusual circumstances and lengthy hours. The traits necessary to become a Culinarian are dedication, endurance and ambition. Upon completion, the student will be able to work in a professional establishment as a second cook or station supervisor.

The AAS Degree Program focuses on every aspect of working in a professional kitchen. Students will be trained in the following areas of study; basic food prep, sanitation, nutrition, supervision, baking, catering, wines and spirits, gardé manger (cold kitchen), purchasing, and soups, sauces, and consommés. Students will also be required to complete an on the job internship prior to graduation.

Once a student completes the AAS Culinary Arts Program, they can apply for certification with the American Culinary Federation as becoming a Certified Cook (CC). Students must be Junior Members of the ACF at the time of graduation. The Culinary Program encourages the students to receive certification due to the increase of positions in the United States that require an individual to be certified to work in different professional establishments.

Students entering this course of study will be required to have completed, or demonstrated proficiency equivalent to the completion of ENG 060; MAT 030, and REA 090. Students must see a faculty advisor before registering for this program.

#### General Education Courses

BUS 115	Introduction to Business	3
CIS 118	Introduction to PC Applications	3
	or	
CSC 105	Computer Literacy	(3)
ENG 115	Technical English and Communication	3
MAT 112	Financial Mathematics	3
PSY 100	Psychology of Workplace Relationships	3
		<u>15</u>

#### Additional required courses

CUA 101	Food Safety and Sanitation	2
CUA 105	Food Service Concepts and Management Skills	3
CUA 116	Catering, Buffets, and Tableside Cooking	3
CUA 120	Wines and Spirits	2
CUA 125	Introduction to Foods	4
CUA 127	Soups, Sauces, and Consommés	3
CUA 129	Center of the Plate	4
CUA 145	Introduction to Baking	4
CUA 156	Nutrition for the Hospitality Professional	3
CUA 210	Advanced Cuisine and Gardé Manger	4
CUA 233	Advanced Line Prep and Cookery	4
CUA 245	International Cuisine	2
CUA 262	Purchasing for the Hospitality Industry	3
CUA 281	Internship	4
		<u>45</u>

**Total Credit Hours for Culinary Arts Emphasis 60**

## Culinary Arts: Baking and Pastry

### Associate of Applied Science Degree

Recommended basic skills standards are

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

This two year program is designed for students seeking advanced employment in the baking and pastry field as assistant pastry chefs, or as a bakeshop station chef. During the course of study students will learn and demonstrate basic baking skills, equipment, decorating, show pieces, breads, advanced desserts, and wedding cakes. Students will also be trained in sanitation, cost controls, purchasing, management skills, and nutrition.

Examinations will be given throughout the program. Once a student completes the AAS Baking and Pastry Arts Program, they can apply for certification with the American Culinary Federation as becoming a Certified Pastry Cook (CPC). Students must be Junior Members of the ACF at the time of graduation. Students entering this course of study will be required to have completed, or demonstrated proficiency equivalent to the completion of ENG 060; MAT 030, and REA 090. Students must see a faculty advisor before registering for this program.

#### General Education Courses

BUS 115	Introduction to Business	3
CIS 118	Introduction to PC Applications	3
	or	
CSC 105	Computer Literacy	(3)
ENG 115	Technical English and Communication	3
MAT 112	Financial Mathematics	3
PSY 100	Psychology of Workplace Relationships	3
		<u>15</u>

#### Additional required courses

CUA 101	Food Safety and Sanitation	2
CUA 105	Food Service Concepts and Management Skills	3
CUA 116	Catering, Buffets, and Tableside Cooking	3
CUA 125	Introduction to Foods	4
CUA 127	Soups, Sauces, and Consommés	3
CUA 145	Introduction to Baking	4
CUA 150	Baking: Decorating and Presentation	3
CUA 151	Baking: Intermediate Bread Preparation	3
CUA 152	Individual Fancy Desserts Production	3
CUA 156	Nutrition for the Hospitality Professional	3
CUA 161	Wedding Cakes	2
CUA 236	Advanced Baking	2
CUA 261	Cost Controls	3
CUA 262	Purchasing for the Hospitality Industry	3
CUA 281	Internship	4
		<u>45</u>

**Total Credit Hours for Baking and Pastry Emphasis 60**

## Food Service Management

### Associate of Applied Science Degree

Recommended basic skills standards are

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

The AAS Degree Program focuses on the aspect of management in a professional food service operation. Students will be trained in the following areas of study; basic food prep, sanitation, cost controls, purchasing, legal aspects, nutrition, catering, beverages management, and supervision skills. Students will also be required to complete an on the job internship prior to graduation.

Students may also take the national examinations by the National Restaurant Association Educational Foundation throughout the degree. Students that complete and pass the required exams will be eligible to receive the Manage First Professional Credential with the documentation of 800 hours industry related training.

Students entering this course of study will be required to have completed, or demonstrated proficiency equivalent to the completion of ENG 060; MAT 030, and REA 090. Students must see a faculty advisor before registering for this program.

#### General Education Courses

ACC 101	Fundamentals of Accounting	3
BUS 115	Introduction to Business	3
CIS 118	Introduction to PC Applications	3
	or	
CSC 105	Computer Literacy	(3)
ENG 115	Technical English and Communication	3
MAT 112	Financial Mathematics	3
PSY 100	Psychology of Workplace Relationships	3
		<u>3</u>
		18

#### Additional required courses

CUA 101	Food Safety and Sanitation	2
CUA 105	Food Service Concepts and Management Skills	3
CUA 116	Catering, Buffets, and Tableside Cooking	3
CUA 120	Wines and Spirits	2
CUA 125	Introduction to Foods	4
CUA 156	Nutrition for the Hospitality Professional	3
CUA 157	Menu Planning	3
CUA 190	Dining Room Management	4
CUA 255	Supervision in the Hospitality Industry	3
CUA 256	Marketing in the Hospitality Industry	3
CUA 261	Cost Controls	3
CUA 262	Purchasing for the Hospitality Industry	3
CUA 263	Legal Aspects of the Hospitality Management	3
CUA 281	Internship	4
		<u>4</u>
		43

**Total Credit Hours for Food Service Management Emphasis** 61

#### Certificates

##### Baking

This program will prepare students for employment in baking and the art of pastries. The certificate program will develop the students' skills and understanding in the areas of chocolates, confections items, ice creams and frozen desserts, yeast products, quick breads, sculpted items, sugar work, use of fruits, and national desserts. Students completing the certificate program could find employment in these specific areas: baker, baking assistant, journeyman baker, cake

decorator, candy maker, or pastry cook. Examinations will be given throughout the duration of the program. Please contact a faculty advisor before registering for this program.

CUA 101	Food Safety and Sanitation	2
CUA 105	Food Service Concepts and Management Skills	3
CUA 145	Introduction to Baking	4
CUA 150	Baking: Decorating and Presentation	3
CUA 151	Baking: Intermediate Bread Preparation	3
CUA 152	Individual Fancy Dessert Production	3
CUA 156	Nutrition for the Hospitality Professional	3
CUA 236	Advanced Baking	2
CUA 262	Purchasing for the Hospitality Industry	3
		<u>3</u>

**Total Credit Hours** 26

##### Culinary Arts

This program is designed for students who seek employment as a journeyman cook, station cook, or entry level cook in a professional establishment. Students will develop skills and understanding of line cookery, basic baking, saucier station, production, nutrition, sanitation, menu planning, cold food production, and entree preparation. Examinations will be given throughout the program. Please contact a faculty advisor before registering for courses.

CUA 101	Food Safety and Sanitation	2
CUA 105	Food Service Concepts and Management Skills	3
CUA 125	Introduction to Foods	4
CUA 127	Soups, Sauces, and Consommés	3
CUA 129	Center of the Plate	4
CUA 145	Introduction to Baking	4
CUA 156	Nutrition for the Hospitality Professional	3
CUA 210	Advanced Cuisine and Gardé Manger	4
CUA 233	Advanced Line Prep and Cookery	4
		<u>4</u>

**Total Credit Hours** 31

##### Culinary Arts: Basic Skills

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.

CUA 101	Food Safety and Sanitation	2
CUA 105	Food Service Concepts and Management Skills	3
CUA 125	Introduction to Foods	4
CUA 145	Introduction to Baking	4
		<u>4</u>

**Total Credit Hours** 13

##### Food Service Management

This program is designed for students who seek employment as supervisor in foodservice management. Students will learn skills and understanding in cost controls, employee management, marketing, sanitation standards, basic nutrition, menu development, establishment concepts, customer and business legalities, catering, wine selection, basic cooking, and purchasing. Examinations will be given throughout the program. Please contact a faculty advisor before registering for this program.

CUA 101	Food Safety and Sanitation	2	ENG 121	English Composition I: CO1	(3)
CUA 105	Food Service Concepts & Management Skills	3	COM 225	Organizational Communication	3
CUA 156	Nutrition for the Hospitality Industry	3	or		
CUA 116	Catering, Buffets, and Tableside Cooking	3	ENG 122	English Composition II: CO2	(3)
CUA 120	Wine & Spirits	2	PSY 101	General Psychology I: SS3	3
CUA 125	Introduction to Foods	4	or		
CUA 156	Marketing in the Hospitality Industry	3	PSY 215	Psychology of Adjustment	(3)
CUA 190	Dining Room Management	4	PSY 102	General Psychology II: SS3	3
CUA 256	Marketing in the Hospitality Industry	3	or		
CUA 262	Purchasing for the Hospitality Industry	3	PSY 235	Human Growth and Development: SS3	(3)
CUA 263	Legal Aspects of Hospitality Management	3			15

**Total Credit Hours****33**

## Dental Assisting

### Associate of Applied Science Degree

Recommended basic skills standards are

- ENG 090
- MAT 030
- REA 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's Commission on Dental Accreditation. Graduates of the certificate program are eligible to take the Dental Assisting National Board (DANB) Examination. Successful completion of the DANB Examination awards students the status of Certified Dental Assistant (CDA).

Students who wish to pursue the Associate of Applied Science Degree in Dental Assisting must be a graduate of an ADA accredited dental assisting certificate program. Students participating in the AAS Degree program will be given instruction, laboratory experience, and clinical experience in expanded functions as permitted by the Dental Practice Law of Colorado. Students who wish to develop skills as an expanded functions dental assistant but, are not graduates of an ADA accredited dental assisting program, must be a Certified Dental Assistant or have a minimum of two years of full time documented experience as a chairside dental assistant, preferably in a general dentistry practice.

Students who are interested in either the certificate program or the AAS degree program must meet with a dental assisting program advisor prior to enrolling in any dental assisting courses.

**General Education Courses**

CIS 118	Introduction to PC Applications	3
COM 115	Public Speaking	3
or		
COM 125	Interpersonal Communication	(3)
or		

**Additional required courses**

DEA 102	Principles of Clinical Practice	3
DEA 104	Specialties of Dentistry	2
DEA 111	Dental Office Management	2
DEA 120	Introductions to Dental Practices	1
DEA 121	Dental Science I	3
DEA 122	Dental Science II	3
DEA 123	Dental Materials I	3
DEA 124	Dental Materials II	3
DEA 125	Dental Radiography	3
DEA 126	Infection Control	3
DEA 131	Advanced Dental Radiography	3
DEA 132	Medical Emergencies	2
DEA 134	Prevention and Nutrition in Dentistry	2
DEA 140	Dental Assisting National Board Review	1
DEA 181	Clinical Internship I	1
DEA 182	Clinical Internship II and Seminar	6
DEA 200	Introduction to Expanded Functions	4
DEA 205	Expanded Functions for Dental Auxiliary	4
		49

**Total Credit Hours****64****Certificate****Dental Assisting**

CIS 118	Introduction to PC Applications	3
COM 115	Public Speaking	3
or		
COM 125	Interpersonal Communication	(3)
or		
ENG 121	English Composition I: CO1	(3)
DEA 102	Principles of Clinical Practice	3
DEA 104	Specialties in Dentistry	2
DEA 111	Dental Office Management	2
DEA 120	Introduction to Dental Practices	1
DEA 121	Dental Science I	3
DEA 122	Dental Science II	3
DEA 123	Dental Materials I	3
DEA 124	Dental Materials II	3
DEA 125	Dental Radiography	3
DEA 126	Infection Control	3
DEA 131	Advanced Dental Radiography	3
DEA 132	Medical Emergencies	2
DEA 134	Prevention and Nutrition in Dentistry	2
DEA 140	Dental Assisting National Board Review (Elective)	1
DEA 181	Clinical Internship I	1
DEA 182	Clinical Internship II and Seminar	6

**Total Credit Hours****46-47**

## Early Childhood Education

### Associate of Applied Science Degree

Recommended basic skills standards are

- ENG 090
- MAT 060
- REA 090

Early Childhood Education, like all education, demands well-prepared teachers. A growing body of research supports the value of high-quality early childhood programs for children's later success in school and in life, the most important determinant of which is the teacher.

Pikes Peak Community College and the Early Childhood Education program faculty are committed to providing the optimal course of study that meets the career goals of each student. The Early Childhood Education program is the foundation for a challenging and rewarding career in early childhood care and education as well as other related fields.

Upon completion of the Early Childhood Education 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 Education program advisor prior to enrolling in a class. Please call (719) 502-3300 to schedule an appointment.

#### General Education Courses

CIS 118	Introduction to PC Applications	3
	or	
CSC 105	Computer Literacy	(3)
	ENG 121 or higher	3
MAT 112	Financial Mathematics	3
PSY 101	General Psychology I: SS3	3
	or	
PSY 215	Psychology of Adjustment	(3)
SOC 101	Introduction to Sociology I: SS3	3
	or	
SOC 205	Sociology of Family Dynamics: SS3	(3)
		15

#### Courses required for all emphasis areas

ECE 101	Introduction to Early Childhood Education	3
ECE 102	Introduction to Early Childhood Lab Techniques	3
ECE 103	Guidance Strategies for Children	3
ECE 111	Infant and Toddler Theory and Practice	3
ECE 112	Introduction to Infant/Toddler Lab Techniques	3
ECE 113	Infant/Toddler Lab Techniques II	3
ECE 191	School Age Theory and Practice	3
ECE 192	School Age Lab Techniques	3
ECE 205	Nutrition, Health and Safety	3
ECE 220	Curriculum Development: Methods and Techniques	3
ECE 226	Creativity and the Young Child	3
ECE 238	Child Growth and Development	4
ECE 240	Administration of Early Childhood Care and Education Programs	3
ECE 241	Admin: Human Relations for Early Childhood Professions	3
ECE 260	Exceptional Child	3
ECE 261	Exceptional Child Lab Techniques	3
ECE 289	Capstone: Early Childhood Education	5

54

#### Total Credit Hours

69

## Certificates

### Director

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

#### Total Credit Hours

31

### Level III

ECE 101	Introduction to Early Childhood Education	3
ECE 102	Introduction to Early Childhood Lab Techniques	3
ECE 103	Guidance Strategies for Children	3
ECE 111	Infant and Toddler Theory and Practice	3
ECE 112	Introduction to Infant/Toddler Lab Techniques	3
ECE 191	School Age Theory and Practice	3
ECE 192	School Age Lab Techniques	3
ECE 205	Nutrition, Health and Safety	3
ECE 220	Curriculum Development: Methods and Techniques	3
ECE 238	Child Growth and Development	4
ECE 240	Administration of Early Childhood Care and Education Programs	3
ECE 241	Admin: Human Relations for Early Childhood Professions	3

#### Total Credit Hours

37

### Group Leader

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

#### Total Credit Hours

16

### Infant Toddler

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

#### Total Credit Hours

10

### Professional Development

Any combination of three (3) classes in the following areas:

Preschool\*

School Age\*

Administration\*

\*Student must see advisor before enrolling in this program



## Electronics Technology

### Associate of Applied Science Degree

Recommended basic skills standards are

- AAA 090
- ENG 060
- MAT 106
- REA 090

This degree program prepares students with technical job entry skills as electronics technicians. Graduates become qualified to work in electronic automation and in control systems environments. Measurement, instrumentation, and control systems automation are work-related areas for career path employment.

Maximizing student success in the electronic program is the department goal. The program faculty recommends that students develop the following desirable skill and knowledge foundations to enhance student success:

- advanced college level study skills
- working knowledge of algebraic principles and basic trigonometric functions
- college-level reading and comprehension skills
- working knowledge and application of college-level English
- demonstrated time management skills
- awareness of workplace utilization of self-management work teams
- basic understanding of physics principles
- keyboarding, mouse, and MS Windows experience
- understanding of basic science and physics principles

Students who want individualized program planning suggestions are encouraged to meet with program faculty. Please call (719) 502-3600 to schedule an appointment.

Fall semester course sequencing provides concurrent enrollment in ELT 106 and ELT 112. Spring semester course sequencing provides concurrent enrollment in ELT 134, ELT 135, ELT 147, and ELT 148. Students should see a program faculty person if unable to take these courses concurrently.

Students can access detailed descriptions of each program course under the ELT 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.

#### General Education Requirements:

COM 125	Interpersonal Communication	3
	or	
COM 217	Group Communications	(3)
CSC 105	Computer Literacy	3
ENG 131	Technical Writing	3
MAT 106	or higher	3-4
PHY	Any Physics Course	4-5
		16-18

#### Discipline Specific Requirements Recommended Sequence:

ELT 106	Fundamentals of DC/AC	3
ELT 112	Advanced DC/AC	3
ELT 134	Solid State Devices I	3
ELT 135	Solid State Devices II	3
ELT 147	Digital Devices I	3
ELT 148	Digital Devices II	3
ELT 215	Operational Amplifiers	3
ELT 258	Programmable Logic Controllers	3
ELT 263	Enhanced Microprocessor Control Systems	4

ELT 264	Enhanced Microprocessor Control System Lab	4
ICF 108	Basic Control Systems	5
ICF 218	Automated Process Control Systems	4
ICF 219	Automated Process Control Systems-Laboratory	4
		45

#### Total Credit Hours

**61-63**

#### Certificates

##### Advanced Electronics

ELT 106	Fundamentals of DC/AC	3
ELT 112	Advanced DC/AC	3
ELT 134	Solid State Devices I	3
ELT 135	Solid State Devices II	3
ELT 147	Digital Devices I	3
ELT 148	Digital Devices II	3

#### Total Credit Hours

**18**

##### Basic Electronics

ELT 106	Fundamentals of DC/AC	3
ELT 112	Advanced DC/AC	3

#### Total Credit Hours

**6**

## Emergency Medical Services

### Associate of Applied Science Degree

Recommended basic skills standards are

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

Pikes Peak Community College offers a variety of courses in the Emergency Medical Services field. It is a Colorado Department of Health and Environment, Pre-hospital Care Division approved training center. It has the approval of the State Board for Community Colleges and Occupational Education. The programs are implemented with the cooperation of local medical societies and emergency medical agencies.

#### EMT Basic

This program provides the Emergency Medical Technician at the Basic or Intermediate level of training with the opportunity to complete the educational requirements for the AAS Degree in Emergency Medical Services. Students at the EMT-Basic and EMT-Intermediate level can advance their knowledge in emergency medical care.

#### General Education Courses

BIO 201	Human Anatomy and Physiology I: SC1	4
BIO 202	Human Anatomy and Physiology II: SC1	4
CIS 118	Introduction to PC Applications	3
ENG 121	English Composition I: CO1	3
PSY 101	General Psychology I: SS3	3
		17

#### Other Course Requirements

EMS 112	Emergency Medical Dispatch	2.5
EMS 125	EMT Basic	9
EMS 136	EMT/Paramedic Safety Issues in the Field	1
EMS 150	Pediatric Education for Pre-hospital Professionals	3
EMS 151	Geriatric Emergencies	3
EMS 152	Wellness for Emergency Services	1
EMS 153	Advanced Patient Assessment and History Taking	2
EMS 170	EMT Basic Clinical	1
HPR 178	Medical Terminology	2
HPR 190	Basic EKG Interpretation	2

HPR 208	Advanced Medical Terminology	2
HWE 100	Human Nutrition	3
PHT 207	Drug Classification	3
PSY 227	The Psychology of Death and Dying: SS3	3
Approved EMS Electives		<u>5.5</u>
		43

**Total Credit Hours for EMS Basic Emphasis** **60**

### Paramedic

This program provides the Emergency Medical Technician at the Paramedic level with the opportunity to complete the educational requirements for the AAS Degree in Emergency Medical Services. Options are designed for the EMT-Paramedic level to allow students an opportunity to pursue a career compatible with their interest.

#### General Education Requirements

BIO 201	Human Anatomy and Physiology I: SC1	4
BIO 202	Human Anatomy and Physiology II: SC1	4
CIS 118	Introduction to PC Applications	3
ENG 121	English Composition I: CO1	3
PSY 101	General Psychology I: SS3	<u>3</u>
		17

#### Other course requirements

EMS 225	Fundamentals of Paramedic Practice	3
EMS 226	Fundamentals of Paramedic Practice Lab	2
EMS 227	Paramedic Special Considerations	3
EMS 228	Paramedic Special Considerations Lab	2
EMS 229	Paramedic Pharmacology	3
EMS 230	Paramedic Pharmacology Lab	2
EMS 231	Paramedic Cardiology	5
EMS 232	Paramedic Cardiology Lab	1
EMS 233	Paramedic Medical Emergencies	4
EMS 234	Paramedic Medical Emergencies Lab	1
EMS 235	Paramedic Trauma Emergencies	4
EMS 236	Paramedic Trauma Emergencies Lab	1
EMS 237	Paramedic Internship Preparation	2
EMS 280	Paramedic Internship I	6
EMS 281	Paramedic Internship II	<u>6</u>
		45

**Total Credit Hours for Paramedic Emphasis** **62**

### Certificates

#### Emergency Medical Technician--Basic

EMS 125	EMT Basic	9
EMS 170	EMT-B Clinical	<u>1</u>

**Total Credit Hours** **10**

#### Emergency Medical Technician--Basic Refresher

EMS 126	EMT Basic Refresher	<u>3</u>
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**Total Credit Hours** **3**

#### Emergency Medical Technician--Paramedic

BIO 201	Human Anatomy and Physiology I: SC1	4
BIO 202	Human Anatomy and Physiology II: SC1	4
EMS 225	Fundamentals of Paramedic Practice	3
EMS 226	Fundamentals of Paramedic Practice Lab	2
EMS 227	Paramedic Special Considerations	3
EMS 228	Paramedic Special Considerations Lab	2
EMS 229	Paramedic Pharmacology	3
EMS 230	Paramedic Pharmacology Lab	2
EMS 231	Paramedic Cardiology	5
EMS 232	Paramedic Cardiology Lab	1
EMS 233	Paramedic Medical Emergencies	4
EMS 234	Paramedic Medical Emergencies Lab	1

EMS 235	Paramedic Trauma Emergencies	4
EMS 236	Paramedic Trauma Emergencies Lab	1
EMS 237	Paramedic Internship Preparation	2
EMS 280	Paramedic Internship I	6
EMS 281	Paramedic Internship II	<u>6</u>

**Total Credit Hours** **53**

## Facilities Maintenance Technology

### Associate of Applied Science Degree

Recommended basic skills standards are

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

This program prepares students to enter the facilities maintenance field. This field of work involves different trade disciplines. The one-year program of core courses trains students in residential heating, ventilation, air conditioning, and refrigeration.

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.

Students may wish to attend summer classes to fulfill their general education course requirements, thereby reducing their fall and spring semester loads.

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

### Heating, Ventilation, Air Conditioning, & Refrigeration

The Heating, Ventilation, Air Conditioning, and Refrigeration (HVAC&R) degree 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.

#### General Education Courses

COM 217	Group Communications	3
CSC 105	Computer Literacy	3
ENG 131	Technical Writing I	3
MAT 107	Career Math	3
PSY 100	Psychology of Workplace Relationships	<u>3</u>
		15

#### Other course requirements

HVA 102	Basic Refrigeration	4
HVA 105	Electricity for HVAC/R	4
HVA 110	Fundamentals of Gas Heating	4
HVA 113	Refrigerant Recovery Training	1
HVA 121	Residential Refrigeration	4
HVA 132	Air Conditioning and Refrigeration Controls	4
HVA 142	Residential Air Conditioning	4
HVA 143	Residential HVAC Trouble Shooting	4
HVA 201	Heating For Commercial	3

HVA 204	Direct Digital Controls	4
HVA 222	HVAC&R Systems Trouble Shooting	5
HVA 231	Pneumatic Controls	4
HVA 233	Advanced Refrigeration	4
HVA 241	Advanced Air Conditioning	3
		<u>52</u>

**Total Credit Hours** **67**

### Certificates

#### 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.

HVA 102	Basic Refrigeration	4
HVA 105	Electricity for HVAC/R	4
HVA 110	Fundamentals of Gas Heating	4
HVA 113	Refrigerant Recovery Training	1
HVA 121	Residential Refrigeration	4
HVA 132	Air Conditioning and Refrigeration Controls	4
HVA 142	Residential Air Conditioning	4
HVA 143	Residential HVAC Trouble Shooting	4
		<u>4</u>

**Total Credit Hours** **29**

### Industry Upgrade

The Industry Upgrade certificate is designed for technicians currently employed in the HVAC&R field who want to upgrade their skills. The courses within this certificate option are constantly updated to include discussion of new technologies and equipment found in large modern facilities.

HVA 201	Heating For Commercial	3
HVA 204	Direct Digital Controls	4
HVA 222	HVAC&R Systems Trouble Shooting	5
HVA 231	Pneumatic Controls	4
HVA 233	Advanced Refrigeration	4
HVA 241	Advanced Air Conditioning	3
		<u>3</u>

**Total Credit Hours** **23**

## Farrier Science Certificate

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 12 credit program is offered from January through June. 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.

Because of the unique schedule of this program, students should contact the division office at (719) 502-3215.

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

### Farrier

FAS 100	Farrier Science I	4
FAS 110	Farrier Science II	4
FAS 120	Farrier Science III	4
		<u>4</u>

**Total Credit Hours for Farrier Emphasis** **12**

### Master Farrier

FAS 130	Master Farrier I	4
FAS 140	Master Farrier II	4
FAS 150	Master Farrier III	4
		<u>4</u>

**Total Credit Hours for Master Farrier Emphasis** **12**

## Fire Science Technology

### Associate of Applied Science Degree

Recommended basic skills standards are

- AAA 090
- ENG 090
- MAT 030
- REA 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 Credit for Prior Learning Program, after which their learning can be expanded by successfully completing additional courses to complete the 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 on 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.

The Fire Science Technology AAS degree requires 69 credits for completion. Fifteen credits are in general education, 12 credits are in technical electives, and 42 credits are in required technical courses.

### General Education Courses

CIS 118	Introduction to PC Applications	3
	or	
CSC 105	Computer Literacy	(3)
ENG 121	English Composition I: CO1	3
	or	
ENG 131	Technical Writing I	(3)
ENG 122	English Composition II: CO2	3
	or	
COM 225	Introduction to Organizational Communication	(3)
MAT 107	Career Math or higher level math	3
POS 111	American Government: SS1	3
	or	
PSY 101	General Psychology I: SS3	(3)
		<u>15</u>

### Technical Courses

Choose 42 hours from the following 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 Operations Level 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 Determination	3
FST 206	Fire Company Supervision and Leadership	3
FST 250	Chemistry for Fire Protection	3
FST 259	Wildland Firefighting Strategy and Tactics	3
		<u>3</u>
		42

**Technical Elective Courses**

Choose 12 hours from the following courses

EMS 115	First Responder	3
EMS 125	EMT Basic	8
FST 100	Firefighter I	9
FST 150	Introduction to Fire Prevention Education	3
FST 160	Candidate Physical Abilities Preparation Class	3
FST 207	Fire Fighting Strategy and Tactics II	3
FST 252	Fire Arson Investigation	3
FST 254	Hazardous Materials Technician Level	3
FST 257	Fire Department Administration	3
		<u>3</u>
		12

Other FST credits do count for Technical Elective courses.

**Total Credit Hours 69****Certificate****Basic Firefighter**

EMS 125	EMT Basic	9
FST 100	Firefighter I	9
FST 107	Hazardous Material Operations	3
		<u>3</u>
		21

**Geographic Information Systems****Certificate**

Recommended basic skills standards are

- ENG 090
- MAT 090
- REA 090

The Geographic Information Systems certificate is designed to develop skills and abilities necessary for successful employment using GIS applications. GIS is a computer based data processing tool used to map, manage, analyze, display and model spatial information.

CIS 145	Complete PC Database	3
CSC 150	Visual Basic Programming	3
GIS 101	Intro to Geographic Information Systems	3
GIS 205	GIS Applications	3
GIS 212	Remote Sensing and Digital Image Processing	4
GIS 280	Internship	2
		<u>2</u>
		18

**Health Information Technology****Associate of Applied Science Degree****Pending State Approval**

Recommended basic skills standards are

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

Health information technologists play a critical role in maintaining, collecting and analyzing the data that doctors, nurses and other healthcare providers rely on to deliver quality healthcare. They are experts in managing patient health information and medical records, administering computer information systems and coding the diagnosis

and procedures for healthcare services provided to patients. HIT professionals work in a multitude of settings throughout the healthcare industry including hospitals, physician's offices and clinics, long term care facilities, insurance companies, government agencies and home care providers. Associates degree personnel hold positions such as health data analyst, insurance claims analyst, records technicians specialist, clinical coding specialist, physician practice manager, patient information coordinator. Students may progress to a bachelor's degree in Health Information Management (HIM).

**General Education Courses**

CIS 118	Introduction to PC Applications	3
COM 125	Interpersonal Communication	3
ENG 121	English Composition	3
MAT 135	Introduction to Statistics	3
MAT 179	Statistics on Computers	1
PSY 101	General Psychology I: SS3	3
		<u>3</u>
		16

**Other Course Requirements**

HIT 101	Health Information Management Science	6
HIT 111	Health Data Management	3
HIT 112	Legal Aspects for Health Records	2
HIT 188	Health Information Practicum I	2
HIT 222	Quality Management	3
HIT 225	Health Information Management	3
HIT 231	Clinical Classification II	5
HIT 288	Health Information Practicum II	2
HPR 106	Law & Ethics for Healthcare	2
HPR 178	Medical Terminology	2
HPR 208	Advanced Medical Terminology	2
MOT 125	Basic Medical Sciences I	3
MOT 130	Insurance Billing & Coding	3
MOT 131	Advanced Insurance Billing & Coding	3
MOT 132	Medical Transcription	4
MOT 133	Basic Medical Sciences II	3
MOT 135	Basic Medical Sciences III	3
		<u>3</u>
		51

**Total Credit Hours 67****Homeland Security Emergency Management****Associate of Applied Science Degree**

Recommended basic skills standards are

- ENG 090
- MAT 090
- REA 090

The Homeland Security/Emergency Management degree develops the competencies and skills necessary to address manmade and natural disasters. This program will prepare you to make decisions, problem solve, plan, implement, and coordinate resources necessary for preparedness, mitigation, response, and recovery from possible disasters. This Associate of Applied Science Degree is designed for students new to this field, as well as students in public safety professions who are looking to upgrade their competencies and skills.

**General Education Courses**

CSC 105	Computer Literacy	3
ENG 121	English Composition I: CO1	3
	or	
ENG 131	Technical Writing	(3)



MAT 120	Mathematics for Liberal Arts: MA1 or higher math course	3-5
POS 111	American Government: SS1	3
<b>Choose one class from the following</b>		
ANT 101	Cultural Anthropology: SS3	3
	or	
PSY 101	General Psychology I: SS3	(3)
	or	
SOC 101	Introduction to Sociology I: SS3	(3)
		<u>15-17</u>

**Required Courses (all emphasis areas)**

EMP 101	Principles of Homeland Security/Emergency Mgmt	3
EMP 106	Exercise Design Evaluation	3
EMP 107	Emergency Operation Centers & Communication	3
EMP 240	Leadership & Influence	3
PSM 130	Homeland Security Law	3
PSM 132	Homeland Defense: Forecasting Terrorism	3
PSM 133	Homeland Security: Chemical and Biological Defense	3
PSM 135	Critical Infrastructure Protection	1
PSM 200	Nat'l Incident Mgmt. System/Interagency Operations	<u>3</u>
		25

**Elective Courses**

You may apply 18-20 credits from courses and certificates taken in Emergency Medical Services, Criminal Justice, Police Academy, Fire Science, or Military Science towards this category. Other earned college credit may be substituted to apply towards Elective Courses. The courses and certificates apply to the following areas:

ANT 221	Exploring Other Cultures I	3
ANT 222	Exploring Other Cultures II	3
CRJ	any course or combination of courses	1-20
ECO 201	Macroeconomics	3
ECO 202	Microeconomics	3
EMP 105	Emergency Planning	3
EMP 275	Special Topics	1-5
EMS	any course or combination of courses	1-20
FST	any course or combination of courses	1-20
HIS 247	Contemporary World History: HI1	3
HIS 249	History of Islamic Civilization	3
MAN 116	Principles of Supervision	3
POS 125	American State and Local Government	3
POS 205	International Relations	3
PSM 136	Hospital Emergency Response Training (HERT) for Weapons of Mass Destruction (WMD)	3
PSM 137	Introduction to Mitigation	3
PSY 226	Social Psychology: SS3	3
SOC 218	Sociology of Diversity	<u>3</u>
		18-20

**Total Credit Hours** **60**

**Certificate**

**Homeland Security/Emergency Management**

EMP 101	Principles of Homeland Security/Emergency Mgmt	3
EMP 106	Exercise Design Evaluation	3
EMP 107	Emergency Operation Centers & Communication	3
EMP 240	Leadership & Influence	3
PSM 130	Homeland Security Law	3
PSM 132	Homeland Defense: Forecasting Terrorism	3
PSM 133	Homeland Security: Chemical & Biological Defense	3
PSM 135	Critical Infrastructure Protection	1
PSM 200	Nat'l Incident Mgmt. System/Interagency Operations	<u>3</u>

**Total Credit Hours** **25**

**Interior Design**

**Associate of Applied Science Degree**

Recommended basic skills standards are

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

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

**General Education Courses**

ART 110	Art Appreciation: AH1	3
CSC 105	Computer Literacy	3
ENG 131	Technical Writing I	3
	or	
COM 115	Public Speaking	(3)
MAT 107	Career Math	3
General Education Electives from approved list on page 79		<u>3</u>
		15

**Other Course Requirements**

CAD 105	Computer Aided Drafting I	3
IND 105	Introduction to Interior Design	3
IND 107	History of Interior Design	3
IND 110	Interior Design I - Overview and Application	3
IND 111	Drafting for Interiors	4
IND 112	Graphic Communications	4
IND 116	Estimating Interior Materials	3
IND 117	Interior Textiles	2
IND 120	Interior Design II: Space Planning & Human Factors	4
IND 151	Residential Design	4
IND 178	Seminar	1
IND 200	Kitchen and Bath Design	4
IND 201	Commercial Design	4
IND 205	Professional Practice for Interior Designers	2
IND 220	Interior Design III: Materials, Details, Codes and Specs	4
IND 225	Lighting Design	2
IND 265	Interior Design IV – Special Applications	3
IND 278	Workshop: Design Portfolio	1
IND 280	Internship	2
IND 289	Capstone: Advanced Design	<u>4</u>
		60

**Total Credit Hours** **75**



## Medical Office Technology

### Associate of Applied Science Degree

Recommended basic skills standards are

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

Clinical facilities require tuberculin skin tests, proof of measles, rubella and rubeola vaccines or titers, proof of hepatitis B vaccinations and a current tetanus. Prior to clinical internship the student must also take a physical exam by their private physician at their own cost.

Facilities such as physician's offices, clinics or hospitals require criminal background checks on all students. Students who have any record of acts of violence or failure to adhere to retraining orders will not be allowed to enroll in internship classes or phlebotomy classes. Students are also required to take and pass drug and alcohol screening prior to their clinical/administrative (internship) or phlebotomy classes. Failure to pass the above tests will result in the inability to complete the desired certification or degree.

### 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 or as hospital unit secretary positions. 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.

### General Education Courses

CIS 118	Introduction to PC Applications	3
COM 225	Organizational Communication	3
ENG 131	Technical Writing I	3
MAT 107	Career Math	3
PSY 101	General Psychology I: SS3	3
		<u>3</u>
		15

### Other Course Requirements

HPR 178	Medical Terminology	2
HPR 208	Advanced Medical Terminology	2
HWE 103	Community First Aid and CPR	1
MOT 110	Medical Office Administration	4
MOT 120	Medical Office Financial Management	3
MOT 123	Intro to Clinical Physiology	1
MOT 124	Medical Filing	2

MOT 125	Basic Medical Sciences I	3
MOT 133	Basic Medical Sciences II	3
MOT 135	Basic Medical Sciences III	3
MOT 136	Introduction to Clinical Skills	2
MOT 138	Medical Assisting Laboratory Skills	4
MOT 140	Medical Assisting Clinical Skills	4
MOT 150	Pharmacology for Medical Assistants	3
MOT 181	Administrative Internship	2
MOT 182	Clinical Internship	3
MOT 189	Review for Medical Assistant National Examination	1

### Student must take one of the following groups

MOT 130	Insurance Billing and Coding	3
	and	
MOT 131	Advanced Insurance Billing and Coding	3
	or	
HPR 101	Customer Service in Healthcare	(2)
	and	
HPR 112	Phlebotomy	<u>(4)</u>
		49

### Total Credit Hours

**64**

### Certificates

#### 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 physician's assistants 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.

CIS 118	Introduction to PC Applications	3
ENG 131	Technical Writing I	3
	or	
COM 225	Organizational Communication	(3)
HPR 178	Medical Terminology	2
HPR 208	Advanced Medical Terminology	2
HWE 103	Community First Aid/CPR	1
MOT 110	Medical Office Administration	4
MOT 123	Intro to Clinical Physiology	1
MOT 125	Basic Medical Sciences I	3
MOT 133	Basic Medical Sciences II	3
MOT 135	Basic Medical Sciences III	3
MOT 136	Introduction to Clinical Skills	2
MOT 138	Medical Assisting Laboratory Skills	4
MOT 140	Medical Assisting Clinical Skills	4
MOT 150	Pharmacology for Medical Assistants	3
MOT 182	Clinical Internship	<u>3</u>

### Total Credit Hours

**41**

### Medical Coding Specialist

This certificate option is designed to train students to code and bill physician services in the ambulatory care settings. This course prepares the student to take the National Accrediting exam with AHIMA & AAPC. Credits from this Medical Coding Certificate program may be transferred to the Health Information Technology AAS degree

CIS 118	Introduction to PC Applications	3
HPR 178	Medical Terminology	2
HPR 208	Advanced Medical Terminology	2

MOT 123	Intro to Clinical Physiology	1
MOT 125	Basic Medical Sciences I	3
MOT 130	Insurance Billing and Coding	3
MOT 131	Advanced Insurance Billing and Coding	3
MOT 133	Basic Medical Sciences II	3
MOT 135	Basic Medical Sciences III	3
<b>Total Credit Hours</b>		<b>23</b>

**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.

CIS 118	Introduction to PC Applications	3
ENG 131	Technical Writing I	3
or		
COM 225	Organizational Communication	(3)
HPR 178	Medical Terminology	2
HPR 208	Advanced Medical Terminology	2
HWE 103	Community First Aid/CPR	1
MOT 110	Medical Office Administration	4
MOT 120	Medical Office Financial Management	3
MOT 124	Medical Filing	2
MOT 130	Insurance Billing and Coding	3
MOT 131	Advanced Insurance Billing and Coding	3
MOT 136	Introduction to Clinical Skills	2
MOT 181	Administrative Internship	2
<b>Total Credit Hours</b>		<b>30</b>

**Medical Transcriptionist**

Recommended basic skills standards are

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

The Medical Transcriptionist certificate is designed to prepare students for entry-level employment 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. After completion of this certificate program the student will be eligible to apply for an apprenticeship with the Association for Healthcare Documentation Integrity and the Medical Transcription Industry Association pending approval of accreditation of this program by AHDI (AAMA).

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.

BTE 166	Business Language Skills	3
CIS 118	Introduction to PC Applications	3
HPR 106	Law & Ethics for Health Professions	2

HPR 178	Medical Terminology	2
HPR 208	Advanced Medical Terminology	2
MOT 123	Intro to Clinical Physiology	1
MOT 125	Basic Medical Sciences I	3
MOT 132	Medical Transcription	4
MOT 133	Basic Medical Sciences II	3
MOT 135	Basic Medical Sciences III	3
MOT 142	Medical Transcription II	4
MOT 145	Medical Transcription for Specialties	4
MOT 150	Pharmacology for Medical Assistants	3
MOT 180	Medical Transcription Internship	3
<b>Total Credit Hours</b>		<b>40</b>

**Phlebotomy**

In the Phlebotomy certificate program, students will learn theory, anatomy and physiology, microbiology, and proficiency in collection of tissue and blood samples from patients in a variety of settings. Students will also learn customer service and communication skills necessary to work with patients. Career options are covered, and students will be prepared for a career in phlebotomy. Upon completion of the required courses, students will receive a certificate of phlebotomy from PPCC and will qualify to take the National Registry Board Exam for Registered Phlebotomy Technician (RPT). This certificate can be completed within two semesters if coursework is completed as advised.

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.

HPR 101	Customer Service in Healthcare	2
HPR 113	Advanced Phlebotomy	4
HPR 112	Phlebotomy	4
HPR 178	Medical Terminology	2
HPR 208	Advanced Medical Terminology	2
<b>Total Credit Hours</b>		<b>14</b>

**Multimedia Graphic Design Associate of Applied Science Degree**

Recommended basic skills standards are

- ENG 090
- MAT 030
- REA 090

This program prepares the students for entry-level work in some of the following creative and exciting areas: graphic design, photo enhancement, digital illustration, interactive media digital video production, web design, animation, and production layout. Students receive a blend of knowledge in color, design, computer software, typography, and drawing. Students will also choose from a variety of course electives.

Maximizing student success in the Multimedia Graphic Design program is the department goal. The program faculty recommends that students develop the following desirable skill and knowledge foundations to enhance student success:

- Advanced college level study skills
- Working knowledge of algebraic principles and basic measurement
- College-level reading, writing, comprehension, and study skills
- Working knowledge and application of college-level English
- Demonstrated time management skills
- Keyboarding, mouse and computer experience (will be taught in MGD 102). It is strongly recommended that students see an advisor for program planning.

Students may complete basic skill deficiencies concurrently with the beginning courses in the program. Students must arrange with advisors to remedy deficiencies in program requirements. Please call (719) 502-3143 for advising.

**General Education Courses for all emphasis areas**

ART 110	Art Appreciation: AH1	3
	or	
ART 111	Art History I: AH1	(3)
CIS 118	Introduction to PC Applications	3
	or	
CSC 105	Computer Literacy	3
	or	
CSC 120	Problem Solving with (Software Package)	(3)
ENG 121	English Composition I: CO1	3
	or	
ENG 131	Technical Writing I	(3)
MAT 107	Career Math	3
	or	
MAT 112	Financial Mathematics	(3)
General Education Elective		
Choose from the AAS general education list on page 79		<u>3</u>
		15

**Required MGD courses**

MGD 102	Introduction to Multimedia	3
MGD 103	Production Design	3
MGD 109	Design and Color	3
	or	
ART 131	2-D Design	(3)
MGD 111	Adobe Photoshop I	3
MGD 112	Adobe Illustrator I	3
MGD 113	QuarkXPress	3
MGD 116	Typography I	3
MGD 134	Drawing for Illustrators	3
MGD 141	Web Design I	3
MGD 213	Electronic PrePress	3
MGD 221	Computer Graphics I	3
MGD 289	Capstone	2
Electives Choose fifteen (15) credit hours from electives below		<u>15</u>
		50

**MGD Electives**

ART 138	Photography I	3
ART 143	Digital Photography	3
MGD 106	Creativity and Visual Thinking	3
MGD 107	History of Design	2
MGD 108	History of Illustration	2
MGD 110	Lettering for Graphic Design	2
MGD 114	Adobe InDesign	3
MGD 121	Painter for Digital Media	3
MGD 132	Design and Color II	3
MGD 143	Web Motion Graphic Design I	3
MGD 153	3-D Animation	3
MGD 161	Director I	3
MGD 164	Digital Video Editing I	3
MGD 165	After Effects I	3
MGD 178	Seminar/Workshop	1
MGD 180	Internship	3
MGD 201	Children's Book Illustration	3
MGD 202	Point of Purchase Packaging Design	3
MGD 207	Illustration I	3
MGD 208	Illustration II	3
MGD 209	Illustration III	3
MGD 211	Adobe Photoshop II	3

MGD 212	Adobe Illustrator II	3
MGD 215	Painting for Illustrators	3
MGD 222	Computer Graphics II	3
MGD 241	Web Design II	3
MGD 243	Web Motion Graphic Design II	3
MGD 259	Management and Production	3
MGD 264	Digital Video Editing II	3
MGD 265	After Effects II	3
MGD 266	DVD Authoring	3
MGD 268	Commercial Art Business	3
RTV 108	Principles of Audio	3
RTV 208	Basic Video Production	3
RTV 218	Advanced Video Production	3
<b>Total Credit Hours</b>		<b>65</b>

**Certificates**

**Design to Print**

MGD 109	Design and Color	3
	or	
ART 131	2-D Design	3
MGD 111	Adobe Photoshop I	3
MGD 112	Adobe Illustrator I	3
MGD 113	QuarkXPress	3
MGD 213	Electronic Pre-Press	3
MGD 221	Computer Graphics I	3
MGD 222	Computer Graphics II	<u>3</u>
<b>Total Credit Hours</b>		<b>21</b>

**Digital Image**

ART 143	Digital Photography I	3
	or	
ART 138	Photography I	(3)
MGD 111	Adobe Photoshop I	3
MGD 112	Adobe Illustrator I	3
MGD 211	Adobe Photoshop II	<u>3</u>
<b>Total Credit Hours</b>		<b>12</b>

**Game Development and Programming**

**Pending State Approval**

This certificate introduces students to the basic skills which will assist them in the design and development of computer games. It covers a wide variety of topics including graphics processing, animation, and game programming using a high level programming language.

**Required Multimedia Courses**

MGD 111	Adobe Photoshop I	3
MGD 112	Adobe Illustrator I	3
MGD 143	Web Motion Graphics Design	<u>3</u>
		9

**Required Computer Science Courses**

CSC 126	Game Design and Development	3
CSC 154	Introduction to MS Visual Basic .Net	3
CSC 160	Computer Science I: (Language)	<u>4</u>
		10

**Choose two electives**

CSC 161	Computer Science II: (Language)	4
CSC 200	Game Programming I (2D)	3
CSC 216	Computer Game Logic and Design (3D)	3
MGD 153	3D Animation: I	3
MGD 165	After Effects I	3
MGD 211	Adobe Photoshop II	3
MGD 259	Management and Production	<u>3</u>
		3

<b>Total Credits</b>	<b>25-26</b>
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**Illustration**

MGD 111	Adobe Photoshop I	3
MGD 112	Adobe Illustrator I	3
MGD 207	Illustration I	3
MGD 208	Illustration II	3
MGD 209	Illustration III	3
MGD 215	Painting for Illustrators	3

**Total Credit Hours** **18**

**Video/Animation Production**

MGD 111	Adobe Photoshop I	3
MGD 164	Digital Video Editing I	3
MGD 165	After Effects I	3
MGD 264	Digital Video Editing II	3
MGD 265	After Effects II	3
MGD 266	DVD Authoring	3
RTV 108	Principles of Audio	3
RTV 208	Basic Video Production	3

**Total Credit Hours** **24**

**Web Design**

MGD 111	Adobe Photoshop I	3
MGD 112	Adobe Illustrator I	3
MGD 141	Web Design I	3
MGD 143	Web Motion Graphic Design I	3
MGD 241	Web Design II	3
MGD 243	Web Motion Graphic Design II	3

**Total Credit Hours** **18**

**Natural Resources****Associate of Applied Science Degree**

Recommended basic skills standards are

- ENG 060
- MAT 090
- REA 090

This program is designed to prepare students for employment at the technician level in the following options: natural resources 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. An adventure guide certificate option is also available.

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

New or returning students must satisfactorily pass a Criminal Background Investigation (CBI) prior to entry into the program and before any internship. Failure to pass may jeopardize admission or completion of the program. CBI tests are at student expense.

**General Education Courses**

BIO 148	Basic Ecology	4
COM 214	Natural Resource Interpretation	3
or		
COM 217	Group Communications	(3)
CIS 118	Introduction to PC Applications	3
or		
CSC 105	Computer Literacy	(3)
ENG 131	Technical Writing I	3
MAT 108	Technical Mathematics	4

**17**

**Other Course Requirements**

AGY 240	Introductory Soil Science	4
ARC 218	Surveying	3
BIO 149	Plant Taxonomy	4
or		
BIO 154	Biology of Plants	(4)
EMS 115	First Responder	3
ENV 101	Introduction to Environmental Science	4
GEY 135	Environmental Geology	3
HWE 129	Wilderness First Responder	4
NRE 100	Foundation of Forestry	3
NRE 204	Range Management and Restoration	4
NRE 205	Wildlife and Fisheries Management Principles	3
NRE 211	Environmental Policies and Economics	3
NRE 212	Ecosystem Management	3
NRE 214	Environmental Issues and Ethics	3
NRE 236	Public Relations of Natural Resources	2
NRE 280	Internship	5
PED 165	Wilderness Survival Skills	3
Electives	Choose six (6) credit hours from list below	6

**56**

**Natural Resource Technology Approved Electives**

CHE 101	Introduction to Chemistry I w/Lab: SC1	5
FST 152	Wildland Firefighting	3
GEO 112	Physical Geography - Weather and Climate	3
HIS 207	American Environmental History	3
HIS 225	Colorado History	3
ADG	Any course or combination of courses	1-6
NRT	Any course or combination of courses	1-6
ZOO	Any course or combination of courses	1-6
Any AAS approved electives		1-6

**Total Credit Hours** **74**

**Certificate****Adventure Guide**

ADG 100	Outdoor Leadership	2
ADG 106	Desert Field Studies	2
ADG 107	Mountain Field Studies	2
ADG 115	Avalanche Science	1
ADG 220	Programming for Outdoor Education	3
ADG 280	Adventure Guide Internship	5
BIO 149	Plant Taxonomy	4
COM 214	Natural Resource Interpretation	3
or		
COM 217	Group Communications	(3)
EMS 115	First Responder	3
ENV 101	Introduction to Environmental Science	4
GEY 135	Environmental Geology	3
HWE 121	Wilderness First Aid and Outdoor Emergency Care	2
NRE 214	Environmental Issues and Ethics	3
NRE 236	Public Relations of Natural Resources	2
PED 165	Wilderness Survival Skills	3
PER 128	Introduction to Recreation	2
PER 168	Outdoor Equipment and Facilities	1
PER 252	Principles of Outdoor Recreation	3
Electives	Choose six (6) from list below	6

**Adventure Guide Approved Electives**

FST 152	Wildland Firefighting	3
HIS 225	Colorado History	3
PED 124	Mountain Biking	1
PED 127	Introduction to Flyfishing	1
PED 132	Snowshoeing	1
PED 150	Rock Climbing I	2

PED 151	Rock Climbing II	2
PED 157	Basic Mountaineering	3
PED 161	Beginning Kayaking	1
PED 166	Winter Survival Skills	1
PED 167	Basic Search and Rescue	3
<b>Total Credit Hours</b>		<b>54</b>

## Nursing

Pikes Peak Community College offers the following programs:

- Registered Nurse Associate of Applied Science Degree with PN Exit Option (Track 1)
- Registered Nurse Associate of Applied Science Degree for Advanced Placement (LPN-RN/Track 2)
- Nursing Assistant Certificate

Admission to the college does not assure admission to the registered nursing programs. Admission to the RN program with the LPN exit option and the Advanced Placement option require separate admission criteria. All students interested in the registered nursing programs who do not have previous college courses must complete the PPCC placement exams prior to being advised. Potential students should attend Information Nights held each month to obtain information prior to advising. Interested students can inquire on times by calling (719) 502-3400. Students should complete the application to PPCC by going to the state website at <http://cccweb.cccs.edu/nursing/>. This should be performed when all pre-requisites are completed with a minimum GPA of 2.5 with a minimum of C in each course. The FBI check must be passed at that time. Students should use the following website: [www.healthcareex.com](http://www.healthcareex.com) and follow the directions to select the FBI fingerprinting package. Results are to be sent to the Human Resources Department at PPCC to the attention of Ms. Laura Powell. Once the information is received by the Nursing department, you will be receiving notification from the school of your waitlist number. This process may take up to six months. Students interested in the Nursing Assistant Certificate should apply directly to the college and then sign up for appropriate classes.

All students will be required to meet regulations regarding CPR, immunizations and disability issues. Further detailed information is on the PPCC website under nursing. It is the policy of the PPCC Program of Nursing to provide reasonable accommodation to qualified students with disabilities so they can meet these required technical standards. Whether or not a requested accommodation is reasonable will be determined on an individual basis. Determining what is a reasonable accommodation is an interactive process which the students should initiate with OASIS.

### Nursing: Track One-Registered Nurse Associate of Applied Science Degree with Practical Nurse Exit Option

Recommended basic skills standards are:

- Basic Computer Literacy
- BIO 090
- ENG 090
- MAT 090
- REA 090

The Registered Nursing program is an Associate of Applied Science program. Nursing courses begin in the fall and may be completed in 4-5 semesters. Admission criteria for the state community college nursing programs are standardized. They are subject to change. Students should complete the nursing program application to the PPCC nursing program after completing all pre-requisites by going to the state website at <http://cccweb/cchs/edu/nursing/>.

### Prerequisite Courses

BIO 201	Human Anatomy and Physiology I: SC1	4
BIO 202	Human Anatomy and Physiology II: SC1	4
BIO 204	Microbiology: SC1	4
ENG 121	English Composition I: CO1	3
PSY 235	Human Growth and Development: SS3	<u>3</u>

### Total Prerequisite Credits

**18**

All Biology (BIO) prerequisites must be completed within 7 years of entry into CCCS nursing programs

- All courses must have a minimum of C grade with an overall GPA of 2.5 in the pre-requisites.
- Students will be asked to complete a Nurse Entrance Test for each school to be used only for advising purposes/remediation. Upon provisional acceptance, the program will notify the student of dates needed to obtain additional information
- Criminal background check
- Health statement/immunizations
- CPR for adult /child
- Ability to meet the requirements of the disability policy

### Nursing Curriculum

#### Year I First Semester

HPR 108	Nutrition	1
MAT 103	Math for Clinical Calculations	3
NUR 109	Fundamentals of Nursing	8
NUR 112	Basics of Pharmacology	2

#### Year I Second Semester

BIO 216	Pathophysiology	4
NUR 106	Medical Surgical Nursing Concepts	9
NUR 150	Nursing Care of Obstetric and Pediatric Clients	7
NUR 169	Transition into Practical Nursing (optional summer only)	(5)

#### Year II First Semester

NUR 206	Advanced Concepts of Medical-Surgical Nursing I	8
NUR 211	Nursing Care of Psychiatric Clients	4
NUR 212	Advanced Concepts of Pharmacology	2

#### Year II Second Semester

NUR 216	Advanced Concepts of Medical-Surgical Nursing II	6
NUR 230	Leadership, Management and Trends	5
Humanities or Social Behavior Elective from gtPathways		<u>3</u>

### Total Nursing Credits

**51**

### Total Credits

**80**

Students are eligible to apply to write the NCLEX-PN at the successful completion of the first year of nursing courses and NUR 169 Transition into Practical Nursing (minimum of C grade) Students are eligible to apply to write to NCLEX-RN at the successful completion of the second year of nursing courses. Students may also complete any of the other general education/science courses prior to entry in nursing courses.

### Nursing: Track Two-LPN Advanced Placement Associate of Applied Science Degree

Recommended basic skills standards are:

- Basic Computer Literacy
- BIO 090
- ENG 090
- MAT 090
- REA 090

Pikes Peak Community College offers an advanced placement associate degree program for licensed practical nurses. Prior LPN course work from an accredited practical/vocational nursing program



within the USA and a Colorado LPN license in good standing transfer for 27 credits by the Colorado Articulation Model.

Admission criteria for the state community college nursing programs are standardized and subject to change. Students should complete the nursing program application to the PPCC nursing program after completing all pre-requisites by going to the state website at <http://cccweb.cccs.edu/nursing/>. Students must pass the FBI fingerprinting screen to determine application eligibility. Please follow the directions on the website: [www.healthcareex.com](http://www.healthcareex.com). Send the results to the Human Resources Department at PPCC with attention to Ms. Laura Powell. Once all the material has been received by the department, the student will be assigned a waiting list number. This process may take up to six months.

### Prerequisite Courses

Must be completed with a minimum GPA of 2.5

BIO 201	Human Anatomy and Physiology I: SC1	4
BIO 202	Human Anatomy and Physiology II: SC1	4
BIO 204	Microbiology: SC1	4
ENG 121	English Composition I: CO1	3
PSY 235	Human Growth and Development: SS3	3

Must be completed prior to entry with a minimum grade of C

BIO 216	Pathophysiology	4
HPR 108	Nutrition	1
MAT 103	Math for Clinical Calculations	3
NUR 189	Transition from LPN to AD	4

(Taken only after acceptance)

Other requirements are the same as the student desiring the Track 1 program. Details on the nursing programs can be found on the PPCC website under nursing.

### Certificate

#### Nursing Assistant

Students are eligible to apply to write the State certificate exam for Nurse Aide after completion of NUA 101, NUA 170 and NUA 171. Students completing NUA 171 in addition to NUA 101 and NUA 170 are eligible to receive a certificate from PPCC.

NUA 101	Certified Nurse Aide Health Care Skills	4
NUA 170	Nurse Assistant Clinical Experience	1
NUA 171	Advanced Nurse Aide Clinical	1
<b>Total Credit Hours</b>		<b>6</b>

Other courses for nursing assistants

NUA 105	Home Health Aide Theory	2
NUA 180	Home Health Aide Internship	3

### Paralegal/Legal Assistant

#### Associate of Applied Science Degree

Recommended basic skills standards are

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

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.

#### General Education Courses Part I

COM 115	Public Speaking	3
ENG 121	English Composition I: CO1	3
MAT 106	Survey of Algebra	4
	or	
MAT 109	Geometry	(3)
	or	
MAT 120	Mathematics for the Liberal Arts	(4)
	or	
MAT 121	College Algebra	(4)
POS 111	American Government: SS1	3
		<u>3</u>
		12-13

#### General Education Part II

##### Select 2 courses (6-9 credit hours) from the following:

NOTE: Students may be allowed to substitute one or more of the courses from the General Education, Part II list below with one or more courses from the list of approved AAS General Electives, found in the College Catalog. However, students should be aware that not every course from the AAS General Electives list will meet the Part II General Education Requirements, due to specific American Bar Association (ABA) Guidelines which define a "general education" course. Students wishing to take one or more courses other than those listed should consult with the Paralegal Program Director, to ensure the course will meet the ABA and Part II of the General Education Requirements.

AST 101	Astronomy I: SC1	4
BIO 105	Science of Biology: SC1	4
CHE 101	Introduction to Chemistry I (w/ Lab): SC1	5
ENG 122	English Composition II: CO2	3
FRE 101	Conversational French I	3
GEO 106	Human Geography: SS2	3
GEO 107	Physical Geography	3
GEY 111	Physical Geology: SC1	4
HIS 101	History of Western Civilization I: HI1	3
HIS 102	History of Western Civilization II: HI1	3
HIS 201	United States History I: HI1	3
HIS 202	United States History II: HI1	3
HUM 121	Early Civilizations: AH2	3
PHI 111	Introduction to Philosophy: AH3	3
PHY 101	Basic Physics	4
PSY 101	General Psychology I: SS3	3
SOC 101	Introduction to Sociology I: SS3	3
SPA 101	Conversational Spanish I	3
		<u>3</u>
		6-9

#### Technology Requirement

Paralegal students entering with strong computer skills are urged to request a waiver of CIS 118 by applying to the Division of Mathematics and Technology. Waiving will require proof of competency via completion of a self test and a structured interview with a faculty member from the CIS or CSC department. Waiver requires the credits be replaced by a computer course from the list below.

CIS 118	Introduction to PC Applications	3
CIS 135	Complete PC Word Processing	3

CIS 145	Complete PC Database	3
CIS 155	PC Spreadsheet Concepts: Excel	3
CIS 165	Complete Presentation Graphics: PowerPoint	3

**Other Course Requirements**

NOTE: Students must successfully complete any College Preparatory (under-100 level) courses before enrolling in PAR 115 or subsequent PAR courses.

PAR 115	Introduction to Law	3
PAR 116	Torts	3
PAR 117	Family Law	3
PAR 118	Contracts	3
PAR 125	Property Law	3
PAR 127	Legal Ethics	3
PAR 201	Civil Litigation	3
PAR 206	Business Organizations	3
PAR 211	Legal Research	3
PAR 212	Legal Writing	3
PAR 289	Capstone	3
Electives Choose nine (9) credit hours from electives below		9
		<u>42</u>

**Paralegal/Legal Assistant Approved Electives**

ACC 101	Fundamentals of Accounting	3
CRJ 111	Substantive Criminal Law	3
CRJ 112	Procedural Criminal Law	3
CRJ 210	Constitutional Law	3
CRJ 216	Juvenile Law and Procedures	3
PAR 287	Cooperative Education	3
Choose from the AAS electives list on page 79		<u>3-5</u>

**Total Credit Hours** **63-67**

**Certificate****Paralegal/Legal Assistant**

NOTE: The certificate program offering is only available to students who possess (at the time of entry into the program) an academic associate's degree (Associate of Arts or Associate of Science) or HIGHER from a regionally accredited college or university. Students not possessing a degree must enroll in the Paralegal/Legal Assistant Associate of Applied Science degree program.

PAR 115	Introduction to Law	3
PAR 116	Torts	3
PAR 117	Family Law	3
PAR 118	Contracts	3
PAR 125	Property Law	3
PAR 127	Legal Ethics	3
PAR 201	Civil Litigation	3
PAR 206	Business Organizations	3
PAR 211	Legal Research	3
PAR 212	Legal Writing	3
PAR 289	Capstone	3
Electives Choose three (3) credit hours from the electives below		<u>3</u>
		<u>33</u>

**Paralegal/Legal Assistant & Certificate Approved Electives**

ACC 101	Fundamentals of Accounting	3
CRJ 111	Substantive Criminal Law	3
CRJ 210	Constitutional Law	3
CRJ 208	Criminal Evidence	3
CRJ 216	Juvenile Law and Procedures	3
PAR 275	Special Topics	3
PAR 287	Internship	3

**Total Credit Hours** **36**

**Pharmacy Technician****Associate of Applied Science Degree**

Recommended basic skills standards are

- ENG 060
- MAT 060
- 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.

Admission to the college does not assure admission to the pharmacy technician program. All students interested in the pharmacy technician program who do not have previous college courses must complete the PPCC placement exams prior to being advised. Admission to the pharmacy technician program is accomplished through an application and selection process. Students can pick up a Pharmacy Technician Program Admission Application at the HENPS Division office at either the Centennial or Rampart Range Campus. NO APPLICATION WILL BE REVIEWED THAT IS NOT FULLY COMPLETED. Once completed, please submit to the Pharmacy Technician Program Coordinator and make an appointment to review necessary information at that time.

**General Education Courses**

CSC 105	Computer Literacy	3
ENG 121	English Composition I: CO1	3
MAT 107	Career Math	3
PHI 112	Ethics	3
PSY 101	General Psychology I: SS3	<u>3</u>
		15

**Other Course Requirements**

CHE 101	Introduction to Chemistry: SC1	5
COM 125	Interpersonal Communications	3
HPR 101	Customer Service in Healthcare	2
HPR 278	Medical Terminology	2
HWE 103	Community First Aid and CPR	1
MOT 123	Introduction to Clinical Physiology	1
PHT 105	Orientation to Pharmacy	4
PHT 115	Pharmacology of the GI, Renal, Reproductive, Immune, Dermatologic Systems	3
PHT 116	Institutional Pharmacy	3
PHT 118	Pharmacology of the Nervous, Endocrine, Musculoskeletal Systems	3
PHT 119	Community Pharmacy	3
PHT 170	Pharmacy Clinical: Hospital	4
PHT 171	Pharmacy Clinical: Community	4
PHT 235	Pharmaceutical Calculations and Compounding Techniques	4

**STUDENTS MUST TAKE TWO OF THE FOLLOWING COURSES**

MOT 125	Basic Medical Sciences I	3
MOT 133	Basic Medical Sciences II	3
MOT 135	Basic Medical Sciences III	3
MOT 150	Pharmacology for Medical Assistants	<u>3</u>
		48

**Total Credit Hours** **63**

**Certificate**

COM 125	Interpersonal Communications	3
PHT 105	Orientation to Pharmacy	4
PHT 115	Pharmacology of the GI, Renal, Reproductive, Immune, Dermatologic Systems	3
PHT 116	Institutional Pharmacy	3
PHT 118	Pharmacology of the Nervous, Endocrine, Musculoskeletal Systems	3
PHT 119	Community Pharmacy	3
PHT 170	Pharmacy Clinical: Hospital	4
PHT 171	Pharmacy Clinical: Community	4
PHT 235	Pharmaceutical Calculations and Compounding Techniques	4

**Total Credit Hours****31****Pikes Peak Regional Law Enforcement Academy****Certificate**

Recommended basic skills standards are

- ENG 090
- MAT 030
- REA 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 take 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.

\*Some agencies may require employees to attend their academy as a condition of employment.

CRJ 101	Basic Police Academy I	8
CRJ 102	Basic Police Academy II	6
CRJ 103	Basic Police Academy III	2
CRJ 104	Basic Police Academy IV	1
CRJ 105	Basic Law	6
CRJ 106	Arrest Control Techniques	3
CRJ 107	Law Enforcement Driving	3
CRJ 108	Firearms	3
PED 110	Fitness Center	1

**Total Credit Hours****33****Radio & Television****Associate of Applied Science Degree**

Recommended basic skills standards are

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

The Radio & Television 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 in 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 Associate 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.

**General Education Courses**

ANT 101	Cultural Anthropology: SS3	3
	or	
SOC 101	Introduction to Sociology I: SS3	(3)
BTE 100	Computer Keyboarding	1
BUS 115	Introduction to Business	3
CIS 115	Introduction to Computers	3
	or	
CIS 118	Introduction to PC Applications	(3)
ENG 121	English Composition I: CO1	3
	or	
COM 115	Public Speaking	(3)
MAT 107	Career Math	3
		<u>16</u>

**Other Course Requirements**

RTV 100	Introduction to Telecommunications	2
RTV 101	Radio Programming and Production I	3
RTV 102	Beginning Television Production	3
RTV 103	Writing for Television and Radio	3
	or	
RTV 104	Corporate Scriptwriting	(3)
RTV 106	Radio Programming and Production Lab I	3
RTV 107	Television Studio Production	3
RTV 108	Principles of Audio	3
RTV 110	News Writing and Reporting	3
	or	
JOU 106	Fundamentals of Reporting	(3)
RTV 208	Basic Video Production	3
	or	
MGD 164	Digital Editing I	(3)
RTV 211	Radio Programming and Production II	3
	or	
RTV 212	Advanced Television Production	(3)
RTV 216	Radio Programming and Production Lab II	3
	or	
RTV 217	Advanced TV Studio Production	(3)

RTV 180	Internship–KEPC Radio	4
or		
RTV 182	Internship–Radio Station/Audio Production Company	(4)
or		
RTV 183	Internship–Television Station/Video Production Company	(4)
RTV 284	Internship in Telecommunications	3
Electives Choose six (6) credit hours from list below		<u>6</u>
		45

**Approved Electives**

RTV 109	Radio Broadcast Technical Operations	2
RTV 180	Internship–KEPC Radio	4
RTV 182	Internship–Radio Station/Audio Production	4
RTV 183	Internship–TV Station/Video Production Co.	4
RTV 211	Radio Programming and Production II	3
RTV 212	Advanced Television Production	3
RTV 216	Radio Programming and Production Lab II	3
RTV 217	Advanced TV Studio Production	3
RTV 218	Advanced Videotape Editing	3
RTV 280	Internship–TV Station/Video Production II	3
RTV 281	Internship in News–KEPC Radio	3
RTV 282	Internship–KEPC II	3
RTV 283	Internship–Radio Station/Audio Production II	3

**Total Credit Hours**

61

**Certificates****Radio**

RTV 101	Radio Programming and Production I	3
RTV 103	Writing for TV and Radio	3
or		
RTV 104	Corporate Scriptwriting	(3)
RTV 106	Radio Programming and Production Lab I	3
RTV 108	Principles of Audio	3
RTV 109	Radio Broadcast Technical Operations	2
RTV 110	News Writing and Reporting	3
RTV 180	Internship–KEPC Radio	4
RTV 182	Internship–Radio Station/Audio Production	4
RTV 211	Radio Programming and Production II	3
RTV 216	Radio Programming and Production Lab II	<u>3</u>

**Total Credit Hours**

31

**Beginning Radio Production**

RTV 101	Radio Programming and Production I	3
RTV 106	Radio Programming and Production Lab I	3

**Total Credit Hours**

6

**Advanced Radio Production**

RTV 101	Radio Programming and Production I	3
RTV 106	Radio Programming and Production Lab I	3
RTV 211	Radio Programming and Production II	3
RTV 216	Radio Programming and Production Lab II	<u>3</u>

**Total Credit Hours**

12

**Basic Radio Operations**

RTV 101	Radio Programming and Production I	3
RTV 106	Radio Programming and Production Lab I	3
RTV 109	Radio Broadcast Technical Operations	2
RTV 180	Internship–KEPC Radio	<u>4</u>

**Total Credit Hours**

12

**Advanced Radio Operations**

RTV 101	Radio Programming and Production I	3
RTV 106	Radio Programming and Production Lab I	3
RTV 109	Radio Broadcast Technical Operations	2
RTV 180	Internship–KEPC Radio	4
RTV 182	Internship–Radio Station/Audio Production	4
RTV 211	Radio Programming and Production II	3
RTV 216	Radio Programming and Production Lab II	<u>3</u>

**Total Credit Hours**

22

**Television**

BTE 100	Computer Keyboarding	1
RTV 102	TV Production	3
RTV 103	Writing for TV and Radio	3
or		
RTV 104	Corporate Scriptwriting	(3)
RTV 107	TV Studio Production	3
RTV 181	Internship–College/Interactive TV Studio	4
RTV 183	Internship–TV Station/Video Production Co.	4
RTV 208	Basic Video Production	3
RTV 212	Advanced TV Production	3
RTV 217	Advanced Studio Production	3
RTV 218	Advanced Videotape Editing	<u>3</u>

**Total Credit Hours**

30

**Beginning TV Production**

RTV 102	Television Production	3
RTV 107	TV Studio Production	3
RTV 208	Basic Video Production	<u>3</u>

**Total Credit Hours**

9

**Advanced TV Production**

RTV 102	Beginning Television Production	3
RTV 107	TV Studio Production	3
RTV 212	Advanced Television Production	3
RTV 217	Advanced TV Studio Production	3
RTV 218	Advanced Video Tape Editing	<u>3</u>

**Total Credit Hours**

15

**Beginning TV Production and Editing**

RTV 208	Basic Video Production	3
RTV 218	Advanced Video Tape Editing	<u>3</u>

**Total Credit Hours**

6

**Advanced TV Production and Video Editing**

RTV 102	Television Production	3
RTV 107	TV Studio Production	3
RTV 208	Basic Video Production	3
RTV 212	Advanced TV Production	3
RTV 217	Advanced TV Studio Production	3
RTV 218	Advanced Video Tape Editing	<u>3</u>

**Total Credit Hours**

18

**Basic Copywriting**

RTV 103	Writing for TV and Radio	3
RTV 104	Corporate Script Writing	<u>3</u>

**Total Credit Hours**

6

**Sales and Copywriting**

RTV 103	Writing for TV and Radio	3
RTV 110	News Writing and Reporting	<u>3</u>

**Total Credit Hours**

6

# Sign Language Interpreter Preparation

## Associate of Applied Science Degree

Recommended basic skills standards are

- ENG 090
- MAT 060
- REA 090

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 121 with a C grade or better and ASL 122 with a B grade or better. Contact the Interpreter Preparation Office (502-3500) 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 281) students must have a B average with no more than one C grade in IPP 225, IPP 227, IPP 229, or ASL 222.

Program prerequisite: ENG 090, MAT 060, REA 090 or placement scores of ENG 121, MAT 090, and REA 090 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.

### General Education Courses

ANT 101	Cultural Anthropology: SS3	3
CIS 118	Introduction to PC Applications	3
	or	
CSC 105	Computer Literacy	(3)
COM 115	Public Speaking	3
ENG 121	English Composition I: CO1	3
MAT 107	Career Math (or higher)	3
		<u>15</u>

### Other Course Requirements

ASL 123	American Sign Language III	5
ASL 215	ASL Literature	3
ASL 221	American Sign Language IV	3
ASL 222	American Sign Language V	3
IPP 121	Aspects of Interpreting I	3
IPP 122	Aspects of Interpreting II	3
IPP 125	Oral Transliterating	2
IPP 131	Text Analysis	3
IPP 132	Interpretation Analysis	3
IPP 145	Deaf People in Society	2
IPP 147	Survey of Deaf Culture	3
IPP 205	Educational Interpreting	4
IPP 207	Specialized and Technical Communication	2
IPP 225	English to ASL Interpreting	3
IPP 227	ASL to English Interpreting	3
IPP 229	Transliterating	3
IPP 235	Advanced Interpreting	4
IPP 279	Interpreter Seminar	3
IPP 281	Internship	5
		<u>75</u>

### Total Credit Hours

**75**

## Certificate

### Basic ASL Communication Skills

The ASL certificate is for students who want to broaden their horizons by learning a new language and who plan to use their skills for casual communication as opposed to professional interpreting. ASL is the fourth most commonly used language in the United States and can be a valuable asset in any field that is customer or consumer related. In today's competitive market, every additional skill on your resume places you one step closer to your dream job. This certificate can be a starting point for your new career or can enhance any established degree or profession.

ASL 123	American Sign Language III	5
ASL 221	American Sign Language IV	3
IPP 121	Aspects of Interpreting I	3
IPP 145	Deaf People in Society	2
IPP 147	Survey of Deaf Culture	3
		<u>16</u>

### Total Credit Hours

**16**

## Social Services Technician

### Associate of Applied Science Degree

Recommended basic skills standards are

- ENG 090
- MAT 060
- REA 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 recommends 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 who want individualized program planning suggestions are encouraged to consult program faculty. Please call (719) 502-3180 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.

NOTE: To be employed in the social work field it is expected that you will be able to pass background checks. This will include fingerprinting for the Colorado Bureau of Investigation and a Central Registry Inquiry.

### General Education Courses

CSC 105	Computer Literacy	3
ENG 121	English Composition I: CO1	3
	and	
ENG 122	English Composition II: CO2	3
	or	
COM 225	Introduction to Organizational Communication	(3)
	and	
ENG 131	Technical Writing I	(3)
MAT 107	Career Math	3



PSY 101	General Psychology I: SS3	3
SOC 101	Introduction to Sociology I: SS3	3
SOC 102	Introduction to Sociology II: SS3	3
		<u>21</u>

**Other Course Requirements**

SWK 100	Introduction to Social Work	3
SWK 105	Application of Group Counseling	3
SWK 106	Introduction to Alcohol and Drugs	3
SWK 180	Internship I	6
SWK 181	Internship II	6
SWK 201	Human Behavior in the Social Environment I	3
SWK 202	Human Behavior in the Social Environment II	3
SWK 205	Social Welfare in the US	3
SWK 208	Social Work Case Management	3
SWK 222	Introduction to Social Work Practice	3
SWK 280	Internship III	6
		<u>42</u>

**Total Credit Hours**

**63**

**Certificates**

**Social Services**

SOC 101	Introduction to Sociology I: SS3	3
SWK 100	Introduction to Social Work	3
SWK 180	Internship I	6
SWK 201	Human Behavior in the Social Environment I	3
SWK 205	Social Welfare in the US	3
SWK 208	Social Work Case Management	3
SWK 222	Introduction to Social Work Practice	3
Elective*		3
		<u>27</u>

**Total Credit Hours**

\*Students must consult with advisors for selection of elective courses.

**Case Management Open Field Placement**

**– Internship**

SWK 180	Internship I	6
SWK 205	Social Welfare in the US	3
SWK 208	Social Work Case Management	3
SWK 222	Introduction to Social Work Practice	3
		<u>15</u>

**Total Credit Hours**

**15**

**Child Welfare**

SWK 180	Internship I	6
SWK 205	Social Welfare in the US	3
SWK 208	Social Work Case Management	3
SWK 222	Introduction to Social Work Practice	3
PSY 247	Child Abuse and Neglect	3
		<u>18</u>

**Total Credit Hours**

**18**

**Gerontological**

SOC 201	Introduction to Gerontology	3
SWK 180	Internship I	6
SWK 205	Social Welfare in the US	3
SWK 208	Social Work Case Management	3
SWK 222	Introduction to Social Work Practice	3
		<u>18</u>

**Total Credit Hours**

**18**

**Substance Abuse**

SWK 106	Introduction to Alcohol and Drugs	3
SWK 180	Internship I	6
SWK 205	Social Welfare in the US	3
SWK 208	Social Work Case Management	3
SWK 222	Introduction to Social Work Practice	3
		<u>18</u>

**Total Credit Hours**

**18**

**Water & Wastewater Technology**

**Associate of Applied Science Degree**

Recommended basic skills standards are

- ENG 090
- MAT 060
- REA 090

The Water and Wastewater Technology Program is designed to prepare students for employment at the technician level in water and wastewater treatment operations. The curriculum includes science and math foundations, water and wastewater treatment techniques, field experiences and group projects. Local career opportunities in this ever growing field will be available to the graduates of this program.

**General Education Courses**

BIO 111	College Biology I (w/lab)	5
BIO 204	College Microbiology	4
CHE 111	College Chemistry I (w/lab)	5
CIS 118	Introduction to PC Applications	3
	or	
CSC 105	Computer Literacy	(3)
COM 115	Public Speaking	3
	or	
COM 225	Interpersonal Communications	(3)
ENG 121	English Composition I: CO1	3
	or	
ENG 131	Technical Writing I	(3)
MAT 121	College Algebra	4
PHY 111	College Physics I (w/lab)	5
		<u>32</u>

**Other Course Requirements**

WQM 100	Introduction to Water Quality	3
WQM 105	Specific Calculations for Water Quality	3
WQM 106	Mechanical-Physical Treatment	3
WQM 109	Water Distribution	3
WQM 116	Conventional Surface Water Treatment	3
WQM 119	Basic Water Quality Analysis	3
WQM 118	Wastewater Collection Systems	3
WQM 126	Safety in Water Quality Industry	3
WQM 127	Utility Management	3
WQM 212	Drinking Water Regulations	3
		<u>30</u>

**Total Credit Hours**

**62**

**Certificates**

**Small Systems**

WQM 126	Safety in Water Quality Industry	3
WQM 127	Utility Management	3
WQM 202	Small Water System Operations & Maintenance	3
WQM 203	Small Wastewater Sys. Operations & Maintenance	3
		<u>12</u>

**Total Credit Hours**

**12**



**Water Distribution**

MAT 121 College Algebra	4
WQM 109 Water Distribution	3
WQM 126 Safety in Water Quality Industry	3
WQM 127 Utility Management	3

**Total Credit Hours** **13**

**Water Treatment**

MAT 121 College Algebra	4
CHE 111 College Chemistry	5
WQM 116 Conventional Surface Water Treatment	3
WQM 126 Safety in Water Quality Industry	3
WQM 127 Utility Management	3

**Total Credit Hours** **18**

**Wastewater Collection**

MAT 121 College Algebra	4
WQM 118 Wastewater Collection System	3
WQM 126 Safety in Water Quality Industry	3
WQM 127 Utility Management	3

**Total Credit Hours** **13**

**Wastewater Treatment**

BIO 111 College Biology	5
MAT 121 College Algebra	4
WQM 106 Mechanical-Physical Treatment	3
WQM 126 Safety in Water Quality Industry	3
WQM 127 Utility Management	3

**Total Credit Hours** **18**

**Welding**

**Associate of Applied Science Degree**

Recommended basic skills standards are

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

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.

**General Education Courses**

COM 225 Introduction to Organizational Communication	3
CSC 105 Computer Literacy	3
MAT 107 Career Math	3
General Education Electives from approved list on page 79	6

15

**Other Course Requirements**

MAC 240 CAD/CAM 2D	3
WEL 106 Blueprint Reading for Welders and Fitters	4
WEL 113 Oxyfuel and Plasma Cutting	2
WEL 114 Oxyacetylene Welding	2
WEL 121 Structural Welding I	3
WEL 122 Structural Welding II	3
WEL 124 Introduction to Gas Tungsten Arc Welding	4
WEL 125 Introduction to Gas Metal Arc Welding	4
WEL 200 Advanced CAD/CAM Cutting Processes	4
WEL 205 Introduction to Ornamental Iron	4
WEL 224 Advanced Gas Tungsten Arc Welding	4
WEL 225 Advanced Gas Metal Arc Welding	4
WEL 230 Pipe Welding I	4
WEL 231 Pipe Welding II	4
WEL 240 Pipe Welding Certification	4
WEL 250 Layout and Fabrication	4

57

**Total Credit Hours** **71**

**Certificates**

Courses required for all certificates

MAT 107 Career Math	3
WEL 106 Blueprint Reading for Welders and Fitters	4
WEL 113 Oxyfuel and Plasma Cutting	2
WEL 114 Oxyacetylene Welding	2
WEL 121 Structural Welding I	3
WEL 122 Structural Welding II	3

17

**Basic General Job Entry Skill Level**

WEL 124 Introduction to Gas Tungsten Arc Welding	4
WEL 125 Introduction to Gas Metal Arc Welding	4
Requirements for all certificates	17

**Total Credit Hours** **25**

**Pipe**

WEL 230 Pipe Welding I	4
WEL 231 Pipe Welding II	4
Requirements for all certificates	17

**Total Credit Hours** **25**

**Structural**

WEL 124 Introduction to Gas Tungsten Arc Welding	4
WEL 125 Introduction to Gas Metal Arc Welding	4
Requirements for all certificates	17

**Total Credit Hours** **25**

**Combination Pipe, Structural, and Advanced Processes**

WEL 124 Introduction to Gas Tungsten Arc Welding	4
WEL 125 Introduction to Gas Metal Arc Welding	4
WEL 224 Advanced Gas Tungsten Arc Welding	4
WEL 225 Advanced Gas Metal Arc Welding	4
WEL 230 Pipe Welding I	4
WEL 231 Pipe Welding II	4
Requirements for all certificates	17

**Total Credit Hours** **41**

## Zookeeping Technology

### Associate of Applied Science Degree

Recommended basic skills standards are

- ENG 060
- MAT 090
- REA 090

This program is designed to prepare students to be zookeeping technicians and animal care professionals. Classes include training in science foundations, animal husbandry, career development, horticulture, exhibit design and veterinary zookeeping giving the students the background for a career in the animal care professions.

New or returning students must satisfactorily pass a Criminal Background Investigation (CBI) prior to entry into the program and before any internship. Failure to pass may jeopardize admission or completion of the program. CBI tests are at student expense.

#### General Education Courses

BIO 148	Basic Ecology	4
BIO 150	Animal Biology	4
CIS 118	Introduction to PC Applications	3
	or	
CSC 105	Computer Literacy	(3)
COM 214	Natural Resource Interpretation	3
ENG 131	Technical Writing I	3
MAT 107	Career Math	<u>3</u>
		20

#### Other Course Requirements

EMS 115	First Responder	3
ENV 101	Introduction to Environmental Science	4
NRE 236	Public Relations of Natural Resources	2
ZOO 100	Safety/Zoonoses/Hazardous Materials	.5
ZOO 101	Career Development for Zookeeping	.5
ZOO 105	Reptile and Amphibian Husbandry	4
ZOO 115	Bird Husbandry	4
ZOO 125	Mammal Husbandry	4
ZOO 135	Fish and Aquatic Invertebrate Husbandry	4
ZOO 180	Zookeeping Internship – Hoofstock	5
ZOO 181	Zookeeping Internship – Primates/Carnivores	5
ZOO 205	Horticulture for the Zookeeper	1
ZOO 206	Exhibit Design and Construction	3
ZOO 215	Veterinary Zookeeping	4
ZOO 280	Internship - Birds/Reptiles	5
Electives	Choose six (6) credit hours from the list below	<u>6</u>
		55

#### Zookeeping Technology Approved Electives

BIO 149	Plant Taxonomy	4
	or	
BIO 154	Biology of Plants	(4)
ZOO 117	Animal Conservation in Captivity	3
	or	
NRE 214	Environmental Issues and Ethics	(3)
ZOO 207	Animal Behavior	3
ZOO 212	Elephant Management	3
Any AAS approved elective		<u>1-6</u>

#### Total Credit Hours

**75**

## OTHER PROGRAMS AND COURSES OF STUDY

### Para-Professional Education

#### Associate of Arts or Science Recommended

#### Track/Associate of General Studies

#### Recommended Track

Recommended basic skills standards are

- ENG 090
- MAT 090
- REA 090

Para-professional educators may complete an Associate of Arts, Associate of Science, or Associate of General Studies degree program; or pass a school district designated test. Para-Professional educators seeking degrees at PCC may submit transcripts of completed COTOP Academy course clusters to receive credit for corresponding community college courses. For additional information, please call Wayne Artis at 502-3002 or Glenda Carne at 502-3237.

### Pre-Engineering

#### Associate of Science Transfer Track

Recommended basic skills standards are

- ENG 090
- MAT 121
- REA 090

The transfer 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 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. For additional information, please call 502-3600.

### Secondary Education Teacher Preparation

#### Associate of Arts or Science Recommended

#### Track

Secondary Education Teacher Preparation allows students to complete a transferable associate of arts or science degree preparing them for transfer to a four-year college or university in Colorado where they can complete their Bachelor's degree and teaching credential in two additional years. Students identify a major and transfer institution prior to enrolling for courses and must meet with their faculty advisor before registering for classes to insure transferability of courses to their chosen institution/major. Areas of Certification in Colorado are Art, Drama, English Language Arts, Foreign Language, Health, Mathematics, Music, Physical Education, Science, Social Studies, and Speech. For additional information, please call Wayne Artis at 502-3002 or Glenda Carne at 502-3237.

# COURSE DESCRIPTIONS

Course Descriptions .....	116
Course Numbering System .....	116
Developmental Courses .....	116
Independent Study .....	116
Off–Campus Courses.....	116
Selected Topics .....	116
State–Guaranteed Curriculum.....	116
Work Experience Courses .....	116

## 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 030 through ENG 090 and MAT 030 through MAT 090 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 099. These are courses that teach basic skills often required to complete other college work. Students may be referred to these courses if their placement test scores do not meet college minimum standards. Though developmental courses may be required to enter a program or enroll in other courses, they do not count toward a degree or certificate.

## Independent Study

Independent study classes allow students to develop specialized course goals working independently with an instructor. In this type of class, students meet in person with an instructor and agree to an appropriate course of study to conduct an independent investigation of a problem. One credit hour is awarded for each two hours of contracted special study per week per semester. Enrollment requires approval of the appropriate division director and the chief instructional officer.

## Off Campus Courses

Courses that originate at PPCC campuses and include travel to off-campus locations are considered by the institution to be resident courses.

## Selected Topics

These courses are available in all disciplines under the 175, 177, 176, 275, 276, 277 series. Developmental courses are 075, 076. These courses meet temporary or special requirements for offerings not in the curriculum and explore the viability of adding the proposed course to the curriculum.

## State–Guaranteed Curriculum

The State–Guaranteed 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 the 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.

## 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.



# Accounting

## **ACC 101 Fundamentals of Accounting**

3 Credit Hours • 45 Contact Hours (Lecture)

Presents the basic elements and concepts of accounting, with emphasis on the procedures used for maintaining journals, ledgers, and other related records, and for the completion of end-of-period reports for small service and merchandising businesses.

## **ACC 115 Payroll Accounting**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* Minimum Reading assessment score (ACCUPLACER 60 or COMPASS 50) and ACC 101 or 121 or current enrollment or faculty consent

*Corequisite:* ACC 101 or ACC 121

Studies federal and state employment laws and their effects on personnel and payroll records. The course is non-technical and is intended to give students a practical working knowledge of the current payroll laws and actual experience in applying regulations. Students are exposed to computerized payroll procedures.

## **ACC 121 Accounting Principles I**

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite:* ENG 090, MAT 060, REA 090

Introduces the study of accounting principles for understanding of the theory and logic that underlie procedures and practices. Major topics include the accounting cycle for service and merchandising companies, special journals and subsidiary ledgers, internal control principles and practices, notes and interest, inventory systems and costing, plant assets and intangible asset accounting, and depreciation methods and practices.

## **ACC 122 Accounting Principles II**

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite:* ACC 121 or equivalent

Continues the study of accounting principles as they apply to partnerships and corporations. Major topics include stocks and bonds, investments, cash flow statements, financial analysis, budgeting, and cost and managerial accounting.

## **ACC 125 Computerized Accounting**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ACC 101 or 121

Introduces the capabilities of computer applications in accounting. Includes solving accounting problems of a financial nature and hardware and software controls.

## **ACC 131 Income Tax**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ACC 121 is strongly recommended

This course is the study of basic concepts of federal income taxation, including gross income, deductions, accounting periods and methods, and property transactions, with emphasis on taxation of individuals and sole proprietorships.

## **ACC 135 Spreadsheet Applications for Accounting**

3 Credit Hours • 45 Contact Hours (Lecture)

This course introduces spreadsheets as an accounting tool. Using an accounting perspective, the student applies fundamental spreadsheet concepts. The spreadsheet is used as a problem solving and decision making tool.

## **ACC 211 Intermediate Accounting I**

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite:* ACC 122 and ACC 135 or CIS 155

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

## **ACC 212 Intermediate Accounting II**

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite:* ACC 211

Focuses on the theoretical and practical aspects of accounting for long-term liabilities, stockholders' equity, investments, pensions, and leases. Includes income tax allocation, financial statement analysis, cash flow statements, and accounting methods changes.

## **ACC 215 Accounting Information Systems & 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 systems design, accounting software selection, and the acquisition and implementation of systems are studied. Techniques and systems for electronic control systems, electronic data interchange, electronic funds transfer, and web commerce are explored.

## **ACC 216 Governmental & Not-for-Profit Accounting**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ACC 122

Addresses concepts of budgetary control as a matter of law and public administration theory. Accounting principles and procedures necessary to implement budgetary controls for governmental units and other not-for-profit institutions and organizations are presented.

## **ACC 226 Cost Accounting**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ACC 122 or equivalent with minimum grade of C and ACC 135 or CIS 155

Studies cost accumulation methods and reports. Focuses on the concepts and procedures of job order, process, standard, and direct cost systems, budgeting, planning, and control of costs.

## **ACC 227 Cost Accounting II**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ACC 226

Continues ACC 226 and focuses on the decision making aspects of managerial accounting using electronic spreadsheet applications for assigned problems. Topics include product pricing strategy, capital budgeting, statement of cash flow, and application of linear programming.

## **ACC 287 Cooperative Education**

3 Credit Hours • 135 Contact Hours (Work Experience)

*Prerequisite:* faculty consent

*For Accounting majors only.*

Provides an opportunity to gain practical experience in applying occupational skills and/or to develop specific skills in a practical work setting. The instructor works with the student to select an appropriate work site, establish learning objectives, and coordinate learning activities with the employer or work site supervisor.

## Advancing Academic Achievement

### AAA 050 Semester Survival

2 Credit Hours • 30 Contact Hours (Lecture)

Emphasizes basic study skills in order to strengthen students' chances of completing the current semester successfully.

### AAA 090 Academic Achievement Strategies

3 Credit Hours • 45 Contact Hours (Lecture)

Develops personalized approaches to learn and succeed for easier transition into college. Topics include goal-setting, time management, textbook reading strategies, note-taking, test-taking, listening techniques, concentration and memory devices, and critical thinking for student success.

### AAA 101 The Student Experience

1 Credit Hour • 15 Contact Hours (Lecture)

Introduces students to college culture and prepares them for the challenges they will face in higher education. Through a series of interactive seminars, students discover learning in a multicultural environment and use college and community resources to attain education and career goals.

### AAA 109 Advanced Academic Achievement

3 Credit Hours • 45 Contact Hours (Lecture)

Examines theories and practices associated with successful learning to enhance college success. Areas of study include education and career planning, effective communication, personal management, critical and creative thinking, development of community and awareness of diversity, leadership, and techniques for successful academic performance. Recommended for new and returning students.

## Adventure Guide

### ADG 100 Outdoor Leadership

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

Explores the role of leadership as it applies to guiding in the adventure travel industry. Topics discussed include philosophic approaches, qualification profile, roles and responsibilities, group dynamics, interpersonal communication, professionalism, and various leadership styles.

### ADG 105 Wilderness Skills

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

Covers wilderness theory, wilderness food preparation, map & compass, GPS, and back country wilderness skills. Wilderness emergency protocol will be addressed. Students will have the opportunity to practice and demonstrate Leave No Trace (LNT) principles in a hands-on setting. Upon completion, LNT, inc. will officially certify students as an LNT Trainer.

### ADG 106 Desert Field Studies

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

Focuses on 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 are covered. Students participate in a camping field experience at a desert location.

### ADG 107 Mountain Field Studies

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

Focuses on 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 are covered. Students participate in a camping field experience at a mountain location.

### ADG 115 Avalanche Science

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

Covers the details of avalanche formation and their hazards. Students learn what causes instability in the snow pack and what triggers an avalanche. 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 back country ski and mountain guide.

### ADG 125 Leave No Trace Certification Course

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

This overnighter (two days and one night) is a certification course in the low-impact guidelines of Leave No Trace (LNT). Participants have the opportunity to practice and demonstrate the LNT principles in a hands-on setting. It is a must for guides, outfitters, outdoor educators, scout/youth group leaders, or anyone who cares about minimizing impact on the Colorado back country. 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. This class is a great outdoor resume enhancer.

### ADG 220 Programming for Outdoor Education

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

Focuses 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 are examined. Design and development of publication materials and resources are examined.

### ADG 280 Adventure Guide Internship

5 Credit Hours • 225 Contact Hours (Work Experience)

*Prerequisite:* ADG 100, ADG 220, ADG 125, EMS 115 or faculty consent

Students gain practical experience as interns for public or private adventure outfitters or programs. Includes 230 hours of related field experience in resource technology and work experience in a business or industry. Individual goals, objectives, and bi-weekly progress reports are required.

## Agriculture Crops & Soils

### AGY 240 Introductory Soil Science

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Focuses on formation, physical properties, chemical properties, and management of soils emphasizing conditions that affect plant growth.

## American Sign Language

### ASL 121 American Sign Language I

5 Credit Hours • 75 Contact Hours (Lecture)

Exposes the student to American Sign Language. Readiness activities are conducted focusing on visual/receptive skills and basic communication. Utilizes the direct experience method. Students must complete this course with a grade of C or higher or pass the ASL proficiency test with a score of at least 80% or better prior to registering for ASL 122 if planning to enroll in the Interpreter Preparation Program.

**ASL 122 American Sign Language II**

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite: Successful completion of ASL 121 or passing the ASL 121 proficiency exam or faculty consent*

Develops a basic syntactic knowledge of American Sign Language (ASL), basic vocabulary, and basic conversational skills. Incorporates vital aspects of deaf culture and community. The direct experience method is used to enhance the learning process. Students must complete this course with a grade of B or higher or pass the ASL 121 proficiency test at 80% or better prior to acceptance into the Interpreting and Transliterating Preparation program.

**ASL 123 American Sign Language III**

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite: ASL 122 passing with a grade of B or better or passing the ASL 122 proficiency exam or faculty consent*

Provides the student an opportunity to develop a stronger grasp of American Sign Language (ASL), as well as the cultural features of the language. ASL vocabulary is also increased. The direct experience method is used to further enhance the learning process. This course is a continuation of ASL 122 with more emphasis on expressive skills in signing.

**ASL 125 Fingerspelling**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ASL 122*

Provides the student an opportunity to develop expressive and receptive fingerspelling through various class activities.

**ASL 135 Conversational ASL**

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite: ASL 123 with a grade of C or better*

Provides the student an extended opportunity to develop a strong grasp of American Sign Language (ASL) as well as the cultural features of the language. It helps the student maintain sign language skill. This course is designed for students who have not met the minimum requirements to continue with ASL 221.

**ASL 215 ASL Literature**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ASL 221 with a grade of B or better*

Provides the student with an opportunity to recognize the impact of Deaf Culture on emerging ASL Literature. Covers non-fiction, fiction, poetry, and drama depicted in readings and videotapes related to everyday lives of Deaf people. Develops insight and appreciation of Deaf literature and its implications for Deaf education.

**ASL 221 American Sign Language IV**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: passing ASL 123 with a grade of B or better or faculty consent*

Continues from ASL 123 to provide further study of American Sign Language (ASL) and its grammar, syntax, and cultural features. Helps students develop competency and fluency in the language. Variations in ASL are addressed.

**ASL 222 American Sign Language V**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ASL 221 with a grade of B or better or faculty consent*

Continues ASL 221 with focus on assimilating previously acquired skills and knowledge and increases proficiency in understanding and using American Sign Language (ASL). Addresses debates in ASL.

## Anthropology

**ANT 101 Cultural Anthropology: SS3**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 090, REA 090*

Studies human cultural patterns and learned behavior. Includes linguistics, social and political organization, religion, culture and personality, culture change, and applied anthropology.

**ANT 107 Introduction to Archaeology: SS3**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 090, REA 090*

Introduces the science of recovering the human prehistoric and historic past through excavation, analysis, and interpretation of material remains. Includes a survey of the archaeology of different areas of the Old and New Worlds. Also includes the works of selected archaeologists and discussions of major archaeological theories.

**ANT 111 Physical Anthropology: SS3**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 090, REA 090*

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 090*

Introduces the cultural resources management requirements of the federal government. Explores the history, purposes, and goals of historic preservation through an examination of cultural, archaeological, and historical resources of the American Southwest.

**ANT 215 Indians of North America**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 090, REA 090*

Studies the Indians of North America from the origins of native peoples in the New World, through the development of geographic culture areas, to European contact and subsequent contemporary Native American issues.

**ANT 218 Archaeology of the Bible**

3 Credit Hours • 45 Contact Hours (Lecture)

Examining the early civilizations and major cities described in the Bible, this course is designed to use the methods and critical examination of archaeology. Students will explore the cultural history of the Near East from the Neolithic period to the end of the Iron Age. Students will focus on the Old Testament starting with the domestication of plants and animals in the Neolithic, followed by the development of villages, and then by cities in Israel, Babylon and Egypt.

**ANT 221 Exploring Other Cultures I**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 090, REA 090*

Provides an anthropological understanding of a selected culture. Areas of study include the culture's language, processes of enculturation, subsistence patterns and economics, kinship and descent, political organization, religion, art, history, and its reactions to the forces of globalization.

**ANT 222 Exploring Other Cultures II**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ANT 221, ENG 090, REA 090

Provides an anthropological understanding of another selected culture (continuation of ANT 221) with a more in-depth treatment. Areas of study include the culture's language, processes of enculturation, subsistence patterns and economics, kinship and descent, political organization, religion, art, history, and its reactions to the forces of globalization.

**ANT 225 Anthropology of Religion**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ENG 090, REA 090

Explores the culturally universal phenomenon of religion. Cross-cultural varieties of beliefs in the supernatural and the religious rituals people employ to interpret and control their worlds are examined.

**ANT 263 Anthropology of Folklore**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisites:* ENG 090, REA 090

NOTE: this course may be taken without prior introductory courses in anthropology

This course is a cross-cultural examination of oral traditions and verbal arts and how they reflect and preserve cultural values and worldviews. Various narratives (myths, legends, and tales), dramas, poetry, and other structured sayings are considered.

**ANT 280 AB Southwest Field Exploration**

2 Credit Hours • 60 Contact Hours (Lab)

*Prerequisite:* ENG 090, REA 090

Introduces the social, religious, economic, and cultural development of the Anasazi. Major ruins, excavation sites, and laboratory facilities in the Four Corners region are explored.

## Arabic

**ARA 111 Arabic Language I**

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite:* ENG 090, REA 090

Begins a sequence dealing with the development of functional proficiency in listening, speaking, reading and writing the Arabic language.

**ARA 112 Arabic Language II**

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite:* ARA 111 (Grade of C or better) or faculty consent

Continues Arabic Language I in the development of functional proficiency in listening, speaking, reading and writing the Arabic language. Note: The order of the topics and the methodology will vary according to individual texts and instructors.

## Architecture

**ARC 101 Introduction to Architectural Drawing**

5 Credit Hours • 90 Contact Hours (45 Lecture, 45 Lecture/Lab Combination)

*Prerequisite:* ARC 104 can be taken concurrently*Corequisite:* ARC 104 if not taken previously

Introduces representations in architectural drafting: projections, sectioning, pictorial drawings, and architectural representations.

**ARC 102 Residential Architecture**

5 Credit Hours • 90 Contact Hours (45 Lecture, 45 Lecture/Lab Combination)

*Prerequisite:* ARC 101 or permission of instructor

Covers residential planning, wood frame construction, elements of working drawings, free hand sketching, building code requirements, detailing, and structural framing.

**ARC 104 Architectural Drawing Theory**

4 Credit Hours • 60 Contact Hours (Lecture)

Covers print reading, construction assemblies, terminology, isometric drawings, orthographic projections, and oblique sketching.

**ARC 105 Architectural Building Materials I**

2 Credit Hours • 30 Contact Hours (Lecture)

Covers construction principles, methods, and materials of soils, foundations, concrete, masonry materials and walls, thermal insulation and moisture protection, and passive solar energy to include properties, applications, manufacture, quality, advantages, and limitations.

**ARC 111 Architectural Technology Theory**

2 Credit Hours • 30 Contact Hours (Lecture)

Presents architectural design theory, ethics, and Egyptian, Greek, Roman, Early Christian, Byzantine, Romanesque, and Gothic architecture.

**ARC 114 Building Service Systems I**

2 Credit Hours • 30 Contact Hours (Lecture)

Provides an overview of electrical and plumbing service systems used in buildings to include residential electrical plan layout and related codes.

**ARC 117 Presentation Drawings & Models**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ARC 101

Covers freehand sketching; pencil rendering techniques; perspective; and principles of light, shadow, and shade. After completion of the previous material, each student will then choose an area of interest, either presentation rendering or model building for additional projects.

**ARC 151 Architectural Drafting I**

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

*Prerequisite:* ARC 104*Corequisite:* ARC 104 if not taken previously

Presents the same content as first portion of ARC 101, Architectural drawings include architectural lettering, use of the scale, orthographic projection, pictorial drawings, and building details.

**ARC 152 Architectural Drafting II**

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

*Prerequisite:* ARC 151

Covers the remaining portion of ARC 101; students complete assignments including floor plans, wall and building sections, details, and perspectives.

**ARC 153 Architectural Drafting III**

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

*Prerequisite:* ARC 101 or ARC 151, 152 and ARC 104

Covers the same content as the first portion of ARC 102: residential planning, wood frame construction, and elements of working drawings.

**ARC 154 Architectural Drafting IV**

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

*Prerequisite:* ARC 101, ARC 104

Covers the same content as the remaining portion of ARC 102. A continuation of working drawings, free-hand sketching, building code requirements, and detailing.



**ARC 201 Architectural Drawing III**

5 Credit Hours • 90 Contact Hours (45 Lecture, 45 Lecture/Lab Combination)

Covers advanced working drawings for an architect-designed building composed of a heavy timber or glu-lam frame. This course will include a process for atypical detailing, connections, framing, related building materials and components, and will include problems and solutions unique to this frame type.

**ARC 202 Architectural Drawing IV**

5 Credit Hours • 90 Contact Hours (45 Lecture, 45 Lecture/Lab Combination)

Advanced working drawings for a variety of non-residential construction: steel and concrete frames with masonry walls. Includes related materials and components and custom detailing, connections, and framing. Also covered are advanced drawing systems.

**ARC 208 Architectural Building Materials II**

3 Credit Hours • 45 Contact Hours (Lecture)

Covers basic stress analysis, non-residential steel and concrete frame construction, roofing, plaster and stucco, gypsum board, light gauge metal framing, non-residential door and window assemblies, hardware, and wood and plywood.

**ARC 211 Building Service Systems II**

2 Credit Hours • 30 Contact Hours (Lecture)

Continues ARC 114. Additional topics include heating, cooling, ventilation, fire protection, and conveying systems.

**ARC 218 Surveying**

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

*Corequisite: MAT 108 or MAT 122*

Includes the fundamentals of plane surveying and the basic surveying instruments. It emphasizes construction-related aspects of surveying and the development of skills in using surveying field information. Surveying projects are generally covered in coordinated and fieldwork segments each four-hour class period.

**ARC 222 Estimating & Print Reading**

5 Credit Hours • 75 Contact Hours (Lecture)

Covers 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 of this course.

**ARC 223 Introduction to Building Codes**

3 Credit Hours • 45 Contact Hours (Lecture)

Covers the legal requirements imposed on construction by building codes specifically required by the Uniform Building Code and local modifications to it.

**ARC 224 Construction Contracts & Management**

3 Credit Hours • 45 Contact Hours (Lecture)

Covers construction scheduling methods, specifications, bonds and insurance, general conditions of the construction contract, construction contracts, and labor-management issues.

**ARC 226 Construction Scheduling**

3 Credit Hours • 45 Contact Hours (Lecture)

Discusses various methods of project scheduling. Emphasis will be placed on critical path method techniques and strategies.

**ARC 227 Architectural Structures**

5 Credit Hours • 75 Contact Hours (Lecture)

*Corequisite: MAT 108 or equivalent*

Introduces the concepts of moments of inertia, centroids, shear force and bending moment diagrams, beam and column design, combined stresses, walls, footings, connections, structural systems of wood, reinforced concrete, and steel.

**ARC 235 Contemporary Architectural Theory II**

2 Credit Hours • 30 Contact Hours (Lecture)

Theoretical aspects of architectural design and site planning; and the significance of Medieval, Renaissance, Mannerist, Baroque, Revivalist, Pre-modern, Modern, Post-Modern, and Contemporary architectural history periods.

## Art

**ART 107 Art Education Methods**

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on a multimedia 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: AH1**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 090, REA 090*

Introduces the cultural significance of the visual arts, including media, processes, techniques, traditions, and terminology.

**ART 111 Art History I: AH1**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 121, REA 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: AH1**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 121, REA 090*

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

**ART 115 East Asian Painting I**

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

Emphasizes varied approaches to the basic elements of line, brush strokes, perspective, and media in oriental painting. Explores the expressed colors of nature in Asia through shades of black ink monochrome with the use of oriental brushes, ink sticks, ink stone, rice paper, and water color.

**ART 116 East Asian Painting II**

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

Emphasizes varied approaches to the basic elements of line, brush strokes, perspective, and media in oriental painting. Explores the expressed colors of nature in East Asia through shades of black ink monochrome with the use of oriental brushes, ink sticks, ink stone, rice paper, and water color. Intermediate work is expected and finished pieces are prepared for critique.

**ART 117 Pastel Painting**

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

Approaches the pastel medium in an inventive manner. Color theory will be taught in practice and application.



**ART 118 Art Sampler**

1 Credit Hour • 22.5 Contact Hours (7.5 Lecture, 15 Lab)

Introduces students to basic skills through various art media. This course may be repeated under a different subtitle for a maximum of six Credit Hours. Encompasses a multitude of art experiences that expose students to an art form that they may wish to explore further.

**ART 119 Lettering**

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

Introduces 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)

Investigates the various approaches and media that students need to develop drawing skills and visual perception.

**ART 122 Drawing II**

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

*Prerequisite: ART 121*

Explores expressive drawing techniques with an emphasis on formal composition, color media, and content or thematic development.

**ART 123 Watercolor I**

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

*Prerequisite: ART 121, ART 131, its equivalent, or faculty consent*

Provides on introduction to the basic techniques and unique aspects of materials involved in the use of either transparent or opaque water media or both. Color theory is included.

**ART 124 Watercolor II**

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

*Prerequisite: ART 123 or its equivalent*

Continues the study of watercolor techniques, emphasizing original compositions and experimentation with materials. Color theory is included.

**ART 125 Landscape Drawing I**

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

Emphasizes nature, particularly landscape. Drawing outside or in view of landscape using graphite, ink, prismacolor, pastel, and washes. Students concentrate on various approaches, viewpoints, and styles and acquire expertise and interpretation in a variety of media.

**ART 126 Landscape Drawing II**

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

*Prerequisite: ART 125*

Focuses on drawing outdoors or in view of landscape (both rural and inner city) using graphite, ink, washes, pencils, pastels, and watercolor. Students concentrate on various approaches, viewpoints, and styles and acquire expertise in a variety of media. Each student presents finished pieces matted for critique.

**ART 131 2-D Design**

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

Examines the basic elements of design, visual perception, and artistic form and composition as they relate to two-dimensional media.

**ART 132 3-D Design**

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

Focuses on learning to apply the elements and principles of design to three dimensional problems.

**ART 135 Fiber Design I**

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

Introduces basic fiber design. Explores basic studies and approaches to fiber design, ranging from the uses of dyes, prints, painting, and threads to an appreciation of the properties of various kinds of fiber and textiles.

**ART 136 Navajo Weaving Techniques I**

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

Introduces traditional Navajo weaving. Focuses on building a loom, carding raw wool, hand spinning, dye baths, and actual rug weaving. Explores Navajo history and culture as related to weaving.

**ART 137 Navajo Weaving Techniques II**

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

*Prerequisite: ART 136*

Continues the focus on traditional Navajo weaving. Emphasizes building a loom, carding raw wool, hand spinning, dye baths, and actual rug weaving. Explores Navajo history and culture as related to weaving.

**ART 138 Photography I**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 060 and MAT 060*

Introduces black and white photography as a fine art medium and develops skills necessary for basic camera and lab operations.

**ART 139 Photography II**

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

*Prerequisite: ART 138 or demonstrated competency*

This course is a further exploration in camera and lab operations with an emphasis on individual creativity. It includes the development of a comprehensive portfolio.

**ART 141 Jewelry & Metal Work I**

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

Introduces the construction of jewelry designs in metals and small casting techniques.

**ART 142 Jewelry & Metal Work II**

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

*Prerequisite: ART 141 or faculty consent*

Emphasizes conceptual design development using casting and specialized techniques.

**ART 143 Digital Photography I**

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

*Prerequisite: ART 138*

Introduces the basic concepts of digital imaging as applied to photography. Using applicable technology and hands on experience, modern developments are presented leading to the present applications of digital imaging which combine traditional photographic ideas with electronic media. Enables the student to learn how to operate image manipulation software using a variety of scanning equipment, software tools and output devices by executing new assignments and applying these technologies to their photographic process.

**ART 145 Enameling on Metal I**

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

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 accompany each project so that students experience and profit from instructor comment and peer comment.

**ART 146 Stained Glass I**

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

Develops a basic understanding and approach to stained glass. Students gain an understanding of and appreciation for the properties of glass and the nature of finished stained glass construction.

**ART 147 Stained Glass II**

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

*Prerequisite: ART 146*

A continuation of Stained Glass I, students advance to a clearer but still basic understanding and approach to stained glass. Students gain a greater understanding of and appreciation for the properties of glass and the nature of finished stained glass construction

**ART 150 Digital Art Foundations I**

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

Explores visual problem solving using digital tools for fine art. Students will learn to draw and paint in a variety of artistic modalities using color and grayscale. Two-dimensional to three-dimensional observation exercises in composition will be explored. Students will develop their skills in gesture and contour drawing, painterly expression and artistic elements while using the computer as an art tool. Use of systematic applications for development and presentation of ideas is practiced using vector and raster software. No computer experience is necessary.

**ART 151 Digital Art Foundations II**

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

*Prerequisite: ART 150*

Reviews and further explores the process of generating design utilizing a variety of digital tools. In this course, students will develop their proficiency with the digital tools and learn more advanced techniques in drawing and painting. Students will develop and evaluate their design-oriented projects using the elements and principles. Portfolio development, strong content, and a blending of a variety of computer art applications will be emphasized.

**ART 152 Mixed Media I: Digital Fine Art Techniques**

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

Introduces students to the design and creation of fine-art composites that involve the combinations of techniques, texture, drawing, painting, photography, and objects, and emphasizes the computer as an art tool. In addition to incorporating technology-based vocabulary as it relates to fine-art technique, vector and raster applications are explored for the creation of montage and collage. No computer experience is necessary.

**ART 153 Mixed Media II: Digital Fine Art Techniques**

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

*Prerequisite: ART 152*

Continues the design and creation of fine-art composites with the emphasis on digital tools and techniques. More advanced drawing and painting techniques are also emphasized, using digital creation techniques. Learners will develop and design artistic projects to demonstrate studio elements and principles. Portfolio development, strong content, and a blending of a variety of computer applications for art will be emphasized.

**ART 154 Sculpture I**

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

*Prerequisite: ART 131, ART 132 or equivalent*

Introduces the fundamentals of sculpture such as modeling, casting, carving, and the processes of assemblage.

**ART 155 Sculpture II**

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

*Prerequisite: ART 154 or equivalent*

Develops an understanding and focus on manipulation of three dimensional form, with greater concentration on individual creativity and style.

**ART 156 Figure Drawing I**

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

Introduces the basic techniques of drawing the human figure.

**ART 157 Figure Painting I**

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

Focuses on painting the human figure, and includes a brief survey of figure painting and instruction in the fundamental methods of composition and expressions.

**ART 161 Ceramics I**

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

Introduces traditional and contemporary ceramic forms and processes including handbuilding and throwing on the potter's wheel.

**ART 162 Ceramics II**

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

*Prerequisite: ART 161*

A continuation of ART 161, this course emphasizes skill, technique, and form.

**ART 163 Handbuilt Clay I**

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

Provides instruction in several methods of handbuilding and the 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*

Provides continued instruction in various methods of handbuilding.

**ART 207 Art History – 1900 to Present: AH1**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 090, REA 090*

Provides students with the knowledge base to understand the visual arts as related to Modern and Contemporary visual art. Surveys world art of the twentieth century, including Modernism to Post-Modernism.

**ART 208 Culture Studies**

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

Studies the arts and history of a particular culture at the location of that culture. Students view the arts and architecture of the culture in the historical and spatial contexts for which they were designed and in galleries and museums.

**ART 210 Landscape Painting**

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

*Prerequisite: ART 121 or ART 131*

Focuses on specific landscape concerns in the painting media of your choice.

**ART 211 Painting I**

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

*Prerequisite: ART 121 or ART 131*

Explores basic techniques, materials, and concepts used in opaque painting processes in oil or acrylic painting to depict form and space on a two-dimensional surface.

**ART 212 Painting II**

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

*Prerequisite: ART 211 or faculty consent*

This course further explores techniques, materials, and concepts used in opaque painting processes in oil or acrylic painting, with emphasis on composition and content development.

**ART 213 Painting III**

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

*Prerequisite: ART 212 or faculty consent*

Provides continued exploration of techniques, materials, and concepts used in opaque painting processes in oil or acrylic painting, with emphasis on composition and content development.

**ART 214 Painting IV**

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

*Prerequisite: ART 213 or faculty consent*

Explores advanced techniques, materials, and concepts used in opaque painting processes, with emphasis on the development of themes and a cohesive body of work.

**ART 221 Drawing III**

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

*Prerequisite: ART 122 or faculty consent*

Offers a continued study of expressive drawing techniques and development of individual style, with an emphasis on composition and technique variation.

**ART 222 Drawing IV**

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

*Prerequisite: ART 221 or its equivalent*

Explores advanced drawing problems with an emphasis on conceptual development and portfolio and/or exhibition quality presentation.

**ART 223 Watercolor III**

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

*Prerequisite: ART 124 or its equivalent*

Concentrates on the advanced study of subject development, form, color, and theme in watercolor.

**ART 224 Watercolor IV**

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

*Prerequisite: ART 223, its equivalent, or faculty consent*

Concentrates on the advanced study of techniques, individual style or expression, and consistency of compositional problem solving in watercolor.

**ART 225 Printmaking I**

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

Introduces the basic techniques and skills of printmaking as a fine art media. Instruction includes an understanding of visual concepts as they relate to prints. May include introduction to relief, intaglio, lithography, and screen printing techniques.

**ART 226 Advanced Printmaking I**

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

*Prerequisite: ART 225*

Introduces more advanced techniques and skills of printmaking as a fine art media. Instruction includes an understanding of visual concepts as they relate to prints. May include introduction to relief, intaglio, lithography, and screen printing techniques.

**ART 227 Portraiture**

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

Introduces 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) are emphasized.

**ART 235 Fiber Design II**

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

*Prerequisite: ART 135*

Continues instruction in fiber design (ART 135, Fiber Design I).

**ART 236 Navajo Weaving III**

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

*Prerequisite: ART 137*

Provides continued 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 237 Navajo Weaving Techniques IV**

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

*Prerequisite: ART 236*

Continues Navajo Weaving with emphasis on creating a Navajo Rug based on an original design.

**ART 238 Photography III**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ART 138 and ART 139 or demonstrated competency*

Explores photography technique with emphasis on history, theory, and assimilation of ideas into the students' creative work. Includes the development of a comprehensive portfolio.

**ART 241 Jewelry & Metal Work III**

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

*Prerequisite: ART 142*

Focuses upon advanced work and emphasizes experimentation with materials and techniques, individual designs, and superior craftsmanship.

**ART 242 Jewelry & Metal Work IV**

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

*Prerequisite: ART 241 or faculty consent*

Provides continued study of the properties of metal and stone in creating decorative work. Students employ advanced design and techniques to explore original, personal expression. A variety of materials and approaches are used in discovering new and independently creative finished pieces.

**ART 243 Digital Photography II**

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

*Prerequisite: ART 143*

Expands upon the beginning digital photography class. Focuses on digital photography in terms of design and communication factors including color, visual design, lighting, graphics, and aesthetics.

**ART 244 Digital Photo Studio**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ART 138*

Introduces digital photography as a fine art medium, and develops skills necessary for basic operation of a digital camera and production of digital technology.

**ART 245 Enameling on Metal II**

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

*Prerequisite:* ART 145

Provides continued study of Enameling on Metal I with emphasis on individual designs, advanced techniques, and the effect of technology on the craft.

**ART 246 Stained Glass III**

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

*Prerequisite:* ART 147

Provides continued instruction in which students advance to a clearer and more advanced understanding and approach to stained glass. Students gain a greater understanding of and appreciation for the properties of glass and the nature of finished stained glass construction. Emphasizes original, personal expression.

**ART 247 Stained Glass IV**

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

*Prerequisite:* ART 246

Continues instruction in stained glass with students advancing to a clearer understanding and approach. Students gain greater appreciation for the properties of glass and the nature of finished stained glass construction. Focuses on original, personal expression. Student independence is emphasized with regard to use of material and tools and a wide variety of glass.

**ART 248 Digital Darkroom**

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

*Prerequisite:* ART 138 or ART 244

Teaches computer aided photography and darkroom techniques. The emphasis of this course is image-editing software, which can be used to color correct, retouch and composite photographic images. Other topics include image acquisition, storage, file management, special effects, hard copy and web based image output.

**ART 251 Portrait Photography**

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

*Prerequisite:* ART 138 or ART 244

Teaches the technical and aesthetic aspects of studio and location portrait photography. This course explores the personal style of portraiture, history of the field and portraiture as a visual language and creative expression. This topic also includes lighting, composition, posing, and equipment selection.

**ART 252 Landscape Photography Workshop**

2 Credit Hours • 45 Contact Hours (15 Lecture, 30 Lab)

*Prerequisite:* ART 138

Focuses on traditional and contemporary approaches to landscape photography. Examines technical and aesthetic aspects of landscape photography through group discussions, a field study, lectures, and print and slide critiques.

**ART 254 Sculpting the Figure**

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

Focuses on sculpting the human figure using modeling techniques in clay.

**ART 256 Advanced Figure Drawing**

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

*Prerequisite:* ART 156

Provides continuing study of the various methods of drawing the human figure, with emphasis on the description of form and individual style.

**ART 257 Advanced Figure Painting**

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

*Prerequisite:* ART 157

Offers continued study of painting the human figure with advanced problem solving in composition and experimentation with materials and techniques.

**ART 258 Computer Animation**

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

Focuses on concepts, techniques, and aesthetics of digital animation. Explores 2-dimensional and 3-dimensional design, object creation, modeling, and animation.

**ART 259 Raku**

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

*Prerequisite:* ART 161 or ART 163

Studies the Japanese art of Raku pottery. Students may hand build or make wheel thrown pots and will be involved in the unique firing process.

**ART 261 Ceramics III**

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

*Prerequisite:* ART 162

Encourages students to develop an individual style of wheel thrown and handbuilt 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

Continues advanced work with emphasis on various clay bodies, unique glazes and engobes, combining different textures and shapes, and development of personal forms.

**ART 263 Handbuilt Clay III**

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

*Prerequisite:* ART 164

Introduces students to the principles and practices involved in creating and operating arts organizations in the profit and not-for-profit art world.

**ART 264 Marketing for the Visual Arts**

3 Credit Hours • 45 Contact Hours (Lecture)

Provides students with the framework, tools, and professional materials necessary for the practicing visual artist. Guidelines for writing proposals, artist's statements, and resumes are discussed and practiced. Explores theoretical and practical considerations related to portfolio presentation and exhibiting artwork through hands-on activities, readings, and discussion.

**ART 265 The Business of Visual Art**

3 Credit Hours • 45 Contact Hours (Lecture)

Covers advanced problems with importance placed on large scale pieces that promote creativity with techniques and combinations of different textures.

**ART 269 Ceramic Sculpture**

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

Explores a variety of processes to create three-dimensional images in clay. Focuses on hand-built sculptures without using a potter's wheel and relying on very basic tools. Encourages creative experimentation and engaging in the process.



**ART 277 Studio Art**

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

Designed for advanced students interested in further exploring an art discipline to develop a more comprehensive portfolio.

**ART 280 Internship**

1-6 Credit Hours • 45-270 Contact Hours (Internship)

*Prerequisite: faculty consent*

Provides the opportunity for students to gain supervised occupational experience in any of the disciplines involving the visual arts, including, but not limited to, gallery or museum administration and graphic design. Instruction is coordinated by the on-site supervisor and instructor and is totally based on the student's occupational experience plan.

**Astronomy****AST 101 Astronomy I: SC1**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

*Prerequisite: MAT 090*

Focuses on the history of astronomy, the tools of the astronomer, and the contents of the solar system including the planets, moons, asteroids, comets, and meteoroids. Incorporates laboratory experience.

**AST 102 Astronomy II: SC1**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

*Prerequisite: MAT 090*

Emphasizes the structure and life cycle of the stars, the sun, galaxies, and the universe as a whole, including cosmology and relativity. Incorporates laboratory experience.

**Automotive Collision Technology****ACT 101 Introduction to Automotive Collision Technology**

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Designed as an orientation to the automotive collision repair industry. Students receive an overview of job possibilities as well as learning various types of automobile construction. Names, uses, and maintenance procedures for a variety of tools and equipment are covered. Focuses on general collision repair and refinishing shop safety procedures with an emphasis on personal and environmental safety issues. Students also learn the proper handling and disposal of hazardous materials.

**ACT 111 Metal Welding & Cutting I**

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

*Prerequisite: ACT 101 or faculty consent**Corequisite: ACT 211*

Covers sheet metal oxygen-acetylene welding and MIG welding techniques including safety, materials, equipment, and setups. Personal and vehicle protective measures prior to welding procedures are presented.

**ACT 121 Non-Structural Repair Preparation**

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

*Prerequisite: ACT 101 or faculty consent*

Covers the basic characteristics of preparation for automotive repair. Students familiarize themselves with damage analysis, extent of damage, and the sequence of repair. Focuses on removal of vehicle components and protection of panels along with storage and labeling of parts. Safety procedures and equipment use are included.

**ACT 122 Panel Repair & Replacements**

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

*Prerequisite: ACT 111 and ACT 123 or faculty consent*

Covers straightening techniques including tension pulls/stress relief, metal finishing, metal shrinking, and use of fillers. Emphasizes the identification, handling, and replacement of parts such as adjustment and alignment of bolt-on parts, fixed parts, and accessories. Training covers the use of adhesives, sound deadeners, and welding methods performed during repairs.

**ACT 123 Metal Finishing & Body Filling**

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

*Prerequisite: ACT 101 or faculty consent*

Covers metal finishing, metal shrinking, and the use of cosmetic fillers. Emphasis is placed on the use of proper tools required to perform these tasks, including use, selection, and safety procedures for tools and equipment selected.

**ACT 131 Structural Damage Diagnosis**

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

*Prerequisite: ACT 122 or faculty consent**Corequisite: ACT 132*

Focuses on methods of frame measurement using dimension charts and service manuals. Includes the use of self-centering gauges and mechanical and electronic measuring. Appropriate terms and definitions of vehicle structures and vehicle diagnosis are covered, including identification and analysis of damage. Includes the techniques for basic hook ups and safety procedures used in making corrective pulls.

**ACT 132 Structural Damage Repair**

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

*Prerequisite: ACT 122 or faculty consent**Corequisite: ACT 131*

Continues the study and application of frame measurement and repair. The student applies methods found in dimension charts and service manuals for vehicle diagnosis and straightening. Training includes the replacement of a structural panel with the identification of damaged suspension components replaced according to manufacturer's recommendations.

**ACT 142 Surface Preparation I**

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

*Prerequisite: ACT 101 or faculty consent**Corequisite: ACT 143*

Covers surface preparation for refinishing including cleaning, sanding, feather edging, chemical treatment of bare materials, and priming. The application of primers, including rationale and use is covered. In addition the student learns skills for proper removal and storage of exterior trim and protection of adjacent panels.

**ACT 143 Spray Equipment Operation**

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

*Prerequisite: ACT 101 or faculty consent**Corequisite: ACT 142*

Covers the inspection, cleaning, and determination of the condition of spray guns and related equipment. Students learn skills for adjusting spray guns by setting-up and testing spray gun operations.

**ACT 144 Refinishing I**

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

*Prerequisite: ACT 142 and ACT 143**Corequisite: ACT 244*

Provides the knowledge needed for application and use of automotive paint systems. Course includes locating color codes, mixing formulas, matching, and selections of materials. Proper paint gun use and adjustments are taught for the product being applied. In addition, the student practices correct masking and detailing techniques.



**ACT 151 Plastics & Adhesives I**

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

*Prerequisite:* ACT 121 and ACT 243*Corequisite:* ACT 251

Designed to teach the state-of-the-art repair for both rigid and flexible plastic components and choosing adhesives using the latest manufacturer's repair techniques.

**ACT 161 Automotive Graphics & Designs**

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

*Prerequisite:* ACT 160

This course provides instruction in the application of graphics and designs to an automotive finish. These designs include striping, flames, paint fades, and graphics, etc.

**ACT 164 Hobbyist's Paint & Body**

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Grading: S/U only

Provides an opportunity for current and former students enrolled in the Auto Collision Technology program to practice skills previously learned, using their own vehicles as projects. Any automotive hobbyist who is not a former student may also sign up for the course; however, previous knowledge of basic body working and painting procedures is strongly recommended.

**ACT 170 Automotive Collision Technology Lab Experiences I**

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

*Prerequisite:* ACT 142, ACT 143*Corequisite:* ACT 241

Designed to prepare the student to perform basic tasks for a specialized area in a controlled instructional lab.

**ACT 171 Automotive Collision Technology Lab Experiences II**

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

*Prerequisite:* ACT 131, ACT 132, ACT 232*Corequisite:* ACT 231

Course is a continuation of Lab experience. Designed to prepare the individual to perform basic tasks for a specialized area in a controlled instructional lab.

**ACT 172 Automotive Collision Technology Experiences Level III**

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

*Prerequisite:* Completion of all courses in ACT specialization area

Course is a continuation of Lab experience. Designed to prepare the individual to perform basic tasks for a specialized area in a controlled instructional lab.

**ACT 180 Automotive Collision Repair Level I Internship**

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* Completion of coursework in a specialized area

Designed to meet the needs of the student in a selected specialized area in a work-based environment. Individualized instruction at the job site is coordinated based on student's interest and instructor approval.

**ACT 181 Automotive Collision Repair Level II Internship**

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* Completion of all courses in ACT specialization area

Course is a continuation of Level I Internship. Student uses the knowledge and skills acquired throughout the ACT program in a job site placement.

**ACT 211 Metal Welding & Cutting II**

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

*Prerequisite:* ACT 101 or faculty consent*Corequisite:* ACT 111

Covers MIG welding procedures of seam weld, stitch welds, and destructive testing. Resistance spot welding, which includes two-sided spot weld, plasma cutting, safety, materials, and equipment and operating procedures, with emphasis on shop safety is also presented.

**ACT 220 Structural Repair II**

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* ACT 219 (may be taken concurrently) or faculty consent

Designed as a continuation of ACT 219. Students continue practice in structural damage analysis and measuring procedures on both unitized and body-over-frame type vehicles. Proper methods for straightening, as well as replacing structural, mechanical, and electronic components are covered.

**ACT 221 Moveable Glass & Hardware**

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

*Prerequisite:* ACT 101 or faculty consent*Corequisite:* ACT 232

Covers door glass, vent windows, and glass mechanisms (both electric and mechanical) with emphasis on removal and replacement. In addition, interior trim panels, seats, and headliners are removed and replaced. Student learns proper care and treatment of vehicle seat protectors plus the proper use of tools required to perform these tasks.

**ACT 231 Adv. Structural Damage Diagnosis & Repair**

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

*Prerequisite:* ACT 131 and ACT 132

Covers major automotive body repair in vehicles with major damage on conventional structures and unibody structures. Student learns the operation of equipment and techniques used to straighten and align damaged frames. Identification and analysis of frames, hot and cold stress relieving, servicing, and sectioning of structural frames are also included. Liability issues and the importance of making these corrections according to the manufacturer's recommendations and industry standards are emphasized.

**ACT 232 Fixed Glass Repair**

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

*Prerequisite:* ACT 101 or faculty consent*Corequisite:* ACT 221

Covers the removal and replacement of fixed glass using manufacturer's specifications, proper tools, and recommended materials. Application of skills are demonstrated and utilized for the removal and replacement of modular glass using manufacturer's specifications and procedures.

**ACT 241 Paint Defects**

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

*Prerequisite:* ACT 144

Covers paint defects. Emphasizes the causes of paint defects with methods to cure problems during and after refinishing procedures. Students learn to identify the proper surface preparations to apply prior to refinishing. Training includes using paint equipment and determining paint film thickness with proper temperatures for refinishing.

**ACT 242 Surface Preparation II**

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

*Prerequisite:* ACT 142 and ACT 143*Corequisite:* ACT 243

Emphasizes surface preparation for refinishing, including cleaning, sanding, feather edging, chemical treatment of bare metals, and priming. The application of primers, including why and where to use them is covered.

**ACT 243 Refinishing II**

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

*Prerequisite:* ACT 142 and ACT 143*Corequisite:* ACT 242

In this advanced course students learn the necessary skills used to tint and blend panels working with the latest finishes and paints. Special coatings and procedures are covered in this course.

**ACT 244 Final Detail**

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

*Prerequisite:* ACT 101*Corequisite:* ACT 144

Focuses on the detailing procedures in paint refinishing of vehicles. Methods and techniques are specialized to enhance painting skills. Transfers and tapes methods with decals, etc. are demonstrated.

**ACT 251 Plastics & Adhesives II**

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

*Prerequisite:* ACT 121 and ACT 243*Corequisite:* ACT 151

Emphasizes advanced plastic and adhesives. The current state-of-the-art repair for both rigid and flexible plastic components using the latest manufacturer's repair techniques is presented. Sheet Molded Compound procedures and the use of proper adhesives are covered.

## Automotive Service Technology

**ASE 102 Introduction to the Automotive Shop**

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

Prepares the incoming automotive student to work in the shop safely and gain familiarity with the shop and common equipment.

**ASE 110 Brakes I**

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

*Prerequisite:* ASE 102

Covers basic operation of automotive braking systems. Includes operation, diagnosis, and basic repair of disc brakes, drum brakes, and basic hydraulic systems.

**ASE 120 Basic Automotive Electricity**

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

*Prerequisite:* ASE 102

Introduces automotive electricity and includes basic electrical theory, circuit designs, and wiring methods. Focuses on multi-meter usage and wiring diagrams.

**ASE 123 Automotive Battery, Starting, & Charging Systems**

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

*Prerequisite:* ASE 120

Covers the operation, testing, and servicing of automotive battery, starting, and charging systems. Includes voltage and amperage testing of starter and generator, load testing and maintenance of a battery, and starter and generator overhaul.

**ASE 130 General Engine Diagnosis**

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

*Prerequisite:* ASE 123

Focuses on lecture and related laboratory experiences in the diagnosis and necessary corrective actions of automotive engine performance factors.

**ASE 132 Ignition System Diagnosis & Repair**

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

*Prerequisite:* ASE 130

Focuses on lecture and related laboratory experiences in the diagnosis, service, adjustments, and repair of various automotive ignition systems.

**ASE 134 Automotive Emissions**

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

*Prerequisite:* ASE 132

Focuses on lecture and laboratory experiences in the diagnosis and repair of automotive emission control systems.

**ASE 140 Suspension & Steering I**

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

*Prerequisite:* ASE 102

Focuses on lecture and related experiences in the diagnosis and service of suspensions and steering systems and their components.

**ASE 150 Automotive U-joint & Axle Shaft Service**

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

*Prerequisite:* ASE 102

Studies the operating principles and repair procedures relating to axle-shaft and universal joints.

**ASE 151 Automotive Manual Transmission/Transaxles & Clutches**

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

*Prerequisite:* ASE 150

Focuses on lecture and related laboratory experiences in the diagnosis and repair of automotive manual transmissions, transaxles and clutches, and related components.

**ASE 152 Differentials & 4WD/AWD Service**

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

*Prerequisite:* ASE 151

Focuses on lecture and related laboratory experiences in the diagnosis and repair of automotive differentials, four wheel, and all wheel drive units.

**ASE 160 Automotive Engine Removal & Installation**

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

*Prerequisite:* ASE 102

Focuses on lecture and laboratory experiences in the removal and installation procedures of the automotive engine from and into front wheel and rear wheel drive vehicles.

**ASE 161 Engine, Disassembly Diagnosis & Assembly**

5 Credit Hours • 105 Contact Hours (15 Lecture, 90 Lecture/Lab Combination)

*Prerequisite:* ASE 160

Focuses on lecture and laboratory experiences in the disassembly, diagnosis, and reassembly of the automotive engine. Topics include the diagnostic and repair procedures for the engine block and head assemblies.

**ASE 163 Automotive Component Removal & Replacement**

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

Practical methods of removal and installation of engines, transmissions, transfer cases, clutch assemblies, bolt, and thread repair.

**ASE 210 Brakes II**

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

*Prerequisite:* ASE 110

Covers the operation and theory of the modern automotive braking systems. Includes operation, diagnosis, service, and repair of the anti-lock braking systems, power assist units, and machine operations of today's automobile.

**ASE 220 Specialized Electronics Training**

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

*Prerequisite:* ASE 120

Provides a systematic approach to automotive electrical systems. Builds from the basic electrical principles and concepts through semiconductors and microprocessors. Features on-bench exercises. Students practice diagnostic procedures that have applications to present and future automotive electronics and electrical systems.

**ASE 221 Automotive Body Electrical**

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

*Prerequisite:* ASE 120

Provides a comprehensive study of the theory, operation, diagnosis, and repair of vehicle accessories.

**ASE 231 Automotive Computers**

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

*Prerequisite:* ASE 120, ASE 134, ASE 220

Focuses on lecture and laboratory experiences in the inspection and testing of typical computerized engine control systems.

**ASE 233 Fuel Injection & Exhaust Systems**

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

*Prerequisite:* ASE 120, ASE 134, ASE 231

Focuses on lecture and related laboratory experiences in the diagnosis and repair of electronic fuel injection systems and modern exhaust systems.

**ASE 235 Drivability Diagnosis**

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

*Prerequisite:* ASE 233

Emphasizes lecture and related laboratory experience in diagnostic techniques and the use of diagnostic scan tools, oscilloscopes, lab scopes, multi-meters, and gas analyzers. Students diagnose live vehicle drivability problems.

**ASE 240 Suspension & Steering II**

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

*Prerequisite:* ASE 140

Emphasizes lecture and related experiences in the diagnosis and service of electronic suspensions and steering systems and their components.

**ASE 250 Automatic Transmission/Transaxle Service**

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

*Prerequisite:* ASE 102

Focuses on practical methods of maintaining, servicing, and performing minor adjustments on an automatic transmission and transaxle.

**ASE 251 Automatic Transmission/Transaxle Diagnosis & Assemblies**

5 Credit Hours • 105 Contact Hours (15 Lecture, 90 Lecture/Lab Combination)

*Prerequisite:* ASE 250

Covers diagnosis, principles of hydraulics, principles of electronic components, power flow, theory of operation, removal of transmission/transaxle, tear down, replacement of components, measurement and subsequent adjustment of components and replacement of transmission/transaxle.

**ASE 265 Automotive Heating & Air Conditioning**

5 Credit Hours • 105 Contact Hours (15 Lecture, 90 Lecture/Lab Combination)

*Prerequisite:* ASE 102

Emphasizes lecture and related laboratory experiences in the diagnosis and service of automotive heating and air conditioning systems and their components.

**ASE 282 Co-op/Internship: General (Summer)**

1 Credit Hour • 45 Contact Hours (Internship)

Emphasizes practical on-the-job, work-related experience that corresponds to the area of study. In this semester, the student takes all related sponsor requirements in (STS) Service Training Standards (General Motors) or (F.A.S.T.) Fundamental Automotive Systems Training (Chrysler) or others as required by the program track.

## Automotive Technology

**AUT 105 Introduction to Motorsports Technology**

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

*Prerequisite:* faculty consent

Provides an introduction to the motorsports industry and support industries. Introduces shop safety and vehicle safety.

**AUT 108 Racing Vehicle Systems**

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

*Prerequisite:* AUT 105

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.

**AUT 109 High Performance Suspension & Chassis Design**

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

*Prerequisite:* faculty consent

Introduces the fundamentals of chassis types and components. Includes steering and suspension component theory, tire and wheel theory, chassis design, and geometry theory as applied to oval track, drag race, and road race vehicles.

**AUT 110 High Performance Suspension & Chassis Setup**

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

*Prerequisite:* faculty consent

Introduces chassis set-up based on vehicle purpose. Incorporates chassis measurement, including ride heights, caster, camber, steering toe, ackerman, control arm angles, roll centers, and weight distribution. All measurements are taken and adjustments completed to allow the vehicle to perform as desired.

**AUT 116 High Performance Brake Systems**

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

*Prerequisite: faculty consent*

Introduces high performance brake systems as applied to racing vehicles.

**AUT 118 High Performance Power Trains**

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

*Prerequisite: faculty consent*

Introduces high performance transmissions, drive lines, and differentials. Includes design, repair, and service techniques as applied to racing vehicles.

**AUT 119 High Performance Electrical & Fuel Systems**

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

*Prerequisite: faculty consent*

Introduces electrical and fuel systems as applied to racing vehicles. Includes carburetion, fuel injection, fuel pumps, fuel cells, ignition systems, switches, and wiring.

**AUT 125 Engines I**

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

*Prerequisite: faculty consent*

Provides for individual study, enabling self-paced instruction and features an open entry, open exit system. Emphasizes video and computer technology. Includes operation and construction of the internal combustion engine, both domestic and foreign. Covers inspection, measuring, parts identification, and vehicle I.D. The student presents 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 Lecture/Lab Combination)

*Prerequisite: AUT 125*

Develops procedures of diagnosis and testing from a knowledge of engine operation. Performs a complete engine rebuild process including the use of special equipment studied in AUT 125 and through the use of video and computer-assisted instruction.

**AUT 127 High Performance Lubrication & Cooling Systems**

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

*Prerequisite: faculty consent*

Introduces basics of wet and dry sump lubrication systems, oil delivery and filtration systems, oil chemical design and function. Focuses on the theory of cooling system design, components and coolants used in high performance applications.

**AUT 128 High Performance Engine Design, Blueprinting, & Testing**

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

*Prerequisite: faculty consent*

Introduces high performance engine theory, design, components and their function. Emphasizes disassembly and assembly techniques and an introduction to dynamometer testing.

**AUT 136 Introduction to Racecar Body Fabrication**

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

*Prerequisite: faculty consent*

Introduces a variety of techniques used in the forming of racecar body panels made up of various types of materials. Emphasizes sheet steel, aluminum, and composite plastics. Students practice the fabrication and finishing of body panels. Tools and equipment typically used in the industry are also covered.

**AUT 137 Introduction to Racecar Chassis Fabrication**

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

Introduces the student to various designs and methods for fabrication of racecar chassis and roll cage components. Covers body mounting techniques and suspension pick up points.

**AUT 205 Advanced Automotive Engines**

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

*Prerequisite: AUT 126*

This course is a continuation of Automotive Engines II with an emphasis on advanced diagnosis and engine rebuild techniques.

**AUT 206 High Performance Engines**

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

*Prerequisite: faculty consent*

Focuses on the theory of design and development of high performance engines. Covers the use of specialty equipment for the development of high performance engines.

## Biology

**BIO 090 Basic Biology Concepts**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

Examines the molecular, cellular, genetic, and laboratory concepts necessary to succeed in a 200-level Biology course. This course includes a study of chemistry, cell structure and function, cellular metabolism, and basic concepts of molecular biology. This course includes laboratory experience.

**BIO 105 Science of Biology: SC1**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

*Corequisite: MAT 090, REA 090*

Examines the basis of biology in the modern world and surveys the current knowledge and conceptual and framework of the discipline. Explores biology as a science - a process of gaining new knowledge - as is the impact of biological science on society. Includes laboratory experiences. Designed for non-science majors.

**BIO 106 Basic Anatomy & Physiology**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

*Prerequisite: REA 090*

Focuses on basic knowledge of body structures and function, and provides a foundation for understanding deviations from normal and disease conditions. This course is designed for individuals interested in health care and is directly applicable to the Practical Nursing Program and the Medical Office Technology program.



**BIO 111 General College Biology I with Lab: SC1**

5 Credit Hours • 90 Contact Hours (60 Lecture, 30 Lab)

*Prerequisite: MAT 090, REA 090 or permission of Department Chair*

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. The course includes laboratory experience.

**BIO 112 General College Biology II with Lab: SC1**

5 Credit Hours • 90 Contact Hours (60 Lecture, 30 Lab)

*Prerequisite: BIO 111 (Grade of C or higher) or permission of Department Chair*

A continuation of BIO 111. Includes ecology, evolution, classification, structure, and function in plants and animals. This course includes laboratory experience.

**BIO 148 Basic Ecology**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

Studies the interrelationships between organisms and their environment. Includes population dynamics and the diversity of ecosystems. Lab includes field experience.

**BIO 149 Plant Taxonomy**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

Focuses on beginning biological and botanical terminologies, techniques, and experiments and provides a strong background in plant relationships and identification of plants. Includes laboratory and field experience.

**BIO 150 Animal Biology**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

Focuses on the phylogenetic study of animals. Includes an introduction to the invertebrates and a concentrated study of the diverse vertebrate forms. Lab experiences parallel lecture topics.

**BIO 154 Biology of Plants**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

Focuses on the diversity of plants, the structure and function of plants, the ecology of plants, and human use of plants. Emphasizes seed-producing vascular plants, especially flowering plants. Lab and field experience is included.

**BIO 201 Human Anatomy & Physiology I: SC1**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

*Prerequisite: BIO 090 or BIO 111 (grade of C or higher) or permission of Department Chair*

Focuses on an integrated study of the human body, including the histology, anatomy, and physiology of each system. Examines molecular, cellular, and tissue levels of organization plus integuments, skeletal, articulations, muscular, nervous, and endocrine systems. Includes a mandatory hands-on laboratory experience covering experimentation, microscopy, observations, and dissection. This is the first semester of a two-semester sequence.

**BIO 202 Human Anatomy & Physiology II: SC1**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

*Prerequisite: BIO 201 (grade of C or higher) or equivalent, or permission of Department Chair*

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

**BIO 204 Microbiology: SC1**

4 Credit Hours • 90 Contact Hours (45 Lecture, 45 Lab)

*Prerequisite: BIO 111 or BIO 201 (grade of C or higher) or permission of Department Chair*

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

**BIO 211 Cell Biology**

4 Credit Hour • 75 Contact Hours (45 Lecture, 30 Lab)

*Prerequisite: BIO 111 or equivalent, or permission of department chair*

This course is an intensive study of the cell and its organelles. Emphasis will be on the molecular mechanisms involved in cell communication, metabolism, motility, genetics, growth, and reproduction. This course requires hands-on laboratory experience.

**BIO 212 Molecular Biology**

4 Credit Hour • 75 Contact Hours (45 Lecture, 30 Lab)

*Prerequisite: BIO 111 or equivalent, or permission of department chair*

This course is an intensive survey of molecular biology techniques and principles. Topics will include chemical and enzymatic reactions, cellular processes, DNA, RNA, and protein manipulations, and genetic studies. This course requires hands-on laboratory experience.

**BIO 216 Pathophysiology**

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite: BIO 201, BIO 202*

Focuses on the functions of the human body systems with emphasis on their interrelationships and adaptation to stress and disease.

**BIO 224 Genetics**

4 Credit Hour • 75 Contact Hours (45 Lecture, 30 Lab)

*Prerequisite: BIO 201, BIO 202*

Focuses on the functions of the human body systems with emphasis on their interrelationships and adaptation to stress and disease.

## Business

**BUS 105 Business Orientation**

0.5 Credit Hours • 7.5 Contact Hours (Lecture)

Places emphasis on getting acquainted with the college and each other, advising and career exploration, study skills strategies, presentation skills and team building exercises. This is an introductory course required for all freshmen business majors.

**BUS 115 Introduction to Business**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 090*

Focuses on the operation of the American business system. Covers fundamentals of the economy, careers and opportunities, marketing, management, production, governmental regulations, tools of business, and social responsibilities.

**BUS 181 Internship**

3 Credit Hours • 45 Contact Hours (Internship)

*Prerequisite: Program Advisor's approval*

Provides students with hands-on training in their career field. Occurs in a business setting arranged through a Student Work Experience (SWE)/Internship Coordinator, or by utilizing a current employment organization. Student is expected to work a minimum of 7.5 hours per week. Students attend 3 seminars during the semester of enrollment. Class utilizes cooperative work experience or project methods depending on the individual situation.



**BUS 182 Internship**

3 Credit Hours • 45 Contact Hours (Internship)

*Prerequisite: BUS 181*

Provides continued instruction and work experience.

**BUS 203 Introduction to International Business**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: BUS 115 and sophomore standing*

Provides student with an understanding of the interdisciplinary nature of international business. Course will cover the development of international business; theories and methods of international trade; financing mechanisms and terms used in export documentation and export finance; the effects of economics, political and cultural environment on international business and trade; impact of geography in business transactions; legal aspects of international business; and developing an effective international marketing strategy.

**BUS 204 Introduction to E-Business**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: BUS 115*

Introduces the use of technology in all aspects of a business. Explores the use of technology for customer relations management, accounting and financial applications, purchasing and production tools, sales and marketing functions, and human resources management. Examines use of the Internet, world-wide-web and sophisticated multi-function software tools. Students gain a heightened awareness of emerging technologies and trends in e-business.

**BUS 216 Legal Environment of Business**

3 Credit Hours • 45 Contact Hours (Lecture)

Emphasizes public law, regulation of business, ethical considerations, and various relationships existing within society, government, and business. Specific attention is devoted to economic regulation, social regulation, regulation and laws impacting labor-management issues, and environmental concerns. Students develop an understanding of the role of law in social, political, and economic change.

**BUS 217 Business Communication & Report Writing**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 090*

Emphasizes effective business writing and covers letters, memoranda, reports, application letters, and resumes. Includes the fundamentals of business communication and an introduction to international communication.

**BUS 226 Business Statistics**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: MAT 090*

Focuses on statistical study, descriptive statistics, probability, and the binominal distribution, index numbers, time series, decision theory, confidence intervals, linear regression, and correlation. Intended for the business major.

**BUS 281 Internship**

1-6 Credit Hours • 45 Contact Hours per credit (Internship)

*Prerequisite: BUS 182*

Provides continued instruction and the opportunity for students to supplement coursework with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor.

**BUS 282 Internship**

1-6 Credit Hours • 45 Contact Hours per credit (Internship)

*Prerequisite: BUS 281*

Provides continued instruction with the opportunity for students to supplement coursework with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor.

## Business & Technology Education

### (Office Administration)

**BTE 100 Computer Keyboarding**

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

Grading: SU only

Designed for students who have minimal or no keyboarding skills. Introduces the touch method of keyboarding, as well as the basic operation and functions of the equipment. Emphasizes learning the alphanumeric keyboard, proper technique, and speed control.

**BTE 102 Keyboarding Applications I**

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

*Prerequisite: Ability to Keyboard 20 WPM or faculty consent*

Designed for students with minimal keyboarding skills. Introduces letters, tables, memos, and manuscripts. Emphasizes speed and accuracy.

**BTE 108 Ten-Key by Touch**

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

Introduces touch control of the ten-key pad. Emphasizes the development of speed and accuracy using proper technique.

**BTE 111 Keyboarding Speedbuilding I**

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

*Prerequisite: Ability to keyboard by touch or faculty consent*

Grading: SU only

Designed to increase speed and improve accuracy in keyboarding on the PC through the use of correct techniques and concentrated effort.

**BTE 166 Business Editing Skills**

3 Credit Hours • 45 Contact Hours (Lecture)

Provides proofreading techniques and reviews spelling, punctuation, grammar, and word processing formats on various types of business documents and worksheets.

**BTE 187 Cooperative Education/Internship**

3 Credit Hours • 135 Contact Hours (Internship)

Provides students with the opportunity to supplement course work with practical work experience related to their educational program and occupational objectives. Students are placed at approved work sites that are related to their program of study. They work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor/coordinator.

## Chemistry

**CHE 101 Introduction to Chemistry I with Lab: SC1**

5 Credit Hours • 90 Contact Hours (60 Lecture, 30 Lab)

*Prerequisite: MAT 090 or concurrent enrollment*

Includes the study of measurements, atomic theory, chemical bonding, nomenclature, stoichiometry, solutions, acid and base, gas laws, and condensed states. Laboratory experiments demonstrate the above concepts qualitatively and quantitatively. Designed for non-science majors, students in occupational and health programs, or students with no chemistry background.

**CHE 102 Introduction to Chemistry II with Lab: SC1**

5 Credit Hours • 90 Contact Hours (60 Lecture, 30 Lab)

*Prerequisite: CHE 101 or faculty consent*

Focuses on introductory organic chemistry and biochemistry (sequel to Introduction to Chemistry I). Includes the study of hybridization of atomic orbitals for carbon, nomenclature of both organic and biochemical compounds, physical and chemical properties of various functional groups of organic chemistry, and physical and chemical properties of biochemical compounds along with their biochemical pathways. Incorporates laboratory experiments.

**CHE 111 General College Chemistry I with Lab: SC1**

5 Credit Hours • 105 Contact Hours (60 Lecture, 45 Lab)

*Prerequisite: One year of high school chemistry or equivalent**Corequisite: MAT 121*

Focuses on basic chemistry and measurement, matter, chemical formulas, reactions and equations, stoichiometry, and thermochemistry. Covers the development of atomic theory culminating in the use of quantum numbers to determine electron configurations of atoms and the relationship of electron configuration to chemical bond theory and molecular orbital theory. Includes gases, liquids, and solids. Problem-solving skills are emphasized. Incorporates laboratory experiments.

**CHE 112 General College Chemistry II with Lab: SC1**

5 Credit Hours • 105 Contact Hours (60 Lecture, 45 Lab)

*Prerequisite: CHE 111, MAT 121*

Presents concepts in the areas of solution properties, chemical kinetics, chemical equilibrium, acid-base and ionic equilibrium, thermodynamics, electrochemistry, nuclear chemistry, and organic chemistry. Emphasizes problem solving skills and descriptive contents for these topics. Laboratory experiments demonstrate qualitative and quantitative analytical techniques.

**CHE 211 Organic Chemistry I with Lab**

5 Credit Hours • 105 Contact Hours (45 Lecture, 60 Lab)

*Prerequisite: CHE 112*

Focuses on compounds associated with the element carbon. Includes structure and reactions of aliphatic hydrocarbons and selected functional group families. Covers nomenclature of organic compounds, stereochemistry, and reaction mechanisms such as SN1, SN2, E1 and E2. Laboratory experiments demonstrate the above concepts plus the laboratory techniques associated with organic chemistry.

**CHE 212 Organic Chemistry II with Lab**

5 Credit Hours • 105 Contact Hours (45 Lecture, 60 Lab)

*Prerequisite: CHE 211*

Continues the investigation into the chemistry of carbon-based compounds, their reactions and synthesis. Includes the structure, physical properties, reactivities, and synthesis of organic functional groups not covered in the first semester. Explores functional groups including alcohols, ethers, aromatics, aldehydes, ketones, amines, amides, esters, and carboxylic acids. Includes reactions and reaction mechanisms of aromatic compounds. An introduction to biochemical topics may be included if time permits. Lab experiences demonstrate the above concepts and the laboratory techniques associated with organic chemistry.

**Computer Aided Drafting****CAD 100 Blueprint Reading for Computer Aided Drafting**

3 Credit Hours • 52.5 Contact Hours (30 Lecture, 22.5 Lecture/Lab Combination)

Covers linetype identification, identification of symbols, linear dimensions, angular dimensions, arrowless dimensions, machine process callouts, drawing notes, ANSI/ASME/ISO dimensioning standards, tolerances, freehand sketching, and reading working drawings.

**CAD 101 Computer Aided Drafting I**

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

Focuses on basic computer aided drafting skills using the latest release of CAD software. Includes file management, Cartesian coordinate system, drawing set-ups, drawing aids, layer usage, drawing geometric shapes, editing objects, array, text applications, basic dimensioning, and Help access.

**CAD 102 Computer Aided Drafting II**

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

*Prerequisites: CAD 101 or permission of instructor*

Focuses on advanced computer aided drafting skills using the latest release of CAD software. Includes blocks and wblocks, polylines, multilines, polyline editing, advanced editing, editing with grips, hatching, isometric drawings, dimensions and dimension variables, paper space and viewports, templates, external references, and printing/plotting.

**CAD 105 AutoCAD for Interiors**

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Prerequisites: CIS 115 or CIS 118*

Provides an advanced an opportunity for the Interior Design student to obtain the basic skills necessary to operate Computer Aided Design (CAD) software. AutoCAD software is emphasized.

**CAD 121 Intermediate CAD II**

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

Focuses on 2D residential concept drawings that are created from given design parameters and appropriate specifications. Requires 2D floor plans, cross sections and elevations.

**CAD 151 Computer Aided Drafting/Technical Drafting Applications**

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Prerequisites: CAD 100, CAD 101, CAD 102 or permission of instructor*

Focuses on the principles of technical drafting using the latest release of CAD software. Includes 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.

**CAD 201 Computer Aided Drafting/Custom**

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

Focuses on program customization using the latest release of CAD software. Includes customizing menus, customizing toolbars, attribute extraction, basic CAD programming, advanced dimensioning, path options, script files, and slide shows.

**CAD 202 Computer Aided Drafting/3D**

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

*Prerequisites:* CAD 101 or permission of instructor

Focuses on construction of three-dimensional objects using the latest release of CAD software. Includes wire frame construction, surface modeling, solid modeling, extrusions, Boolean operations, 3D editing, 3D views, rendering, and 3D to 2D construction.

**CAD 217 3D Studio VIZ**

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

Focuses on introductory level basic features of the software using the latest version of 3D Studio VIZ. Includes 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.

**CAD 218 3D Studio VIZ/Advanced**

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

*Prerequisite:* CAD 217

Builds on the basic 3D Studio VIZ skills learned in CAD 218. Includes importing and editing solid models, external processes (special effects), incorporating scanned images, advanced materials editing, creating materials libraries, rendering, animating, and project management.

**CAD 219 3D/MAX**

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

Introduces 3D rendering and animation using AUTODESK 3D Studio software. Emphasizes 3D geometry, texture mapping, lighting, camera placement, shading, photo-realistic rendering, animation techniques, and walk through animations.

**CAD 220 3D MAX Advanced**

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

*Prerequisite:* CAD 219

Focuses on advanced rendering and using AUTODESK 3D Studio software. Emphasizes 3D geometry manipulation, external processing, and video postproduction of 3D studio animations.

**CAD 224 Revit**

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

*Prerequisites:* CIS 115 or CIS 118

Provides students with the software application training in AutoDesk Revit necessary to produce 3D architectural models and 3D drawings utilizing AIA standards.

**CAD 225 Architectural Desktop/Autodesk**

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

*Prerequisite:* CAD 102 or faculty consent

Provides students with the software application training in Architectural Desktop necessary to produce 3D architectural drawings utilizing 2D drafting skills.

**CAD 240 Inventor I/AutoDesk**

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

*Prerequisite:* CAD 202 or faculty consent.

Introduces basic non-parametric 3D concepts to build confidence in 3D thinking and moves on to three-dimensional parameters. The student learns to construct, modify, and manage complex parts in 3D space as well as how to produce 2D drawings from the 3D models.

**CAD 255 SolidWorks/Mechanical**

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

Introduces basic non-parametric 3D concepts to build confidence in 3D thinking and progresses to three-dimensional parameters. The student learns to construct, modify, and manage complex parts in 3D space as well as to produce 2D drawings from the 3D models.

**CAD 280 Internship**

3 Credit Hours • 105 Contact Hours (15 Lecture, 90 Internship)

*Prerequisites:* CAD 100, CAD 101, CAD 102

Provides student with the opportunity to supplement coursework with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the business location and with direct guidance of the instructor.

**Communication****COM 115 Public Speaking**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ENG 090, REA 090

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

**COM 125 Interpersonal Communication**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ENG 090, REA 090

Examines the communication involved in interpersonal relationships occurring in family, social, and career situations. Relevant concepts include self-concept, perception, listening, nonverbal communication, and conflict.

**COM 214 Natural Resource Interpretation**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ENG 090, REA 090

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. The course focuses on experiential skill development in the area of educational interpretation at times including, but not limited to, in-class and on-site interpretation of historical, geological, zoological, and other environmental topics and sites. It also stresses the preparation of educational presentations aimed at all levels of learners from pre-K through mature adulthood using various presentation techniques including, but not limited to, visual aids, props, dramatic performance, and puppetry.

**COM 216 Principles of Speech Communication II**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ENG 090, REA 090, COM 115

Emphasizes the intensification of ideas and styles with a focus on persuasive speaking. The course includes additional studies in rhetorical analysis and oral delivery methods.

**COM 217 Group Communication**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* COM 115

Examines group communication theories with an emphasis on leadership and group behaviors. The course provides opportunities for group participation.

**COM 220 Intercultural Communication**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 090, REA 090*

Explores the link between culture and communication and will develop and/or enhance communication skills and the abilities appropriate to a multicultural society. Emphasis will be on understanding diversity within and across cultures. Relevant concepts include perception, worldview, context, ethics, language, and nonverbal communication.

**COM 225 Organizational Communication**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 090, REA 090. Students encouraged to take COM 115 and/or have organizational setting experience.*

Studies 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.

## Computer Information Systems

**CIS 101 Alternative Input/Output for Computers**

1 Credit Hour • 15 Contact Hours (Lecture)

*Prerequisite: faculty consent*

Focuses on teaching alternative methods for inputting data into a computer. Individualized for each student, the course covers such programs as Dragon Naturally Speaking, Dragon Dictate, or Job Access with Speech (JAWS). It is designed for students who have little or no previous computer experience.

**CIS 102 Computer Assistive Technology**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: faculty consent*

Introduces assistive technology and alternative methods for utilization of computer systems. Depending upon student need or interest, the student selects the AT or method. Options include voice recognition, screen readers, screen enlargement, keyboard modification, word predication, reading enhancement programs, and alternative data entry methods.

**CIS 104 Word Processing with Assistive Technology**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: faculty consent*

Provides training in the functions, features, and uses of assistive technology and alternative methods. Covers the introduction of standard word processing features needed for proper presentation of college or business papers and the methodology to successfully use the assistive technology/alternative method in continuing educational or employment environments.

**CIS 107 Voice Recognition: Dragon**

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

Grading: SU only

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

**CIS 110 Introduction to the PC**

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

Provides the beginning computer user with hands-on experience in the elementary use of the personal computer. This course introduces the basic feature of and the terminology associated with personal computers, including topics such as database, spreadsheet, and word processing.

**CIS 115 Introduction to Computer Information Systems**

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on an overview of the needs for and roles of computer information systems. Emphasizes computer requirements in organizations, history, hardware functions, programming, systems development, and computer operations. Introduces computer applications.

**CIS 118 Introduction PC Applications**

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces computer concepts and components, as well as application-suite software and the Internet. Includes descriptions of and hands-on experiences with word processing, spreadsheets, databases, operating environments and other common PC application packages.

**CIS 120 Technology for Career Development**

1 Credit Hour • 15 Contact Hours (Lecture)

Prepare students to actively pursue a career path. This course will emphasize awareness of career opportunities through the use of career assessment tools, academic advising and career professionals. It will provide students with skills assessment tools, professional development activities, and information for creating and maintaining an electronic career portfolio.

**CIS 124 Introduction to Operating Systems**

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces concepts, terminology, and hands-on skills in the use of DOS and Windows. Emphasizes navigation, file manipulation, file creation, and troubleshooting.

**CIS 130 Introduction to Internet**

1 Credit Hour • 15 Contact Hours (Lecture)

Enhances the student's knowledge of the Internet and its resources. Individuals learn terminology in dealing with the Internet. Includes privacy and copyright issues with information retrieved from the Internet. Students experience the use of e-commerce, multimedia, and e-mail. Explores searching the Internet and credibility of information obtained with searches.

**CIS 135 Complete PC Word Processing**

3 Credit Hours • 45 Contact Hours (Lecture)

Explores a complete array of word processing skills. The skills needed to create, edit, format, and printing documents are covered. Other topics include character, paragraph, and page formats, the use of spelling checkers and thesaurus, hyphenation, tables, mail merge, document design, and graphics.

**CIS 145 Complete PC Database**

3 Credit Hours • 45 Contact Hours (Lecture)

Explores a complete array of database skills. Includes table, query, form, and report creation and modification. Other topics include application integration and automation of database tasks within the database.

**CIS 155 PC Spreadsheet Concepts: Excel**

3 Credit Hours • 45 Contact Hours (Lecture)

Exposes the student to a wide range of uses of the electronic spreadsheet with special emphasis on using it as a business tool. Includes fundamentals and terms, creating and saving workbooks, entering and using formulas, formatting, printing, multiple-page workbooks, creating charts, entering and using functions, managing lists, and simple macros.

**CIS 165 Complete Presentation Graphics: PowerPoint**

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on the development of presentation graphics materials including graphs, charts, illustrations, and diagrams. Emphasizes effective communication through computerized presentations. Covers features of PowerPoint and effective presentation techniques.



**CIS 202 Automated Project Management**

3 Credit Hours • 45 Contact Hours (Lecture)

Provides an in depth exploration of project management techniques that use software to automate the project management processes. The course emphasizes project management strategies, goal setting and communication with team members, management and vendors. Critical thinking, discussion, and real world projects will be used to explore the creation of a task list, resource assignment and leveling. Students will learn to use GANTT charts, milestones, Critical Path Methodology, PERT, project tracking and reporting.

**CIS 203 Technology for Career Success**

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite: CIS 120*

Prepare students to transition into a career. This course will provide students with resources for career development and tools to succeed in a competitive labor market. Offers students an opportunity to build an employment focused electronic portfolio in preparation for career growth and lifelong learning after completing their program of study.

**CIS 204 Customization of Assistive Technology**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: CIS 104 or concurrent enrollment; faculty consent*

Provides training in the customization of computer assistive technology and alternative methods. Includes individualized set up features specific to the assistive technology or alternative method and the individual. Covers program features or methods needed for use in data base programs, spreadsheets, email, and the internet. Examines individual macros and commands to enhance usage.

**CIS 220 Fundamentals of Unix**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: CIS 115*

Covers the structure and fundamentals of the UNIX operating system. Includes the files system and file processing, various utility programs, and shell, multi-user operation, text processing, and communications.

**CIS 223 Linux**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: CIS 124*

Introduces students to the concepts of installing, configuring, and managing the Linux operating system. Topics covered include working with various desktops, use of file system commands, and management of user and group permissions.

**CIS 240 Database Design & Development**

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces the basic concepts of relational databases, data storage, and retrieval. Covers database design, data modeling, transaction processing, and introduces the Structured Query Language for databases.

**CIS 243 Introduction to SQL**

3 Credit Hours • 45 Contact Hours (Lecture)

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. Also focuses on SQL\*Plus to manipulate SQL statements.

**CIS 251 Introduction to Standard Query Language (SQL)**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: CIS 145 or equivalent knowledge and experience*

Introduces students to ANSI SQL which is the basis for most other Structured Query Languages. Students learn to query and update data, create table and views, use indexes, secure data, develop stored procedures and triggers, learn object relational concepts, and develop applications with embedded SQL and ODBC.

**CIS 254 Oracle Forms**

4 Credit Hours • 75 Contact Hours (30 Lecture, 45 Lecture/Lab Combination)

*Prerequisite: CIS 243*

Introduces students to the Oracle Developer suite of applications including Forms Builder, Graphics Builder, and Reports Builder. Students gain experience creating database applications while connected to an Oracle relational database. Skills learned include object navigation, layout editing, manipulating data block and layout wizards, working with property palettes, writing SQL triggers, incorporating Oracle built-in functions, creating input parameters, and linking applications through menus.

**CIS 256 Oracle Reports**

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

Introduces the Oracle Reports Developer. Covers building, retrieving, displaying and formatting data from different data sources in numerous report styles

**CIS 258 Oracle HTML DB**

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

Introduces the basic concepts of building applications using Oracle HTML DB. Covers building Web based applications from Oracle databases, adding forms, reports, and page processing.

**CIS 267 Management of Information Systems**

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces the concepts and techniques of managing computer-based information resources. Includes hardware, software, personnel, control techniques, and the placement and integration of information systems resources within the organization.

**CIS 268 Systems Analysis & Design I**

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces the student to the materials, techniques, procedures, and human interrelations involved in developing computer information systems. Includes the systems approach, fact gathering techniques, forms design, input/output, file design, file organization, various charting techniques, system audits on controls, project management, implementation, and evaluation.

**CIS 287 Cooperative Education**

3 Credit Hours • 135 Contact Hours (Work Experience)

Provides students an opportunity to gain practical experience in applying their occupational skills and/or to develop specific skills in a practical work setting. The instructor works with the student to select an appropriate work site, establish learning objectives, and to coordinate learning activities with the employer or work site supervisor.

**CIS 288 Practicum**

1 Credit Hour • 45 Contact Hours (Practicum)

Provides students with the opportunity to supplement coursework with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor.



**CIS 289 Capstone**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: sophomore standing*

Serves as the capstone course for CIS majors. Incorporates projects that allow students to develop advanced techniques and assemble information from different courses. Most projects will include the creation of interactive application programs for the non-computer user and require research beyond the classroom to prepare the student for entry level employment in a variety of situations.

## Computer Networking

**CNG 101 Introduction to Networking**

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on underlying concepts of data communications, telecommunications, and networking. Emphasizes the terminology and technologies in current networking environments and provides a general overview of the field of networking as a basis for continued study in the field.

**CNG 102 Local Area Networks**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: CNG 101 or faculty consent*

Introduces Local Area Networking concepts. Focuses on discussions and demonstrations of planning, installing, and supporting networks.

**CNG 103 Wide Area Networks**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: CNG 101 or faculty consent*

Provides the student with conceptual and working knowledge of how Local Area Networks communicate over a wide area. Introduces telephony - the technology of switched voice communications. Provides students with an understanding of how communication channels of the public switched telephone networks are used for data communications and how voice data communications have become integrated.

**CNG 104 Introduction to TCP/IP**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: CNG 101 or faculty consent*

Outlines four important networking architectures in corporate environments today - TCP/IP, SNA, AppleTalk, and DNA. Focuses on the major components and functions of each of these architectures as well as methods used to connect different architectures. Provides students with concepts that are important to the field of systems integration, as well as a conceptual basis for understanding network architectures.

**CNG 108 Network Analysis & Design**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: CNG 101, CNG 102, CNG 103, CNG 104*

Provides advanced instruction for networking professionals and students who grasp the basic concepts of networking but would like to understand methods used to analyze, design, and manage LAN's point-to-point networks. Exercises are geared toward learning techniques used to design and analyze networks.

**CNG 121 Computer Technician I: A+**

4 Credit Hours • 60 Contact Hours (Lecture)

Introduces personal computer hardware to gain the skills and knowledge for a successful entry-level computer service technician. Provides extensive hands-on work with computer systems. Includes PC setup and configuration, floppy and hard drive installation and basic maintenance and troubleshooting. Successful completion prepares the student for the core hardware service technician portion of the CompTIA A+ Certification Exam.

**CNG 127 IT Essentials**

5 Credit Hours • 75 Contact Hours (Lecture)

Introduces students to information technology and data communications. Enables the student to develop the necessary skills to enter this field by building a computer, installing the operating system, adding peripherals, connecting the computer to a local area network and the Internet. It is a hands-on, lab-based course stressing safety and working effectively in a group environment. This course prepares students for CompTIA A+ certification.

**CNG 128 IT Essentials II: Network Operating Systems**

5 Credit Hours • 75 Contact Hours (Lecture)

Introduces multi-user, multi-tasking networking operating systems. Focuses on characteristics of the Linux, Unix, Windows 2000, NT, and XP networking operating systems. Explores a variety of topics including installation procedures, security issues, back up procedures and remote access. The course prepares the student for both the CompTIA Server+ certification and the Linux+ certification.

**CNG 132 Principles of Information Security**

3 Credit Hours • 45 Contact Hours (Lecture)

Examines the field of information security to prepare information systems students for their future roles as business decision-makers. The course presents a balance of the managerial and the technical aspects information security. The concepts covered in this course should be helpful for students working towards the Certified Information Systems Security Professional (CISSP) certification.

**CNG 240 Fundamentals of Network Security**

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite: Completion of the CCNA program or current CCNA certification*

This course is part of the Cisco Networking Academy Program. Emphasizes security policy design and management, security technologies, products, and solutions. Covers firewall and secure router design, installation, configurations, and maintenance. Includes AAA and VPN implementation using routers and firewalls. This course enables the student to take the Cisco MCNS (Managing Cisco Network Security) and the CSPFA (Cisco Secure PIX Firewall Advanced) exams, giving the student the new Cisco Security Specialist 1 certification. *NOTE:* In order to take the MCNS and CSPFA exams, CCNA certification is required.

**CNG 258 Computer Forensics**

4 Credit Hours • 60 Contact Hours (Lecture)

Exposes the student to the field of Computer Forensics and investigation. Provides the student with methods to properly conduct a computer forensics investigation beginning with a discussion of ethics. Topics covered include fundamental concepts, history of computer forensics, file structures, data recovery techniques, computer forensic tools and analysis. The curriculum and objectives map to the International Association of Computer Investigative Specialists (IACIS) certification.

**CNG 260 Cisco Network Associate I**

5 Credit Hours • 75 Contact Hours (Lecture)

Introduces network fundamentals, the OSI model and industry standards, IP addressing (subnet masks), and basic network design.

**CNG 261 Cisco Network Associate II**

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite: CNG 260*

Focuses on router theory and technologies, including router configurations, protocols, network management, and introductory LAN switching.

**CNG 262 Cisco Network Associate III**

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite: CNG 261*

Focuses on advanced routing and switching configurations, LAN switching, network management, and advanced network design.

**CNG 263 Cisco Network Associate IV**

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite: CNG 262*

Focuses on project-based learning, including advanced network design projects and advanced management projects. This course and CNG 260, CNG 261 and CNG 262 prepare students for the CISCO Certified Network Associate (CCNA) certification exam.

**CNG 264 Home Integration**

5 Credit Hours • 75 Contact Hours (Lecture)

Introduces the elements of Smart home technology in preparation for the HTI+ industry certification examination.

## Computer Science

**CSC 105 Computer Literacy**

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces computers and includes the history of computers and their impact on society. Focuses on microcomputer terminology as well as criteria for evaluating hardware and software. Enables students to develop a working knowledge of an operating system, the internet, and several microcomputer applications.

**CSC 116 Logic & Program Design**

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces computer program design using concepts of structured programming and logic. Includes pseudo code, flowcharts, and structure charts. Covers variables, data types, control structures, looping, program breaks, and arrays.

**CSC 119 Introduction to Programming**

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

*Prerequisite: CSC 116*

Focuses on a general introduction to computer programming. Emphasizes the design and implementation of structured and logically correct programs with good documentation. Focuses on basic programming concepts, including numbering systems, control structures, modularization, and data processing. A structured programming language is used to implement the student's program designs.

**CSC 120 Problem Solving with (Software Package)**

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

Provides an introductory level course in computer programming using a high level programming language. The course will cover design and development of simple software applications. Topics covered will include design of software from initial phase through coding phase, input and output of data, functions or methods, control structures, arrays and error handling.

**CSC 125 Programming for the Internet**

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

*Prerequisite: The student should have an understanding of Windows, a browser, and the Internet*

Provides the student with a basic understanding of the more common programming languages/scripts used on the internet. Emphasizes the development of dynamic/interactive web pages. Some of the internet languages that are covered include HTML, DHTML, XML, JavaScript, Vbscript, Active Server Pages, CGI, Form processing, and PERL.

**CSC 126 Game Design and Development**

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

Combines problem-solving techniques with computer game design and implementation to introduce the student to basic gaming and computer science concepts. Students design, implement, and test computer games using software that allows for basic game creation through a wide variety of game creation tools; no prior programming experience is required.

**CSC 150 Visual Basic Programming**

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

*Prerequisite: CSC 120 or faculty consent*

Introduces programming and applications development for the Microsoft Windows Programming environment using Visual Basic for Windows.

**CSC 151 Advanced Visual Basic Programming**

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

*Prerequisite: CSC 150 or faculty consent*

Builds on the skills learned in CSC 150. Focuses on more involved applications, work with advanced controls, and deals with additional advanced topics.

**CSC 154 Introduction to MS Visual Basic .NET (OOP)**

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

Provides students with the knowledge and skills needed to develop applications in Microsoft Visual Basic .NET for the Microsoft .NET platform. Focuses on user interfaces, program structure, language syntax, and implementation details. This is the first course in the Visual Basic .NET curriculum and serves as the entry point for other .NET courses.

**CSC 155 Introduction to C # with MS.Net**

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

*Prerequisite: CIS 116 or equivalent knowledge or experience*

Teaches students the fundamental skills that are required to design and develop object-oriented applications for the Web and Microsoft Windows by using C# and the Microsoft Visual Studio .Net development environment.

**CSC 160 Computer Science I: (Language)**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

*Prerequisite: MAT 106 or equivalent experience or faculty consent*

Introduces students to the discipline of computer science. Covers algorithm development, data representation, logical expressions, sub-programs, and input/output operations using a structured programming language. Requires intensive lab work outside of class time.

**CSC 161 Computer Science II: (Language)**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

*Prerequisite: CSC 160 or faculty consent*

Continues the structured algorithm development and problem solving techniques begun in Computer Science I. Enables students to gain experience in the use of data structures and design of larger software projects. Requires intensive computer laboratory experience.

**CSC 165 Discrete Structures**

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite: Faculty consent*

Prepares students for a fundamental understanding of computing and computer science. Includes set theory, Boolean algebra, relations, functions, graph theory and techniques for formal reasoning.

**CSC 200 Game Programming**

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

Introduces the student to game programming techniques and using a game library. Skills developed include programming input devices, 2D game theory and design, bit map handling, sprite programming and threads.

**CSC 216 Computer Game Logic and Design**

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

Teaches the fundamentals of two and three dimensional game programming. The course includes use of graphics, sound and multiple input devices.

**CSC 225 Computer Architecture/Assembly Language Programming**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

*Prerequisite: CSC 160 or equivalent or faculty consent*

Introduces concepts of computer architecture, functional logic, design, and computer arithmetic. Focuses on the mechanics of information transfer and control within a computer system. Includes symbolic programming techniques, implementing high level control structures, addressing modes and their relation to arrays, subprograms, parameters, linkage to high level languages, and the assembly process.

**CSC 230 C Programming: Unix**

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

*Prerequisite: MAT 121, CSC 119, or faculty consent*

Introduces C programming language - a mid level language whose economy of expression and data manipulation features allow a programmer to deal with the computer at a low level.

**CSC 231 Advanced C Programming: Platform**

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

*Prerequisite: CSC 230*

Continues the study of C begun in CSC 230. Includes pointers, arrays, linked lists, stacks and queues, trees, and advanced user interfaces such as menus, windows, and cursor control.

**CSC 233 Object-Oriented Programming in C++**

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

*Prerequisite: CSC 230 or CSC 160 or equivalent experience, or permission of instructor*

Covers all syntactical components of the C++ language including arrays, structures, pointers, functions and classes. Emphasizes inheritance, overloading, and polymorphism. Focuses on writing clear, properly structured, and well documented programs using the C++ Language and Object-Oriented methodology. It is the advanced course in C++ Programming.

**CSC 236 C# Programming**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

*Prerequisite: Familiarity with the C++ programming language or permission of the instructor.*

Introduces the C# programming language. Covers all syntactical components of the language including arrays, structures, functions, and classes. Content will focus on writing clear properly structured, and well-documented programs using C# and object oriented methodology.

**CSC 240 Java Programming**

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

*Prerequisite: MAT 106 or equivalent experience or faculty consent*

Introduces the Java programming language and covers basic graphics, events/procedures, user interface, and libraries. Enables the student to write and execute a variety of Java programs. Incorporates Java Applets into HTML.

**CSC 241 Advanced Java Programming**

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

*Prerequisite: CSC 240*

Continues the study of the Java programming language. Covers advanced programming topics including multi-threading, network/Internet programming, database programming, and JavaBeans. Enables the student to write advanced, large, and complex programs.

**CSC 268 Programming in Perl**

2 Credit Hours • 30 Contact Hours (Lecture)

Introduces the knowledge and skills necessary to be able to write programs in the Perl programming language. This course will offer a brief introduction of writing CGI programs using Perl.

## Computer Web Based

**CWB 110 Complete Web Authoring**

3 Credit Hours • 45 Contact Hours (Lecture)

Explores the complete set of web authoring skills using HTML and/or other scripting languages. Includes links, backgrounds, controlling text and graphic placement, tables, image maps, frames, and forms.

**CWB 130 Complete Web Editing Tools**

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces advanced web editing techniques to control web page layout. Advanced HTML topics such as frames and web forms are introduced. In addition students learn to create and manage web sites using a Graphical Web Design program such as Front Page or DreamWeaver.

**CWB 163 Introduction to HTML**

1 Credit Hour • 15 Contact Hours (Lecture)

Provides an introduction to Hypertext Markup Language. Teaches students to write HTML, to create tags, format text, insert and manipulate images, create links, lists, tables and forms, and to work with style sheets. Basic knowledge of computer and internet experience preferred

**CWB 164 XML**

3 Credit Hours • 45 Contact Hours (Lecture)

Provides students with an introduction to the XML language's structure and syntax. Examines supporting tools such as XSL and CSS. This course is not designed to focus on a particular implementation of XML, but examine the possibilities of using XML with popular technologies such as Java SAX, SOAP, RDF, and the DOM.

**CWB 221 Technology Foundations for E-Commerce**

3 Credit Hours • 45 Contact Hours (Lecture)

Provides the student with thorough knowledge of e-commerce architecture, relational database management systems, and HTML and Network fundamentals.

## Criminal Justice

**CRJ 101 Basic Law Enforcement Academy I**

8 Credit Hours • 180 Contact Hours (Lecture/Lab Combination)

*Prerequisite: Permission of Academy Director**Corequisite: CRJ 102, 103, 104, 105, 106, 107, 108, PED 110*

Conforms to POST standards and state certification requirements as well as the basic skills and knowledge necessary to perform the entry level duties of a Police Officer. Emphasis will be on simulating actual situations utilizing a lecture and laboratory mode of learning.

**CRJ 102 Basic Law Enforcement Academy II**

12 Credit Hours • 270 Contact Hours (Lecture/Lab Combination)

*Prerequisite: Permission of Academy Director**Corequisite: CRJ 101, 103, 104, 105, 106, 107, 108, PED 110*

Conforms to POST standards and state certification requirements as well as the basic skills and knowledge necessary to perform the entry level duties of a Police Officer. Emphasis will be on simulating actual situations utilizing a lecture and laboratory mode of learning.

**CRJ 103 Basic Law Enforcement Academy III**

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

*Prerequisite: Permission of Academy Director**Corequisite: CRJ 101, 102, 104, 105, 106, 107, 108, PED 110*

Enhances the standards established by the P.O.S.T. Board and state certification requirements as well as the basic skills and knowledge necessary to perform the entry level duties of a Police Officer. Emphasis will be on expanding the P.O.S.T. curriculum to create a unique learning experience.

**CRJ 104 Basic Law Enforcement Academy IV**

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

*Prerequisite: Permission of Academy Director**Corequisite: CRJ 101, 102, 103, 105, 106, 107, 108, PED 110*

Enhances the standards established by the P.O.S.T. Board and state certification requirements as well as the basic skills and knowledge necessary to perform the entry level duties of a Police Officer. Emphasis will be on expanding the P.O.S.T. curriculum to create a unique learning experience.

**CRJ 105 Basic Law**

8 Credit Hours • 120 Contact Hours (Lecture)

*Prerequisite: Permission of Academy Director**Corequisite: CRJ 101, 102, 103, 104, 106, 107, 108, PED 110*

Covers constitutional and procedural consideration affecting arrest, search and seizure, and civil liability. Includes the Colorado criminal, liquor, controlled substance, and children's codes. Emphasizes victim's rights and court room testimony.

**CRJ 106 Arrest Control Techniques**

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

*Prerequisite: Permission of Academy Director**Corequisite: CRJ 101, 102, 103, 104, 105, 107, 108, PED 110*

Grading: S/U only

Covers the skills, knowledge and abilities necessary to effectively maintain control of a suspect when making an arrest. Emphasizes the continuum of force and de-escalation of force.

**CRJ 107 Law Enforcement Driving**

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

*Prerequisite: Permission of Academy Director**Corequisite: CRJ 101, 102, 103, 104, 105, 106, 108, PED 110*

Grading: S/U only

Covers the skills, knowledge, and abilities required for operation of a law enforcement vehicle. Emphasizes defensive driving. Enables students to demonstrate skills by driving a vehicle under simulated conditions.

**CRJ 108 Firearms**

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

*Prerequisite: Permission of Academy Director**Corequisite: CRJ 101, 102, 103, 104, 105, 106, 107, PED 110*

Grading: S/U only

Discusses the skills, knowledge, and abilities necessary to safely use police firearms. Students will demonstrate skills by firing weapons on a firing range. The student will demonstrate basic safety techniques and will explain the firearms role within the continuum of force.

**CRJ 110 Introduction to Criminal Justice**

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces a study of the agencies and processes involved in the criminal justice system: the legislature, the police, the prosecutor, the public defender, the courts, and corrections. Includes an analysis of the roles and problems of the criminal justice system in a democratic society, with an emphasis upon inter-component relations and checks and balances.

**CRJ 111 Substantive Criminal Law**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: CRJ 110 or equivalent*

Teaches legal definitions of crime, purposes and functions of the law, historical foundations, and the limits of the criminal law.

**CRJ 112 Procedural Criminal Law**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: CRJ 110 or equivalent*

Covers constitutional and procedural considerations affecting arrest, search and seizure, post-conviction treatment, origin, development, philosophy, and constitutional basis of evidence. Focuses on degrees of evidence and rules governing admissibility, judicial decisions interpreting individual rights, and an analysis of case studies from arrest through final appeal.

**CRJ 118 Report Writing**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 121 or ENG 131*

Identifies the areas of concern in regards to proper documentation of police related activities. Focuses on report writing skills, proper structuring of interviews, and chronological documentation of events. Incorporates proper sentence structuring, the use of correct terminology, and accuracy in written reports.

**CRJ 125 Law Enforcement Operations**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: CRJ 110*

Examines the complexity and multi-dimensional aspects of the law enforcement role and career; law enforcement discretion; law enforcement values and culture in modern America. Covers the role and functions of law enforcement in occupational, social, political, and organizational context.

**CRJ 126 Patrol Procedures**

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on an in-depth study of the basic knowledge and skills required of a peace officer to safely and effectively accomplish the patrol procedure.

**CRJ 127 Crime Scene Investigation**

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

Focuses on basic procedures in crime scene management to include photography and preparing initial reports and sketches. Includes processing evidence and related criminalistic procedures. Covers interviewing suspects, witnesses and victims to include the recording of identifications and descriptions. Incorporates lab and lecture.

**CRJ 135 Judicial Function**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: CRJ 110 or equivalent*

Examines the criminal process with an analysis of the major judicial decision-makers, i.e., prosecutors, defense attorneys, judges, and the discretionary aspects of adjudication.



**CRJ 145 Correctional Process**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: CRJ 110 or equivalent*

Focuses on the post-conviction corrections process, the development of a correctional philosophy, theory, and practice, a description of institutional operation, programming and management, and community-based corrections, probation, and parole.

**CRJ 146 Community Based Corrections**

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces an analysis of community based correctional programs and procedures. Emphasizes the environment and the relationship to public safety, reintegration, and punishment.

**CRJ 167 Fingerprinting**

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

An in-depth instruction of the interpretation, classification, and presentation in court of the Henry System of classification of fingerprint patterns. Instructor includes the discussion of lifting and preserving fingerprints from crime scenes. The processing of a crime scene using basically powders and a magna brush. The student will be proficient in the Henry System and use all kits and allied equipment in a high level at the completion of the course.

**CRJ 208 Criminal Evidence**

3 Credit Hours • 45 Contact Hours

*Prerequisite: CRJ 110*

Reviews the basic principals of evidence in state and Federal criminal proceedings. Includes analysis of the Federal Rules of Evidence and the Colorado Evidence Rules, as well as evidentiary and procedural requirements in the courts. The course will focus on evidence questions in the context of the examination of witnesses, competency, privilege, relevancy, hearsay, burden of proof and the presentation of scientific and demonstrative evidence. Constitutional guidelines affecting evidence collection and admissibility will also be reviewed.

**CRJ 209 Criminal Investigation I**

3 Credit Hours • 45 Contact Hours (Lecture)

Covers the function of the preliminary investigation at a crime scene to include securing the scene, crime scene searchers, police drawings, and recognition and collection of evidence.

**CRJ 210 Constitutional Law**

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on the powers of government as they are allocated and defined by the United States Constitution. Includes intensive analysis of United States Supreme Court decisions.

**CRJ 211 Criminal Investigation II**

3 Credit Hours • 45 Contact Hours (Lecture)

Builds on CRJ 209 with focus on 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*

Focuses on 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. Includes confessions, undercover operations, surveillance techniques, and survival skills unique to undercover operants.

**CRJ 215 Constitutional Rights of Inmates**

3 Credit Hours • 45 Contact Hours (Lecture)

Covers an overview of the criminal justice system as it pertains to the constitutional rights of inmates including civil and criminal liabilities, legal services, and disciplinary proceedings.

**CRJ 216 Juvenile Law & Procedures**

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on an in-depth analysis of the socio-legal operation of the Juvenile Justice System emphasizing the substantive and due process rights of minors. Includes analysis of legal reasoning underlying the juvenile law as it operates at all levels of government.

**CRJ 218 Drug Investigative Strategies**

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on laws dealing with gambling, prostitution, sex crimes, and narcotics. Emphasizes special techniques employed in the detection, suppression, and apprehension of violators. Includes effects of drugs and narcotics, identification of narcotics, and terminology.

**CRJ 219 Police Intelligence**

2 Credit Hours • 30 Contact Hours (Lecture)

Focuses on the fundamentals of how law enforcement agencies apply intelligence in police operations and combat organized crime. Explains the structure, training, staffing, and security of intelligence units and demonstrates operating guidelines at a command level.

**CRJ 220 Human Relations & Social Conflict**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: CRJ 110 or equivalent*

Highlights the environmental, organizational, and socio-psychological dimensions of social control. Includes the study of individual attitudes, beliefs, and behavior involved in role conflicts, community relations, and conflict management in the social structure.

**CRJ 225 Crisis Intervention**

3 Credit Hours • 45 Contact Hours (Lecture)

Provides information and application of crisis theories in working with diverse populations. Examines the interventionist role.

**CRJ 227 Law Enforcement Supervisory Training Program**

2 Credit Hours • 30 Contact Hours (Lecture)

Develops the Law Enforcement Supervisor. It provides an overview of police supervision and gives the student an understanding of the first-line supervisor's role from three perspectives: management expectations, first-line supervisor's concept of the role, and subordinates expectations. This is a P.O.S.T. approved course.

**CRJ 230 Criminology**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: CRJ 110 or equivalent*

Examines the question of crime causation from legal, social, political, psychological, and theoretical perspectives. Covers the history and development of criminology.

**CRJ 240 Criminal Investigations**

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces investigation methods and procedures from preliminary through the follow-up stages.

**CRJ 245 Interview & Interrogation**

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on the study of technical and legal approaches used in gathering desired information from victims, witnesses, and suspects. Examines the fundamental characteristics of questioning and the use of psychological influences.



**CRJ 246 Traffic Investigation**

3 Credit Hours • 45 Contact Hours (Lecture)

Provides an overview of the skills and concepts necessary to complete an accurate investigation of a traffic collision. Emphasizes traffic management concepts, selective traffic enforcement, and safety issues.

**CRJ 249 Penology**

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on an historical and theoretical study of incarceration as punishment, deterrence, and incapacitation.

**CRJ 250 Computer Crime Investigation**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: Law Enforcement personnel or permission of Academy Director*

Provides a basic foundation of the skills and knowledge necessary to understand and investigate the computer criminal. Investigative procedures, interviewing skills, and the necessity of search warrants will be covered. Legal issues regarding personal liability, privacy, and wiretapping will also be discussed.

**CRJ 255 Organizational Management of Correctional Institutions**

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on 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 Lecture/Lab Combination)

Focuses on current methods and techniques of police photography. Includes the use, nomenclature, and operation of 35mm and 4x4 cameras at simulated crime scenes and traffic accidents. Incorporates the development, printing, and enlargement of photos.

**CRJ 264 Practical Crime Scene Investigation**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: CRJ 160, CRJ 209, CRJ 211, CRJ 260*

Introduces the investigation of death from the edico-legal standpoint. Discusses all aspects of an investigation from the initial findings to identification of the deceased and the determination of cause and time of death. Includes the follow-up investigation and the preparation and presentation of evidence for the criminal trial.

## Culinary Arts

**CUA 101 Food Safety & Sanitation**

2 Credit Hours • 30 Contact Hours (Lecture)

Covers the basic rules of sanitation, food-borne illnesses, safe food temperatures, safe food handling techniques, the HACCP Program, pest control procedures, and local/state health rules and regulations for food service operations. At the completion of the course students take a nationally recognized test from the Education Foundation of the National Restaurant Association. If passed with a score of 75% or more, students receive a Certificate of Completion from the Education Foundation.

**CUA 105 Food Service Concepts & Management Skills**

3 Credit Hours • 45 Contact Hours (Lecture)

Demonstrates the use of management skills training in the food service industry by use of student interaction research, and also demonstrates the various styles of menu development. Includes basic responsibility for food service personnel in all kitchen positions with emphasis on advertising vs. publicity, job analysis, description specifications, and duty list as related to recruiting and hiring process. Covers application, interview techniques, training, and hiring process. Incorporates preparation of menus for different styles of food service concept establishments.

**CUA 116 Catering, Buffets, & Tableside Cooking**

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

Focuses on getting started in the catering business. Includes recruiting, types of events, contacts, kitchen set-up, equipment, pricing, and menu development. Enables students to present and plan various stations of buffet set-ups and to demonstrate techniques of tableside service and flambé tableside cooking. Students also participate in basic ice carving demonstrations.

**CUA 120 Wines & Spirits**

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

Enables students to examine types of beverages and equipment including wines, beers, spirits, bar equipment, and staffing. Covers profitability, marketing, federal and local laws, and service. Focuses on the history of making and processing wines, spirits, and beers.

**CUA 125 Introduction to Food**

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Provides students with the fundamental principles and practices of a commercial kitchen, including safety and sanitation applications, use and care of equipment, tools, utensils and knives, recipe use and conversion, organization of work, and basic cooking methods. Focuses on the fundamental principles and production of stocks, soups, sauces, gravies, and thickening agents. Principles of cold food and non-alcoholic beverage preparation and production in a commercial kitchen. Basic cold food decorative work such as fruit and vegetable garnishes and carvings, terrines, and hors d'oeuvres. Emphasizes the affects of seasonings and cooking methods of vegetable products and basic hot food preparation. Students prepare breakfast orders similar to those ordered in restaurants with egg cookery and dairy products emphasized.

**CUA 127 Soups, Sauces, & Consommés**

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

*Prerequisite: CUA 101, CUA 125*

Covers the preparation of the five mother sauces and small-derived sauces. Enables students to prepare stocks, consommés, emulsified sauces, clear soups, pureed soups, chowders, national, and cream soups. Introduces gravies and sauce garnishing.

**CUA 129 Center of the Plate**

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Prerequisite: CUA 101, CUA 125*

Provides the basics methods for preparation and cooking of various types of potatoes, starches, legumes, and pastas. Enables students to prepare and cook a variety of casseroles and grain products. The basics of meat handling, including principles used for selecting meat products, their basic cuts and cooking methods. Focuses on a variety of meat products, and the basics of handling poultry, fish, and seafood including principles used for selection and the basic forms these products have and the methods of cooking them. Focuses on preparation of poultry, fish and seafood products, and incorporates practice in the use of these principles and methods. Enables the student to plan and prepare a variety of complete meals in a commercial kitchen.

**CUA 145 Introduction to Baking**

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Provides the student with the fundamentals of baking terminology, principles of baking, and the characteristics of the functions of the main ingredients that is used in bakery production. Orients student to use commercial equipment, tools, and provides the student with the fundamentals of basic yeast-raised production and quick breads, white bread, rolls, variety grain breads, specialty breads, sweet yeast-raised products, and quick bread, fundamentals of basic cake, pie, pastry, and cookie production. Enables the student to produce a variety of cakes, pies, pastries, cookies, and assorted dessert items in a commercial kitchen.

**CUA 150 Baking: Decorating & Presentation**

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

*Prerequisite: CUA 101, CUA 125*

Examines the preparation and production of cakes, pastries, different styles of decorating, equipment, and types of products used for decoration. Covers the use of plate painting, national products, and designing show pieces.

**CUA 151 Baking: Intermediate Bread Preparation**

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

*Prerequisite: CUA 101, CUA 125*

Focuses on preparation of types of bread products including French, rye, wheat, brioche, and croissants. Enables the student to demonstrate different styles of presentation including rolling, braiding, cloverleaf, parker-house, single knot, butter-flake, comb, and wreath shape. Examines production steps, ingredients, and equipment that apply to course training.

**CUA 152 Individual Fancy Dessert Production**

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

*Prerequisite: CUA 101, CUA 145*

Focuses on the preparation and decoration of individual dessert items. Covers the preparation of cream horns, napoleons, éclairs, cream puffs, marzipan fruits, marzipan sculptures, tarts, flambéed desserts, international desserts, pastry shells, pulled sugar, spun sugar, and individual chocolate decorations. Students research and locate dessert menus/recipes to be used in lab production.

**CUA 156 Nutrition for the Hospitality Professional**

3 Credit Hours • 45 Contact Hours (Lecture)

Provides students with the fundamentals of human nutrition. Focuses on the nutritional needs of humans throughout their life cycle as well as those with special dietary needs. Students may take a nationally recognized test from the Educational Foundation of the National Restaurant Association.

**CUA 157 Menu Planning**

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces the student to planning menus and integrating them into foodservice operations. Equips the student with a working knowledge of the function, mechanics, and results achieved by the menu. Provides an overview of the existing and growing foodservice industry as seen through the menu.

**CUA 161 Advanced Cake Decorating – Wedding Cakes**

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

*Prerequisite: CUA 150*

Demonstrates a variety of wedding cake decorating techniques. We will learn to work with gumpaste, rolled fondant, royal icing. Student will complete a two-tier wedding cake.

**CUA 190 Dining Room Management**

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Focuses on service related skills and knowledge used in the foodservice industry. Enables the student, through a laboratory setting, to practice skills and acquire the knowledge of “front of the house” operations common to dining rooms in the industry. Includes table setting, side work, serving customers, operating a Point-of-Sale system, hosting and supervising dining room personnel. At the completion of the class, students are able to supervise the operation of a sit-down dining operation. Meets a minimum of 90 hours.

**CUA 210 Advanced Cuisine & Garde Manger**

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Prerequisite: CUA 129*

Focuses on the preparation of food display items for buffets and banquets such as fancy garnishes, fruit and vegetable carvings, canapés, party trays, etc. Includes pates, galantines, terrines, and choud froid items. Incorporates creation of food artistry show pieces meeting competition guidelines developed by the American Culinary Federation. Covers the preparation of a regional, ethnic, or cultural culinary presentation based upon personal research.

**CUA 233 Advanced Line Prep & Cookery**

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Prerequisite: CUA 129*

Focuses on preparation of complete meals to order. Emphasizes cooking center of the plate items such as meat, fish, seafood, and poultry as well as accompaniment foods such as starches and vegetables. Enables the student to prepare sauces, entrée salads, edible garnishes, and meals determined by the menu prepared for a dining room setting. Emphasizes line supervisor, sauté cook, pantry cook, cook’s helper, and runner responsibilities.

**CUA 236 Advanced Baking**

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

*Prerequisite: CUA 145*

Provides students the opportunity to refine their baking skills in the areas of desserts, yeast breads, garnishing, and presentation of baked products. Enables the student to bake, garnish and present a variety of baked goods. These products are prepared and displayed for the public in various locations in the college.

**CUA 245 International Cuisine**

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

*Prerequisite: CUA 125*

Introduces full meal preparation of non-traditional international cuisine. Ethnic ingredients and meals from India, Thailand, Greece, Morocco, Africa, South America and Ecuador will be introduced.

**CUA 255 Supervision in the Hospitality Industry**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: CUA 105*

Provides the current/future foodservice operator, manager, or supervisor with a solid foundation for developing communication skills, planning and decision-making skills, and skills for creating a goal-oriented environment utilizing management principles in the selection, training, evaluating, delegating, motivating, rewarding, and disciplining employees. Stresses skills for success through people development.

**CUA 256 Marketing in the Hospitality Industry**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: CUA 105*

Involves the student in a study of foodservice marketing including marketing planning, use of marketing information in the foodservice operation, marketing research, understanding foodservice customers, advertising and promotion, hospitality group sales, and menu design and pricing strategies. At the conclusion of this course, the student will take a nationally recognized test and receive a certificate from the Education Foundation of the National Restaurant Association.

**CUA 261 Cost Controls**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: CUA 105*

Provides students with the opportunity to learn the types of costs usually found in the food service industry. Students will learn to apply control techniques to a variety of costs and sales. They will also learn to interpret a variety of financial reports which reflect the relationship between costs and income. Students may take the national Cost Controls test from the National Restaurant Association Education Foundation. If they pass the test with 75% or higher, they will receive a national certificate for the course.

**CUA 262 Purchasing for the Hospitality Industry**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: CUA 105*

Emphasizes controlling costs as applied to the selection and procurement of food and supply items. Covers selection and procurement of food and supplies, supplier selection, and distribution systems including the forces affecting them.

**CUA 263 Legal Aspects of Hospitality Management**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: CUA 105*

Provides the student with an overview of legal subjects relevant to foodservice. Covers Federal, State, and Local regulations, patron civil rights, liability and safety, laws relating to employment, security, contracts, property rights, franchising, bankruptcy and reorganization, court system and out-of-court settlements, and choosing and managing an attorney.

**CUA 281 Internship**

4 Credit Hours • 180 Contact Hours (Work Experience)

*Prerequisite: CUA 127*

Places students in an actual work situation where they participate in the operation of a foodservice establishment. Hours of work are arranged by the site supervisor and the intern. The number of hours required are determined by the number of credits the course carries.

## Dance

**DAN 105 Hip Hop Dance**

1 Credit Hour • 30 Contact Hours (Lab)

Consists of basic traditional jazz and ballet movements. Warm-up exercises will include body toning and stretching. Students will learn diagonal step combinations leading to hip-hop dance routines.

**DAN 111 Modern Dance I**

1 Credit Hour • 30 Contact Hours (Lab)

*Prerequisite: ENG 060*

Introduces basic concepts and skills of modern dance. Focuses on technique work to increase strength, flexibility, endurance, coordination, rhythm, and spatial awareness. Explores dance as a tool for communication and dance as an art form.

**DAN 112 Modern Dance II**

1 Credit Hour • 30 Contact Hours (Lab)

*Prerequisite: ENG 060*

Includes a more in-depth study of modern dance concepts as well as more specific techniques of modern dance choreography. Focuses on more advanced technique work and more emphasis on improvisation.

**DAN 113 Modern Dance III**

1 Credit Hour • 30 Contact Hours (Lab)

*Prerequisite: ENG 060*

Builds on the skills learned in DAN 112 with more advanced technique work. Enables students to increase knowledge of specific modern choreographers' techniques and develop more experience with movement improvisation.

**DAN 114 Modern Dance IV**

1 Credit Hour • 30 Contact Hours (Lab)

*Prerequisite: DAN 113*

Teaches a variety of modern dance techniques and experimentation with movement styles. Attention is placed on the performance elements of dance technique. This intermediate/advanced modern dance class is designed to challenge a dance student.

**DAN 121 Jazz I**

1 Credit Hour • 30 Contact Hours (Lab)

*Prerequisite: ENG 060*

Introduces the basic techniques and vocabulary of jazz dance and the basic elements of dance. Focuses on movement oriented dance, comprised of warm-up exercises, center combinations, traveling combinations, and cool down.

**DAN 122 Jazz II**

1 Credit Hour • 30 Contact Hours (Lab)

*Prerequisite: ENG 060*

Continues Jazz I with an increased knowledge of jazz dance. Enables the student to work at an intermediate level with a basic understanding of body alignment, balance, and musicality.

**DAN 123 Jazz III**

1 Credit Hour • 30 Contact Hours (Lab)

*Prerequisite: ENG 060*

Builds on skills learned in DAN 122 and incorporates work at an intermediate/advanced level. Expands on jazz dance technique through more challenging movement combinations. Requires knowledge of the learned basics in dance.

**DAN 124 Jazz IV**

1 Credit Hours • 30 Contact Hours (Lab)

Builds on skills learned in DAN 123 and incorporates work at a more advanced level. Emphasizes more challenging movement combinations and performance techniques.

**DAN 125 History of Dance I**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 090, REA 090*

Introduces the history of dance as a theatre or performing art. Examines dance from Classical Greece through the Renaissance, including court and classical ballet to modern dance with African and Caribbean influences.

**DAN 129 Introduction to Dance**

1 Credit Hour • 30 Contact Hours (Lab)

Introduces the art of dance and movement expression from a variety of viewpoints: historical, cultural, aesthetic, critical, and creative. Examines the art and craft of dance as an expression of culture and community while exploring personal expression, imagery, dance techniques, and performance qualities.

**DAN 130 Dance Sampler**

1 Credit Hour • 30 Contact Hours (Lab)

Introduces the beginning dancer to popular dances through a social dance sampler in Salsa, Swing, and Country Western Dance technique, footwork, body posturing, rhythms, and dance floor etiquette. Examines a variety of dances such as Salsa's Mambo, Cha-Cha, and Rumba; Swing's Lindy Hop (jitterbug); and Country Western's Two Step, Cowboy Waltz, Cotton-Eyed Joe, and various Country Western line dances.

**DAN 131 Ballet I**

1 Credit Hour • 30 Contact Hours (Lab)

*Prerequisite: ENG 060*

Introduces the basic techniques of ballet, which are built upon knowledge of ballet terminology, fundamental exercises, and the basic elements of dance. Focuses on movement-oriented dance, comprised of stretching, barre warm-up exercises, simple terre ^ terre and jumping steps, and basic extended positions.

**DAN 132 Ballet II**

1 Credit Hour • 30 Contact Hours (Lab)

*Prerequisite: ENG 060*

Continues Ballet I and emphasizes ballet terminology, fundamental exercises, and the basic elements of dance. Focuses on an intermediate level within the basic structure of the ballet class.

**DAN 133 Ballet III**

1 Credit Hour • 30 Contact Hours (Lab)

*Prerequisite: ENG 060*

Builds on Ballet II at an intermediate/advanced level. Continues learning within the basic structure of a ballet class while increasing the level of skills through more experience with challenging movement combinations.

**DAN 134 Ballet IV**

1 Credit Hour • 30 Contact Hours (Lab)

*Prerequisite: DAN 133*

Consists of traditional and contemporary ballet technique with focus on correct body alignment and kinesiology for an increased physical performance. This is not a point class.

**DAN 141 Ballroom Dance I**

1 Credit Hour • 30 Contact Hours (Lab)

*Prerequisite: ENG 060*

Introduces the basic terminology, techniques, and routines of several dances from a specific country or region. Focuses on the music, costumes, and customs related to the dances of study. Partners are not required.

**DAN 142 Ballroom Dance II**

1 Credit Hour • 30 Contact Hours (Lab)

*Prerequisite: ENG 060*

Continues Dance 141 with focus on regional dances, customs, and rhythms. Partners are not required.

**DAN 143 Tap I**

1 Credit Hour • 30 Contact Hours (Lab)

Introduces basic tap dance movements and techniques. The shuffle, ball change, brush, flap heel drop, stomp, and stamp step are covered.

**DAN 151 Belly Dance I**

1 Credit Hour • 30 Contact Hours (Lab)

Presents belly dance - the oldest dance form known to humankind and a celebration of life! Emphasizes developing balance and enables the student to perform a belly dance and learn the history of belly dance and costuming techniques.

**DAN 152 Belly Dance II**

1 Credit Hour • 30 Contact Hours (Lab)

Continues Belly Dance I (DAN 151) with emphasis on coordination and balance and additional techniques. Includes costume design.

**DAN 211 Dance Composition**

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

*Prerequisite: REA 090, ENG 090; two techniques classes or faculty consent*

Focuses on principles of choreography and development of individual expressive style.

**DAN 221 Dance Performance I**

2 Credit Hours • 60 Contact Hours (Lab)

*Prerequisite: faculty consent through audition*

Enables students to rehearse and perform dances for community concerts after selection through audition. Covers warm-up/advanced technique, rehearsals, and cool down in a dance company atmosphere. Focuses on choreography for original ballet, modern dance, and jazz dance works.

**DAN 222 Dance Performance II**

2 Credit Hours • 60 Contact Hours (Lab)

*Prerequisite: DAN 221*

Continues Dance Performance class offering more opportunities for students to perform in different settings.

**DAN 224 Dance for Musical Theatre I**

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

*Prerequisite: Dance technique courses*

Introduces students to dance within the context of musical theatre. Enables the student to practice non-verbal communication and expressive movement techniques.

**DAN 225 Dance for Musical Theatre II**

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

*Prerequisite: DAN 224*

Continues Dance 224 with more emphasis on performance.

**DAN 226 Pointe I**

1 Credit Hour • 30 Contact Hours (Lab)

*Prerequisite: Instructor Permission*

Emphasizes elementary pointe technique. Most work will be done at the barre stressing the muscular development of the foot, which is necessary before more advanced work can be undertaken.

**DAN 227 Pointe II**

1 Credit Hours • 30 Contact Hours (Lab)

*Prerequisite: Instructor Permission*

Offers a continuation of DAN 226 Pointe I, with emphasis on barre work to strengthen the foot and ankle. Students will gain knowledge and skill leading to the intermediate level.

## Deaf Prep

### DEP 011 Deaf Prep American Sign Language I

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

Allows the student to study the Deaf culture. Focuses on discussion of experiences of the Deaf or hard of hearing person while growing up. Covers the values, traditions, and norms of both Deaf and hearing people.

### DEP 012 Deaf Prep American Sign Language II

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

Discusses diversity of Deaf people in general. Examines the lives of Deaf people from past and present. Enables the student to compare people from different countries and their sign languages. Incorporates volunteer time at one of the Deaf centers.

### DEP 013 Deaf Prep American Sign Language III

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

Focuses on expressive skills development. Involves students in activities that require observing different Deaf actors and poets. Enables the student to develop skills to act or tell stories in ASL to several kinds of audiences.

### DEP 014 Deaf Prep American Sign Language IV

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

Allows the Deaf students to study their own language in depth. Involves analyzing different components of ASL grammar and developing the understanding of each component and its functions. Emphasizes improving and maintaining their signing skills.

### DEP 021 Deaf Prep Critical Thinking I

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

Serves as the first course in a sequence for students enrolled in the Deaf Prep Program and is taught in American Sign Language. It is remedial in nature and targets Deaf students who are not academically ready for developmental classes. Focuses on Feuerstein Instrumental Enrichment program as well as other activities, games, and projects. Is highly individualized and assignments vary according to student's understanding and progress.

### DEP 022 Deaf Prep Critical Thinking II

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

Serves as the second course for students enrolled in the Deaf Prep Program and is taught in American Sign Language. Is remedial in nature and targets Deaf students who are not academically ready for developmental classes. Focuses on Feuerstein Instrumental Enrichment program as well as other activities, games, and projects. Is highly individualized and assignments vary according to student's understanding and progress.

### DEP 023 Deaf Prep Critical Thinking III

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

Serves as the third course in the sequence and is taught in American Sign Language. Is remedial in nature and targets Deaf students who are not academically ready for developmental classes. Focuses on Feuerstein Instrumental Enrichment program as well as other activities, games, and projects. Is highly individualized and assignments vary according to student's understanding and progress.

### DEP 024 Deaf Prep Critical Thinking IV

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

Serves as the fourth course in a sequence and is taught in American Sign Language. Is remedial in nature and targets Deaf students who are not academically ready for developmental classes. Focuses on Feuerstein Instrumental Enrichment program as well as other activities, games, and projects. Is highly individualized and assignments vary according to student's understanding and progress.

### DEP 031 Deaf Prep English I

5 Credit Hours • 112.5 Contact Hours (Lecture/Lab Combination)

Serves as the first in a sequence for students enrolled in the Deaf Prep Program and is taught in American Sign Language. Is remedial in nature and targets Deaf students who are not academically ready for developmental classes. Includes reading and writing of English and comparison of English and ASL. Placement is based upon students' abilities and needs and the results of pretesting. Incorporates highly individualized activities, projects, and assignments.

### DEP 032 Deaf Prep English II

5 Credit Hours • 112.5 Contact Hours (Lecture/Lab Combination)

Serves as the second in a sequence for students enrolled in the Deaf Prep Program and is taught in American Sign Language. Is remedial in nature and it targets Deaf students who are not academically ready for developmental classes. Includes reading and writing of English and comparison of English and ASL. Placement is based upon students' abilities and needs and the results of pretesting. Incorporates highly individualized activities, projects, and assignments.

### DEP 033 Deaf Prep English III

5 Credit Hours • 112.5 Contact Hours (Lecture/Lab Combination)

Serves as the third in a sequence for students enrolled in the Deaf Prep Program and is taught in American Sign Language. Is remedial in nature and targets Deaf students who are not academically ready for developmental classes. Includes reading and writing of English and comparison of English and ASL. Placement is based upon students' abilities and needs and the results of pretesting. Incorporates highly individualized activities, projects, and assignments.

### DEP 034 Deaf Prep English IV

5 Credit Hours • 112.5 Contact Hours (Lecture/Lab Combination)

Serves as the fourth in a sequence for students enrolled in the Deaf Prep Program and is taught in American Sign Language. Is remedial in nature and targets Deaf students who are not academically ready for developmental classes. Includes reading and writing of English and comparison of English and ASL. Placement is based upon students' abilities and needs and the results of pretesting. Incorporates highly individualized activities, projects, and assignments.

### DEP 041 Deaf Prep Math I

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

Serves as the first in a sequence for students enrolled in the Deaf Prep Program and is taught in American Sign Language. Is remedial in nature and targets Deaf students who are not academically ready for developmental classes. Includes whole number arithmetic as well as operations with fractions and decimals. Placement is based upon students' abilities and needs and the results of pretesting. Incorporates highly individualized activities, projects, and assignments.

### DEP 042 Deaf Prep Math II

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

Serves as the second in a sequence for students enrolled in the Deaf Prep Program and is taught in American Sign Language. Is remedial in nature and targets Deaf students who are not academically ready for developmental classes. Includes whole number arithmetic as well as operations with fractions and decimals. Placement is based upon students' abilities and needs and the results of pretesting. Incorporates highly individualized activities, projects, and assignments.



**DEP 043 Deaf Prep Math III**

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

Serves as the third in a sequence for students enrolled in the Deaf Prep Program and is taught in American Sign Language. Is remedial in nature and targets Deaf students who are not academically ready for developmental classes. Includes whole number arithmetic as well as operations with fractions and decimals. Placement is based upon students' abilities and needs and the results of pretesting. Incorporates highly individualized activities, projects, and assignments.

**DEP 044 Deaf Prep Math IV**

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

Serves as the fourth in a sequence for students enrolled in the Deaf Prep Program and is taught in American Sign Language. Is remedial in nature and targets Deaf students who are not academically ready for developmental classes. Includes whole number arithmetic as well as operations with fractions and decimals. Placement is based upon students' abilities and needs and the results of pretesting. Incorporates highly individualized activities, projects, and assignments.

**DEP 051 Deaf Prep Resource Management I**

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

Serves as the first in a sequence for students enrolled in the Deaf Prep Program and is taught in American Sign Language. Is remedial in nature and targets Deaf students who need to improve their life skills. Enables the student to recognize and utilize resources within themselves, their close relationships, their communities, and their world. Class activities may include field trips, guest lecturers, and special projects. These classes are highly individualized and assignments vary according to students' understanding and progress.

**DEP 052 Deaf Prep Resource Management II**

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

Serves as the second in a sequence for students enrolled in the Deaf Prep Program and is taught in American Sign Language. Is remedial in nature and targets Deaf students who need to improve their life skills. Enables the student to recognize and utilize resources within themselves, their close relationships, their communities, and their world. Class activities may include field trips, guest lecturers, and special projects. These classes are highly individualized and assignments vary according to students' understanding and progress.

**DEP 053 Deaf Prep Resource Management III**

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

Serves as the third in a sequence for students enrolled in the Deaf Prep Program and is taught in American Sign Language. Is remedial in nature and targets Deaf students who need to improve their life skills. Enables the student to recognize and utilize resources within themselves, their close relationships, their communities, and their world. Class activities may include field trips, guest lecturers, and special projects. These classes are highly individualized and assignments vary according to students' understanding and progress.

**DEP 054 Deaf Prep Resource Management IV**

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

Serves as the fourth in a sequence for students enrolled in the Deaf Prep Program and is taught in American Sign Language. Is remedial in nature and targets Deaf students who need to improve their life skills. Enables the student to recognize and utilize resources within themselves, their close relationships, their communities, and their world. Class activities may include field trips, guest lecturers, and special projects. These classes are highly individualized and assignments vary according to students' understanding and progress.

**DEP 061 Deaf Prep Study Skills I**

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

Allows students to develop their skills in goal setting, time management, and test taking. Addresses effectiveness of proper school tools, attitudes, and behaviors. Develops awareness of the availability of college resources such as interpreters, notetakers, mentors, libraries, tutoring centers, and computer labs.

**DEP 062 Deaf Prep Study Skills II**

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

Allows students to develop their skills in goal setting, time management, and test taking. Addresses effectiveness of proper school tools, attitudes, and behaviors. Develops awareness of the availability of college resources such as interpreters, notetakers, mentors, libraries, tutoring centers, and computer labs.

## Dental Assisting

**DEA 102 Principles of Clinical Practice**

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

*Corequisite: DEA 120 and DEA 121 or program coordinator consent*

Includes techniques used in four handed dentistry, instrument identification, and armamentarium for tray set-ups. Covers sterilization and aseptic procedures.

**DEA 104 Specialties in Dentistry**

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

*Corequisite: DEA 102, DEA 120, and DEA 121 or program coordinator consent*

Focuses on armamentarium of specific tray set-ups for periodontics, endodontics, and fixed and removable prosthodontics. Examines pediatric dentistry, oral surgery, and implants. Includes diagnosis, treatment, and the dental assistant's role in each specialty.

**DEA 111 Dental Office Management**2 Credit Hours • 45 Contact Hours (45 Lecture/Lab Combination)  
*Prerequisite: DEA 102, DEA 104, DEA 120, DEA 121, DEA 123, DEA 125, DEA 126**Corequisite: DEA 122, DEA 124, DEA 131, DEA 132, DEA 134 or program coordinator consent*

Includes office management and clerical practices, scheduling appointments, completing daily records, insurance and tax forms, bookkeeping and recall systems, and ordering supplies.

**DEA 120 Introduction to Dental Practices**

1 Credit Hour • 15 Contact Hours (Lecture)

*Corequisite: DEA 121*

Includes roles and responsibilities of the dental health team; educational background for the various specialties including general practitioner, hygienist, dental assistant; history, legal implications, ethical responsibilities and the role of professional organizations.

**DEA 121 Dental Science I**

3 Credit Hours • 45 Contact Hours (Lecture)

*Corequisite: DEA 120*

Includes fundamentals of the oral structures as they apply to oral histology, embryology, morphology, pathology, dental anatomy, and dental charting.

**DEA 122 Dental Science II**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* DEA 102, DEA 104, DEA 120, DEA 121, DEA 126 or program coordinator consent

Includes survey of human anatomy and physiology, the structure of the head and neck as applied to dental assisting, the function of the maxilla and mandible, processes, foramen, sutures, and major nerve and blood supply.

**DEA 123 Dental Materials I**

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

*Corequisite:* DEA 120, DEA 121 or program coordinator consent

Includes fundamentals of dental materials as they apply to clinical and laboratory applications.

**DEA 124 Dental Materials II**

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

*Prerequisite:* DEA 120, DEA 121, DEA 123 or program coordinator consent

Includes type, compositions, and uses of elastomeric impression materials and the fabrication of custom impression trays and temporary crowns.

**DEA 125 Dental Radiography**

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

*Corequisite:* DEA 120, DEA 121 or program coordinator consent

Focuses on the science of radiography, the application of radiographic techniques, and aseptic techniques.

**DEA 126 Infection Control**

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

*Corequisite:* DEA 120, DEA 121 or program coordinator consent

Includes basic information concerning infection and disease transmission in the dental office. Emphasizes knowledge of microorganisms, with an emphasis on aseptic techniques, sterilization, and hazardous communication management.

**DEA 131 Advanced Dental Radiography**

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

*Prerequisite:* DEA 120, DEA 121, DEA 125

Includes theory and techniques of exposing intra-oral and extra-oral radiographs on adults, children, edentulous, and special needs patients. Covers dental anatomy radiographic interpretation and aseptic techniques. Enables the student to expose radiographs on the x-ray mannequin and patients. Students must be a minimum of eighteen years of age.

**DEA 132 Medical Emergencies**

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

*Prerequisite:* DEA 102, DEA 120, DEA 121

Includes techniques for taking and reading vital signs as well as Cardiopulmonary Resuscitation (CPR) for Health Care Providers. Emphasizes recognition, prevention, and management of medical emergency situations in the dental office. Covers completing and updating patient health history. Addresses pharmacology.

**DEA 134 Prevention & Nutrition in Dentistry**

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

*Prerequisite:* DEA 102, DEA 120, DEA 121*Corequisite:* DEA 122, DEA 132 or program coordinator consent

Includes techniques in preventive dentistry with an emphasis on fluoride application and oral home care instruction. Includes nutrition as it applies to dental health and diet counseling. Covers techniques for coronal polishing.

**DEA 140 Dental Assisting National Board Review (Elective)**

1 Credit Hour • 15 Contact Hours (Lecture)

*Prerequisite:* DEA 102, DEA 104, DEA 111, DEA 120, DEA 121, DEA 122, DEA 123, DEA 124, DEA 125, DEA 126, DEA 131, DEA 132, DEA 134, DEA 181, 2 years documented full time dental assisting experience or program coordinator consent*Corequisite:* DEA 182

Focuses on a review for the Dental Assisting National Board (DANB) Examination.

**DEA 181 Clinical Internship I**

1 Credit Hour • 45 Contact Hours (Work Experience)

*Prerequisite:* Program coordinator consent

Includes the opportunity for clinical application of dental assisting techniques in a dental office or clinical setting as part of the American Dental Association's requirement of 300 clinical internship hours.

**DEA 182 Clinical Internship II & Seminar**

6 Credit Hours • 270 Contact Hours (Work Experience)

*Prerequisite:* DEA 181 and program coordinator consent

Focuses on clinical practice in private or public dental offices or clinics with clinical work experience in both general dentistry and specialty fields on a rotating basis.

**DEA 200 Introduction to Expanded Functions**

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* Graduate of an American Dental Association accredited dental assisting program, Certified Dental Assistant, or 2 years of documented full time dental assisting experience or program coordinator consent.

Emphasizes techniques and concepts of expanded functions in dental assisting, including team management, placement and finishing of dental restorative materials, and adjunct procedures necessary to restorative dentistry.

**DEA 205 Expanded Functions for the Dental Auxiliary**

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* DEA 200

Focuses on clinical application of expanded functions in dental assisting.

**Diesel Power Mechanics****DPM 100 Introduction to Diesel Mechanics**

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

Focuses on a basic understanding of general maintenance procedures for trucks and trailers and outlines the duties and responsibilities of the diesel mechanic. Addresses the use of shop tools, shop equipment, and the use of flat-rate and vehicle and shop safety procedures, and tool requirements. Covers preventative maintenance procedures.

**DPM 101 Diesel Shop Orientation**

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

*Prerequisite: faculty consent*

Focuses on maintaining a safe and clean working heavy duty diesel shop. Emphasis is placed on the proper use and care for hand, electric, air and hydraulic tools safely. Covers how to clean equipment properly, to handle and dispose of hazardous materials correctly, and to apply mandated regulations. Emphasis is also placed on proper lifting equipment.

**DPM 103 Diesel Engines I**

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

*Prerequisite: faculty consent*

Covers the theory of operation and repair of diesel engines with emphasis on the smaller automotive and medium range diesel engines. Enables the student to disassemble, inspect, and reassemble engines.

**DPM 106 Fuel Injection**

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

*Prerequisite: DPM 100*

Covers the theory of operation and repair of fuel injection systems. Provides laboratory assignments that involve disassembly, assembly, and service procedures on fuel system components.

**DPM 107 Fundamentals of Four-Wheel & Front-Wheel Drive**

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

*Prerequisite: faculty consent*

Focuses on the operation and repair of four wheel drive and front wheel drive systems.

**DPM 203 Diesel Engines II**

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

*Prerequisite: faculty consent*

Continues to build on skills learned in Diesel Engines I with major emphasis on heavy duty diesel engine theory, diagnosis, and repair.

**DPM 205 Heavy Duty Powertrains**

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

*Prerequisite: DPM 100 or faculty consent*

Studies the power train from the clutch to the final drive on heavy-duty equipment. Includes a study of clutch types, transmissions, and final drives and covers diagnosis and servicing of the components.

**DPM 206 Heavy Duty Brake Systems**

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

*Prerequisite: DPM 100 or faculty consent*

Focuses on the various braking systems incorporated in heavy-duty trucks and heavy equipment. Includes a study of hydraulic, air, and engine brake systems and covers the diagnosis and service of the components.

**DPM 210 Air Induction & Engine Analysis**

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

*Prerequisite: DPM 100 or faculty consent*

Covers the theory of operation and repair of turbochargers, superchargers, intercoolers, and various induction systems. Examines factors regulating engine performance failure and procedures for reclaiming engine performance.

**DPM 222 H/D Lighting & Instrumentation**

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

*Prerequisite: faculty consent*

Provides students with diagnosis and repair of lighting systems found on Medium/Heavy duty trucks and equipment. Emphasis on inspecting and testing of electrical circuits, switches and interfacing through data bus with on board computers.

**Early Childhood Education****ECE 100 Pre-licensing Training for Family Child Care Providers**

1 Credit Hour • 15 Contact Hours (Lecture)

Provides the educational training necessary to meet the hours and categories of training required by the Colorado Department of Human Services to open a licensed child care facility for children ages 2-12, with no more than two children under the age of two. Upon completion of 15 hours of training, in the areas listed below, the student will have met the academic training requirements of the Colorado Department of Human Services needed to open a licensed child care facility for children ages 2-12, with no more than two children under the age of two.

**ECE 101 Introduction to Early Childhood Education**

3 Credit Hours • 45 Contact Hours (Lecture)

Provides an introduction to Early Childhood Education. Includes the eight key areas of professional knowledge: Child Growth and Development; Health, Nutrition and Safety; Developmentally Appropriate Practices; Guidance; Family and Community Relationships; Diversity; Professionalism; Administration and Supervision. Focuses on ages birth through age eight.

**ECE 102 Introduction to Early Childhood Lab Techniques**

3 Credit Hours • 105 Contact Hours (15 Lecture, 90 Practicum)

*Prerequisite: ECE 101, ECE 103 or concurrent enrollment*

Focuses on a classroom seminar and placement in a child care setting. The supervised placement provides the student with the opportunity to observe children, to practice appropriate interactions, and to develop effective guidance and management techniques. Addresses ages birth through age 8.

**ECE 103 Guidance Strategies for Children**

3 Credit Hours • 45 Contact Hours (Lecture)

Explores guidance theories, applications, goals, techniques, and factors that influence expectations, classroom management issues, and prosocial skills. Addresses ages birth through age 8.

**ECE 111 Infant & Toddler Theory & Practice**

3 Credit Hours • 45 Contact Hours (Lecture)

Presents an overview of theories, applications (including observations) and issues pertinent to infant and toddler development in group and/or family settings. Includes state requirements for licensing, health, safety, and nutrition issues.

**ECE 112 Introduction to Infant/Toddler Lab Techniques**

3 Credit Hours • 105 Contact Hours (15 Lecture, 90 Practicum)

*Prerequisite: ECE 111 or concurrent enrollment*

Includes a classroom seminar and placement in an infant and/or toddler setting. The supervised placement provides the student with the opportunity to observe, to practice appropriate interactions, and to develop effective guidance and nurturing techniques with infants and/or toddlers. Addresses ages prenatal through age 2.

**ECE 113 Infant/Toddler Lab Techniques II**

3 Credit Hours • 135 Contact Hours (Practicum)

*Prerequisite: ECE 111, ECE 112 or concurrent enrollment*

Continues ECE 112 with responsibility for planning and implementing developmentally appropriate activities and caregiving.

**ECE 191 School Age Theory & Practice**

3 Credit Hours • 45 Contact Hours (Lecture)

Emphasizes processes for planning and implementing developmentally appropriate environments, materials, and experiences in school age programs, working with children ages 6 – 12 years of age. Provides expression and problem-solving skills in school age children.

**ECE 192 School Age Lab Techniques**

3 Credit Hours • 135 Contact Hours (Practicum)

*Corequisite: ECE 191*

Incorporates lab experience in before/after school, summer camp, or elementary school programs. Focuses on planning and implementing developmentally appropriate curriculum for school age children. Includes assisting the supervising teacher in all activities.

**ECE 205 Nutrition, Health & Safety**

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on nutrition, health, and safety as a key factor for optimal growth and development of young children. Includes nutrient knowledge, menu planning, food program participation, health practices, management and safety, appropriate activities, and communication with families. Addresses ages from prenatal through age 8.

**ECE 220 Curriculum Development: Methods & Techniques**

3 Credit Hours • 45 Contact Hours (Lecture)

Provides an overview of early childhood curriculum development. Includes processes for planning and implementing developmentally appropriate environments, materials and experiences, and quality in early childhood programs.

**ECE 225 Language & Cognition for the Young Child**

3 Credit Hours • 45 Contact Hours (45 Lecture)

*Prerequisite: PSY 238 or faculty consent*

Note: Course offered at CCC Online only

Examines theories of cognitive and language development as a framework for conceptualizing the way children acquire thinking skills. Includes observing, planning, facilitating, creative representation, and evaluating strategies within the context of play. Focuses on language, science, math, problem solving, and logical thinking. Addresses ages birth through age 8.

**ECE 226 Creativity & the Young Child**

3 Credit Hours • 45 Contact Hours (45 Lecture)

Note: Course offered at CCC Online only

Provides an emphasis on encouraging and supporting creative self expression and problem solving skills in children. Explores creative learning theories and research. Focuses on developmentally appropriate curriculum strategies in all developmental domains. Addresses ages birth through age 8.

**ECE 238 Child Growth & Development**

4 Credit Hours • 67.5 Contact Hours (45 Lecture, 22.5 Lecture/Lab Combination)

Covers the growth and development of the child from conception through the elementary school years. Emphasizes physical, cognitive, language, social and emotional domains and the concept of the whole child and how adults can provide a supportive environment. Ages addressed: prenatal through age 12. This course has an early childhood laboratory component.

**ECE 240 Administration of Early Childhood Care & Education Programs**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ECE 101 or faculty consent*

Examines Colorado's minimal licensing requirements, as well as optimal standards pertaining to the operation of programs for young children. Focuses on the director's administrative skills and role as a community advocate for young children. Addresses ages birth through age 12.

**ECE 241 Admin: Human Relations for Early Childhood Professions**

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on the human relations component of an early childhood professional's responsibilities. Includes director-staff relationships, staff development, leadership strategies, parent-professional partnerships, and community interaction.

**ECE 260 Exceptional Child**

3 Credit Hours • 45 Contact Hours (Lecture)

Presents an overview of typical and atypical developmental progression. Includes planning techniques, learning strategies, legal requirements, and accommodations and adaptations that are necessary in order to create an integrated classroom environment for a child with a wide range of exceptionalities. Focuses on ages birth through age 8.

**ECE 261 Exceptional Child Lab Techniques**

3 Credit Hours • 135 Contact Hours (Practicum)

*Prerequisite: ECE 260 or concurrent enrollment*

Incorporates a supervised experience in a program serving exceptional children in an inclusive setting. Focuses on the responsibility for planning and implementing developmentally appropriate activities, supporting classroom adaptations and accommodations, practicing appropriate interactions, and developing effective guidance and nurturing techniques.

**ECE 279 Seminar**

1-6 Credit Hours • 45 Contact Hours per credit (Practicum)

Provides students with an opportunity to examine aspects of early childhood education in detail.

**ECE 288 Practicum: Early Childhood Education**

1-7 Credit Hours • 45 Contact Hours per credit (Practicum)

*Prerequisite: faculty consent**Corequisite: faculty consent*

Provides students with advanced field experience opportunities in early childhood education programs.

**ECE 289 Capstone: Early Childhood Education**

5 Credit Hour • 225 Contact Hours (Work Experience)

*Prerequisite: ECE Program requirements*

Incorporates a demonstrated culmination of learning within a given program of study.

## Economics

**ECO 201 Principles of Macroeconomics: SS1**

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on the study of the American economy, stressing the interrelationships among household, business, and government sectors. Explores saving and investment decisions, unemployment, inflation, national income accounting, taxing and spending policies, the limits of the market and government, public choice theory, the Federal Reserve System, money and banking, and international trade.



**ECO 202 Principles of Microeconomics: SS1**

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on the consumer, the firm, the nature of cost, and how these relate to the economy as a whole. Analyzes economic models of the consumer, perfect competition, monopoly, oligopoly, and monopolistic competition. Explores economic issues including market power, population growth, positive and negative externalities, income distribution, poverty and welfare, discrimination, and international economic interdependence.

**Education****EDU 110 Overview of Special Populations for Paraeducators**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: A reading level of 9th grade or faculty consent is required for entry into the class.*

Provides students with knowledge in the areas of laws and history of special education; roles and responsibilities of paraeducators; planning for students with disabilities; typical and non-typical developmental stages of children and youth; basic learning concepts; cognitive, communicative, physical and affective needs of students with disabilities; understanding people with disabilities; transition, job coaching; and how to teach students self-advocacy skills.

**EDU 111 Communication Skills with Special Populations for Paraeducators**

3 Credit Hours • 45 Contact Hours (Lecture)

Provides knowledge in areas of effective communication skills, problem solving techniques, and analyzing self as communicator.

**EDU 112 Health & Safety Issues in Schools for Paraeducators**

1 Credit Hour • 15 Contact Hours (Lecture)

Provides students with the knowledge in the areas of health and safety issues in schools; basic first aid and CPR procedures; and the feeding and positioning of physically challenged students.

**EDU 114 Student Behavior Management for Paraeducators**

3 Credit Hours • 45 Contact Hours (Lecture)

Provides students knowledge in the areas of behavior modification; teaching appropriate behaviors; contingency contracts; observing and recording behavior; lunchroom supervision; and playground supervision.

**EDU 131 Introduction to Adult Education**

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces the student to the basic concepts in the instruction of adults. Emphases will be placed on understanding the adult learner and how their individual backgrounds and experiences can affect the learning process. Additionally, the course will cover applicable federal and state legislation which affects adult learning programs and will offer information on additional resources and associations in the field of Adult Education.

**EDU 132 Planning, Organizing & Delivering Adult Education Instruction**

3 Credit Hours • 45 Contact Hours (Lecture)

Covers the basics of planning an adult education program, organizing instruction within the various content areas and delivering the material in a variety of ways, both in groups and individualized instruction. A wide variety of learning principles and theories will be addressed in ways that show their applicability to the adult learner and his/her education.

**EDU 133 Adult Basic Education (ABE)/Adult Secondary Education (ESL)**

3 Credit Hours • 45 Contact Hours (Lecture)

Specifically address the different levels within an Adult Education program. Each level will be addressed in terms of appropriate assessment tools and instructional techniques. Emphasis will be placed on teaching ways that the adult education instructor can encourage the development of cognitive skills at each level, as a springboard to the next higher level.

**EDU 134 Teaching English as a Second Language to Adult Learners**

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces the development and implementation of a program to teach English to adults whose first language is not English. Topics will range widely from assessment and placement to the theories behind language acquisition. Students will also cover a wide variety of methodologies, both group and individualized, that are aimed at teaching the non-English speaker the written and verbal skills, necessary to successfully function in the United States.

**EDU 135 Family Literacy in Adult Education**

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces the students to the philosophy and theory behind family literacy, as well as give practical advice on the development and implementation of a family literacy program. The four-component model of adult education, early childhood education, parent and child together time (PACT), and parenting will be covered, both in theory and practical application.

**EDU 141 Basic Instructional Techniques for Paraeducators**

3 Credit Hours • 45 Contact Hours (Lecture)

Provides students with knowledge in the areas of delivering instruction; grouping students; reading with students; modifying instructional materials; using technology; and utilizing adaptive equipment.

**EDU 188 Practicum I**

1-6 Credit Hours • 45 Contact Hours per credit hour (Practicum)

Provides students with the opportunity to supplement coursework with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the education facility and with the direct guidance of the instructor.

**EDU 220 Exploration of Teaching**

2 Credit Hours • 30 Contact Hours (Lecture)

Gives students a study of the broad overview of topics related to the teaching profession, grades K-12. Provides a hands-on, relevant exploration to help each student personally consider a career in education.

**EDU 221 Introduction to Education**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: REA 090, ENG 121*

*Corequisite: Field-Experience component if not embedded in the class*

Focuses on the historical, social, political, philosophical, cultural, and economic forces that shape the United States public school system. Includes current issues of educational reform, technology as it relates to education, and considerations related to becoming a teacher in the state of Colorado.



**EDU 232 Literacy in the Multicultural/Multilingual Classroom**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: faculty consent*

Introduces students to the theories, methods, and techniques for teaching reading and language to children from diverse cultural and linguistic backgrounds. Includes field experience applying coursework with children.

**EDU 250 CTE in Colorado**

3 Credit Hours • 45 Contact Hours (Lecture)

Explores common elements of American community college philosophy and current practices. It details the philosophy of Career and Technical Education (CTE), the federal Carl D. Perkins legislation and related guidelines for CTE, national and state regulatory agencies, the CCCS program approval process, enrollment management and advising strategies, relevant local and national issues, and quality assurance principles.

**EDU 260 Adult Learning & Teaching**

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces the basic instructional theory focusing on the adult learner. Includes developing a syllabus, learning goals and outcomes, and lesson plans. Emphasizes teaching to a diverse participant body, classroom management, learning theory, learning styles, teaching styles, and using technology in the classroom.

**EDU 261 Teaching, Learning & Technology**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: EDU 221 or EDU 260*

Prepares students to integrate technology into their teaching curriculum. Enables the student to design educational and training materials incorporating instructional technology. Explores a variety of technologies, including the computer, Internet, multimedia, graphics, audio, and text with an emphasis on increasing learning through their use. Examines combining technology with a variety of instructional methodologies.

**EDU 263 Teaching & Learning Online**

3 Credit Hours • 45 Lecture

Provides faculty with the knowledge and skills necessary to design, develop, and deliver courses in a distance format. Focuses on assessment and evaluation methods and methods to incorporate interactive, collaborative and expanded learning activities.

**EDU 265 Instructional Design**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: EDU 221 or EDU 260 or faculty consent*

Introduces the student to a systematic approach to Instructional Design and the design of instruction with multimedia. Incorporates learning and instructional theory into course/training design to ensure the quality of instruction. Covers the process of goal analysis and learning needs coupled with the development of a delivery system to meet those needs. Includes the development of instructional materials and activities and the evaluation of all instruction and learner activities.

**Electronics****ELT 106 Fundamentals of DC/AC**

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

*Prerequisite: MAT 090**Corequisite: ELT 112*

Introduces the basic skills needed for many careers in electronics and related fields. Covers the operations and applications of basic DC and AC circuits consisting of resistors, capacitors, inductors, transformers, and diodes. Emphasizes the use of common test instruments in troubleshooting.

**ELT 109 Quality Business Practices**

1 Credit Hour • 15 Contact Hours (Lecture)

Covers current business practices designed to improve productivity and quality in the workplace. Addresses practices affecting materials and process control, as well as personnel-related issues of performance and work teams.

**ELT 112 Advanced DC/AC**

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

Continues to build on ELT 106 and covers advanced concepts of DC-AC circuits, including DC network theorems and analysis of AC series-parallel circuits. Includes an expanded treatment of power supplies, dual-supply rectifier circuits, and Zener diode voltage regulators. Emphasizes troubleshooting.

**ELT 134 Solid State Devices I**

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

*Prerequisite: ELT 112 or equivalent or waiver*

Focuses on diode and transistor studies starting with a review of semiconductor materials. Emphasizes rectifier circuits, R-C and L-C filters, limiters and peak detectors, zener regulators, Schottky diodes, varactors/varistors, LED's bipolar transistors, transistor approximation, load-lines, biasing techniques, saturation, operating point, AC models including small-signal operation, h-parameters, and data sheet understanding and interpolation.

**ELT 135 Solid State Devices II**

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

*Prerequisite: ELT 134 or equivalent or waiver*

Continues the study of transistors with an emphasis on application of modern devices to industrial circuits. Includes power amplifiers, Cascaded and Darlington configurations, field-effect devices, JFET's and MOSFET's, depletion and enhancement mode devices, biasing techniques, thyristors, SCR's and variations of the SCR family of devices.

**ELT 147 Digital Devices I**

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

*Prerequisite: ELT 106*

Introduces the operation and application of gates, flip-flops, counters, shift registers, encoders-decoders, and LED displays. Covers binary numbers, Boolean algebra, and troubleshooting.

**ELT 148 Digital Devices II**

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

*Prerequisite: ELT 147*

Continues ELT 147 with emphasis on the operation and application of programmable logic devices, synchronous counters, multiplexers, liquid crystal displays, ROM, and RAM. Includes specifications of ICs, display multiplexing, and design and minimization of circuits. Troubleshooting is emphasized.

**ELT 248 Automation Control Circuits**

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

*Prerequisite: ELT 106 and ELT 258*

Introduces the fundamentals of automatic controls including process control methodologies used to regulate a system or multiple systems for the purpose of establishing and maintaining a predictable manufacturing process.

**ELT 258 Programmable Logic Controllers**

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

*Prerequisite: ELT 106*

Covers the fundamentals of programmable logic controllers (PLCs) as they are applied in robotics and automation. Includes history, terminology, typical applications, hardware, and software. Incorporates lab and project activities that address operating, monitoring, programming, troubleshooting, and repairing PLC controlled lab trainers as well as actual industrial equipment.

**ELT 263 Enhanced Microprocessor Systems**

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite: ELT 147, ELT 148*

Focuses on 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.

**ELT 264 Enhanced Microprocessor Systems Lab**

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Prerequisite: ELT 147, ELT 148**Corequisite: ELT 263*

Covers construction, measurement, analysis, application, and experimentation with systems developed in ELT 263.

## Emergency Management & Planning

**EMP 101 Principles of Emergency Management**

3 Credit Hours • 45 Contact Hours (Lecture)

Presents a broad overview of an emergency management system and the importance of an integrated approach to managing emergencies. Enables the student to formulate the elements of an integrated teamwork system and devise specific actions for improving their own contributions to local emergency management teams. Focuses on all disciplines that work together in planning for or responding to emergencies.

**EMP 105 Emergency Planning**

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces a specialized type of community planning that identifies local government strategies, resources and responsibilities for protecting citizens from the effects of disasters and other major emergency events. Focuses on the Emergency Operations Plan (EOP) and a jurisdiction's game plan for dealing with potential catastrophes resulting from natural hazards and/or human-caused hazards. Examines EOPs in detail including their history and evolution, process, recommended content, style and format, involved stakeholders, and implementation methods. Covers the context of emergency planning as it relates to long-range community planning. Addresses methods for conducting a comprehensive community hazard analysis and highlights lessons learned in recovering from a disaster.

**EMP 106 Exercise Design Evaluation**

3 Credit Hours • 45 Contact Hours (Lecture)

Provides knowledge and the development of skills that enable the student to train a staff and to conduct an exercise that tests a community's plan and its operational response capability. Enables the student to manage exercise evaluation activities before, during, and after an emergency management exercise.

**EMP 107 Emergency Operations Center & Communications**

3 Credit Hours • 45 Contact Hours (Lecture)

Provides the knowledge and skills to manage and operate an EOC during crisis situations. Covers aspects of properly locating and designing an EOC, how to staff, train and brief EOC personnel, and how to operate an EOC during various situations. Focuses on various aspects of information gathering and dissemination including best practices for use of computers in an EOC environment, promoting enhanced planning and better control information flow to safely and effectively make strategic response decisions.

**EMP 240 Leadership & Influence**

3 Credit Hours • 45 Contact Hours (Lecture)

Explores the dynamics of managing major emergency incidents, focusing on the National Incident Command System. Covers major incidents where large life, property, or economic losses are possible. Includes organization and staffing, incident and event planning/staffing, organizing a response to an incident, and incident resource management. Actual incidents are discussed and analyzed. Focuses on the experience of others in handling major emergencies and the preplanning of emergencies.

## Emergency Medical Services

**EMS 112 Emergency Medical Dispatch**

2.5 Credit Hours • 37.5 Contact Hours (Lecture)

Provides technical and practical information, skill practice, and written examination for the current or potential emergency dispatcher.

**EMS 115 First Responder**

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

Provides the student with core knowledge and skills to function in the capacity of a first responder arriving at the scene of an emergency, providing supportive care until advanced EMS help arrives.

**EMS 125 EMT Basic**

9 Credit Hours • 135 Contact Hours (Lecture)

*Corequisite: HPR 102*

Enables the student after successful completion of this course to take the EMT Certification Examination subject to the requirements of the Colorado Department of Health and Environment. Includes written and practical examinations. Student must be at least 18 years of age.

**EMS 126 EMT Basic Refresher**

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

*Prerequisite: Permission of Instructor*

Provides required didactic and skills review for renewing EMT students. Accommodates the needs of the re-entry EMT student.

**EMS 136 EMT/Paramedic Safety Issues in the Field**

1 Credit Hour • 15 Contact Hours (Lecture)

Provides EMTs and paramedics with the skills needed to quickly assess the scene for potential hazards to themselves. Introduces topics on scene safety, evaluation of potential problem patients, verbal communication control techniques, physical control techniques for the problem patient, and scene control techniques.

**EMS 150 Pediatric Education for Prehospital Professionals**

1 Credit Hour • 15 Contact Hours (Lecture)

Provides the student with core knowledge and skills necessary to provide emergency care to the pediatric patient.

**EMS 151 Geriatric Emergencies**

3 Credit Hours • 45 Contact Hours (Lecture)

Addresses the problems most common in the elderly population. Provides the emergency medical services responder the necessary information to help understand those problems and provide quality care in the pre-hospital setting.

**EMS 152 Wellness for Emergency Services**

1 Credit Hour • 15 Contact Hours (Lecture)

Offers the EMS provider methods for coping with stress in the workplace and educates pre-hospital providers on finding additional options to reduce stress and make wise choices in the midst of difficult situations.

**EMS 153 Advanced Patient Assessment & History****Taking**

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

Teaches the pre-hospital health care provider techniques in assessing the patient – both medical and trauma. Covers history taking, documentation, communication and assessment techniques for the special patient.

**EMS 170 EMT Basic Clinical**

1 Credit Hour • 30 Contact Hours (Clinical)

*Corequisite: EMS 125*

Grading: SU only

Provides the EMS student with the clinical experience required of initial and some renewal processes.

**EMS 225 Fundamentals of Paramedic Practice**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: Permission of Instructor*

Serves as the first course of the National Standard Paramedic Curriculum as approved by the Colorado State Department of Health and Environment.

**EMS 226 Fundamentals of Paramedic Practice Lab**

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

*Prerequisite: Permission of Instructor*

Serves as the lab experience to coincide with EMS 225 topics.

**EMS 227 Paramedic Special Considerations**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: Permission of Instructor*

Focuses on a comprehensive study of Advanced Life Support Practice.

**EMS 228 Paramedic Special Considerations Lab**

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

*Prerequisite: Permission of Instructor*

Serves as the lab experience for those students enrolled in EMS 227.

**EMS 229 Paramedic Pharmacology**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: Permission of Instructor*

Focuses on a comprehensive study of emergency pharmacology.

**EMS 230 Paramedic Pharmacology Lab**

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

*Prerequisite: Permission of Instructor*

Serves as the required lab course in the paramedic education program.

**EMS 231 Paramedic Cardiology**

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite: Permission of Instructor*

Addresses cardiology topics as presented in the National Standard Curriculum for paramedics.

**EMS 232 Paramedic Cardiology Lab**

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

*Prerequisite: Permission of Instructor*

Grading: SU only

Incorporates a hands-on application of principles of cardiac care in the hospital environment.

**EMS 233 Paramedic Medical Emergencies**

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite: Permission of Instructor*

Focuses on a comprehensive study of adult medical emergencies.

**EMS 234 Paramedic Medical Emergencies Lab**

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

*Prerequisite: Permission of Instructor*

Grading: SU only

Focuses on a clinical study of adult and pediatric medical emergencies.

**EMS 235 Paramedic Trauma Emergencies**

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite: Permission of Instructor*

Focuses on a comprehensive study of adult and pediatric trauma emergencies.

**EMS 236 Paramedic Trauma Emergencies Lab**

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

*Prerequisite: Permission of Instructor*

Grading: SU only

Serves as a lab presenting various acute trauma scenarios.

**EMS 237 Paramedic Internship Preparatory**

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite: Permission of Instructor*

Reviews concepts and techniques used in the pre-hospital setting.

**EMS 280 Paramedic Internship I**

6 Credit Hours • 270 Contact Hours (Work Experience)

*Prerequisite: Permission of Instructor*

Serves as the preceptor/internship program for paramedic students.

**EMS 281 Paramedic Internship II**

6 Credit Hours • 270 Contact Hours (Work Experience)

*Prerequisite: Permission of Instructor*

Serves as the continuation of EMS 280, preceptor program for paramedic students.

## Engineering Graphics Technology

### EGT 262 Sheet Metal Fabrication Drawings

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

Investigates layout and design of sheet metal components. Explores developments (initial drawings), bend allowance calculations, and flat patterns.

## English

### ENG 030 Basic Writing Skills

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite:* REA 030 or appropriate assessment scores

Focuses on sentence and basic paragraph structure and development. Enables the student to review and improve grammar, usage, and punctuation skills while employing critical thinking strategies and the writing process to respond to a wide variety of writing situations.

### ENG 060 Writing Fundamentals

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ENG 030 (Grade of C or higher) and REA 060 (Grade of C or higher) or appropriate assessment scores

Focuses on paragraph structure and development and introduces the formal essay. Enables the student to review and improve grammar, usage, and punctuation skills while employing critical thinking strategies and the writing process to respond to a wide variety of writing situations.

### ENG 090 Basic Composition

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ENG 060 (Grade of C or higher) and REA 060 (Grade of C or higher) or appropriate assessment scores

Emphasizes critical thinking as students explore writing for specific purposes and audiences. Enables the student to develop skills required for college-level writing while reviewing paragraph structure and focusing on essay development.

### ENG 115 Technical English & Communication

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* REA 060, appropriate assessment scores or ENG 060 (Grade of C or higher)

Focuses on the written and oral communication needs of students in vocational and technical fields. Enables the student to practice written, oral, reading, reasoning, and interpersonal communication skills in order to become successful (or to remain successful) in the workplace.

### ENG 116 Designing Print Documentation

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on developing 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, as well as project cycle management, working as part of a documentation team, and collaboration with technical experts.

### ENG 117 Grammar, Usage, & Style for the Professional Writer

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on grammar, usage, and style issues facing the individual who writes on the job, either as a technical writer or a technical professional whose job involves a substantial writing component. Emphasizes knowledge and skills needed for clear, direct, competent communication. Introduces grammatical theory and practice and conventions of usage in English. Covers matters of style, particularly as they relate to clarity for a target audience.

### ENG 118 Designing Online Documentation

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on developing technical documents that are delivered to users on line, such as online manuals and online help information. Emphasizes content, organization, presentation, and style of online documentation. Introduces hypertext and web publishing concepts, as well as project cycle management, working as part of a documentation team, and collaboration with technical experts.

### ENG 121 English Composition I: CO1

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ENG 090 (Grade of C or higher) and REA 090 (Grade of C or higher), or appropriate placement test score

Emphasizes the planning, writing, and revising of compositions, including the development of critical and logical thinking skills. Includes a minimum of five compositions that stress analytical, evaluative, and persuasive/argumentative writing.

### ENG 122 English Composition II: CO2

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ENG 121 with a C grade or higher

Expands and refines the objectives of English Composition I. Emphasizes critical/logical thinking and reading, problem definition, research strategies, and writing analytical, evaluative, and/or persuasive papers that incorporate research.

### ENG 131 Technical Writing I

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ENG 090 (Grade of C or higher) or appropriate placement test score, student must be computer literate.

Develops skills one can apply to a variety of technical documents. Focuses on principles for organizing, writing, and revising clear, readable documents for industry, business, and government.

### ENG 132 Technical Writing II

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ENG 131 (Grade of C or higher)

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)

Focuses on editing technical documents of varying lengths and types, from memos to product manuals. Emphasizes consistency, readability, and conformity to an organization's style manual. Introduces conventions governing content, organization, presentation, and style of technical documents. Covers how to develop a style manual. Introduces concepts of project cycle management, working as part of a documentation team, and collaboration with technical experts.

### ENG 215 Playwriting I

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ENG 121 (Grade of C or higher)

Enables the student to learn and practice playwriting techniques, thereby improving creative writing skills. Emphasizes elements of dramatic structure, dialogue, styles, and theatrical practices. Note: This course is co-scheduled with THE 215 and may be taken as ENG 215 or THE 215 but not as both.

### ENG 221 Creative Writing I

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ENG 121 (Grade of C or higher) or faculty consent

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



**ENG 222 Creative Writing II**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 221*

Provides continued development of written expression in such forms as poetry, fiction, and/or nonfiction writing.

**ENG 226 Fiction Writing**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 121 (Grade of C or higher)*

Teaches techniques for creating fiction, including the study and appreciation of the language and forms of the short story.

**ENG 227 Poetry Writing**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 121 (Grade of C or higher)*

Teaches techniques for creating poems, including study of figurative language, forms, and sound patterns of poetry.

**ENG 230 Creative Nonfiction**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 121 (Grade of C or higher)*

Teaches students to incorporate literary techniques into factual writing. Enables the student to survey a wide range of readings and analyze form and content. Includes critical review, biographical profiles, travel writing, and memoirs. Provides the opportunity for students to write and review their own nonfiction in a supportive, constructive setting.

**ENG 231 Literary Magazine**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 121 (Grade of C or higher)*

Teaches the student the editorial process involved in preparing a literary magazine for publication. Covers the process of selection of material (fiction, nonfiction, poetry, and visual art) to be published, as well as design, layout, and production to prepare a manuscript for publication. Enables the student to produce a literary magazine.

**ENG 235 Rhetoric & Propaganda**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 121 (Grade of C or higher)*

Examines classical and modern theories of rhetoric, understood as effective, ethical means of persuasion, and the ways in which propaganda departs from these means. Enables the student to apply theories of rhetoric and propaganda to examples of presidential rhetoric, Nazi and Soviet propaganda, and other examples of persuasive writing. Includes the study of visual rhetoric with students constructing criteria for identifying visual propaganda, and studying the complex relationship, historically and in the present, between propaganda, democracy, advertising, and mass media.

**English as a Second Language****ESL 011 Basic Pronunciation**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: appropriate placement score*

Provides listening and speaking activities that help students recognize and produce English vowel and consonant sounds and common stress and intonation patterns.

**ESL 012 Intermediate Pronunciation**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: appropriate placement score*

Provides listening, speaking, and reading activities that help students recognize and produce a variety of stress and intonation patterns in English. Helps students to produce problematic English sounds.

**ESL 021 Basic Grammar**

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite: appropriate placement score*

Assists the student in mastering basic structures in English grammar through oral and written practice.

**ESL 022 Intermediate Grammar**

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite: ESL 021 or appropriate placement score*

Reviews basic grammar and introduces intermediate structures. Provides integrated practice through a variety of oral and written exercises.

**ESL 023 Advanced Grammar**

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite: ESL 022 or appropriate placement score*

Reviews intermediate grammar. Introduces advanced structures with increased emphasis on written communication.

**ESL 031 Basic Conversation**

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite: appropriate placement score*

Provides listening and speaking activities that help the student communicate more competently. Provides practice with pronunciation, vocabulary, and basic grammatical patterns.

**ESL 032 Intermediate Conversation**

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite: ESL 031 or appropriate placement score*

Teaches listening, pronunciation, and conversation skills. Increases speed and accuracy in speaking through free and guided conversational practice.

**ESL 041 Basic Reading**

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite: appropriate placement score*

Improves comprehension of simple written texts through vocabulary building and reading strategies.

**ESL 042 Intermediate Reading**

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite: ESL 041 or appropriate placement score*

Helps the student read more quickly and accurately and understand a variety of intermediate level reading material.

**ESL 043 Advanced Reading**

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite: ESL 042 or appropriate placement score*

Prepares the student for academic reading assignments. Assists the student to read more accurately and critically through the development of vocabulary knowledge and reading skills. Introduces research skills.

**ESL 052 Intermediate Composition**

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite: appropriate placement score*

Introduces the fundamentals of paragraph organization and development. Assists the student in developing sentence variety and grammatical competency within well-organized paragraphs.

**ESL 053 Advanced Composition**

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite: ESL 052 or appropriate placement score*

Reviews paragraph organization and develops the skill of writing essays using selected rhetorical modes. Stresses accurate use of advanced grammatical structures. Includes summarizing, paraphrasing, and research writing.



## Environmental Science

### ENV 101 Introduction to Environmental Science

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Introduces the student to the basic concepts of ecology and the relationship between environmental problems and biological systems. Includes discussions on biology, chemistry, geology, energy, natural resources, pollution, and environmental protection.

## Ethnic Studies

### ETH 200 Introduction to Ethnic Studies: SS3

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces students to the issues of race and ethnicity. Emphasizes ethnic relations in the United States as it pertains to four major groups: Americans of African, Asian, Latino and Native descent. Explores issues of racial and ethnic identity, racism and discrimination, stereotyping, prejudice, segregation, colonialism, integration and acculturation.

## Facilities Maintenance Technology

### FMT 101 Facilities Maintenance - Custodial Techniques

4 Credit Hours • 75 Contact Hours (30 Lecture, 45 Lecture/Lab Combination)

Focuses on products and techniques of maintaining commercial or industrial buildings. Covers health standards and issues.

### FMT 102 Facilities Maintenance - Electricity

4 Credit Hours • 75 Contact Hours (30 Lecture, 45 Lecture/Lab Combination)

Focuses on electrical fundamentals as applied to residential and commercial facilities maintenance. Covers repair, service, and maintenance of electrical systems and codes.

### FMT 103 Facilities Maintenance - Plumbing

4 Credit Hours • 75 Contact Hours (30 Lecture, 45 Lecture/Lab Combination)

Addresses troubleshooting, servicing, and repairing of plumbing systems found in commercial and industrial buildings. Includes codes and safety practices.

### FMT 112 Swimming Pool Maintenance

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

Focuses on the fundamentals of pool operation and maintenance techniques for private and public swimming pools.

### FMT 201 Appliance Technology I

7 Credit Hours • 135 Contact Hours (45 Lecture, 90 Lecture/Lab Combination)

*Prerequisite:* HVA 105, HVA 132 or faculty consent

Examines mechanical systems, water distribution, and electrical and gas systems of laundry equipment. Includes service and repair on washers and dryers.

### FMT 202 Appliance Technology II

7 Credit Hours • 135 Contact Hours (45 Lecture, 90 Lecture/Lab Combination)

*Prerequisite:* HVA 105, HVA 132

Examines mechanical systems, water distribution, and electrical and gas components of kitchen equipment. Covers service and repair on dishwashers, disposals, ranges, and microwave ovens.

### FMT 203 Appliance Technology III

4 Credit Hours • 75 Contact Hours (30 Lecture, 45 Lecture/Lab Combination)

*Prerequisite:* HVA 105, HVA 132

Instructs students in the fundamentals of operation, theory, and troubleshooting electronic controls found in modern household appliances.

### FMT 204 Building Maintenance

4 Credit Hours • 75 Contact Hours (30 Lecture, 45 Lecture/Lab Combination)

*Prerequisite:* Sophomore standing or faculty consent

Focuses on light construction, repairs, and maintenance of buildings and explores trends and issues in facilities maintenance. Covers preventative maintenance methods.

## Farrier Science

### FAS 100 Farrier Science I

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

Grading: SU only

Focuses on horses from evolution to the present with emphasis on existing breeds and shoeing requirements. 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 Lecture/Lab Combination)

*Prerequisite:* FAS 100

Grading: SU only

Focuses on corrective shoeing for pleasure horses and racehorses. Emphasizes anatomy of horses, physiology of the lower leg, preliminary examination, and 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 Lecture/Lab Combination)

*Prerequisite:* FAS 110

Grading: SU only

Introduces special purpose shoeing for racehorses, trail horses, etc. Examines corrective shoeing, shoeing requirements for various breeds, special purpose plating, special equipment, and public relations.

### FAS 130 Master Farrier I

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

*Prerequisite:* FAS 120

Grading: SU only

Continues the basic farrier course. Enables the Master student to 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 Lecture/Lab Combination)

*Prerequisite:* FAS 130

Grading: SU only

Allows Master students to assist the instructor in teaching anatomy of horses, physiology of the lower leg, natural angle of the leg, and hoof preparation. Incorporates student research and reports on assigned subjects.

**FAS 150 Master Farrier III**

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

*Prerequisite:* FAS 140

Grading: SU only

Enables the student to demonstrate skill in all phases of horseshoeing, especially in the area of corrective shoeing and unusual hoof repair.

**Finance****FIN 106 Consumer Economics**

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on consumer effectiveness based on consumer choice theory, maximizing income through informed decision making, product utility, and customer satisfaction.

**FIN 201 Principles of Finance**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* MAT 112, ACC 101 or 121

Provides factual knowledge of financial institutions and the monetary system used in the United States in relationship to the global economy. Examines tools and techniques such as capital budgeting, time value of money, analysis of financial statements, cost of capital, and risk analysis to analyze business decisions, plan and determine project and firm value, and evaluate sources of financing.

**Fire Science Technology****FST 100 Firefighter I**

9 Credit Hours • 157.5 Contact Hours (90 Lecture, 67.5 Lecture/Lab Combination)

*Prerequisite:* EMS 125

Addresses the requirements necessary to perform at the first level of progression as identified in National Fire Protection Association (NFPA) 1001, Firefighter Professional Qualifications. This is a lecture and lab course for meeting the NFPA 1001, level I, standard using IFSTA Essentials.

**FST 101 Firefighter II**

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

Addresses the requirements necessary to perform at the second level of progression as identified in NFPA 1001, level II Fire Fighter Professional Qualifications.

**FST 102 Introduction to Fire Science & Suppression**

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces the fire service organization and operation from past to present operations. Includes operation and organization of federal, state, local, and private protection forces. Emphasizes extinguishing methods and equipment, special extinguishing agents, and special hazard considerations. Serves as a Prerequisite for students having no previous fire suppression training or experience.

**FST 103 Firefighter Occupational Health & Safety**

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on on-scene and on-the-job firefighter health, safety and fitness, the safety officer, 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)

Addresses principles and functions involved in the installation and use of sprinkler systems, special suppression systems, and fire detection and alarm systems. Covers portable fire extinguishing equipment requirements, sprinkler systems, installation, inspection and maintenance, special protection systems, and residential sprinklers.

**FST 105 Building Plans & Construction**

3 Credit Hours • 45 Contact Hours (Lecture)

Covers various methods of building construction, the materials used in building construction, and their relationship to methods of fire attack and extinguishments. Includes types of building construction, principles of fire resistance, flame spread, smoke and fire containment, basic knowledge of plan review, and blueprint specifications.

**FST 106 Fire Inspection Practices**

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces the organization of the fire prevention agency; inspections, surveying, mapping and company inspections; recognition of fire hazards; engineering a solution to the hazard, enforcement of the solution, and public relations as affected by fire prevention. Fire Inspector I State Certificate available.

**FST 107 Hazardous Materials Operations Level I**

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces hazardous materials incidents, recognizing and identifying hazardous materials, planning response, implementing response procedures, decision making, and continued evaluation at the awareness and operation level.

**FST 110 Job Placement & Assessment**

3 Credit Hours • 52.5 Contact Hours (30 Lecture, 22.5 Lecture/Lab Combination)

Addresses all aspects of the Fire Service entrance examination process and especially emphasizes various components of the exam, including the written, physical abilities, and oral interview. The objective of this class is to help increase the entrance firefighter candidate's chance of obtaining a career in the Fire Service.

**FST 150 Introduction to Fire Prevention Education**

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on conducting prevention and education needs assessment, targeting audiences, development and delivery of prevention and education programs. Includes methods of conducting fire prevention and safety inspections.

**FST 151 Driver-Operator**

3 Credit Hours • 45 Contact Hours (Lecture)

Provides the student with the basic knowledge and skills to safely operate fire apparatus according to the NFPA professional standard. Enables the student to display and demonstrate knowledge of fire apparatus, operation of apparatus, pumps and pumping, hydraulics calculations, maintenance, and testing.

**FST 152 Wildland Firefighting**

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

Introduces a basic understanding of wildland fire and the strategies and tactics involved during suppression operations. Includes fire line safety, emphasizing the wildland fire orders and watch out situations. Students receive training qualifying them as Certified Wildland Firefighters under the Incident Command System, recognized by the National Wildfire Coordinating Group. Covers fire behavior, fire weather, fuel types, safety equipment and guidelines, incident size up, determining resource needs, aircraft identification and capabilities, direct vs. indirect attack, burn-out, backfiring, and map reading.

**FST 160 Candidate Physical Abilities Test Prep Course**

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

Grading: SU only

Prepares students for the job as firefighters as well as the testing requirements to test for CPAT. The tools for all classes will be fire service tools, such as sledge hammer, hose, nozzle, ladders, pike pole, power saws, and rescue dummy. The course will include basic fire skills of rescue, hose lay, equipment movement, ladder raise, ladder extend, forcible entry, search, and ceiling breach. The course also includes aerobic and strength training to assist student in passing CPAT.

**FST 201 Instructional Methodology (Fire Instructor I, II)**

3 Credit Hours • 45 Contact Hours (Lecture)

Covers the role and responsibility of the fire service instructor. Includes oral communication skills, concepts of learning, planning and development of lesson plans, instructional materials and delivery methods, testing and evaluations, records and reports, and demonstration of instructional abilities.

**FST 202 Firefighting Strategy & Tactics**

3 Credit Hours • 45 Contact Hours (Lecture)

Firefighting strategy and tactics, methods of fire attack, fire behavior, building construction, and pre-fire planning.

**FST 203 Fire Science Hydraulics**

3 Credit Hours • 45 Contact Hours (Lecture)

Covers hydraulic calculations that are necessary in water delivery and supply for fire suppression; hydraulic laws and formulas as applied to fire protection requirements; and fire apparatus UL requirements.

**FST 204 Fire Codes & Ordinances**

3 Credit Hours • 45 Contact Hours (Lecture)

Covers familiarization and interpretation of national, state, and local codes, ordinances and laws which influence the field of fire prevention. Fire code and life safety code are reviewed and referred to throughout the course.

**FST 205 Fire Cause Determination**

3 Credit Hours • 45 Contact Hours (Lecture)

Covers the proper method(s) of conducting basic fire investigation, determining area and point of origin, cause and methods of fire spread, recognition and preservation of evidence. Includes arson law, Constitutional law, interviewing, court procedures, and testimony.

**FST 206 Fire Company Supervision & Leadership (Fire Officer I)**

3 Credit Hours • 45 Contact Hours (Lecture)

Covers fire department organization, management philosophies, leadership traits, time management, group dynamics, communications, motivation counseling, conflict resolution, and employee discipline. Meets components of Fire Officer I State Certificate.

**FST 207 Firefighting Strategy & Tactics II**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: FST 202*

Focuses on tactics and strategies associated with transportation emergencies and fires, high-rise fires, below-ground incidents, confined space emergencies, and special rescue situations.

**FST 250 Chemistry for Fire Protection**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: FST 107*

Addresses the actions and reactions of commonly encountered products and chemicals, chemical properties, and field applied chemistry.

**FST 252 Fire Arson Investigation**

3 Credit Hours • 45 Contact Hours (Lecture)

Studies cause and origin as related to arson fires; evidence preservation and chain of evidence; interviewing; giving testimony; and laws associated with fire and arson investigation, records, and reports.

**FST 253 Fire Ground Organization & Command**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: FST 202*

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 Technician Level**

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 a mitigation teams, command and control of hazardous materials incidents.

**FST 255 Fire Service Management**

3 Credit Hours • 45 Contact Hours (Lecture)

Serves as the basic management course for present and potential members of the fire service, and for students and members of other fire science-related professions. Introduces the student to current management practices and philosophies and real-world applications from the supervisor's point of view. Covers decision making/problem solving, communication skills, conflict resolution, creativity and innovation, as well as the role of the manager in supervising personnel and programs, e.g., motivation, leadership, counseling, ethics, and handling discipline and grievances.

**FST 256 Fire Service EMS Management**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: EMS 125*

Addresses budgeting, staffing, training, and equipment issues; transportation, standard of care, and protocols; operations, communications, incident and disaster management, and legal issues associated with EMS operations.

**FST 257 Fire Department Administration**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: FST 206*

Focuses on the operations of volunteer and combination fire departments, compliance with standards and ordinances, funding, recruiting, hiring and retaining employees, funding and budgeting, organizational planning, and public relations.

**FST 258 Wildland Fire Incident Management & Organization**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: FST 152 or previous certified red card training*

Introduces and develops supervisory and decision-making skills for fireline management individuals. Covers (1) First Attack Incident Commander, (2) Crew Supervisor, (3) Incident Commander Multi-resource, and (4) Task Force/Strike Team Leader. All four courses are certifiable by the Incident Command System under NIIMS and recognized by the National Wildfire Coordinating Group. Covers fireline safety, size-up, incident planning, ordering, tactics, strategies, and administrative duties.

**FST 259 Wildland Firefighting Strategy & Tactics**

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on management of uncontrolled fire burning, urban/wildland interface, strategy and tactics used in controlling wild land fires, prevention methods, and incident command practices.

**FST 260 Interface Fire Behavior S-290**

2 Credit Hours • 30 Contact Hours (Lecture)

Analyzes the effects of fuels, weather, topography, and fire behavior on the wildland fire environment. Acquaints prospective fire line supervisors in wildland fire behavior for effective and safe fire management operations.

**FST 261 Fire Operations in the Urban Interface**

2 Credit Hours • 30 Contact Hours (Lecture)

Examines fireline personnel skills to anticipate and predict wildland fire behavior, weather, and rates of spread. This course was developed under the Interagency Curriculum established and coordinated by the National Wildfire Coordinating Group. Covers fire environment, fuels classification, topography and fire behavior, temperature-moisture relationship, fuel moisture, local and general winds, atmospheric stability and instability, keeping current with the weather, extreme fire behavior, fire behavior affecting fireline tactics, and fire behavior predictions.

**FST 262 Wildland Fire Behavior**

3 Credit Hours • 45 Contact Hours (Lecture)

Gives fireline personnel skills to anticipate and predict wildland fire behavior, weather, and rates of spread. This course was developed under the Interagency Curriculum established and coordinated by the National Wildfire Coordinating Group. The course covers fire environment, fuels classification, topography and fire behavior, temperature-moisture relationship, fuel moisture, local and general winds, atmospheric stability and instability, keeping current with the weather, extreme fire behavior, fire behavior affecting fireline tactics, and fire behavior predictions.

**FST 263 Powersaws S-212**

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

Ability to perform chainsaw operations. Teaches the wildland firefighter the skills necessary to use, repair, and maintain a chainsaw in the field. Focuses on techniques to fell trees and buck material in a fireline operation.

**FST 265 Ignition Operations S-234**

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

Teaches the wildland firefighter techniques in conducting firing operations. Focuses on the duties and responsibilities in applying fire to the ground, the devices used, techniques and sequences, fire behavior descriptions, evaluations of the operation, and safety concerns related.

**FST 266 Crew Boss S-230**

2 Credit Hours • 30 Contact Hours (Lecture)

Meets the training needs of a Crew Boss on an incident. Includes preparation, mobilization, tactics and safety, off-line duties, demobilization, and post-incident responsibilities.

**FST 270 Basic Air Ops S-270**

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

Surveys the uses of aircraft in fire suppression. The course provides instruction on how to deal with management policy, regulations, and procedures which govern agency aviation operations in fire suppression. This course is the S-270 course offered by the National Wildfire Coordinating Group (NWC).

## Foreign Languages

See specific language for a list of courses offered. American Sign Language, Arabic, French, German, Italian, Japanese, Russian, Spanish.

## French

**FRE 101 Conversational French**

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces beginning students to conversational French and focuses on understanding and speaking French. Covers basic vocabulary, grammar, and expressions that are used in daily situations and in travel.

**FRE 111 French Language I**

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite: ENG 090, REA 090*

Begins a sequence dealing with the development of functional proficiency in listening, speaking, reading, and writing the French language.

**FRE 112 French Language II**

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite: FRE 111 with a C grade or higher or faculty consent*

Continues French I in the development of functional proficiency in listening, speaking, reading, and writing the French language.

**FRE 211 French Language III: AH4**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: FRE 112 with a C grade or higher or faculty consent*

Continues French I and II in the development of increased functional proficiency in listening, speaking, reading, and writing the French language.

**FRE 212 French Language IV: AH4**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: FRE 211 with a C grade or higher or faculty consent*

Continues French I, II, and III in the development of increased functional proficiency in listening, speaking, reading, and writing the French language.

## Geographical Information Systems

**GIS 100 GIS Fundamentals**

1 Credit Hour • 15 Contact Hours (Lecture)

Provides information on the basic concepts of GPS (Global Positioning Systems) and GIS (Geographic Information Systems). Defines the two systems and explains the link from one to the other. Analyzes the different types of GPS Equipment and differentiates between their role in the GPS technology world. Provides information on the types of mapping systems available today and the necessary information to integrate GPS data. Upon the integration of the data, creation of the GIS network is demonstrated. Enables the learner to develop basic skills, attitudes, and knowledge to make the GPS equipment productive in a recreation or work environment.

**GIS 101 Introduction to Geographic Information Systems**

3 Credit Hours • 45 Contact Hours (Lecture)

Surveys the development and operation of automated geographic information systems. Focuses on the fundamentals of using computers to draw maps. Incorporates study of cartographic fundamentals such as map projections, map scales, selective display of data on maps, and various computer software applications in GIS.



**GIS 150 Relational Database Management Systems**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: GIS 101*

Emphasizes various types of data, data management, and the complex relationships between data files and a GIS. Enables the student to learn several essential components and methods of successful data and project management.

**GIS 205 GIS Applications**

3 Credit Hours • 45 Contact Hours (Lecture)

Presents a sequel to GIS 105 with a deeper look at the principles of GIS, including both raster and vector data structures, data conversion, map algebra, spatial analysis, modeling, and networks. Various ways that GIS is currently being used in science, business, and government will also be presented. ArcView Network Analyst, Spatial Analyst, and 3D Analyst software will be utilized and a final project is required.

**GIS 212 Remote Sensing & Digital Image Processing**

4 Credit Hours • 60 Contact Hours (Lecture)

Introduces students to basic concepts and procedures used in the processing of remotely sensed data, with an emphasis on integration of digital imagery into basic GIS applications.

**GIS 280 Internship**

2 Credit Hours • 90 Contact Hours (Internship)

*Prerequisite: faculty consent*

Provides students with the opportunity to supplement coursework with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor.

## Geography

**GEO 105 World Regional Geography: SS2**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 090*

Facilitates an understanding of spatial relationships between and among the geographic regions of the world. Includes demographic and cultural (political, economic, and historic) forces related to the physical environments of selected regions. Focuses on analysis of interrelationships between developed and developing regions, and the interactions between human societies and natural environments.

**GEO 106 Human Geography: SS2**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 090*

Introduces geographic perspectives and methods with applications to the study of human activities. Emphasizes the distribution of humans, adjustments to the natural environment, and land use practices.

**GEO 107 Physical Geography**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 090*

Focuses on the study of the spatial relationship between humans and the natural environment. Covers five main themes: the atmosphere (weather and climate); the hydrosphere (water bodies and rivers); the lithosphere (earth's crust and landforms); the biosphere (soil, plant, and animal relationships); and the impact of the human population on these environmental factors. Recommended for students interested in environmental studies, earth science, and geography.

**GEO 111 Physical Geography–Landforms**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

*Prerequisite: ENG 090*

Introduces the principles of landforms as a major aspect of the human natural environment. Incorporates an integrated process of lecture, discussion, and laboratory assignments. The course may be transferred to universities and colleges as science credit.

**GEO 112 Physical Geography–Weather & Climate**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

*Prerequisite: ENG 090*

Introduces the principles of meteorology, climatology, world vegetation patterns, and world regional climate classification. Incorporates an integrated process of lecture, discussion, and laboratory assignments and may be transferred to colleges and universities as science credit.

## Geology

**GEY 111 Physical Geology: SC1**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

*Prerequisite: MAT 090*

Studies the materials of the earth, its structure, surface features, and the geologic processes involved in its development. This course includes laboratory experience.

**GEY 121 Historical Geology: SC1**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

*Prerequisite: MAT 090*

Studies the physical and biological development of the earth through the vast span of geologic time. Emphasizes the investigation and interpretation of sedimentary rocks, the record of ancient environments, fossil lifeforms, and physical events, all within the framework of shifting crystal plates. Course includes laboratory experience.

**GEY 135 Environmental Geology**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 090*

Introduces geology and its relationship to the human environment. Covers geologic hazards such as floods, landslides, avalanches, earthquakes, and volcanoes. Focuses on surface and groundwater resources in terms of exploitation and our responsibility to protect these resources from contamination. The geologic aspects of land use practices, as well as mineral and energy resource exploitation are reviewed and related to legislation regarding environmental law.

**GEY 143 The Geology & Evolution of Caves**

2 Credit Hours • 30 Contact Hours (Lecture)

Introduces the science of caves. Includes cave formation and evolution, cave decorations (speleothems), and the adaptations of living organisms to life below ground. Incorporates a one-day field trip to a nearby cave system.

## German

**GER 111 German Language I**

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite: ENG 090, REA 090*

Begins a sequence dealing with the development of functional proficiency in listening, speaking, reading, and writing the German language.

**GER 112 German Language II**

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite: GER 111 with a C grade or higher or faculty consent*

Continues German Language I in the development of functional proficiency in listening, speaking, reading and writing the German language.



**GER 211 German Language III: AH4**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: GER 112 with a C grade or higher or faculty consent*

Continues German Language I and II in the development of increased functional proficiency in listening, speaking, reading, and writing the German language.

**GER 212 German Language IV: AH4**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: GER 211 with a C grade or higher or faculty consent*

Continues German Language I, II, and III in the development of increased functional proficiency in listening, speaking, reading, and writing the German language.

**Health & Wellness****HWE 100 Human Nutrition**

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces basic principles of nutrition with emphasis on personal nutrition. Satisfies nutrition requirement of students entering health care professions.

**HWE 103 Community First Aid & CPR**

1 Credit Hour • 15 Contact Hours (Lecture)

Uses demonstration videos, instructor led practice and workbook/textbook study to prepare for certification in Adult/Child/Infant CPR and Community First Aid.

**HWE 104 CPR Instructor Course**

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

*Prerequisite: Current HCP CPR card*

Provides information for the potential CPR instructor. Course requirements, renewal information, and current content are discussed. Practice teaching is included in course.

**HWE 120 Wilderness First Aid**

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

*Prerequisite: Current CPR card*

Provides limited medical information to cope with basic wilderness emergencies.

**HWE 121 Wilderness First Aid & Outdoor Emergency Care**

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

*Prerequisite: First responder certification*

Provides more advanced wilderness care for the First Responder or EMT provider.

**HWE 129 Wilderness First Responder**

4 Credit Hours • 67.5 Contact Hours (45 Lecture, 22.5 Lecture/Lab Combination)

Provides the student with those skills and emergency medical care techniques used by guides, trip leaders and others providing primary care in backcountry settings. The student will be able to respond correctly to those medical and trauma situations commonly encountered when entry into the EMS system is delayed or unlikely.

**Health Information Management****HIT 101 Health Information Management Science**

6 Credit Hour • 90 Contact Hours (Lecture)

Introduces the student to the health record, from inception to completion. Emphasis is on form, content and regulations impacting the health record in the various health care settings. Other areas to be discussed include the computerized aspects of the health record as well as the functions and responsibilities of the health information department. This course also examines various health care delivery systems and health care practitioners. The dilemmas of health care with attention directed to current events and how these events impact our profession are discussed.

**HIT 111 Health Data Management**

3 Credit Hour • 45 Contact Hours (Lecture)

*Prerequisite: HIT 101, CIS 118*

Focuses on the effective collection, presentation and verification of health care data necessary for the preparation of administrative and clinical reports. The role of data in clinical research, vital statistics and epidemiology will be discussed. Laboratory activities will focus on manual and automated data presentation techniques and on the interpretation and analysis of health care data. The role of the health information professional in transforming data into meaningful information for use in clinical and financial decision making will be stressed. Data reliability and validity will be emphasized.

**HIT 112 Legal Aspects for Health Records**

2 Credit Hour • 30 Contact Hours (Lecture)

*Prerequisite: HIT 101*

Introduces the student to the legal system and identified the role of the HIM professional in this system. Specific Federal and State laws are identified and discussed as they relate to release of medical information. Proposed Federal and State legislation that affects the health care industry is examined and discussed.

**HIT 188 Health Information Practicum I**

2 Credit Hour • 90 Contact Hours (Practicum)

*Prerequisite: Completion of all first year HIT courses.*

Provides a directed clinical experience in a health information department in a health care facility. This experience focuses on the practice of skills related to the application of legal principles, record analysis and abstraction and record retention and retrieval.

**HIT 222 Quality Management**

3 Credit Hour • 45 Contact Hours (Lecture)

*Prerequisite: Completion of all first year HIT courses.*

Introduces the student to the basic concepts of quality management in the health care environment. Requirements by regulatory agencies regarding quality, utilization and risk management are discussed. Data collection, verification, analysis and presentation techniques will be studied. The course emphasizes the ongoing use of objective data and feedback to improve processes, systems and patient outcomes.

**HIT 225 Health Information Management**

3 Credit Hour • 45 Contact Hours (Lecture)

*Prerequisite: HIT 101, HIT 111, HIT 112*

Concentrates on the principles of management as they relate to the administration of the health information management department as part of a health care organization.

**HIT 231 Clinical Classifications II**

5 Credit Hour • 75 Contact Hours (Lecture)

*Prerequisite: All first year HIT courses, HIT 221, BIO 216*

Provides an intermediate study of ICD-9-CM coding conventions and principles. DRG and case mix logic along with regulations regarding their use in conjunction with optimization and compliance issues will be discussed. CPT/HCPCS in both the hospital-based outpatient and physician office settings will be studied. Students apply these skills in assigning codes for actual medical records from area facilities.

**HIT 288 Health Information Practicum II**

2 Credit Hour • 90 Contact Hours (Practicum)

*Prerequisite: Completion of all first and second year HIT courses.*

Focuses on the ability of the student to apply classroom knowledge in a clinical setting, practice professionalism, gain insight into the functions of the department and understand the relationship of health records to the facility as a whole. Emphasis is on the ability to act independently, complete assigned projects and demonstrate a good understanding of health information management concepts.

## Health Professional

**HPR 101 Customer Service in Healthcare**

2 Credit Hours • 30 Contact Hours (Lecture)

Instructs students in customer service theory and techniques specifically in the healthcare arena. This course will discuss therapeutic communication, conflict resolution, and negotiation, as well as employee/employer relations.

**HPR 102 CPR for Professionals**

.5 Credit Hours • 7.5 Contact Hours (Lecture)

Meets the requirement for American Red Cross Professional Rescuer CPR or American Heart Association Basic Life Support for those who work in Emergency Services, Health Care, and other professional areas. Material presented in the course is basic patient assessment, basic airway management, rescue breathing, and CPR for infant, child, and adult patients.

**HPR 106 Law & Ethics for Health Professionals**

2 Credit Hours • 30 Contact Hours (Lecture)

Introduces student to the study and application medico-legal concepts in medical careers. This course seeks to establish a foundation for ethical behavior and decision making in health professions.

**HPR 108 Dietary Nutrition**

1 Credit Hour • 15 Contact Hours (Lecture)

Studies the basic principles in clinical practice involved in the assistance of health care. The course will cover factors which influence the nutritional status of individuals, methods of nutritional assessment and support, and diet modification for specific disease states.

**HPR 112 Phlebotomy**

4 Credit Hours • 90 Contact Hours (30 Lecture, 60 Lab)

Teaches the duties associated with the practice of venipuncture, capillary puncture, and special collection procedures. Students will have experience with quality control, infection control and safety procedures as well as laboratory computer systems. Students successfully completing this course may apply for a National Phlebotomy Registry Examination.

**HPR 113 Advanced Phlebotomy**

4 Credit Hours • 90 Contact Hours (30 Lecture, 60 Lab)

*Prerequisite: HPR 112*

Instructs students in advanced phlebotomy techniques to include patients in trauma, neonatal, geriatric, and long term acute care areas. In addition, laboratory procedures taught include specimen processing and advanced point-of-care instrumentation. This course includes a lecture/lab combination that teaches theory and direct application of theoretic content and clinical opportunities for student to master learned skills.

**HPR 116 Computers in Health Care**

1 Credit Hour • 30 Contact Hours (Lab)

Introduces the learner to use of personal computer technology and the concepts of software applicable to health care. Basic features of selected software, terminology related to hardware, software and online resources (which include PC, word processing, e-mail) and electronic health-based research will be emphasized. Provides opportunities for practical applications of computer skills to nursing care.

**HPR 120 Advanced Cardiac Life Support**

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

*Prerequisite: Permission of Instructor*

Presents the required material for ACLS completion. It will cover arrhythmias, medications, therapeutic modalities for life threatening arrhythmias, airway management, and other treatment modalities used in cardiac and respiratory arrest.

**HPR 130 Pediatric Advanced Life Support**

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

*Prerequisite: Permission of Instructor*

Provides students the needed information and skills as required by health care agencies for pediatric emergencies.

**HPR 178 Medical Terminology**

2 Credit Hours • 30 Contact Hours (Lecture)

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

**HPR 190 Basic EKG Interpretation**

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

Provides instruction for interpretation of EKG strips, anatomy and physiology of the heart, using three-lead monitoring as a guide. Twelve-lead EKG may be discussed.

**HPR 200 Advanced ECG Interpretations**

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

*Prerequisite: HPR 190*

Focuses on each wave and interval of the complex, the axis, and the 12-lead presentation of some rhythm disturbances.

**HPR 208 Advanced Medical Terminology**

2 Credit Hours • 30 Contact Hours (Lecture)

Continues from a beginning medical terminology course for the student with emphasis on combining complex prefixes, roots and suffixes. Includes pathophysiology for major body systems. Includes terms related to diagnostic tools per body systems, as well as commonly used medical abbreviations.

## Heating, Ventilation, & Air Conditioning

### HVA 102 Basic Refrigeration

4 Credit Hours • 75 Contact Hours (30 Lecture, 45 Lecture/Lab Combination)

Introduces the basic theory of refrigeration systems, components, charging, recycling, and evacuation of refrigeration units.

### HVA 105 Electricity for HVAC/R

4 Credit Hours • 75 Contact Hours (30 Lecture, 45 Lecture/Lab Combination)

Teaches resistance, current, voltage, and power in AC and DC circuits; measurements; computations of series and parallel circuits; circuit analysis and troubleshooting with basic test equipment.

### HVA 110 Fundamentals of Gas Heating

4 Credit Hours • 75 Contact Hours (30 Lecture, 45 Lecture/Lab Combination)

Introduces students to the fundamentals of gas heating. Students work in a classroom and shop environment. Topics include the basics of gas heating systems, operation of gas valves and burners, gas pipe system design, gas piping system code requirements, and basic code requirements for heating systems.

### HVA 113 Refrigerant Recovery Training

1 Credit Hour • 15 Contact Hours (Lecture)

Explains the laws regarding refrigerant recovery. The course includes hands-on use of recovery equipment. Upon successful completion of this course students will be prepared to take the EPA certification test. Test is offered following the class. Test fee is not included in course fee.

### HVA 121 Residential Refrigeration

4 Credit Hours • 75 Contact Hours (30 Lecture, 45 Lecture/Lab Combination)

*Prerequisite:* HVA 102 or faculty consent

Covers refrigerators, freezers, and humidifiers. Students learn refrigeration, electrical, defrost, and ice maker systems. Lab experiences include troubleshooting and repair of residential refrigeration equipment.

### HVA 132 Air Conditioning & Refrigeration Controls

4 Credit Hours • 75 Contact Hours (30 Lecture, 45 Lecture/Lab Combination)

*Prerequisite:* HVA 102, HVA 105, or faculty consent

Continues HVA 105. The course applies the knowledge of basic electricity to controls related to air conditioning and refrigeration equipment. The course also works on reading and drawing schematic and ladder diagrams.

### HVA 142 Residential Air Conditioning

4 Credit Hours • 75 Contact Hours (30 Lecture, 45 Lecture/Lab Combination)

*Prerequisite:* HVA 102, HVA 105 or faculty consent

Details the principles of operation, servicing, and installation of air conditioning systems as they apply to humidifying, cooling, and dehumidifying a residential structure. Basic load calculations will be covered.

### HVA 143 Residential HVAC Trouble Shooting

4 Credit Hours • 75 Contact Hours (30 Lecture, 45 Lecture/Lab Combination)

*Prerequisite:* HVA 110 or faculty consent

Troubleshooting practical problems and techniques will be covered. Use of computer simulation as well as actual equipment will be utilized.

### HVA 201 Heating For Commercial

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

*Prerequisite:* Sophomore standing or faculty consent

Covers hydronic and steam heating systems, including steam, hot water, and forced air-heating systems for commercial buildings.

### HVA 204 Direct Digital Controls

4 Credit Hours • 75 Contact Hours (30 Lecture, 45 Lecture/Lab Combination)

*Prerequisite:* Sophomore standing or faculty consent

Introduces the student to the field of direct digital controls.

### HVA 222 HVAC & R Systems Troubleshooting

5 Credit Hours • 105 Contact Hours (15 Lecture, 90 Lecture/Lab Combination)

*Prerequisite:* Sophomore standing or faculty consent

Studies troubleshooting industrial and commercial heating, ventilating, air conditioning, and refrigeration systems.

### HVA 231 Pneumatic Controls

4 Credit Hours • 75 Contact Hours (30 Lecture, 45 Lecture/Lab Combination)

*Prerequisite:* Sophomore standing or faculty consent

Covers pneumatic controls and systems used in controlling commercial and industrial HVAC equipment. The course includes lab experimentation with pneumatic controls, rebuilding of valves and actuators, and calibration of various types of controls. Students work with controls from most of the major manufacturers.

### HVA 233 Advanced Refrigeration

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* Sophomore standing or faculty consent

Builds on the skills acquired in refrigeration fundamentals. The student will have an opportunity to study and to work on rooftop units, ice machines, and commercial reach-in and walk-in coolers.

### HVA 241 Advanced Air Conditioning

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

*Prerequisite:* Sophomore standing or faculty consent

Studies commercial air conditioning systems to include centrifugal water chillers, air handlers, and building systems.

## History

### HIS 101 History of Western Civilization I: HI1

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ENG 090, REA 090

Explores a number of events, peoples, groups, ideas, institutions, and trends that have shaped Western Civilization from the prehistoric era to 1650. Reflects the multiple perspectives of gender, class, religion, and ethnic groups. Focuses on developing, practicing, and strengthening the skills historians use while constructing knowledge in this discipline.

### HIS 102 History of Western Civilization II: HI1

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ENG 090, REA 090

Explores a number of events, peoples, groups, ideas, institutions, and trends that have shaped Western Civilization from 1650 to the present. Reflects the multiple perspectives of gender, class, religion, and ethnic groups. Focuses on developing, practicing, and strengthening the skills historians use while constructing knowledge in this discipline.

**HIS 111 World Civilization I: HI1**

3 Credit Hours • 45 Contact Hours (Lecture)

Enables the student to view history up to 1500 CE in a broad global sense. Focuses on the common denominators among all people. This approach goes beyond political borders, to provide a better appreciation for different cultures.

**HIS 112 World Civilization II: HI1**

3 Credit Hours • 45 Contact Hours (Lecture)

Enables students to view history post 1500 CE in a broad global sense. Focuses on the common denominators among all people. This approach goes beyond political borders to provide a better appreciation for different cultures.

**HIS 201 United States (U.S.) History I: HI1**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 090, REA 090*

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

**HIS 202 United States (U.S.) History II: HI1**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 090, REA 090*

Explores events, trends, peoples, groups, cultures, ideas, and institutions in United States History, including the multiple perspectives of gender, class, and ethnicity, between the period of the American Civil War and the present. Focuses on developing, practicing, and strengthening the skills historians use while constructing knowledge in the discipline.

**HIS 206 U.S. Family History & Genealogy**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 090, REA 090*

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. Team-taught by a historian and a genealogist.

**HIS 207 American Environmental History**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 090, REA 090*

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. Examines the development of conservation movements and environmental policies in modern America.

**HIS 208 Native American Experience**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 090, REA 090*

Analyzes historical and socio-cultural change for Native Americans (Indians) from pre-colonial America to the present, emphasizing those processes and relations with non-Native Americans which have contributed to the current conditions.

**HIS 209 History of the American Southwest**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 090, REA 090*

Traces and analyzes the cultural and historical development of what is now the southwestern United States, a region defined most by its arid environment and the cultural and political interactions of Southwest Indians, Spanish conquerors, Mexican settlers, late-coming Yankees, artists and artisans, and modern Sunbelt migrants.

**HIS 215 Women in U.S. History**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 090, REA 090*

Examines women's changing roles in American history from the pre-colonial native population to the present. Emphasizes the nature of women's work and the participation of women in the family, political, religious, and cultural activities and in social reform movements.

**HIS 225 Colorado History**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 090, REA 090*

Presents the story of the people, society, and cultures of Colorado from its earliest Native Americans, through the Spanish influx, the explorers, the fur traders and mountain men, the gold rush, railroad builders, the cattlemen and farmers, the silver boom, the tourists, and the modern state.

**HIS 235 History of the American West**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 090, REA 090*

Traces the history of the American West, from the Native American cultures and the frontier experiences of America's earliest, eastern settlers, through the Trans-Mississippi West, across the great exploratory and wagon trails, and up to the present West, be it urban, ranching, reservation, resource management, or industrial. Emphasizes the north and central parts of the West.

**HIS 236 Contemporary U.S. History**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 090, REA 090*

Focuses on the major political, economic, social, and cultural developments that have shaped modern America.

**HIS 241 History of the Pikes Peak Region**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 090, REA 090*

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.

**HIS 247 Contemporary World History: HI1**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 090, REA 090*

Investigates the major political, social, and economic developments, international relationships, scientific breakthroughs, and cultural trends that have shaped the various global regions and nation-states from 1900 to the present. Emphasizes the interactions of global regions and nation-states.



**HIS 249 History of Islamic Civilization**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 090, REA 090*

Surveys the tenets of Islam and the political, social, and cultural history of the civilizations which embraced it from the 6th century to the modern day. Focuses on the diversity and dynamism of Islamic civilizations through time by looking at legal systems, scientific and artistic accomplishments, philosophical heterogeneity, and political developments

**Hospitality Management****HOS 280 Internship**

3 Credit Hours • 135 Contact Hours (Internship)

*Prerequisite: faculty consent*

Exposes the learner to the practical application of course studies in the hospitality industry. The course consists of practical experience in a hotel, restaurant, convention center, resort, tourism operation, or other professional opportunity in the hospitality industry.

**Humanities****HUM 103 Introduction to Film Art**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 090, REA 090; humanities courses may be taken in any order*

Studies the relationships among film's stylistic systems, narrative systems, and audience reception. Students view, discuss, and critically analyze a variety of films which represent key historical and aesthetic periods as well as a variety of genres and themes. The course incorporates the vocabulary of stylistic systems (for instance, cinematography, editing, and art direction) and narrative systems (for instance, story structure and character motivation) as both relate to the kinds of meanings a film conveys.

**HUM 115 World Mythology**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 090, REA 090; humanities courses may be taken in any order*

Introduces students to the mythologies of various cultures with a special emphasis on Greece, Asia, and North America. Common themes are illustrated and some artistic reactions are used as examples.

**HUM 121 Early Civilizations: AH2**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 090, REA 090; humanities courses may be taken in any order*

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.

**HUM 122 From Medieval to Modern: AH2**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 090, REA 090; humanities courses may be taken in any order*

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.

**HUM 123 The Modern World: AH2**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 090, REA 090; humanities courses may be taken in any order*

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.

**HUM 131 The Arts & Cultures of Mexico**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 090, REA 090; humanities courses may be taken in any order*

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.

**HUM 163 Film Criticism**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 090, REA 090; humanities courses may be taken in any order*

Considers different approaches to film criticism, including the journalist, humanist, auteurist, genre, social science, historical, and ideological/theoretical approaches. Students will view and analyze films applying each of the critical approaches through class discussion and other assignments.

**HUM 164 American Cinema**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 090, REA 090; humanities courses may be taken in any order*

Introduces film studies and surveys the American film industry as an art form, as an industry, and as a system of representation and communication. This course explores how Hollywood films work technically, aesthetically, and culturally to re-enforce and challenge America's national self image.

**HUM 201 Twentieth Century American Arts**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 090, REA 090; humanities courses may be taken in any order*

Focuses on elements common to the arts of film, painting, architecture, literature, and music of 20th century United States. Students study the effects of the economy, business, and industry and traditional North American values and dreams on the arts.

**HUM 236 North American Indian Arts**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 090, REA 090; humanities courses may be taken in any order*

Focuses on North American Indian music, dance, architecture, painting, sculpture, pottery, and fashions through a study of the literature of Indian cultures in North America.

**HUM 237 Hispanic Arts of the American Southwest**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 090, REA 090; humanities courses may be taken in any order*

Examines the history, visual arts, and permanency of the Hispanic culture of the American Southwest. Through the study of historical sequences, major artistic expressions dating from 1598, and aspects of literature of the contemporary Hispanic society, students will gain an insight into the Hispanic cultural contributions to the Southwest.



**HUM 238 Sacred Images, Sacred Spaces: Southwestern U.S.**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 090, REA 090; humanities courses may be taken in any order*

Examines the historical, social, geographical, and cultural forces that influenced the design and presentation of sacred images in several Southwestern U.S. cultures. Students will study stylistic features of images in various media in relation to the sacred spaces where they are displayed or employed in rituals.

**HUM 241 Asian Arts & Cultures**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 090, REA 090; humanities courses may be taken in any order*

Explores 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.

**Integrated Circuit Fabrication****ICF 101 Microelectronics Fabrication**

3 Credit Hours • 45 Contact Hours (Lecture)

Delivers the foundation 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 104 Vacuum Systems**

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Delivers design and application concepts for Gas Delivery and Vacuum Technologies with specific reference to the semiconductor fabrication industry. Basics of gas flow dynamics from the viscous flow regime through the ultra high vacuum are explored. The way these gas properties affect how gas delivery and vacuum systems have to be designed, built, and operated to obtain the desired conditions for various industrial processes are investigated. Areas discussed will include roughing and high vacuum pumps, vacuum and pressure measurement systems, mass flow controllers, pressure regulators, connection systems, and materials of construction. Characterization, troubleshooting, and leak detection of these systems and their components are also covered.

**ICF 106 Semiconductor Active Devices & Mixed Signal ICs**

6 Credit Hours • 90 Contact Hours (Lecture)

*Prerequisite: ELT 106, ELT 112**Corequisite: ICF 107*

Introduces semiconductor devices, linear electronic circuits, and digital electronic circuits.

**ICF 107 Semiconductor Active Devices & Mixed Signal ICs Lab**

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

*Prerequisite: ELT 106, ELT 112**Corequisite: ICF 106*

Teaches the student to analyze and demonstrate competency in the use of semiconductor active devices, linear and nonlinear operational integrated circuits. The course will also cover op-amp feedback methods, comparator circuits, mixed-signal analog and digital circuit types. Emphasis will be placed on control system op-amp circuits, process control applications, and manufacturing applications for system automation. The class will also cover IC circuit performance measuring criteria, troubleshooting concepts, analog-to-digital and digital-to-analog conversion circuits.

**ICF 108 Introduction to Control Systems**

5 Credit Hours • 112.5 Contact Hours (Lecture/Lab Combination)

Covers the concepts, design, and function of feedback loop control system components with specific reference to the semiconductor fabrication industry.

**ICF 205 Advanced Equipment Maintenance & Troubleshooting**

5 Credit Hours • 112.5 Contact Hours (Lecture/Lab Combination)

*Prerequisite: ICF 218, ICF 219*

Covers the knowledge and skills required for maintaining and troubleshooting semiconductor manufacturing equipment.

**ICF 214 RF Energy & Process**

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

*Prerequisite: ELT 106, ELT 112*

Covers the basic properties of plasma and its applications in the semiconductor processes. Focus is mainly on RIE and DPS Etch, PE and HDP CVD, Ashers, and PVD. Hardware covers amplifier circuits, RF energy waves, transmission lines, and matching networks. Included are common troubleshooting issues, special topics, and safety.

**ICF 215 Semiconductor Manufacturing Technology**

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite: ICF 101*

Describes relevant microchip manufacturing technology with emphasis on process integration and troubleshooting common manufacturing problems.

**ICF 218 Automated Process Control Systems**

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite: ICF 108**Corequisite: ICF 219*

Covers the principles and applications of feedback loop control at system level. Areas covered include transducers, controllers, and system designs. Both analog and digital as well as microprocessor and computer control are studied.

**ICF 219 Automated Process Control Systems Lab**

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Prerequisite: ICF 108**Corequisite: ICF 218*

Teaches the student the principles of control systems by experiment, reading, and research. The class runs concurrently with ICF 218 Automated Process Control System where the principles are taught.

**Interior Design****IND 105 Introduction to Interior Design**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 090, MAT 060, REA 090*

Introduces design awareness, color, and the elements of style in this overview of the interior design industry. Focus is on design awareness and creative problem solving while studying various facets related to interiors.

**IND 107 History of Interior Design**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 090, MAT 060, REA 090*

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.

**IND 110 Interior Design I – Overview & Application**

3 Credit Hours • 67.5 Contact Hours (Lecture/Lab Combination)  
*Prerequisite: IND 105, IND 111, and permission of instructor*

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.

**IND 111 Drafting for Interiors**

4 Credit Hours • 75 Contact Hours (30 Lecture, 45 Lecture/Lab Combination)

Introduces the basic drafting tools and techniques, graphic references and symbols, use of pencil and technical pen. Student learns to draft floor plans and interior elevations. Course also covers basic interior dimensioning and lettering as well as isometric drawing construction for interior components.

**IND 112 Graphic Communication**

4 Credit Hours • 60 Contact Hours (Lecture)

Teaches methods of communicating interior design plans, elements and ideas in 3-D, through perspective drawing construction and quick sketch techniques, and practice rendering and illustration skills.

**IND 116 Estimating Interior Materials**

3 Credit Hours • 45 Contact Hours (Lecture)  
*Prerequisite: IND majors only, IND 110*

Develops skills when estimating materials and costs for interior finishes including paint, carpet, wall covering, and fabrics. Emphasis is on specification, documentation, and details.

**IND 117 Interior Textiles**

2 Credit Hours • 45 Contact Hours (Lecture/Lab Combination)  
*Prerequisite: IND 105*

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

**IND 120 Interior Design II – Space Planning & Human Factors**

4 Credit Hours • 75 Contact Hours (30 Lecture, 45 Lecture/Lab Combination)

*Prerequisite: IND 110*

Develops awareness of human dimensions, special relationships, and the importance of the physical and psychological characteristics of people. Studies include residential and commercial spaces and ADA factors.

**IND 151 Residential Design**

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

*Prerequisite: CAD 105, IND 105, IND 110, IIND 111, IND 120*

Teaches and applies the preliminary project phases of the residential design process. Project documentation is introduced and practiced. At least one portfolio is produced.

**IND 178 Seminar**

1 Credit Hours • 15 Contact Hours (Lecture)

This course provides students with an experiential learning opportunity.

**IND 200 Kitchen & Bath Design**

4 Credit Hours • 75 Contact Hours (30 Lecture, 45 Lecture/Lab Combination)

Provides the specialized design process and documentation requirements of kitchen and bath design and applies NKBA guidelines. Students become familiar with trade resources supporting the design field. At least two portfolio projects are produced. Students will be encouraged to produce project documents using a variety of computer software applications.

**IND 205 Professional Practice for Interior Designers**

2 Credit Hours • 30 Contact Hours (Lecture)  
*Prerequisite: IND 120*

Introduces 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.

**IND 220 Interior Design III – Materials, Details, Codes, & Specs**

4 Credit Hours • 75 Contact Hours (30 Lecture, 45 Lecture/Lab Combination)

*Prerequisite: CAD 105, IND 105, IND 110, IIND 111, IND 120*

Coordinates 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.

**IND 225 Lighting Design**

2 Credit Hours • 30 Contact Hours (Lecture)

Teaches and applies basic knowledge of interior lighting technology and design. Content includes lamp classifications, color rendition, how lighting sources effect our perception of space, how to compute and control proper lighting levels, and how to communicate design information by means of a reflected ceiling plan and luminaire schedule. Students will be encouraged to produce projects using a variety of computer software applications.

**IND 261 Studio II – Commercial Design**

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

*Prerequisite: CAD 105, IND 105, IND 110, IIND 111, IND 120, IND 220*

Provides the advanced interior design student with the specific area for which the student will be expected to generate completed projects for final formal presentation. Independent research and study are expected.

**IND 265 Interior Design IV – Special Applications**

3 Credit Hours • 52.5 Contact Hours (30 Lecture, 22.5 Lecture/Lab Combination)

*Prerequisite: ENG 090, MAT 060, REA 090, CAD 105, IND 105, IND 110, IIND 111, IND 120*

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 interior design. A project will be completed for each of the different software programs.

**IND 278 Workshop (Design Portfolio)**

1 Credit Hour • 22.5 Contact Hours (Lecture/Lab Combination)  
*Prerequisite: Permission of Department Chair*

Provides students with an experiential learning opportunity.

**IND 280 Internship**

2 Credit Hours • 90 Contact Hours (Internship)  
*Prerequisite: CAD 105, IND 105, IND 110, IIND 111, IND 120*

Provides work experience in a business or industry; 45 fieldwork hours per credit hour.

**IND 289 Capstone (Advance Design)**

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

Provides a demonstrated culmination of learning within a given program of study.

**Interpreter Preparation****IPP 121 Aspects of Interpreting I**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ASL 122 with a B grade or higher, ENG 090 or appropriate placement test

*Corequisite:* ASL 123

Acquaints the student with the basics of interpreting. This will enable the student to understand what interpreting involves, and the professional requirements for being an interpreter. In this course, the student is introduced to the code of ethics, situation assessment required for effective interpreting, and certification of interpreters.

**IPP 122 Aspects of Interpreting II**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* IPP 121

*Corequisite:* ASL 221

Provides 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 the various settings in which interpreters work. Students will have opportunities to observe various professional interpreters throughout the semester.

**IPP 125 Oral Transliterating**

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite:* IPP 121

*Corequisite:* IPP 132

Provides the student with the opportunity to develop basic oral communication facilitation skills. The course allows the student the advantage of learning the different techniques in rendering effective oral communication facilitation between consumers.

**IPP 131 Text Analysis**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ASL 122 with a B or better, successful placement in ENG 121 on COMPASS or ACET

Focuses on learning and utilization of a sequenced method of preparing for interpreting assignments and analyzing English spoken text. Students will also increase their English and ASL vocabulary and learn to understand cultural implications in those languages.

**IPP 132 Interpretation Analysis**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* IPP 131, ENG 121

Follows IPP 131 and is a continuation of the work begun in that course. The goal in this course is for students to interpret fully analyzed English texts and to analyze their own interpretations. Students will learn to see what they do well and what needs improvement as well as to develop exercises to improve their work. Students will continue the vocabulary work begun in IPP 131, further increasing English/Sign vocabulary and idioms.

**IPP 145 Deaf People in Society**

2 Credit Hours • 30 Contact Hours (Lecture)

*Corequisite:* ANT 101 or faculty consent

Expands the student's knowledge of the impact of deafness on the development of language and cognition and the socialization of Deaf individuals in a Hearing World.

**IPP 147 Survey of Deaf Culture**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ANT 101, ASL 123, IPP 145

Surveys the factors that contribute to defining Deaf persons as members of a cultural minority. This course will look at the impact of language on the culture as well as the role of norms, values, traditions, and minority groups within Deaf culture. Attention will also be given to identity and membership in Deaf culture.

**IPP 205 Educational Interpreting**

4 Credit Hours • 60 Contact Hours (Lecture)

*Corequisite:* ASL 221, IPP 122

Helps students gain insight into the roles of the interpreter/tutor in the mainstream environment, and to recognize the implications of child development and classroom interaction patterns on interpreting. Students also discuss tutoring strategies.

**IPP 207 Specialized & Technical Communication**

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite:* ASL 222

Expands their repertoire of specialized and technical sign terminology and ability to apply them in appropriate contexts.

**IPP 225 English to ASL Interpreting**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ASL 221, IPP 132

*Corequisite:* ASL 222, IPP 227

Provides the student an opportunity to further develop interpreting skills from English to ASL.

**IPP 227 ASL to English Interpreting**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ASL 221, IPP 132, COM 115

*Corequisite:* ASL 222, IPP 225

Provides the student an opportunity to build skills in interpreting and transliterating into spoken English from ASL and various contact varieties.

**IPP 229 Transliterating**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* IPP 122, ASL 221, and IPP 132

Provides the student with knowledge of transliterating techniques and ability to develop skills in transliterating spoken English into signed English. The student is introduced to the concept of transliterating and the differences in transliterating and interpreting.

**IPP 235 Advanced Interpreting**

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite:* ASL 222, IPP 225, IPP 227, IPP 229

*Corequisite:* IPP 279, IPP 281

Provides the student an opportunity to further develop and refine skills in ASL to English and English to ASL interpretation and transliteration.

**IPP 279 Interpreter Seminar**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* Must have GPA of B or better; no more than one C in ASL 222, IPP 225, IPP 227, IPP 229

*Corequisite:* IPP 235, IPP 281, MAT 107

Grading: SU only

Provides the student with an open forum to discuss situations arising from interpreter assignments during internship and an opportunity to prepare for entering the interpreting field.

**IPP 281 Internship**

5 Credit Hours • 225 Contact Hours (Internship)

*Prerequisite: Must have GPA of B or better; no more than one C in ASL 222, IPP 225, IPP 227, IPP 229**Corequisite: IPP 235, IPP 279*

Grading: SU only

Provides field experience interpreting in a supervised educational, community, service agency, or other setting.

**Italian****ITA 111 Italian Language I**

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite: ENG 090, REA 090*

Begins a sequence dealing with the development of functional proficiency in listening, speaking, reading, and writing the Italian language.

**ITA 112 Italian Language II**

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite: ITA 111 with a C grade or higher or faculty consent*

Continues Italian Language I in the development of functional proficiency in listening, speaking, reading, and writing the Italian language. Note: The order of the topics and the methodology will vary according to individual texts and instructors.

**Japanese****JPN 101 Conversational Japanese I**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisites: REA 090, ENG 090*

Introduces beginning students to conversational Japanese and focuses on understanding and speaking Japanese. Covers basic vocabulary, grammar, and expressions that are used in daily situations and in travel.

**JPN 111 Japanese Language I**

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite: ENG 090, REA 090*

Begins a sequence dealing with the development of functional proficiency in listening, speaking, reading, and writing the Japanese language.

**JPN 112 Japanese Language II**

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite: JPN 111 with a C grade or higher or faculty consent*

Continues Japanese Language I in the development of functional proficiency in listening, speaking, reading, and writing the Japanese language.

**JPN 211 Japanese Language III: AH4**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: JPN 112 with a C grade or higher or faculty consent*

Continues Japanese Language I and II in the development of increased functional proficiency in listening, speaking, reading, and writing the Japanese language.

**JPN 212 Japanese Language IV: AH4**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: JPN 211 with a C grade or higher or faculty consent*

Continues Japanese Language I, II, and III in the development of increased functional proficiency in listening, speaking, reading, and writing the Japanese language.

**Journalism****JOU 102 Introduction to Editing**

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on the process of editing articles for publication in newspapers, newsletters, magazines, and the Internet. The Associated Press style is emphasized.

**JOU 105 Introduction to Mass Media**

3 Credit Hours • 45 Contact Hours (Lecture)

Places the mass media in an historical and cultural perspective, considering the validity, integrity, and influence of the media in a democracy.

**JOU 106 Fundamentals of Reporting**

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

Introduces newswriting, reporting, and interviewing with an emphasis on clarity, accuracy, completeness, timeliness, and fairness.

**JOU 109 Introduction to Desktop Publishing**

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

Introduces fundamentals of desktop publishing, using database files, desktop publishing, and graphics programs, as well as HTML coding to design brochures, fliers, newsletters, newspapers, and Web sites. Students will also create database files and charts for computer-assisted reporting.

**JOU 111 Principles of Advertising**

3 Credit Hours • 45 Contact Hours (Lecture)

Employs design concepts, principles, and practices for advertising management for the mass media.

**JOU 114 TV Production**

3 Credit Hours • 45 Contact Hours (Lecture)

Covers principles and techniques of television production, as well as the role of the director/producer.

**JOU 121 Photojournalism**

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

Provides 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/pictures relationships in creating photo essays for publications.

**JOU 206 Intermediate Newswriting & Editing**

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

*Prerequisite: ENG 090 and JOU 106*

Presents how to gather information as an investigative reporter through research of local, state, and federal government publications, how to cover police beat and city hall, how our courts and regulatory agencies function, and how to cover other challenges such as the environment, religion, science, medical, public safety, and business.

**JOU 215 Publications Production & Design**

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

*Prerequisite: ENG 090 and REA 090*

Provides for students' participation in the planning, writing, design, and production processes of a non-newspaper publication.

**JOU 221 Newspaper Design I**

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

*Prerequisite: ENG 090*

Provides students with experience in newswriting, 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: ENG 090 and completion of JOU 221*

Allows students to build their newspaper production experience through 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: JOU 106 or faculty consent*

Focuses on public relations and its role for the individual, the non-profit organization, business, and government; research methodology, principles, and practices necessary to become a public relations practitioner; and media channels best suited to a persuasive appeal or crisis.

**JOU 241 Magazine Article Writing**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 090 or faculty consent*

Studies trade, consumer, and technical markets; manuscript development with emphasis on nonfiction; submission techniques; and trends affecting the marketing of manuscripts.

**JOU 280 Internship**

3-5 Credit Hours • 360 Contact Hours (Internship)

*Prerequisite: faculty consent*

Provides a structured, guided, and individualized research that is organized and tailored around the interests and needs of the individual student who may use journalism skills and experiences acquired during previous coursework.

## Literature

**LIT 115 Introduction to Literature I: AH2**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 121 or concurrent enrollment*

Introduces students to fiction, poetry, and drama. Emphasizes active and responsive reading.

**LIT 125 Study of the Short Story**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 121 or concurrent enrollment*

Focuses on careful reading and interpretation of the short story as a distinct genre. It examines formal as well as thematic elements of short fiction. Critical thinking, discussion, and writing about short stories will enhance perceptive reading skills and heighten awareness of the human condition.

**LIT 201 Masterpieces of Literature I: AH2**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 121 or concurrent enrollment*

Examines significant writings in world literature from the ancients through the Renaissance. Emphasizes careful readings and understanding of the works and their cultural backgrounds.

**LIT 202 Masterpieces of Literature II: AH2**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 121 or concurrent enrollment*

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 205 Ethnic Literature: AH2**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 121 or concurrent enrollment*

Focuses on significant texts by ethnic Americans including African-American, Native American, Latino/a, and Asian Americans. Emphasizes careful reading and understanding of the cultural and literary elements of the works.

**LIT 211 Survey of American Literature I: AH2**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 121 or concurrent enrollment*

Provides an overview of American literature from the Native American through the nineteenth century Romantics. It explores ideas, historical and social contexts, themes and literary characteristics of works in various genres by major writers.

**LIT 212 Survey of American Literature II: AH2**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 121 or concurrent enrollment*

Provides an overview of American literature from the mid-nineteenth century to the present. It explores ideas, historical and social contexts, themes and literary characteristics of works in various genres by major writers.

**LIT 221 Survey of British Literature I: AH2**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 121 or concurrent enrollment*

Provides an overview of British literature from the Anglo-Saxon period through the 17th 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: AH2**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 121 or concurrent enrollment*

Provides an overview of British literature from the 18th century to the present. Explores ideas, historical and social contexts, themes and literary characteristics of works in various genres by major writers.

**LIT 225 Introduction to Shakespeare**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 121 or concurrent enrollment*

Explores a selection of works by William Shakespeare. It focuses on careful reading and interpretation of the plays and poems, includes pertinent information about Elizabethan England, and examines formal as well as thematic elements of the selected works.

**LIT 246 Literature of Women**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 121 or concurrent enrollment*

Examines the techniques and themes in literature by and about women by examining women's issues from various genres.

**LIT 248 Native American Literature**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 121 or concurrent enrollment*

Examines oral and written literature created by Native American peoples. Emphasizes narrative and ceremonial literature from the oral tradition. Examines oratory, autobiography, essays, poetry, short stories, and novels as oral and written forms.

**LIT 255 Children's Literature**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 121 or concurrent enrollment*

Evaluates the criteria for selecting appropriate literature for children through exploration of genres, age levels, values taught through literature, and the literary and artistic quality of various texts.



**LIT 257 Literature & Film**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 121 or concurrent enrollment*

Examines the relationship between literature and motion pictures, emphasizing the technique and interpretive function of filmmakers.

**LIT 268 Celtic Literature**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 121 or concurrent enrollment*

Exposes the student to Irish literature. The course examines significant writings in Irish literature from the ancients through to the twenty-first century. The course emphasizes the careful reading and understanding of works of poetry, fiction, and drama, as well as their cultural backgrounds.

**LIT 269 Popular Literature & Culture**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 121 or concurrent enrollment*

Explores special interests in literature, such as Detective Fiction and Science Fiction

## Machining

**MAC 101 Introduction to Machine Shop**

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

Covers safety procedures, use of bench tools, layout tools, power saws, drill presses, precision measurement tools, and various hand tools related to the machine shop. Also included are sharpening drill bits and general purpose turning tools for the lathe as well as determining speeds and feeds for both the lathe and the milling machine.

**MAC 102 Blueprint Reading**

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

Students read blueprints and interpret symbols, notes dimensions, and tolerances.

**MAC 110 Introduction to Engine Lathe**

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

*Prerequisite: MAC 101, MAC 102 or concurrent enrollment*

Introduces basic lathe applications which will consist of identifying lathe components and controls, understanding turning safety, calculating speeds and feeds, using various tools and tool holders, identifying basic tool geometry, and the use of common lathe spindle tooling. Students will perform basic lathe operations, which will consist of facing, center-drilling, chuck turning, turning between centers, boring, grooving, tapers, knurling, and single point threading. Students will be required to produce specified parts to a tolerance of +/- .004 in. and perform competencies set by manufacturing standards.

**MAC 111 Intermediate Engine Lathe**

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

*Prerequisite: MAC 110 or concurrent enrollment*

Teaches students to prepare single point external and internal unified screw threads to a Class 3 fit, generate angles with the compound rest within one degree, ream holes concentric within .001 inches, determine cutting speeds, and perform facing and turning operations.

**MAC 112 Advanced Engine Lathe**

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

*Prerequisite: MAC 102 or concurrent enrollment*

Prepares students to form radius, single-point isometric threads, turn spherical radius, use a radius gauge, and work within .0005 inches tolerance externally.

**MAC 120 Introduction to Milling Machine**

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

*Prerequisite: MAC 101, MAC 102 or concurrent enrollment*

Teaches students to identify the major parts of the vertical mill; align a vise; use an indicator, edge finder, and boring head; determine speeds and feeds; perform simple indexing; mill flat and square surfaces and slots; drill, bore, and tap holes; and work within a plus or minus .002 inch tolerance.

**MAC 121 Intermediate Milling Machine**

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

*Prerequisite: MAC 120 or concurrent enrollment*

Prepares students to determine hole locations by coordinates and degrees, use a rotary table, use a jig bore to drill holes by the coordinate method, and work within plus or minus .001 inch tolerance.

**MAC 122 Advanced Milling Machine Operations**

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

*Prerequisite: MAC 121 or concurrent enrollment*

Prepares students to indicate the head of a vertical mill, bore holes, drill holes at an angle, and work with tolerances of .0008 inches location and diameter.

**MAC 201 Introduction to CNC Turning Operations**

3 Credit Hours • 45 Contact Hours (Lecture)

Covers computer numerical control (CNC) lathe operations, control functions, the letter address system, the program format, and machine setup. G &amp; M codes, control functions, the letter address system, and math issues related to CNC are included. This class is NOT offered on an open-entry, open-exit basis.

**MAC 202 CNC Turning Operations II**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: MAC 201 or concurrent enrollment*

Prepares students to write basic computer numerical control (CNC) lathe part programs, G and M codes, math related to CNC, setups, speeds and feeds, straight turning, spherical turning, threading, chamfering, tapering, drilling, tapping, boring, and grooving. Cutter compensations, sub-programming techniques, repetitive cycles, and both absolute and incremental exercises will be incorporated into programs. Students will also proof and edit the programs to make them valid. This class is NOT offered on an open-entry, open-exit basis.

**MAC 205 Introduction to CNC Milling Operations**

3 Credit Hours • 45 Contact Hours (Lecture)

Provides transitional information between conventional machining applications and the typical applications found in computer numerical control machining. Topics may consist of numerical control systems, The Cartesian coordinate system, high efficiency tooling applications, objectives of numerical control, calculating speed and feed rates, defining and calculating tool motion, fixturing requirements, basic program structure, programming codes, and basic conversational programming. Operations of NC machines will be required.

**MAC 206 CNC Milling Operations II**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: MAC 205 or concurrent enrollment*

Exposes the student to the principle operations of both vertical and horizontal CNC milling machines via lecture instruction methods, multi-media instruction methods, and manufacturing hands-on methods. The student will be exposed to the basic CNC machining center, principle operations, manual controls, programming methods, tool-offsets, G54-G59 work offsets, cutter radius compensation, and tool selection methods. General operator skills and basic setup skills will be stressed.

**MAC 207 CNC Milling Lab**

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

*Prerequisite: MAC 206 or concurrent enrollment*

Prepares students to write programs and run parts from both blueprints provided and per individual student designs. Proofing and editing programs, sub-programs, managing cutter compensations, fixture offsets, and overall execution at the machine will be the primary focus.

**MAC 240 CAD/CAM 2D**

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

Provides the student with the essential concepts and techniques that are required to successfully create part geometry, generate tool path, verify tool path models, and post process the NC codes. The student will be exposed to a 2-axis machining, 3-axis machining wire frame and surface modeling, lathe programming, and DNC systems. Programming projects and models will be demonstrated in the CNC manufacturing lab.

**MAC 241 CAD/CAM 2D Lab**

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

*Prerequisite: MAC 240 or concurrent enrollment*

Requires students to produce a variety of lab exercises on robotic machinery in a self-paced format in conjunction with MAG 215. Aspects of toolpaths for contour, drill, and pocket will be covered. Chaining geometry, setting parameters, and managing cutter compensations will be addressed in both multi-tool programs and re-machining operations. Coursework will primarily focus on 2D geometry projects.

**MAC 245 CAD/CAM 3D**

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

Covers both the production and surfacing of three-dimensional geometry in a self-paced setting. Issues will be covered related to the production of wire frames, solids, surfaces, the joining of surfaces, joining of solids, managing construction planes, sweeping, rotating, and controlling parameter settings. A familiarity with Mastercam, CNC programming techniques, and CNC operations is recommended.

**MAC 246 CAD/CAM 3D Lab**

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

*Prerequisite: MAC 245 or concurrent enrollment*

Requires students to produce a variety of three dimensional lab exercises on robotic machinery in a self-paced format in conjunction with MAG 225. Coursework will focus primarily on advanced geometry to include developing an understanding of CNC codes related to work offsets, cutter compensations, and tool management within CAD/CAM programs on the milling machine.

**MAC 250 Advanced Inspection Techniques**

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

*Prerequisite: MAT 108*

Exposes the student to the principles of dimensional metrology. Students will learn how to use common measuring instruments relating to state-of-the-art manufacturing environments. Students will also learn the importance of Quality Control, TQM, and SPC processes as they relate to manufacturing environments. Use of a coordinate measuring machine will be delivered.

**MAC 252 Practical Metallurgy**

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

Offers a study of metallurgical terms and definitions in an effort to understand both the behavior of metals and their service to industry. Characteristics during heating, cooling, shaping, forming, and the stresses related to their mechanical properties are covered. The theory behind the alloys, heat treatment processes, and the impact they have on strength, toughness, hardness, elasticity, ductility, malleability, wear resistance, and fatigue resistances is investigated.

## Management

**MAN 116 Principles of Supervision**

3 Credit Hours • 45 Contact Hours (Lecture)

Studies the principles and techniques of supervising and motivating personnel. This course is designed for students who are interested in supervising others or for those currently in supervision. Course content focuses on the human interaction in supervision.

**MAN 117 Time Management**

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

Provides students with the conceptual knowledge and tools to make better use of their time in the management function.

**MAN 125 Team Building**

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

Introduces the concept of working as a team member. Activities and assignments will emphasize the ability to negotiate, work together, build consensus, and make quality decisions.

**MAN 128 Human Relations in Organizations**

3 Credit Hours • 45 Contact Hours (Lecture)

Explores the importance of effective communication in our personal lives as well as in the world of business. Practical business applications such as employee motivation, handling customer complaints, and effectively resolving conflict in the workplace will be a major part of the curriculum.

**MAN 200 Human Resource Management I**

3 Credit Hours • 45 Contact Hours (Lecture)

Provides the student with a broad overview of the contemporary issues, theories, and principles used to effectively manage human resources. Topics include recruiting, hiring, compensation and benefits, training and development, employee relations, and legal issues.

**MAN 205 Event Planning**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: BUS 115 or faculty consent*

Presents the components of meeting planning; organization, personnel, finances, site selection, transportation, program design, promotion, arranging exhibits, and evaluation.

**MAN 216 Small Business Management**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: MAN 226, MAR 216, ACC 101 OR 121*

Examines the elements necessary for the successful formation of a new small business. It is also designed to enhance the skills of those already involved in the operation of a small business. The course includes the development of a complete small business plan.

**MAN 226 Principles of Management**

3 Credit Hours • 45 Contact Hours (Lecture)

Presents a survey of the principles of management. Emphasis is on the primary functions of planning, organizing, leading, and controlling with a balance between the behavioral and operational approach.

**MAN 240 Strategic Management**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: BUS 115, MAN 226 and sophomore standing*

Presents the development of business policy and the integration of skills learned in prior business study, including strategy formulation, implementation, and evaluation. Focus is on the coordination of marketing, production, finance, accounting, and ethics and social responsibility to achieve competitive advantage.

**MAN 246 Critical Issues in Marketing & Management**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: BUS 115 and sophomore standing*

Examine current issues, practices, challenges and trends in the marketing and management environments including truth in advertising, promotional codes of conduct and a diverse workforce.

**Manufacturing Technology****MTE 120 Manufacturing Process**

3 Credit Hours • 45 Contact Hours (Lecture)

Provides the student an overview of the different methods, tools and machines which are used to manufacture industrial and consumer products.

**Marketing****MAR 111 Principles of Sales**

3 Credit Hours • 45 Contact Hours (Lecture)

Enables the student to understand and develop ethical sales techniques and covers the role of selling in the marketing process. Areas of emphasis include behavioral considerations in the buying and selling process and sales techniques.

**MAR 117 Principles of Retailing**

3 Credit Hours • 45 Contact Hours (Lecture)

Emphasizes the study of the basic principles and techniques of merchandising, operations, layout, store organization, site location, and customer service with an emphasis on retailing operations.

**MAR 160 Customer Service**

3 Credit Hours • 45 Contact Hours (Lecture)

Enables students to learn the relationship of self to customers, problem solve, and understand the importance of communicating with customers. Specific emphasis is given to managing customer expectations by building customer rapport and creating positive outcomes.

**MAR 216 Principles of Marketing**

3 Credit Hours • 45 Contact Hours (Lecture)

Presents the analysis of theoretical marketing processes and the strategies of product development, pricing, promotion and distribution, and their applications to businesses and the individual consumer.

**MAR 220 Principles of Advertising**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: MAR 216*

Examines the principles and practices of advertising and its relationship to business in order to promote a business or organization. Areas of major emphasis include advertising principles, strategies, media, copy and layout, and ethical considerations.

**MAR 240 International Marketing**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: BUS 115, MAR 216 and sophomore standing*

Enables the student to explore the international marketing for U.S. products, and to explore the increasing competitive international environment and recent changes in the environment that have challenged U.S. business. The course is designed to make the reader an "informed observer" of the global market place as well as enabling him/her to develop skills to make marketing decisions in a global context.

**MAR 249 Strategic Marketing**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: BUS 115, MAR 216 and sophomore standing*

Illustrates the connections between a market-driven strategy, customer satisfaction, and profitable growth. Students will examine how marketing strategies are developed and executed within both small and large organizations. The course will emphasize strategy development, implementation, and evaluation.

**Mathematics****MAT 030 Fundamentals of Mathematics**

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite: Math assessment*

Includes the vocabulary, operations, and applications of whole numbers, decimals, and basic fractions and mixed numbers.

**MAT 060 Pre-Algebra**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: Successful completion of MAT 030 (grade of C or higher) or appropriate math assessment*

Further the study of fractions and mixed numbers. Also included are vocabulary, operations, and applications of ratio, proportion, percent, area, perimeter, US and metric measures, integers, and an introduction to algebraic expressions and the solution of basic first-degree equations.

**MAT 090 Introductory Algebra**

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite: Successful completion of MAT 060 (grade of C or higher) or appropriate math assessment*

Includes first-degree equations, inequalities, formulas, polynomials, algebraic fractions, factoring polynomials, solving quadratic equations by factoring applications. Coordinate geometry, graphing linear equations and inequalities, and systems of linear equations may be included.

**MAT 103 Math for Clinical Calculations**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: MAT 090 (grade of C or higher) or appropriate math assessment*

Provides a review of general mathematics, introductory algebra and an opportunity to learn systems of measurement and methods of solving problems related to drug dosage and intravenous fluid administration. It is designed for students in the health disciplines. Topics may include algebra, graphs, measurement and conversion between various systems of measurement..

**MAT 106 Survey of Algebra**

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite: Successful completion of MAT 090 (grade of C or higher) or appropriate math assessment*

Emphasizes problem solving with further study of equations, slope, inequalities, systems of equations, polynomials, quadratic equations, rational expressions, rational exponents, radical expressions, graphing and applications. A graphing calculator or equivalent software may be utilized.

**MAT 107 Career Math**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: Successful completion of MAT 060 (grade of C or higher) or appropriate math assessment*

Covers material designed for career technical students or general studies students who need to study particular mathematical topics. Topics may include arithmetic review, calculator usage, algebra, geometry, trigonometry, graphs, and finance. These are presented on an introductory level and the emphasis is on applications. The specific topics covered are selected to meet the needs of the students enrolled in the course.

**MAT 108 Technical Mathematics**

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite: Mat 090 (grade of C or higher) or appropriate math assessment*

Covers material designed for career technical students or general studies students who need to study particular mathematical topics. Topics may include calculator usage, algebra, geometry, trigonometry, graphs, finance logarithms and statistics. These are presented on an introductory level and the emphasis is on applications. The specific topics covered are selected to meet the needs of the students enrolled in the course.

**MAT 109 Geometry**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: Successful completion of MAT 090 (grade of C or higher) or appropriate math assessment*

Teaches basic geometric principles involving lines, triangles, circles, polygons, and three-dimensional figures. Geometric constructions and measurement in the metric and U.S. systems are covered.

**MAT 111 Technology Lab for Algebra**

1 Credit Hour • 30 Contact Hours (Lab)

Explores and applies algebraic topics in a laboratory course using graphing calculators.

**MAT 112 Financial Mathematics**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: MAT 060 or equivalent*

Covers topics including pricing, taxes, insurance, interest, annuities, amortization, investments using financial calculators, and spreadsheets.

**MAT 120 Mathematics for the Liberal Arts: MA1**

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisites: Accuplacer score of 85(EA), ACT score of 19, or MAT 106*

Develops mathematical and problem-solving skills. Appropriate technological skills are included. Content is selected to highlight connections between mathematics and the society in which we live. Topics include set theory and logic, mathematical modeling, probability and statistical methods, and consumer mathematics. Additional content will include one topic in geometry, numeration systems, decision theory, or management science.

**MAT 121 College Algebra: MA1**

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisites: Accuplacer score of 85(EA), ACT score of 23, or MAT 106*

Includes a brief review of intermediate algebra, equations, and inequalities, functions and their graphs, exponential and logarithmic functions, linear and non-linear systems, selection of topics from among graphing of the conic sections, introduction to sequences and series, permutations and combinations, the binomial theorem, and theory of equations. A graphing calculator is required.

**MAT 122 College Trigonometry: MA1**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: Successful completion of MAT 121 (grade of C or higher) or appropriate math assessment*

Covers topics including trigonometric functions (with graphs and inverse functions), identities and equations, solutions of triangles, complex numbers, and other topics as time permits. This is a traditional Prerequisite course to the calculus sequence.

**MAT 123 Finite Mathematics: MA1**

4 Credit Hours • 60 Contact Hours (Lecture)

Offered: Spring &amp; Summer

*Prerequisite: Successful completion of MAT 106 (grade of C or higher) or appropriate math assessment*

Covers topics including functions, matrix algebra, linear programming, and an introduction to probability and counting techniques. Emphasis is on applications. This course may include other topics such as statistics when time permits. This course is primarily intended for business, life science, or social science majors.

**MAT 125 Survey of Calculus: MA1**

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite: Successful completion of MAT 121 (grade of C or higher) or appropriate math assessment*

Includes derivatives, integrals, and their applications, with attention restricted to algebraic, exponential, and logarithmic functions for business, life science, and/or social science majors.

**MAT 135 Introduction to Statistics: MA1**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisites: Accuplacer score of 85(EA), ACT score of 21, or successful completion of MAT 106 (grade of C or higher)**Corequisite: MAT 179*

Includes data presentation and summarization, introduction to probability concepts and distributions, statistical inference—estimation, hypothesis testing, comparison of populations, correlation, and regression.

**MAT 155 Integrated Math I: MA1**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisites: Accuplacer score of 85(EA), ACT score of 19, or successful completion of MAT 106 (grade of C or higher)*

Engages students in the concepts of school mathematics, the course will include the recognition of numerical and geometric patterns and their application to a variety of mathematical situations; mathematical problem-solving, reasoning, critical thinking, and communication; algebraic thinking, representation, analysis, manipulation, generalizations and extensions.

**MAT 156 Integrated Math II: MA1**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisites: Accuplacer score of 85(EA), ACT score of 19, or successful completion of MAT 106 (grade of C or higher)*

Further MAT 155 concepts, the course will include fundamentals of probability, statistics, and Euclidean geometry. Mathematical problem-solving, reasoning, critical thinking and communication will continue to be an integral part of this sequence.

**MAT 166 Pre-Calculus: MA1**

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite: Successful completion of MAT 121 (grade of C or higher) or appropriate math assessment*

Reviews college algebra and college trigonometry intended for those planning to take calculus. Topics include algebraic manipulations, properties of algebraic and trigonometric functions and their graphs, trig identities and equations, conic sections, polar coordinates, and parametric equations.



**MAT 179 Computer Applications for Statistical Procedures**

1 Credit Hour • 22.5 Contact Hours (7.5 Lecture, 15 Lab)

*Prerequisite: MAT 106**Corequisite: MAT 135*

Uses statistical software and the World Wide Web to engage students in an active visual approach to the topics covered in MAT 135. Students will work with real world data on problems of a practical nature.

**MAT 201 Calculus I: MA1**

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite: Successful completion of MAT 166 (grade of C or higher) or appropriate math assessment*

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: MA1**

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite: Successful completion of MAT 201 (grade of C or higher) or appropriate math assessment*

Continuation of single variable calculus which will include techniques of integration, polar coordinates, analytic geometry, improper integrals, and infinite series.

**MAT 203 Calculus III: MA1**

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite: Successful completion of MAT 202 (grade of C or higher) or appropriate math assessment*

Completes the traditional subject matter of Calculus. Topics include vectors, vector-valued functions, and multivariable calculus including partial derivatives, multiple integrals, line integrals, and application.

**MAT 215 Discrete Mathematics: MA1**

4 Credit Hours • 60 Contact Hours (Lecture)

Offered: Spring

*Prerequisite: Successful completion of MAT 201 (grade of C or higher)*

Includes formal logic, algorithms, induction proofs, counting and probability, recurrence relations, equivalence relations, graphs, shortest-path, and tree traversal. This course is designed for mathematics and computer science students.

**MAT 255 Linear Algebra**

3 Credit Hours • 45 Contact Hours (Lecture)

Offered: Spring

*Prerequisite: Successful completion of MAT 202 (grade of C or higher)*

Includes vector spaces, matrices, linear transformations, matrix representation, eigenvalues, and eigenvectors.

**MAT 265 Differential Equations: MA1**

3 Credit Hours • 45 Contact Hours (Lecture)

Offered: Fall

*Prerequisite: Successful completion of MAT 202 (grade of C or higher)*

Emphasizes techniques of problem solving and applications. Topics include first, second, and higher order differential equations, series methods, approximations, systems of differential equations, and Laplace transforms.

**MAT 280 Internship**

1 Credit Hours • 45 Contact Hours (Internship)

*Prerequisite: Requires written approval of the math lab coordinator*

Provides student with the opportunity to supplement coursework with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor.

**Medical Office Technology****MOT 100 Professional Household Health Assistant**

5 Credit Hours • 112.5 Contact Hours (Lecture/Lab Combination)

Provides skills through lecture and hands-on lab, experiences in both classroom environment and household sites. Topics include family dynamics, communication skills, boundaries, patient assistance skills in the home, nutrition, safety issues & body mechanics, environmental care, chronic illness care in the home, and self-marketing skills. This course is designed to provide clients home care by providers who attend to basic needs in the home for support of the professional nurse and other healthcare providers. This person attends to the needs based on family requirements in support of patient comforts and safety, while providing companionship and assistance for patients and family.

**MOT 110 Medical Office Administration**

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite: ENG 090, REA 090*

Introduces the administrative duties specifically used in medical offices.

**MOT 120 Medical Office Financial Management**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: MAT 030**Corequisite: CIS 118*

Covers the practical uses of accounts and records with emphasis on accounting principles and analysis for use in a medical office.

**MOT 123 Introduction to Clinical Physiology**

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

*Prerequisite: REA 090**Corequisite: HPR 178*

Introduces the allied health professional to the human body and introduces the fields of chemistry and biology with applications to the function of the human body. Examines the states of homeostasis and disease and alterations in those states. Students will also be introduced to the study of pharmacology and applying the disciplines of chemistry and biology to body processes. This course is a pre-requisite for MOT 125, MOT 133, and MOT 135.

**MOT 124 Medical Filing**

2 Credit Hours • 30 Contact Hours (Lecture)

Introduces the student to the basic rules and principles of filing in medical facilities. Topics include numeric, terminal digit, alphabetic, and computer-assisted filing methods. Cross-referencing, color-coding, and medical records control will also be introduced.

**MOT 125 Basic Medical Sciences I**

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

*Prerequisite: MOT 123*

Teaches the anatomy and physiology, pathophysiology, and drug therapy of the immune, musculoskeletal, and digestive systems. A discussion of pediatric implications as they relate to clinical physiology will also be covered. This course is a follow-on course from MOT 133. Students may take MOT 125, MOT 133, and MOT 135 in any order after successfully completing MOT 123.



**MOT 130 Insurance Billing & Coding**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: MOT 125, MOT 135*

Introduces outpatient coding with an ultimate goal to present a clear picture of medical procedures and services performed (CPT codes), correlating the diagnosis, symptom, complaint or condition (ICD-9 codes), thus establishing the medical necessity required for third-party reimbursement.

**MOT 131 Advanced Insurance Billing & Coding**

3 Credit Hours • 45 Contact Hours (Lecture)

*Corequisite: MOT 125, MOT 135*

Prepares the student to code correctly and optimize reimbursements for a full range of medical services by expanding coverage of diagnostic and therapeutic procedures, official coding guidelines, APGs, APCs, DRGs, Medicare fraud and abuse.

**MOT 132 Medical Transcription**

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite: MOT 125, HPR 208*

Provides basic knowledge, understanding, and skills required to transcribe medical dictation with accuracy, clarity, and timeliness, applying the principles of professional and ethical conduct.

**MOT 133 Basic Medical Sciences II**

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

*Prerequisite: MOT 123*

Teaches the anatomy and physiology, pathophysiology, and drug therapy of the cardiovascular, respiratory, and dermatology systems. This course is a follow-on course from MOT 123. Students may take MOT 125, MOT 133, and MOT 135 in any order after successfully completing MOT 123.

**MOT 135 Basic Medical Sciences III**

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

*Prerequisite: MOT 123*

Covers the anatomy and physiology, pathophysiology, and drug therapy of the Renal, Reproductive, Neurological, and Endocrine systems. This course is a follow-on course from MOT123. Students may take MOT125, MOT133, and MOT135 in any order after successfully completing MOT123.

**MOT 136 Introduction to Clinical Skills**

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

*Corequisite: MOT 138, MOT 140*

Provides hands on experience with the basic clinical skills required for assisting with patient care. Delivers the theory behind each skill presented as well as proper technique for performing each skill. Includes knowledge and/or performance of blood borne pathogens/OSHA regulations, medical asepsis, procedural gloving, patient gowning, positioning, and measurement of vital signs.

**MOT 138 Medical Assisting Lab Skills**

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Corequisite: MOT 136*

Introduces the student to basic routine laboratory skills and techniques for collection, handling, and examination of laboratory specimens often encountered in the ambulatory care setting. Emphasizes hands-on experience.

**MOT 140 Medical Assisting Clinical Skills**

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Corequisite: MOT 136*

Provides hands on experience with the clinical skills required for assisting with patient care. Delivers the theory behind each skill presented as well as proper technique for performing each skill.

**MOT 142 Medical Transcription II**

4 Credit Hours • 60 Contact Hours (Lecture)

*Prerequisite: MOT 132**Corequisite: MOT 180*

Uses a simulation approach to build student vocabulary and speed while providing actual medical transcription of a variety of health care and medical reports at progressively increasing accuracy and productivity standards.

**MOT 145 Transcribe Medical Specialties**

4 Credit Hours • 60 Contact Hours (Lecture)

Familiarizes students with medical specialties and associated terminology, abbreviations, procedures, medications, and instruments used in medical treatment.

**MOT 150 Pharmacology for Medical Assistants**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: MAT 030*

Provides an overview of pharmacology language, abbreviations, systems of measurement and conversions. The Controlled Substances Act, prescriptions, forms of medications, patient care applications, drug classifications/interactions, and safety in drug therapy and patient care are presented. Information regarding the measurement of medications, dosage calculations, routes of administration, and commonly prescribed drugs in the medical office is provided.

**MOT 180 Medical Transcription Internship**

3 Credit Hours • 180 Contact Hours (Internship)

*Corequisite: MOT 142 or faculty consent*

Provides supervised placement in contracted facility for guided experience in the application of knowledge and skills acquired in the classroom.

**MOT 181 Administrative Internship**

2 Credit Hours • 90 Contact Hours (Internship)

*Prerequisite: Must be in the final semester of MOT degree or certificate program or program coordinator consent.*

Provides supervised placement in contracted facility for guided experience in application of knowledge and skill acquired in the classroom. Positions are non-paid due to CAAHEP requirement. Student must have permission by program coordinator to begin internship.

**MOT 182 Clinical Internship**

3 Credit Hours • 135 Contact Hours (Internship)

*Prerequisite: Must be in final semester of MOT degree or certificate program or have program coordinator consent*

Provides supervised placement in contracted facility for guided experience in applications of knowledge and skills acquired in the classroom. Positions are non-paid due to CAAHEP requirement. Student must have permission by program coordinator to begin internship.

**MOT 183 Medical Assistant Internship**

5 Credit Hours • 225 Contact Hours (Internship)

*Prerequisite: Must be in final semester of MOT degree or certificate program or program coordinator consent*

Provides supervised placement in contracted facility for guided experience in application of knowledge and skill acquired in the classroom. The student assists with a variety of business and clinical procedures. Positions are non-paid due to CAAHEP requirement. Student must have permission by program coordinator to begin internship.

**MOT 189 Review for Med. Asst. National Examination**

1 Credit Hour • 15 Contact Hours (Lecture)

*Prerequisite: Must be in final semester of MOT degree or certificate program*

Prepares the candidate sitting for the National Registration/Certification Examination for Medical Assistant through review and practice. These examinations are given with the intent of evaluating the competency of entry-level practitioners in Medical Assisting, therefore supporting quality care in the office or clinic.

## Meteorology

**MET 150 General Meteorology: SC1**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

Provides an introduction to general meteorology and atmospheric sciences. It includes the composition and structure of the atmosphere and characteristics that affect the atmosphere, such as temperature, pressure, and moisture. Additionally, the development of weather systems, such as storm systems, hurricanes, weather fronts and cloud development will also be examined. Finally, concepts of climatology will be stressed.

## Multimedia Graphic Design

**MGD 102 Introduction to Multimedia**

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

Introduces the types of equipment and technical considerations used in multimedia productions and the multimedia professions. It focuses on current types of equipment such as scanners, printers, digital cameras and computers. Students gain hands-on experience in how the technology is utilized for input and output in production and design projects. Overview of software and basic design principles will be explored.

**MGD 103 Production Design**

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

Explores the use of tools, computer graphics techniques, and design layout principles to produce professional graphic designs. Studies include printing basics, typography, and digital color systems. Students use creative thinking to solve communication and design concepts for the output process.

**MGD 104 Videography**

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

Offers an introduction to the principles and techniques of videotape production, including camera operation, basic script writing, lighting, sound, and basic digital editing. Detailed examination of the pre-production, production, and post-production processes, as well as aesthetics, will be included.

**MGD 105 Typography & Layout**

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

Covers the creation and production of graphic projects, emphasizing the layout creative design process, problem solving, and research. Provides experience producing thumbnails, roughs, and digital layouts emphasizing refined creative typography.

**MGD 106 Creativity & Visual Thinking**

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

Introduces the visual and oral skills necessary to analyze works of art and design, articulate complex ideas, and then present the solution cogently in 2-D and 3-D projects and presentation skill building. The underlying philosophy of what we see, how we see, and what we do with it is the major concern of this class.

**MGD 107 History of Design**

2 Credit Hours • 30 Contact Hours (Lecture)

Explores the pivotal events and achievements that have led to the current state of graphic communication. Through lectures, slides, videos, class discussions, and research, students discover the creative thinkers, innovations, and breakthrough technologies that have shaped the evolution of visual communication, advertising, and industrial design today.

**MGD 108 History of Illustration**

2 Credit Hours • 30 Contact Hours (Lecture)

Presents a selected overview of the origins of illustration to the present giving equal emphasis to commercial illustration, fine art, and gallery illustration. Special attention is paid to stylistic changes, work methods, and social context.

**MGD 109 Design & Color**

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

Covers the design process and creative problem solving; design and color theories, fundamentals, styles; stages area applied to workups; finished art; and presentations. Emphasis will be on line, form, composition, and continuity.

**MGD 110 Lettering for Graphic Design**

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

Studies lettering and letter forms; the various methods and mediums used in freehand and mechanically-rendered lettering; the design of lettering; and practical applications of lettering in the field of graphic design.

**MGD 111 Adobe Photoshop I**

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

Concentrates on the high-end capabilities of a raster photo-editing software as an illustration, design, and photo retouching tool. Students explore a wide range of selection and manipulation techniques that can be applied to photos, graphics, and videos.

**MGD 112 Adobe Illustrator I**

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

Acquaints students with the processes of a vector drawing program on the computer. Students learn how to use the tools to create digital artwork that can be used in web design, print media, and digital screen design.

**MGD 113 QuarkXPress**

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

Introduces students to QuarkXPress, a digital page layout tool. Students learn how to assemble, organize, manipulate, and manage text and graphics to produce a high quality publication. Class discussions and independent projects supplement hands-on classroom work.

**MGD 114 Adobe InDesign**

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

Introduces students to InDesign, a page layout program which integrates seamlessly with other Adobe design programs. InDesign delivers creative freedom and productivity to DTP. Class discussions and independent projects supplement hands-on classroom work.

**MGD 116 Typography I**

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

Introduces the history and concepts of typography as applied to graphic communications. Explores appropriate use of typography in a variety of design applications, emphasizing the basic design principles of typographic compositions and typesetting. Covers type recognition and typography terms.

**MGD 121 Painter for Digital Media**

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

Teaches students how to work with an illustration and paint software application called Painter. Color and relationships, repeat patterns, animation and digitization are among the topics covered in the course as students explore the possibilities of visual art using computers. Assigned projects cover a wide range of visual approaches. Painter provides an extra competitive edge for students.

**MGD 132 Design & Color II**

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

*Prerequisite: MGD 109*

Covers the creative problem solving techniques for effective design and advertising continuity. Advanced exploration with design devices, theories, and applications will be discussed. Students will continue skills as well as design process development for ideas and concepts through all the layout stages to the finished presentation.

**MGD 134 Drawing for Illustrators**

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

Covers fundamentals skills and theories of drawing and rendering line structure, form, value, texture, and composition. Application of drawing skills with various media for line quality as well as value and texture interpretations are also covered.

**MGD 141 Web Design I**

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

Introduces the fundamentals of HTML syntax using a simple text editor to create a web page. Web-safe colors and the use of graphic editors will be explored. Students study web aesthetics and intuitive interface design. The course emphasizes file organization and layout including tables and frames.

**MGD 143 Web Motion Graphic Design I**

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

Stresses creation of animated GIF's and dynamic, interactive media for Web applications. Students will learn how to draw objects, create symbols, and assemble motion tweens.

**MGD 153 3D Animation I**

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

*Prerequisite: MGD 102 or faculty consent*

Encompasses all major aspects of creating 3D characters using animation software. Using developed characters, the student will learn how to animate for personality.

**MGD 161 Director I**

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

Examines Macromedia Director, the leading authoring tool for interactive multimedia from the art director's perspective. Students will learn the basics of 2D animation for both computer presentations and the web. Interface design and scene development are emphasized. Hands-on projects include lingo scripts, behaviors, adding sound and digital video to student's movies.

**MGD 164 Digital Video Editing I**

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

*Prerequisite: MGD 102 or faculty consent*

Introduces digital non-linear video editing. Students will capture, compress, edit, and manipulate video images using a personal computer. Assembly techniques including media management, editing tools, titles, and motion control, transitions and filters, and special effects are explored.

**MGD 165 After Effects I**

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

Provides the fundamental techniques for creating digital motion graphics such as 2D animations, animated logos, video graphics, etc. Classes cover relevant tools and techniques as well as industry standards, delivery methods, and output.

**MGD 178 Seminar/Workshop**

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

Provides students with an exceptional learning experience.

**MGD 180 Internship**

3 Credit Hours • 135 Contact Hours (Internship)

*Prerequisite: faculty consent*

Provides students with the opportunity to supplement coursework with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor.

**MGD 201 Children's Book Illustration**

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

*Prerequisite: MGD 109*

Studies the artist's role as a visual storyteller, with completion of a finished project to portfolio. Covers adapting a story into character development, story boarding, visual, editing and constructing the final drawing. Special attention to specifications, deadlines, reproduction requirements, and professionalism.

**MGD 202 Point of Purchase Packaging Design**

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

*Prerequisite: MGD 109, MGD 132, MGD 133, or faculty consent*

Introduces the theories and principles that apply to three-dimensional design graphics for packaging and display; various dimensional marketing solutions to create dynamic visual effects concepts will be developed. Work layout stages and mock-ups will utilize various methods of cutting, folding, and assembly to explore the design concepts and their visual effects.

**MGD 207 Illustration I**

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

*Prerequisite: MGD 134*

Addresses methods and techniques used in the profession of illustration for advertising, brochures, books and other forms of printed communications. Course concentrates on developing expertise in producing line and continuous-tone, black-and-white art with emphasis on design and the creation of art for reproduction.

**MGD 208 Illustration II**

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

*Prerequisite: MGD 207*

Addresses methods and techniques used in the illustration profession beyond those covered in Illustration I. Course concentrates on developing expertise in producing color art for reproduction.

**MGD 209 Illustration III**

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

*Prerequisite: MGD 208*

Continues Illustration II with added emphasis on conceptual development and proficiency in technique.

**MGD 211 Adobe Photoshop II**

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

*Prerequisite: MGD 111 or faculty consent*

Develops and reinforces image composition techniques learned in Adobe Photoshop I, MGD 111. Fundamentals are continuously reinforced as new design techniques are introduced.

**MGD 212 Adobe Illustrator II**

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

*Prerequisite: MGD 112 or faculty consent*

Enables the student to continue development of electronic drawing skills through practice and use of state of the art illustration software.

**MGD 213 Electronic Prepress**

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

*Prerequisite: MGD 111, 112, 113 or faculty consent*

Explores in detail the electronic prepress process. Students examine steps for preparing a digital file for trapping, output considerations, and proofing techniques. Creating effective electronic designs and efficient use of today's software programs are also covered.

**MGD 215 Painting for Illustrators**

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

Develops a more refined visual vocabulary, concentrating only on wet media both monochromatic and full color. Projects are more self-directed with emphasis on research, content composition, and professional expectation of the illustration in the graphic area. Working from both life and photographic subjects, the student will develop skills to achieve control of the painterly illustration media.

**MGD 221 Computer Graphics I**

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

*Prerequisite: MGD 111, 112, 113 or faculty consent*

Introduces the process of generating computer design.

**MGD 222 Computer Graphics II**

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

*Prerequisite: MGD 111, 112, 113, 221 or faculty consent*

Continues MGD 221 with advanced problems in generating computer design for graphics application, emphasizing production of individual fine art pieces.

**MGD 241 Web Design II**

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

*Prerequisite: MGD 141 or faculty consent*

Expands on previously learned fundamentals of HTML introducing cascading style sheets, DHTML, JavaScripts, and CGI forms. Color usage and interface design principles are emphasized in this course. This course will examine Web sites that employ more complex structures, optimal site architecture and navigation necessary for larger and more complex sites.

**MGD 243 Web Motion Graphic Design II**

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

*Prerequisite: MGD 143 or faculty consent*

Stresses the complex creation of 2D animated motion graphics concentrating on the prior skills learned and the use of scripting and behaviors. Students will create motion graphics using these skills and apply them to web sites. Web site justification of motion graphics will be stressed, appraised, and weighed.

**MGD 259 Management & Production**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: MGD 102, 213 or 221, 141 or faculty consent*

Examines development of multimedia from a production standpoint. The process of transforming conceptual designs into actual projects is explored. Students study the management function of those tasks associated with the business end of development. Teamwork is emphasized throughout the course.

**MGD 264 Digital Video Editing II**

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

*Prerequisite: MGD 164 or faculty consent*

Looks at the more complex and advanced techniques of digital video editing. Areas of editing such as masking, filtering, blue/green screening, track mattes, and image mattes will be examined. Students will produce a movie project in this class and discuss practical ways to distribute to various audiences.

**MGD 265 After Effects II**

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

*Prerequisite: MGD 165 or faculty consent*

Provides advanced skills and techniques for creating digital motion graphics. The course covers relevant tools and techniques as well as industry standards, specialized techniques, and additional tools and resources.

**MGD 266 DVD Authoring**

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

*Prerequisite: MGD 164 or faculty consent*

Introduces students to all aspects of DVD authoring; covers source acquisition, DVD production, interface design, organization, management, and appropriate DVD output solutions.

**MGD 268 Commercial Art Business**

2 Credit Hours • 30 Contact Hours (Lecture)

Presents a guide to freelance work and a study of business practices and procedures unique to commercial art including billing rates, client management, business forms, employee management, taxes, licenses, registration, bid processes, and self-promotion. Course may include visits by professionals in the field and discussion of career opportunities and professional organizations.

**MGD 289 Capstone**

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

A demonstrated culmination of learning within a given program of study.

## Music

**MUS 100 Fundamentals of Music**

3 Credit Hours • 45 Contact Hours (Lecture)

Designed to help the beginning music student, or those students with a limited background in music theory, study the basic elements of music, including notation, rhythm, scales, key signatures, intervals, and chords.

**MUS 105 Introduction to Electronic/Computer Music**

3 Credit Hours • 45 Contact Hours (Lecture)

Explores the elements of electronic music and demonstrates some of the most popular music software for the Macintosh and IBGM computers, including music notation and music sequencing programs. Achieving a fundamental working knowledge of setup and recording procedures on a personal computer is stressed. Equipment is provided, and beginner's knowledge on either the Macintosh or IBM computer is helpful but not essential.

**MUS 110 Music Theory I**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: MUS 100 or faculty consent**Corequisite: MUS 112*

Presents music fundamentals, diatonic four-part harmony, analysis, ear training, and keyboard harmony.



**MUS 111 Music Theory II**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* MUS 110, MUS 112*Corequisite:* MUS 113

Presents chromatic four-part harmony, analysis, ear training, and keyboard harmony.

**MUS 112 Ear Training/Sight-singing I Lab**

1 Credit Hour • 37.5 Contact Hours (Studio)

*Prerequisite:* Follow sequence of MUS 100 or MUS 101, or equivalent proficiency*Corequisite:* MUS 110 or faculty consent

Presents exercises in sight-singing with melodic and rhythmic dictation.

**MUS 113 Ear Training/Sight-singing II Lab**

1 Credit Hour • 37.5 Contact Hours (Studio)

*Prerequisite:* MUS 112 or equivalent proficiency via faculty consent*Corequisite:* MUS 111

Presents exercises in sight-singing with melodic and rhythmic dictation.

**MUS 120 Music Appreciation: AH1**

3 Credit Hours • 45 Contact Hours (Lecture)

Covers the basic materials of music, musical forms, media, genres, and musical periods. Emphasizes the development of tools for intelligent listening and appreciation.

**MUS 121 Music History I: AH1**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ENG 121 or concurrent enrollment, MUS 100 or MUS 110, MUS 120

Studies the various periods of music history with regard to the composers, esthetics, forms, and genres of each period. Considers music from the Middle Ages through the Classical period.

**MUS 122 Music History II: AH1**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ENG 121 or concurrent enrollment, MUS 100, MUS 120

Continues Music History I with a study of music from the early Romantic period to the present.

**MUS 123 Survey of World Music**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ENG 121

Provides an overview of non-Western music from around the world; provides basic listening skills and the historical/cultural context for a variety of world music styles to enable an understanding and appreciation of non-Western musical expression.

**MUS 125 History of Jazz Music**

3 Credit Hours • 45 Contact Hours (Lecture)

Provides an overview of the history of jazz in America, and provides basic listening skills for the understanding and appreciation of jazz music.

**MUS 126 History of American Popular Music**

3 Credit Hours • 45 Contact Hours (Lecture)

Provides a survey of the history and literature of American Popular Music from 1600 to the present. Through the study of the many ethnic influences that contribute to the diverse musical landscape of American Popular Music, the students acquire an appreciation of this rich musical heritage. These musical styles have evolved out of the diversity in America, and are performed and enjoyed throughout the world.

**MUS 131 Music Class I:**

2 Credit Hours • 45 Contact Hours (15 Lecture, 30 Lab)

*Prerequisite:* faculty consent

Applies the fundamentals of music to the voice or specific musical instruments. This course also introduces basic techniques, repertoire, and sight-reading. First year, first term.

**MUS 132 Music Class II:**

2 Credit Hours • 45 Contact Hours (15 Lecture, 30 Lab)

*Prerequisite:* faculty consent

Applies the fundamentals of music to the voice or specific musical instruments. The course also introduces basic techniques, repertoire, and sight-reading. First year, second term.

**MUS 133 Music Class III:**

2 Credit Hours • 45 Contact Hours (15 Lecture, 30 Lab)

*Prerequisite:* faculty consent

Applies the fundamentals of music to the voice or specific musical instruments. The course also introduces basic techniques, repertoire, and sight-reading. First year, third term.

**MUS 134 Music Class IV:**

2 Credit Hours • 45 Contact Hours (15 Lecture, 30 Lab)

*Prerequisite:* faculty consent

Applies the fundamentals of music to the voice or specific musical instruments. The course also introduces basic techniques, repertoire, and sight-reading. First year, fourth term.

**MUS 141 Private Instruction I:**

1-2 Credit Hours • 7.5-15 Contact Hours (Private Instruction)

*Prerequisite:* Class instruction or faculty consent.

Offers private instruction consisting of a thirty or sixty-minute lesson per week. Participation in a student performance is required at least once each term. First year, first term.

**MUS 142 Private Instruction II:**

1-2 Credit Hours • 7.5-15 Contact Hours (Private Instruction)

*Prerequisite:* Class instruction or faculty consent.

Offers private instruction consisting of a thirty or sixty-minute lesson per week. Participation in a student performance is required at least once each term. First year, second term.

**MUS 143 Private Instruction III:**

1-2 Credit Hours • 7.5-15 Contact Hours (Private Instruction)

*Prerequisite:* Class instruction or faculty consent.

Offers private instruction consisting of a thirty or sixty-minute lesson per week. Participation in a student performance is required at least once each term. First year, third term.

**MUS 144 Private Instruction IV:**

1-2 Credit Hours • 7.5-15 Contact Hours (Private Instruction)

*Prerequisite:* Class instruction or faculty consent.

Offers private instruction consisting of a thirty or sixty-minute lesson per week. Participation in a student performance is required at least once each term. First year, fourth term.

**MUS 151 Ensemble I:**

1 Credit Hour • 37.5 Contact Hours (Studio)

*Prerequisite:* faculty consent

First year, first term. Rehearses and performs various types of musical literature.

**MUS 152 Ensemble II:**

1 Credit Hour • 37.5 Contact Hours (Studio)

*Prerequisite:* faculty consent

Rehearses and performs various types of musical literature. First year, second term.



**MUS 153 Ensemble III:**

1 Credit Hour • 37.5 Contact Hours (Studio)

*Prerequisite: faculty consent*

Rehearses and performs various types of musical literature. First year, third term.

**MUS 154 Ensemble IV:**

1 Credit Hour • 37.5 Contact Hours (Studio)

*Prerequisite: faculty consent*

Rehearses and performs various types of musical literature. First year, fourth term.

**MUS 210 Music Theory III**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: MUS 111, MUS 112**Corequisite: MUS 112*

Continues study of four-part music, including extended harmonic progressions of ninth, eleventh, and thirteenth chords, extended alteration, non-chord tones, modulation, and compositions.

**MUS 211 Music Theory IV**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: MUS 210**Corequisite: MUS 213*

Offers a continuation of chromatic harmony, analysis, ear-training, and keyboard harmony. New topics will include Impressionism and 20th century styles of composition.

**MUS 212 Advanced Ear Training/Sight-singing I Lab**

1 Credit Hour • 37.5 Contact Hours (Studio)

*Prerequisite: follow sequence or faculty consent**Corequisite: MUS 210*

Presents modulating and chromatic exercises in sight-singing and dictation. Dictation includes four-part writing.

**MUS 213 Advanced Ear Training/Sight-singing II Lab**

1 Credit Hour • 37.5 Contact Hours (Studio)

*Prerequisite: Follow sequence or faculty consent**Corequisite: MUS 211*

Presents modulating and chromatic exercises in sight-singing and dictation. Dictation includes four-part writing.

**MUS 232 Music Class II:**

2 Credit Hours • 45 Contact Hours (15 Lecture, 30 Lab)

*Prerequisite: faculty consent*

Applies the fundamentals of music to the voice or specific musical instruments. The course also introduces basic techniques, repertoire, and sight-reading. Second year, second term.

**MUS 233 Music Class III:**

2 Credit Hours • 45 Contact Hours (15 Lecture, 30 Lab)

*Prerequisite: faculty consent*

Applies the fundamentals of music to the voice or specific musical instruments. The course also introduces basic techniques, repertoire, and sight-reading. Second year, third term.

**MUS 234 Music Class IV:**

2 Credit Hours • 45 Contact Hours (15 Lecture, 30 Lab)

*Prerequisite: faculty consent*

Applies the fundamentals of music to the voice or specific musical instruments. The course also introduces basic techniques, repertoire, and sight-reading. Second year, fourth term.

**MUS 241 Private Instruction I:**

1-2 Credit Hours • 7.5-15 Contact Hours (Private Instruction)

*Prerequisite: Class instruction or faculty consent*

Offers private instruction consisting of a thirty or sixty-minute lesson per week. Participation in a student performance is required at least once each term. Second year, first term.

**MUS 242 Private Instruction II:**

1-2 Credit Hours • 7.5-15 Contact Hours (Private Instruction)

*Prerequisite: Class instruction or faculty consent*

Offers private instruction consisting of a thirty or sixty-minute lesson per week. Participation in a student performance is required at least once each term. Second year, third term.

**MUS 243 Private Instruction III:**

1-2 Credit Hours • 7.5-15 Contact Hours (Private Instruction)

*Prerequisite: Class instruction or faculty consent.*

Offers private instruction consisting of a thirty or sixty-minute lesson per week. Participation in a student performance is required at least once each term. Second year, third term.

**MUS 244 Private Instruction IV:**

1-2 Credit Hours • 7.5-15 Contact Hours (Private Instruction)

*Prerequisite: Class instruction or faculty consent.*

Offers private instruction consisting of a thirty or sixty-minute lesson per week. Participation in a student performance is required at least once each term. Second year, fourth term.

**MUS 251 Ensemble I:**

1 Credit Hour • 37.5 Contact Hours (Studio)

*Prerequisite: faculty consent*

Rehearses and performs various types of musical literature. Second year, first term.

**MUS 252 Ensemble II:**

1 Credit Hour • 37.5 Contact Hours (Studio)

*Prerequisite: faculty consent.*

Rehearses and performs various types of musical literature. Second year, second term.

**MUS 253 Ensemble III:**

1 Credit Hour • 37.5 Contact Hours (Studio)

*Prerequisite: faculty consent*

Rehearses and performs various types of musical literature. Second year, third term.

**MUS 254 Ensemble IV:**

1 Credit Hour • 37.5 Contact Hours (Studio)

*Prerequisite: faculty consent*

Rehearses and performs various types of musical literature. Second year, fourth term.

## Natural Resources

### NRE 100 Foundations of Forestry

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

Presents the principles of forest science, dendrology, forest fire behavior, and silviculture principles.

### NRE 204 Range Management & Restoration

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Covers management of rangelands, important plants, rangeland communities, and restoration practices to restore disturbed ecosystems. Students will learn field measurement techniques of ecosystem components.

### NRE 205 Wildlife & Fisheries Management Principles

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

*Prerequisite:* ENG 131

Covers theory, philosophy, and applications for study and management of wildlife and fisheries resources. Field and laboratory methods used in wildlife management also covered.

### NRE 211 Environmental Policies & Economics

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ENG 131

Covers interactions, resources, economics and politics; government and environment policy. Evaluation of alternative resource use patterns and land use plans. Discussion and analysis of current environmental issues and the impact of economic growth.

### NRE 212 Ecosystem Management

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

*Prerequisite:* BIO 148

Focuses on the larger landscape in order to integrate the human, biological, and physical dimensions of natural resource management. Collaborative management techniques are discussed.

### NRE 214 Environmental Issues & Ethics

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on special environmental problems, current issues, or trends. Traditional and environmental philosophies are discussed. Students debate various environmental issues.

### NRE 236 Public Relations of Natural Resources

2 Credit Hours • 30 Contact Hours (Lecture)

Provides 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.

### NRE 278 Seminar

1-6 Credit Hours • 45 Contact Hours per credit hour (Work Experience)

Provides students with an experiential learning opportunity.

### NRE 280 Internship

5 Credit Hours • 225 Contact Hours (Internship)

*Prerequisite:* faculty consent

Provides students with the opportunity to supplement coursework with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor.

### NRE 289 Capstone

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

*Prerequisite:* faculty consent

Provides a demonstrated culmination of learning within a given program of study.

## Nursing

### NUR 106 Medical & Surgical Nursing Concepts

9 Credit Hours • 217.5 Contact Hours (52.5 Lecture, 15 Lab, 150 Clinical)

*Prerequisite:* Successful completion of preceding nursing program coursework or permission of program director

*Corequisite:* BIO 216, NUR 150

Introduces the student to the role of the nurse in assessing and meeting the medical and surgical nursing needs of adults across the life span in various health care settings. The student learns nursing concepts to assist the patient in achieving optimal functioning. Knowledge from foundational nursing, the sciences, pharmacology, and nutrition along with the continued integration of mental health and cultural concepts provides foundations for nursing care planning for medical and surgical clients.

### NUR 109 Fundamentals of Nursing

8 Credit Hours • 210 Contact Hours (30 Lecture, 90 Lab, 90 Clinical Lab)

*Prerequisite:* BIO 201, BIO 202, BIO 204, ENG 121, PSY 235

Introduces theories and skills basic to the role of the nurse as provider of care, manager of care and member of the nursing profession. Emphasis is placed on introduction to critical thinking and the nursing process. Students will demonstrate a beginning level of competence in providing therapeutic nursing care for clients with common health alterations across the health continuum.

### NUR 112 Basic Concepts of Pharmacology

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite:* Admission to the program

*Corequisite:* NUR 109

Utilizes nursing process to introduce the basic concepts of pharmacology related to the actions, therapeutic and adverse effects, interactions of drugs, drug classification, and the basic pharmacology of commonly used medications. Emphasis is placed on therapeutic interventions and client education. Learners will apply knowledge gained in selected clinical settings situations in caring for a diversity of clients across the lifespan health illness continuum.

### NUR 150 Nursing Care of Obstetric & Pediatric Clients

7 Credit Hours • 165 Contact Hours (45 Lecture, 30 Lab, 90 Clinical)

*Prerequisite:* NUR 109

Provides a family centered approach to professional nursing practice of the childbearing family and children across the health continuum. Emphasis is placed on the care of the perinatal client and children from birth through adolescence. The impact of psychosocial and cultural values and practices are explored. Legal and ethical accountability are integrated throughout the course.

### NUR 169 Transition into Practical Nursing

5 Credit Hours • 120 Contact Hours (30 Lecture, 90 Clinical)

*Prerequisite:* NUR 106, NUR 150

Provides the student with a transition into the practical nurse role. Emphasis is placed on professionalism in nursing, communication, entry into practice, provider and manager of care and nursing management and leadership. The student assumes the role of the practical nurse as they manage patient care.

**NUR 189 Transition from LPN to AD**

4 Credit Hours • 90 Contact Hours (30 Lecture, 60 Lab)

*Prerequisite: Acceptance into LPN/RN program*

Focuses on assisting the LPN to transition into a new role as an Associate Degree Nursing Student. Emphasis will be placed on roles and responsibilities of the AND, nursing process, critical thinking, legal and ethical issues and nursing practice issues related to specialized skills and the care of special populations.

**NUR 201 IV Therapy for LPN's**

5 Credit Hours • 105 Contact Hours (45 Lecture, 30 Lab, 30 Clinical)

Provides LPNs with an opportunity to expand their nursing roles by learning appropriate procedures for intravenous therapy and venous blood withdrawal. The course includes lecture, laboratory practice and clinical experiences. The course prepares the student for IV certification under State Board of nursing Guidelines.

**NUR 206 Advanced Concepts of Medical-Surgical Nursing I**

8 Credit Hours • 195 Contact Hours (45 Lecture, 15 Lab, 135 Clinical)

*Prerequisite: Successful completion of preceding nursing program course work or permission of the program director**Corequisite: Successful completion of concurrent nursing program course work or program director permission*

Focuses on the role of the registered professional nurse as care provider, teacher, manager, professional, and advocate in meeting the nursing needs of adults across the life span. Utilizing the nursing process, the student is expected to integrate previous learning to assist the patient and family in achieving optimal functioning in various health care settings.

**NUR 211 Nursing Care of Psychiatric Clients**

4 Credit Hours • 105 Contact Hours (15 Lecture, 30 Lab, 60 Clinical)

*Prerequisite: Successful completion of preceding nursing program course work or program director permission**Corequisite: NUR 206, NUR 212*

Develops concepts of psychosocial integrity and emphasizes the function and responsibility of nursing in promoting and maintaining mental health of individuals and families. This course emphasizes communication and caring through the application of the therapeutic relationship and nursing process in the care and treatment of common clinical conditions/disorders.

**NUR 212 Pharmacology II**

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite: NUR 106, NUR 150**Corequisite: NUR 206, NUR 211*

Builds upon the concepts introduced in NUR 112 Pharmacology I regarding the safe administration of medications to clients across the health continuum. Utilizing the nursing process the student demonstrates understanding of the role of the nurse as provider of care, manager of care, and member of the profession. Emphasis is placed upon the therapeutic use of medications in the nursing care of individuals with complex health needs. The student is introduced to the calculation of complex intravenous drip rates.

**NUR 216 Advanced Concepts of Medical Surgical Nursing II**

6 Credit Hours • 150 Contact Hours (30 Lecture, 120 Clinical)

*Prerequisite: Successful completion of preceding nursing program course work or program director permission**Corequisite: NUR 230 and elective*

Continues to focus on the role of the registered professional nurse as care provider, teacher, manager, professional, and advocate in meeting the complex medical and surgical health care needs of adult clients. Utilizing the nursing process, the student is expected to integrate previous learning to assist the patient and family in achieving optimal functioning in various complex health care situations and settings.

**NUR 230 Leadership, Management Trends**

5 Credit Hours • 127.5 Contact Hours (22.5 Lecture, 105 Clinical)

*Prerequisite: NUR 211, NUR 212**Corequisite: NUR 216*

Introduces students to current trends in leadership and management concepts affecting the healthcare continuum and the practice of nursing. The student assumes the role of provider, manager of care and member of the discipline at the entry level into professional nursing. There is a practicum for application which may occur across the healthcare continuum, as the student manages groups of clients and health care personnel. The course will facilitate transition from student to the role of the graduate nurse.

**NUR 290 RN Refresher Course**

5 Credit Hours • 97.5 Contact Hours (30 Lecture, 67.5 Lecture/Lab Combination)

*Prerequisite: Colorado RN License in good standing*

Presents material that is designed for all RN's regardless of time absent from nursing practice, to explore avenues of employment. Clinical experience is held in the hospital to refresh and update basic nursing skills. Other opportunities for clinical experience may include home health, long-term, rehabilitation, and hospice.

**NUR 291 RN Refresher Course Clinical**

3 Credit Hours • 90 Contact Hours (Clinical)

*Prerequisite: Colorado RN License in good standing**Corequisite: NUR 290*

Presents material as a co-requisite to NUR 290, the RN didactic portion of the completer program. Students will demonstrate skill attainment gained in NUR 290.

**Nursing Assistant****NUA 101 Certified Nurse Aide Health Care Skills**

4 Credit Hours • 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, 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 105 Home Health Aide Theory**

2 Credit Hours • 30 Contact Hours (Lecture)

Introduces the student to the expanding field of Home Health Nursing. The student will discover the uniqueness of Home Health Care and the vital role that the nursing assistant plays as part of the home care team. The student will learn how to assist home care patients with activities of daily living and maintain a safe, clean, and comfortable environment. The student will also learn the differences and challenges of caring for patients in their natural home environment versus institutional settings.

**NUA 170 Nurse Assistant Clinical Experience**

1 Credit Hour • 30 Contact Hours (Clinical)

*Prerequisite: Successful completion of NUA 101*

Grading: SU only

Applies knowledge gained from NUA 101 in a clinical setting.

**NUA 171 Advanced Nurse Aide Clinical**

1 Credit Hour • 30 Contact Hours (Clinical)

*Prerequisite: NUA 101, NUA 170 and current CPR card, negative TB test or chest X-ray, and current immunizations*

Grading: SU only

Prepares the student to move toward more independent functioning in applying knowledge and skills gained in NUA 101 and NUA 170. The student will learn skills that address cultural competency, care of the dying patient, and organizational skills.

**NUA 180 Home Health Aide Internship**

3 Credit Hours • 82.5 Contact Hours (22.5 Lecture/Lab Combination, 60 Clinical)

*Prerequisite: Current Colorado nurse aide certification or successful completion of a Colorado nurse aide course*

Prepares the nurse aide for entry-level into the home health care setting.

## Paralegal

**PAR 115 Introduction to Law**

3 Credit Hours • 45 Contact Hours (Lecture)

Provides an understanding of the role of paralegals, issues facing paralegals, the working of the legal system, and ethical questions. Legal terminology and an overview of the substantive areas of law will be discussed.

**PAR 116 Torts**

3 Credit Hours • 45 Contact Hours (Lecture)

A basic course in tort law, including negligence, intentional torts, and strict liability, with an emphasis on personal injury litigation.

**PAR 117 Family Law**

3 Credit Hours • 45 Contact Hours (Lecture)

This course covers domestic law, common property, dissolutions, adoptions, legal separation, and other family law issues.

**PAR 118 Contracts**

3 Credit Hours • 45 Contact Hours (Lecture)

This course covers the basic principles of contract law.

**PAR 125 Property Law**

3 Credit Hours • 45 Contact Hours (Lecture)

This course covers real estate law, ownership, sale, leasing, financing, and government regulation of land.

**PAR 127 Legal Ethics**

3 Credit Hours • 45 Contact Hours (Lecture)

Explores the parameters of professional responsibilities and value systems for paralegals and related occupations.

**PAR 201 Civil Litigation**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: PAR 115 or faculty consent*

Intensive study of the legal process including the Federal and Colorado Rules of Civil Procedure.

**PAR 206 Business Organizations**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: PAR 115 or faculty consent*

Study of the major types of business organizations.

**PAR 208 Probate & Estates**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: PAR 115 or faculty consent*

The course provides an understanding of the creation and administration of an estate, including wills and trusts, and the probate process.

**PAR 211 Legal Research**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: PAR 115 or faculty consent*

The course is designed to introduce students to basic legal research tools, including statutes, digests, case law, citators, encyclopedias, dictionaries, and online data bases.

**PAR 212 Legal Writing**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: PAR 115, PAR 211, ENG 121, or faculty consent*

In this course students practice the content and conventions of legal writing.

**PAR 218 Bankruptcy Law**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: PAR 115 or faculty consent*

This course covers the federal and state laws and procedures involving bankruptcy.

**PAR 287 Cooperative Education**

3 Credit Hours • 105 Contact Hours (15 Lecture, 90 Work Experience)

Provides students an opportunity to gain practical experience in applying their occupational skills and/or to develop specific skills in a practical work setting. The instructor will work with students to select an appropriate work site, establish learning objectives, and to coordinate learning activities with the employer or work site supervisor.

**PAR 289 Capstone**

3 Credit Hours • 105 Contact Hours (15 Lecture, 90 Work Experience)

*Prerequisite: All required courses in certificate and AAS degree program*

Emphasizes a synthesis of the information and skills that students learn throughout their paralegal studies.

## 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. The student is introduced to pharmacy practice, standards of practice, certification, pharmacy associations, and opportunities available to the pharmacy technician. Includes surveying laws, regulations, and standards at the federal and state level as they govern the practice of pharmacy. Discussion includes legal and ethical responsibilities of the pharmacy technician. Also introduced are pharmacy terminology, symbols, and abbreviations. Professionalism and communication skills stressing interactions with patients and health care professionals are discussed.



**PHT 115 Pharmacology of the GI, Renal, Reproductive, Immune, Dermatologic Systems**

3 Credit Hours • 45 Contact Hours (Lecture)

Provides the basic concepts of normal body function as well as the diseases which impact the various body systems and the drugs used to treat such diseases. Emphasizes disease state management and drug therapy.

**PHT 116 Institutional Pharmacy**

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

*Prerequisite: PHT 105*

This course is designed to provide students with a basic understanding of general and specific tasks as well as the responsibilities involved in the practice of pharmacy in an institutional pharmacy setting. While the emphasis will be on in-patient hospital pharmacy practice, other related practice settings (such as Homecare and Nursing Home or Long-Term Care) will be explored. A laboratory experiential component will provide an opportunity for "hands-on" experience in the preparation of intravenous admixtures, aseptic technique, unit-dose distribution, dispensing for greater than 24 hours.

**PHT 118 Pharmacology of the Nervous, Endocrine, Musculoskeletal Systems**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: PHT 115*

Serves as the second part of the two-part presentation of the basic concepts of normal body function. Reviews the disease states which impact the various body systems and the drugs used to treat such diseases. Emphasizes disease state management and drug therapy.

**PHT 119 Community Pharmacy**

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

*Prerequisite: PHT 105*

This course is designed to provide students with a basic understanding of both general and specific tasks and responsibilities involved in the practice of pharmacy in a community pharmacy setting. While the emphasis will be on chain and independent community pharmacy practice, other related practice settings (such as consultant pharmacy, mail order pharmacy and nuclear pharmacy) will also be explored. Students will also have an opportunity to obtain "hands on" experience in the important technical duties of dispensing and compounding. The course will utilize a "lecture-informal discussion" format combined with a series of practice skills laboratory sessions.

**PHT 170 Pharmacy Clinical: Hospital**

4 Credit Hours • 160 Contact Hours (7.5 Lecture, 152.5 Clinical)

*Prerequisite: PHT 105, PHT 116, PHT 119, PHT 207, PHT 220, PHT 221, PHT 235*

This course is designed to provide students with "hands on" experience in an inpatient hospital pharmacy setting within the State of Colorado. Students must complete all didactic course work prior to enrolling in this course. The course involves a minimum of 160 hours including 8 hours of seminar class time and 152 hours of on-the-job work experience. Each student is required to work under the supervision of a licensed pharmacist (i.e. preceptor) who may, in turn, delegate some supervisory and/or training responsibilities to another licensed pharmacist or certified pharmacy technician. During their work time at their hospital pharmacy site, students are expected to participate in the pharmacy practice activities delineated in the Clinical Site Manual provided each student and each preceptor. Such activities include, but are not limited to, dispensing, compounding, inventory handling and control, drug distribution, and the preparation of intravenous (IV) admixture products, chemotherapy products, and total parenteral nutrition (TPN) products. Students are also expected to complete daily and weekly reports of their work activities and are required to evaluate both their work site and their preceptor at the conclusion of their clinical rotation. Similarly, each

preceptor is asked to complete an evaluation of, and provide a grade for, each student at the completion of the student's rotation. The course instructor is also required to evaluate each student after completing a visit to the student's work site and discussing the student's performance with both the student and his/her preceptor.

**PHT 171 Pharmacy Clinical: Community**

4 Credit Hours • 160 Contact Hours (7.5 Lecture, 152.5 Clinical)

*Prerequisite: PHT 105, PHT 116, PHT 119, PHT 207, PHT 220, PHT 221, and PHT 235*

This course is designed to provide students with "hands on" experience in a community pharmacy setting within the State of Colorado. Students must complete all didactic course work prior to enrolling for this course. The course involves a minimum of 160 hours including 8 hours of seminar class time and 152 hours of on-the-job work experience. Each student is required to work under the supervision of a licensed pharmacist (i.e. preceptor) who may, in turn, delegate some supervisory and/or training responsibilities to another licensed pharmacist or certified pharmacy technician. During their work time at their community pharmacy site, students are expected to participate in the pharmacy practice activities delineated in the Clinical Site manual provided each student and each preceptor. Such activities include, but are not limited to, dispensing, compounding, inventory handling and control, drug distribution, processing of third party claims, maintenance of patient profiles, and interaction and communication with patients. Students are also expected to complete daily and weekly reports of their work activities and are required to evaluate both their work site and their preceptor at the conclusion of their clinical rotation. Similarly, each preceptor is asked to complete an evaluation of, and provide a grade for, each student at the completion of the student's rotation. The course instructor is also required to evaluate each student after completing a visit to the student's work site and discussing the student's performance with both the student and his/her preceptor.

**PHT 205 Certification Review**

0.5 Credit Hour • 7.5 Contact Hours (Lecture)

This course is developed to prepare the student for the National Pharmacy Technician Certification Examination.

**PHT 206 Employment Preparation**

0.5 Credit Hour • 7.5 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 drug development process, the different pregnancy classifications, the degree of potential harm for each class, and 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.

**PHT 220 Pharmacology & 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 common therapeutic drugs, dosages, indications, actions, effects, side effects, toxicity, and incompatibilities.



**PHT 221 Pharmacology & Pathophysiology II**

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite:* PHT 220

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 235 Pharmaceutical Calculations & Compounding Techniques**

4 Credit Hours • 67.5 Contact Hours (45 Lecture, 22.5 Lecture/Lab Combination)

*Prerequisite:* MAT 060

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. The student learns to solve problems involving calculations pertinent to the preparations of pharmaceuticals. These skills are put to practical use in the compounding portion of this course. Preparation of sterile products, parenteral admixtures, TPN solutions and chemotherapeutics, and using proper aseptic techniques are taught. The safe handling of antineoplastics and other hazardous drug products, as well as special drug storage requirements are learned. The importance of accuracy, quality, and infection control is emphasized. Use and maintenance of equipment such as Laminar Flow Hoods, autoinjectors, and pumps are discussed. Accuracy is stressed.

## Philosophy

Philosophy courses can be taken in any order.

**PHI 111 Introduction to Philosophy: AH3**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ENG 121

Introduces significant human questions and emphasizes understanding the meaning and methods of philosophy. Includes human condition, knowledge, freedom, history, ethics, the future, and religion.

**PHI 112 Ethics: AH3**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ENG 121

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: AH3**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ENG 121

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.

**PHI 114 Comparative Religions: AH3**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ENG 090

This course introduces students to the similarities and differences among concepts predominant in the major world religions, comparing sociological, philosophical, and phenomenological similarities between major world faiths. It is designed to transfer to any four-year college philosophy, religious studies, or humanities department.

**PHI 115 World Religions – West**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ENG 121

Introduces the student to the common and different concepts predominant in the major world religions. Includes sociological, political, psychological, and philosophical aspects of a variety of belief systems. Focuses on the concept of religion as a cultural system, and a way that people make sense of a complex world. Particular emphasis is placed on how myths, legends, and folk tales reveal religious concerns.

**PHI 116 World Religions – East**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ENG 121

Emphasizes the diversity and richness of Eastern Religions within a cross-cultural context. Concepts such as fate, reincarnation, enlightenment, and morality are analyzed.

**PHI 142 New Testament**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ENG 121

This course surveys the literature of the early Christian era, from its inception to approximately 150 C.E. The New Testament as well as selected non-canonical writings from the period is examined. The course focuses on the interpretation of these texts in light of the cultural milieu from which they arose. Particular attention is paid to the influence of ancient literary conventions upon the Christian writers of this time.

**PHI 201 Social & Political Philosophy**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ENG 121; PHI 112

Addresses a single topic among those relevant to social and political philosophy such as political philosophy such as political rights, political freedom, social obligations, or democracy.

**PHI 214 Philosophy of Religion: AH3**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ENG 121

Focuses on the critical examination of the fundamental concepts, ideas, and implications of religion. Specific topics will include: the nature of God, the varieties of religious experience, argument concerning God's existence, the Problem of Evil, faith and reason, religion and human destiny, and the connection between religion and ethics.

**PHI 250 Eastern Wisdom**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ENG 121

Covers fundamental theories of Indian, Chinese, Japanese, and Muslim metaphysics, epistemology, ethics, and aesthetics, focusing on the development of Hinduism, Buddhism, Confucianism, Taoism, Shintoism, as well as Islam's development in the East.

## Photography—see Art

## Physical Education

### **PED 102 Volleyball**

1 Credit Hour • 30 Contact Hours (PED)

This course is designed to introduce and improve student skill level in volleyball. The primary emphasis is on teaching the student the elements of volleyball: rules, offensive and defensive play, passing, serving, setting, attacking, team play and game strategies.

### **PED 105 Basketball**

1 Credit Hour • 30 Contact Hours (PED)

This course is designed to introduce and improve student skill level in basketball. The primary emphasis will be on teaching the student the elements of basketball rules, offensive and defensive footwork, shooting, passing, dribbling, rebounding, team play, and game strategies.

### **PED 106 Tennis**

1 Credit Hour • 30 Contact Hours (PED)

This course is designed to introduce and improve the skill level in tennis. The primary emphasis is teaching students the elements of tennis: rules of the game, ground strokes, serving, the various shots, and singles and doubles play and strategies.

### **PED 110 Fitness Center Activity I**

1 Credit Hour • 30 Contact Hours (PED)

This course is designed for individuals interested in improving total fitness via an aerobic circuit training program. The course will include an individual fitness evaluation, computerized analysis of results, and a prescribed exercise program. All of the basic components of fitness including flexibility, muscular strength, muscular endurance, cardiovascular fitness, and body composition will be addressed. Weight machines, stationary bicycles, and computerized cardiovascular equipment will be used to elicit improvements in fitness.

### **PED 111 Fitness Center Activity II**

1 Credit Hour • 30 Contact Hours (PED)

*Prerequisite: PED 110*

This is an advanced course designed for individuals interested in reaching a higher level of total fitness via an aerobic circuit training program. The course will include an individual fitness evaluation, computerized analysis of results, and a prescribed exercise program. All of the basic components of fitness including flexibility, muscular strength, muscular endurance, cardiovascular fitness, and body composition will be addressed. Weight machines, stationary bicycles, and computerized cardiovascular equipment will be used to elicit improvements in fitness.

### **PED 113 Fitness Concepts**

1 Credit Hour • 30 Contact Hours (PED)

Focuses on providing information and guidelines for moving toward a healthier lifestyle. Includes classroom instruction, an individual fitness evaluation, computerized analysis of results, and a prescribed exercise program utilizing the equipment and exercise options available in the Fitness Center.

### **PED 114 Walking & Jogging**

1 Credit Hour • 30 Contact Hours (PED)

This course is designed to help students understand the values in walking and jogging. Safety precautions and emphasis on personal programs will be emphasized.

### **PED 115 Body Sculpting & Toning**

1 Credit Hour • 30 Contact Hours (PED)

This course is designed to introduce exercise techniques to improve overall physical fitness. The primary emphasis is the interaction between cardiovascular conditioning, muscular strength and endurance, flexibility, and program design that are integrated into an aerobic format. Emphasis is placed upon blending together different combinations and sequences of exercises while conditioning the entire body. Students exercise using various types of resistance equipment.

### **PED 116 Weight Training**

1 Credit Hour • 30 Contact Hours (PED)

This course offers basic instruction and practice in weight training. Students utilize weight training equipment in accordance to their abilities and goals. Emphasis is placed upon weight training equipment orientation, correct lifting techniques, and basic program design for men and women.

### **PED 121 Step Aerobics**

1 Credit Hour • 30 Contact Hours (PED)

This course is designed to introduce basic step aerobics, exercise techniques, and improve physical fitness. The primary emphasis is to gain an understanding of the basic principles of step aerobics including the effects upon the cardio-respiratory system and skeletal muscles, various step patterns, and choreography.

### **PED 124 Mountain Biking**

1 Credit Hour • 30 Contact Hours (PED)

Introduces basic mountain biking skills and techniques. The primary emphasis is to gain an understanding of the basic principles of mountain biking. Students develop skills and techniques for all riding situations, review bicycle anatomy, and basic maintenance and repairs.

### **PED 127 Introduction to Flyfishing**

1 Credit Hour • 30 Contact Hours (PED)

Enables the student to gain the knowledge and skill of the fine art of flyfishing including the selection and use of appropriate equipment, fly-casting techniques, flyfishing entomology, and guiding techniques. Includes several field trips to local flyfishing areas.

### **PED 131 Nordic Skiing**

1 Credit Hour • 30 Contact Hours (PED)

Provides the student with the fundamental skills of nordic skiing. Emphasizes skiing technique, conditioning, safety, and equipment. The course incorporates classroom and activity sessions. Conditioning in the fitness center and trips to local ski areas are covered.

### **PED 132 Snowshoeing**

1 Credit Hour • 30 Contact Hours (PED)

Emphasizes the basic skills, equipment, clothing and techniques of snowshoeing. It includes the objective dangers involved with winter recreation.

### **PED 138 Introduction to Winter Sports**

1 Credit Hour • 30 Contact Hours (PED)

This course provides an overview of at least two of the following winter sports: alpine skiing, snowboarding, ice skating, telemark skiing, Nordic skiing, snowshoeing, or skate skiing. The primary emphasis is on gaining the knowledge and techniques necessary for winter sports on beginner to intermediate groomed or backcountry terrain. Multiple field trips to ski areas or other outdoor venues are required.

**PED 143 Tai Chi I**

1 Credit Hour • 30 Contact Hours (PED)

This course is designed to introduce Tai Chi as an expression of understanding of self-control, exercise, and self-defense. The primary emphasis is to gain an understanding of the history (origins and changes) of Tai Chi, the movements and their names, application of movements and terminology.

**PED 144 Tai Chi II**

1 Credit Hour • 30 Contact Hours (PED)

This course will emphasize the instruction of Tai-Chi from a practical and scientific approach with illustrations of applications for each of the movements in daily life. Cardiovascular training, strength and flexibility training, balance and coordination will be integral parts of the Tai-Chi training. In addition psychosocial skills such as meditation, relaxation, and self-efficacy will be addressed.

**PED 145 Pilates Matwork I**

1 Credit Hour • 30 Contact Hours (PED)

Focuses on Pilates matwork to increase core strength, overall muscles tone and flexibility with focused and precise floor work techniques. A physical education class built upon the philosophies and exercises of Josef Pilates.

**PED 146 Martial Arts**

1 Credit Hour • 30 Contact Hours (PED)

This course is designed to introduce basic martial arts techniques and forms designed to improve the physical and mental capacity of an individual. The primary emphasis is to gain an understanding of the basic philosophies and concepts around the martial arts; the approach to ethics; and to provide a clear-cut guide for developing a powerful sense of character and will.

**PED 147 Yoga**

1 Credit Hour • 30 Contact Hours (PED)

This course offers guided instruction in yoga. Students practice yoga according to their individual fitness levels and abilities. Emphasis is placed on enhancing general health and well-being through the performance of yoga strength, flexibility, balance, and relaxation techniques and exercises.

**PED 148 Yoga II**

1 Credit Hour • 30 Contact Hours (PED)

*Prerequisite: PED 147 or faculty consent*

Concepts of basic yoga are carried into additional areas. Increases awareness of yoga and its physical and mental benefits.

**PED 150 Rock Climbing I**

2 Credit Hours • 60 Contact Hours (PED)

Introduces basic rock climbing, improving dexterity, problem solving skills and the physical work capacity of an individual. Enables the student to gain an understanding of the general principles of climbing; how equipment works and how it is used; basic climbing skills and techniques; safety and climbing etiquette and terminology.

**PED 151 Rock Climbing II**

2 Credit Hours • 60 Contact Hours (PED)

Introduces lead climbing skills and techniques, problem solving skills and physical fitness. Emphasizes the general principles of lead climbing; proper usage of climbing equipment; development of lead climbing skills and techniques; climbing ethics and safety; and terminology.

**PED 153 Hiking**

1 Credit Hour • 30 Contact Hours (PED)

This course is designed to provide skills related to hiking and wilderness travel. This course emphasizes hiking skills, proper conditioning, route finding, equipment, and hiking hazards and ethics. The course involves conditioning in the fitness center and weekend hikes.

**PED 155 Outdoor Expedition**

3 Credit Hours • 90 Contact Hours (PED)

Consists of a group expedition covering seven to ten days incorporating hiking, backpacking, climbing or paddling in remote North America regions. Examines the rationale for organizing and conducting wilderness trips.

**PED 157 Basic Mountaineering**

3 Credit Hours • 90 Contact Hours (PED)

Provides students with a combination of skills and practical experience in the fundamentals of mountaineering. Emphasizes basic climbing skills and techniques, equipment usage, safety systems, mountain travel and awareness, problem solving and decision-making, high altitude climate and weather, wilderness ethics, and physical fitness.

**PED 159 Colorado Fourteeners**

2 Credit Hours • 60 Contact Hours (PED)

Presents an historical look into the naming and climbing of Colorado's 14,000 foot peaks. Includes information on the current routes to ascend the peaks.

**PED 161 Beginning Kayaking**

1 Credit Hour • 30 Contact Hours (PED)

Provides basic kayak and water reading skills. The students will learn boating safety, hazard evaluation, terminology, whitewater river reading skills, paddling strokes, bracing techniques, peel out and eddy turns, and rescue and self rescue techniques including wet exits, Eskimo rescues and introduction to and practice of the Eskimo roll.

**PED 165 Wilderness Survival Skills**

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

This course emphasizes the physiological, psychological and practical principles of survival. Survival equipment, wilderness improvising techniques, and wilderness dangers are included.

**PED 166 Winter Wilderness Survival Skills**

1 Credit Hour • 30 Contact Hours (PED)

Emphasizes winter survival techniques in the nivean environment at or near timberline. Focuses on winter ecology, basic snow science, and avalanche safety and rescue in a backcountry setting. This course includes field days and an overnight in a snow cave.

**PED 167 Basic Search & Rescue**

3 Credit Hours • 90 Contact Hours (PED)

Covers the basic fundamentals required for search and rescue in a wilderness environment. Includes tracking techniques and field trips.

**PED 210 Fitness Center Activity III**

1 Credit Hour • 30 Contact Hours (PED)

*Prerequisite: PED 110 and PED 111*

This is an advanced exercise course designed for individuals interested in attaining a high level of total fitness. The course will include an individual fitness evaluation, computerized analysis of results, and a prescribed exercise program. All of the basic components of fitness including flexibility, muscular strength, muscular endurance, cardiovascular fitness, and body composition will be addressed. The primary mode of training will be Aerobic Circuit Training. The circuit training will be supplemented with additional work on the specialized weight machines, dumbbells, treadmills, rowers, stair climbers, cross trainers, Nordic track, versa climbers, and running track available in the Fitness Center

**PED 211 Fitness Center Activity IV**

1 Credit Hour • 30 Contact Hours (PED)

*Prerequisite: PED 110, PED 111, and PED 210*

This is an advanced course designed for individuals interested in attaining a high level of total fitness. The course will include an individual fitness evaluation, computerized analysis of results, and a prescribed exercise program. All of the basic components of fitness including flexibility, muscular strength, muscular endurance, cardiovascular fitness, and body composition will be addressed. The primary mode of training will be Aerobic Circuit Training. The circuit training will be supplemented with additional work on the specialized weight machines, dumbbells, treadmills, rowers, stair climbers, cross trainers, Nordic track, versa climbers, and running track found in the Fitness Center.

**PED 227 Advanced Fly-Fishing**

1 Credit Hour • 30 Contact Hours (PED)

*Prerequisite: PED 127*

Introduces students to the higher level skill set required for a successful fly fishing guided experience. Topics will include lake and river dynamics and finding the fish, fly tying, as well as the effects of weather on fishing experiences will be discussed. Various methods of getting the client to the fish will be discussed including wading and floating moving water as well as a variety of both hard and inflatable boats. Emphasis will be placed on the presentation of the fly, successfully striking the fish, and catch and release techniques. Other topics directly related to the business of fly fishing such as risk management, etiquette, permitting and type of related careers will be discussed.

**PED 245 Intermediate Pilates, Matwork II**

1 Credit Hour • 30 Contact Hours (PED)

*Prerequisite: PED 145*

Builds upon the philosophies and exercises of Joseph Pilates. Pilates Matwork is a prerequisite, as this course builds upon the basic techniques learned therein. Core strength, flexibility, overall muscle tone and balance are the goals of the matwork.

**Physical Education & Recreation****PER 128 Introduction to Recreation**

2 Credit Hours • 30 Contact Hours (Lecture)

Studies the history, principles, philosophy, and contemporary problems and trends of recreation and their influence upon today's American society.

**PER 168 Outdoor Equipment & Facilities**

1 Credit Hour • 15 Contact Hours (Lecture)

Acquaints and familiarizes the student with wilderness equipment, programs and facilities. Includes field trips to local outdoor industry facilities.

**PER 252 Principles of Outdoor Recreation**

3 Credit Hours • 60 Contact Hours (30 Lecture, 30 Lab)

Includes lecture and practical outdoor experience relating to problems and trends in outdoor recreation.

**Physics****PHY 101 Basic Physics**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

*Prerequisite: ENG 090, MAT 090, REA 090*

This course teaches basic understanding of the laws of physics. Emphasis is on critical thinking skills which allow the student to apply the laws to a wide variety of fields. Applications are illustrated by demonstrations and simple hands-on exercises which involve careful observation, measurement, analysis, and interpretation of phenomena, allowing the student to draw conclusions based on the laws of physics. In addition, the student learns problem solving techniques in which the basic laws are applied in simple, logical or mathematical ways. A variety of media such as strobe photography, diagrams, graphs, and films are used to reinforce understanding of the basic laws and their applications.

**PHY 111 Physics: Algebra-Based I with Lab: SC1**

5 Credit Hours • 105 Contact Hours (60 Lecture, 45 Lab)

*Prerequisite: ENG 090, REA 090, MAT 121*

Enables the student to explore the truth about physical reality through reasoning, mathematics, and experimentation. Examines kinematics, force, circular motion, energy, momentum, torque, rotational dynamics, simple harmonic motion, temperature, heat, and thermodynamics. The concepts and theories presented in class are explored through the demonstrations and the hands-on experiments. This is a general physics course that is recommended for all of the health sciences and all other interested students. Students entering engineering or one of the advanced sciences should register for PHY 211.

**PHY 112 Physics: Algebra-Based II with Lab: SC1**

5 Credit Hours • 105 Contact Hours (60 Lecture, 45 Lab)

*Prerequisite: PHY 111*

Expands upon PHY 111. Some of the topics covered in this class include sound waves, electric fields, electric circuits, magnetic fields, optics, and modern physics. The concepts and theories presented in class are explored through the demonstrations and hands-on experiments.

**PHY 211 Physics: Calculus-Based I with Lab: SC1**

5 Credit Hours • 105 Contact Hours (60 Lecture, 45 Lab)

*Prerequisite: ENG 090, REA 090, MAT 201*

Physics is the most fundamental of all sciences. The goal of physics is to determine the truth about our physical reality through reasoning, mathematics and experimentation. Some of the topics covered in this class include: kinematics, force, gravity, energy, momentum, torque, rotational dynamics, fluids, and waves. The concepts and theories presented in class are explored through the demonstrations and the hands-on experiments. This first semester calculus-based physics course is recommended for students entering engineering or one of the advanced sciences.

**PHY 212 Physics: Calculus-Based II with Lab: SC1**

5 Credit Hours • 105 Contact Hours (60 Lecture, 45 Lab)

*Prerequisite: PHY 211*

This is the continuation of the PHY 211 course. Some of the topics covered in this class include: thermodynamics, electric fields, electric circuits, magnetic fields, light and optics, and modern physics. The concepts and theories presented in class are explored through demonstrations and hands-on experiments.



## Political Science

### POS 105 Introduction to Political Science: SS1

3 Credit Hours • 45 Contact Hours (Lecture)

Survey of the discipline of political science, including political philosophy and ideology, democratic and non-democratic governments and processes, and international relations.

### POS 111 American Government: SS1

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ENG 090, REA 090

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 125 American State & Local Government

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ENG 090, REA 090

This course is a study of the 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: SS1

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ENG 090, REA 090

This course examines relationships among modern nation states. Topics include diplomacy, nationalism, ideologies, power and influence, conflict and cooperation, the role of non state actors, the international economy, and theoretical attempts to understand international behavior.

### POS 215 Current Political Issues

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* Prior political science class or faculty consent

This course is an in-depth analysis of critical issues in political science. Topics will be determined each term.

### POS 225 Comparative Government: SS1

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* POS 105 or POS 115 are encouraged

This course is a comparison of the basic features of selected developed and developing countries. Topics include ideologies, political parties, interest groups, and governmental institutions.

### POS 288 Practicum

1-6 Credit Hours • 45 Contact Hours per credit hour (Practicum)

Provides students with the opportunity to supplement coursework with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor.

## Psychology

### PSY 100 Psychology of Workplace Relationships

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ENG 060, REA 060

This course focuses on interactions among people – their conflicts, cooperative efforts, and group relationships. It will examine why beliefs, attitudes, and behaviors cause relationship problems in our personal lives and in work-related situations. It will emphasize the analysis of human behavior, the application of prevention strategies, and resolution of the behavior.

### PSY 101 General Psychology I: SS3

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ENG 090, REA 090

Focuses on the scientific study of behavior including motivation, emotion, physiological psychology, stress and coping, research methods, consciousness, sensation, perception, learning, and memory.

### PSY 102 General Psychology II: SS3

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ENG 090, REA 090

Focuses on the scientific study of behavior including cognition, language, intelligence, psychological assessment, personality, abnormal psychology, therapy, life span development, and social psychology.

### PSY 106 Human Relations

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ENG 090, REA 090

This course emphasizes the development and practice of effective interpersonal skills on and off the job.

### PSY 112 Psychology of Adjustment

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ENG 090, REA 090

This course emphasizes personal growth and the development of interpersonal skills. Focus is on the practical application of psychological principles and theories in achieving self-understanding and personal growth.

### PSY 205 Psychology of Gender: SS3

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ENG 121, REA 090, and PSY 101 or PSY 102

Examines gender comparisons in work, courtship, family life, and sexual behavior throughout the life span.

### PSY 217 Human Sexuality: SS3

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ENG 121, REA 090, and PSY 101 or PSY 102

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: SS3

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ENG 121, REA 090, and PSY 101 or PSY 102

Focuses on the behavior of humans in social settings, including attitudes, aggression, conformity, cooperation and competition, prejudice, and interpersonal attraction.

### PSY 227 The Psychology of Death & Dying: SS3

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ENG 121, REA 090, and PSY 101 or PSY 102

Examines the philosophies of life and death, emphasizing dying, death, mourning, and the consideration of one's own death.

### PSY 235 Human Growth & Development: SS3

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ENG 121, REA 090, and PSY 101 or PSY 102

This course is a survey of human development from conception through death emphasizing physical, cognitive, emotional, and psychosocial factors.

### PSY 238 Child Development: SS3

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite:* ENG 121, REA 090, and PSY 101 or PSY 102

Focuses on the growth and development of the individual, from conception through childhood, emphasizing physical, cognitive, emotional, and psychosocial factors.



**PSY 245 Educational Psychology**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 121, REA 090, and PSY 101 or PSY 102*

Focuses on the relationships among theory, research, and practice in the areas of learning, child development, motivation, and educational assessment.

**PSY 247 Child Abuse & Neglect**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 121, REA 090, and PSY 101 or PSY 102*

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: SS3**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 121, REA 090, and PSY 101 or PSY 102*

Examines abnormal behavior and its classification, causes, treatment, and prevention.

**PSY 265 Psychology of Personality**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 121, REA 090, and PSY 101 or PSY 102*

Examines the structure, function, and development of personality. Investigates the major contemporary theories of personality. Covers psychodynamic, behavioral, cognitive-social learning, humanistic, trait, and, optionally, neurobiological, existential, and/or Eastern perspectives. The underlying assumptions and research support for these theories are appraised. Enables the student to gain an appreciation of the value of alternative theoretical approaches to this study of psychology.

## Public Security Management

**PSM 130 Homeland Security Law**

3 Credit Hours • 45 Contact Hours (Lecture)

Provides a comprehensive overview for business, industry, and government as well as those faced with the new legal and security issues raised by new public laws, the new regulatory framework, and a new Department of Homeland Security. A complete overview of homeland security laws and regulations; Emerging public safety requirements and policies; Current and evolving programs to protect water, food and air supplies; Latest security challenges in air transportation, vessel and port operations, and chemical handling and storage; Privacy rights-finding the right balance with security concerns; Human resource issues-hiring, firing, monitoring, providing a safe workplace, and Department of Homeland Security: organizational structure and management priorities; Developing the most effective and compliant security plans.

**PSM 132 Homeland Defense: Forecasting Terrorism**

3 Credit Hours • 45 Contact Hours (Lecture)

Examines the variety of new indicators, warning methodologies, and analytical tools available to analysts; review of the extensive academic, governmental, and policy literature on terrorism forecasting that has been developed to assess and forecast terrorism in its numerous dimensions. Students will comprehend the various analytical capabilities of the types of terrorist threats that are most likely to confront the USA and its allies in the near future, and predict how to develop proactive defenses for the long term protection of our society.

**PSM 133 Homeland Security: Chemical & Biological Defense**

3 Credit Hours • 45 Contact Hours (Lecture)

Provides an overview of the radiological, chemical, biochemical, and biological threat to Homeland Security. Analysis of the agents and means of dissemination or attack that an adversary nation, group or terrorist cell may employ to deliver these agents; review the current and projected means, techniques, and procedures for defense against such agents; review of theory and practices in chemical and biological threats to develop proactive defensive postures to defeat these threats.

**PSM 135 Critical Infrastructure Protection**

1 Credit Hour • 15 Contact Hours (Lecture)

Explores the facets of Critical Infrastructure protection. Provides the student with an interactive forum to develop protection strategies.

**PSM 136 Hospital Emergency Response Training (HERT) for Weapons of Mass Destruction (WMD)**

3 Credit Hours • 45 Contact Hours (Lecture)

Provides Hospital Emergency Response Training (HERT) for Weapons of Mass Destruction (WMD). This course is designed to provide guidance to hospitals, EMS, health care facilities and citizens who may become involved in a mass casualty incident as a result of a hazardous materials incident (HMI) or weapons of mass destruction (WMD) event. The HERT/WMD introduces the hospital incident management system (HIMS), addresses chemical protective clothing and equipment (CPC&E) requirements, and presents guidance for hospital emergency response team (HERT) design, development and training. This course prepares HERT to conduct safe and effective emergency response during mass casualty incidents (MCI).

**PSM 137 Introduction to Mitigation**

3 Credit Hours • 45 Contact Hours (Lecture)

Provides students with information and skills necessary to sustain actions to reduce or eliminate long-term risk to people and property from hazards and their effects.

**PSM 200 National Incident Management System/ Interagency Operations**

3 Credit Hours • 45 Contact Hours (Lecture)

Explores several components that work together as a system to provide a national framework for preparing for, preventing, responding to, and recovering from domestic incidents. These components include command and management, preparedness, resource management, communications and information management, supporting technologies, and ongoing management and maintenance.

## Radio & Television

**RTV 100 Introduction to Telecommunications**

2 Credit Hours • 30 Contact Hours (Lecture)

Focuses on the study of market demands involving national, local, and international uses of telecommunications.

**RTV 101 Radio Programming & Production I**

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

*Corequisite: RTV 106*

Focuses on radio programming, formats and audience rating surveys, basic and sophisticated communications systems, history of broadcasting, broadcasting and production equipment, and program broadcast systems and propaganda.

**RTV 102 Beginning Television**

3 Credit Hours • 45 Contact Hours (Lecture)

*Corequisite: RTV 107*

Focuses on principles and techniques of television production in theory and the approach of studio and field production. Emphasizes producing television programs, beginning with a concept through script to actual studio production, preproduction, and post production.

**RTV 103 Writing for TV & Radio**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: BTE 100 or concurrent enrollment*

Explores writing techniques for television and radio emphasizing professional techniques, format, and style.

**RTV 104 Corporate Scriptwriting**

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on scriptwriting formats and techniques as they apply to creating corporate and institutional video productions and other broadcast and non-broadcast television productions.

**RTV 105 Principles of Satellite Communication**

2 Credit Hours • 30 Contact Hours (Lecture)

Enables the student to gain a general understanding of the basic operations relating to satellite communications, and how this technology applies to education and industry on a global and national scale.

**RTV 106 Radio Programming & Production Lab I**

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

*Corequisite: RTV 101*

Focuses on the use of basic radio station equipment, programming, and formats. Includes simulated broadcasting using production studio facilities.

**RTV 107 Television Studio Production**

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

*Corequisite: RTV 102*

Examines principles and techniques of basic television production and direction in a laboratory setting using commercial television broadcast equipment for broadcast and institutional video productions.

**RTV 108 Principles of Audio**

3 Credit Hours • 45 Contact Hours (Lecture)

Focuses on basic audio production techniques to be used in television production. Includes the use of basic audio equipment and mixer to produce audio tracks for radio and television production.

**RTV 109 Radio Broadcast Technical Operations**

2 Credit Hours • 30 Contact Hours (Lecture)

Focuses on technical operation of radio transmitting systems and includes FCC rules and regulations.

**RTV 110 News Writing & Reporting**

3 Credit Hours • 45 Contact Hours (Lecture)

*Corequisite: BTE 100*

Emphasizes gathering, writing, and reporting radio and television news and development of communication medium style. Covers the legal system in relation to news reporting ethics. Addresses professional news-sorting and writing software for IBM compatible computers.

**RTV 180 Internship – KEPC Radio**

4 Credit Hours • 150 Contact Hours (15 Lecture, 135 Internship)

*Prerequisite: RTV 101, RTV 106, RTV 131 and faculty consent*

Incorporates on-the-air experience on the college FM radio station, KEPC.

**RTV 181 Internship – College ITV Studio**

4 Credit Hours • 150 Contact Hours (15 Lecture, 135 Internship)

*Prerequisite: RTV 201 and RTV 106 and faculty consent*

Provides experience in a commercial television station or an allied industry.

**RTV 182 Internship – Radio Sta./Audio Production**

4 Credit Hours • 150 Contact Hours (15 Lecture, 135 Internship)

*Prerequisite: RTV 101 and RTV 106 and faculty consent*

Provides experience in a commercial radio station or an allied industry.

**RTV 183 Internship – TV Studio/Video Production Co.**

4 Credit Hours • 150 Contact Hours (15 Lecture, 135 Internship)

*Prerequisite: RTV 101 and RTV 106 and faculty consent*

Provides experience in a commercial television station or an allied industry.

**RTV 208 Basic Video Production**

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

*Prerequisite: RTV 102, RTV 107 or faculty consent*

Introduces basic videotape production and editing on linear and non linear editing systems. Covers producing, writing, directing, lighting, editing, and shooting techniques. Enables the student to gain experience in paint and character generator graphics, image processing, transitions, and techniques using the Avio and Casablanca non linear editors.

**RTV 211 Radio Programming & Production II**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: RTV 101**Corequisite: RTV 107*

Focuses on styles of writing and reporting news, editorials, interviews, and commentaries; station logs and announcing styles and techniques; the Federal Communications Commission with emphasis on politics and serving the public interest; job finding and advancing in broadcasting; women in broadcasting; drama; and specialized production. Includes sports casting and weather casting.

**RTV 212 Advanced Television Production**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: RTV 102, RTV 107**Corequisite: RTV 217*

Introduces additional principles and techniques of television production in theory and the approach of studio and production in news, weather, and sports. Emphasizes direction and production development to include single and multi-camera production. Examines use of effects and chroming. Includes laws and ethics governing the television broadcast industry and Institutional Television.

**RTV 216 Radio Programming & Production Lab II**

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

*Prerequisite: RTV 106**Corequisite: RTV 211*

Covers the operation of technical equipment of a radio broadcasting studio with emphasis on news, special news features, commercials, audition tapes, sports, and weather.

**RTV 217 Advanced Television Studio Production**

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

*Prerequisite: RTV 102, RTV 107**Corequisite: RTV 212*

Focuses on principles and techniques of television production and direction in a laboratory setting using commercial television broadcast equipment for broadcast and institutional video productions.

**RTV 218 Advanced Video Production**

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

*Prerequisite: RTV 208*

Develops advanced video production skills to prepare students for entry into the video production industry. Covers producing, directing, lighting, shooting, and editing techniques, as well as production aesthetics from industry standards. Provides hands on experience with linear and non linear editing systems, and establishment of lighting and camera shooting techniques.

**RTV 280 Internship – TV Studio/Video Production II**

3 Credit Hours • 105 Contact Hours (15 Lecture, 90 Internship)

*Prerequisite: RTV 183 or faculty consent*

Provides experience in a commercial television station or an allied industry.

**RTV 281 Internship in the News – KEPC Radio**

3 Credit Hours • 105 Contact Hours (15 Lecture, 90 Internship)

*Prerequisite: RTV 101, RTV 106, and RTV 109*

Enables the student to cover news events, actualities, and report several regular newscasts on KEPC.

**RTV 282 Internship – KEPC Radio II**

3 Credit Hours • 105 Contact Hours (15 Lecture, 90 Internship)

*Prerequisite: RTV 101, RTV 106, and RTV 109*

Incorporates advanced experience on radio station KEPC.

**RTV 283 Internship – Radio Sta./Audio Prod. II**

3 Credit Hours • 105 Contact Hours (15 Lecture, 90 Internship)

*Prerequisite: RTV 282 or faculty consent*

Incorporates advanced experience in a commercial radio station or an allied industry.

**RTV 284 Internship in Telecommunications**

3 Credit Hours • 105 Contact Hours (15 Lecture, 90 Internship)

*Prerequisite: RTV 201, RTV 206 and faculty consent*

Provides experience in a commercial TV station or an allied industry.

**Radiological Technology****RTE 105 Limited Scope Radiology Equipment & Imaging**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: MOT 123, MOT 125*

Introduces the fundamental aspects of limited scope radiographic equipment for the ambulatory care setting, including basic understanding of physics, x-ray circuits & tube heating management, principles of exposure & image quality such as kVp, mAs, grid, scatter radiation & it's controls, formulating x-ray techniques, the image receptor systems. Have a basic understanding of X-ray darkroom, film processing, radiation safety & monitoring including radiobiology.

**RTE 106 Limited Scope Radiology Patient Positioning & Techniques**

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite: MOT 123, MOT 125*

Introduces the fundamental aspects of limited scope radiographic patient positions and techniques for skull, extremities, trunk of body, spine, including safety and infection control, assessment of patients and management of acute situations.

**Reading****REA 030 Basic Reading Skills**

2 Credit Hours • 30 Contact Hours (Lecture)

Focuses on strategies for word attack, vocabulary development, stages of reading, and basic reading comprehension.

**REA 060 Foundations of Reading**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: Appropriate assessment scores or REA 030*

Focuses on strategies for vocabulary development, improved reading comprehension, and enrichment.

**REA 090 College Preparatory Reading**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: Appropriate assessment scores or REA 060*

Enables the student to apply strategies for improving comprehension, developing vocabulary, and increasing rate for reading college textbooks.

**Real Estate****REE 105 Colorado State Exam Review**

1 Credit Hour • 15 Contact Hours (Lecture)

Helps prepare the student to take and pass the Colorado Real Estate License exam.

**REE 201 Real Estate Brokers I**

6 Credit Hours • 90 Contact Hours (Lecture)

Enables the student, in conjunction with REE 202 - Real Estate Brokers II, to meet the educational requirements of the Colorado Real Estate Commission for a Colorado Real Estate Brokers' license. This course includes Real Estate Law and Practice, Practical Applications, and Current Legal Issues.

**REE 202 Real Estate Brokers II**

6 Credit Hours • 90 Contact Hours (Lecture)

Enables the student, in conjunction with REE 201 - Real Estate Brokers I, to meet the educational requirements of the Colorado Real Estate Commission for a Colorado Real Estate Brokers' license. This course includes Colorado Contracts and Regulations, Closings, and Recordkeeping and Trust Accounts.

**Russian****RUS 111 Russian Language I**

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite: ENG 090, REA 090*

Begins a sequence dealing with the development of functional proficiency in listening, speaking, reading, and writing the Russian language.

**RUS 112 Russian Language II**

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite: RUS 111 with a C grade or higher or faculty consent*

Continues Russian I in the development of functional proficiency in listening, speaking, reading, and writing the Russian language.

**RUS 211 Russian Language III: AH4**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: RUS 112 with a C grade or higher or faculty consent*

Continues Russian Language I and II in the development of increased functional proficiency in listening, speaking, reading, and writing the Russian language.

**RUS 212 Russian Language IV: AH4**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: RUS 211 with a C grade or higher or faculty consent*

Continues Russian Language I, II, and III in the development of increased functional proficiency in listening, speaking, reading, and writing the Russian language. Note: The order of the topics and the methodology will vary according to individual texts and instructors.

**Science****SCI 155 Integrated Science I: SC1**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

Examines the nature of energy and matter, their interactions and changes, and the application of fundamental concepts to the study of our natural world.

**SCI 156 Integrated Science II: SC1**

4 Credit Hours • 75 Contact Hours (45 Lecture, 30 Lab)

*Prerequisite: SCI 155*

Examines earth and biological systems, living and non-living environments, through the application and refinement of fundamental energy and matter concepts.

**Social Work****SWK 100 Introduction to Social Work**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: MAT 060, ENG 090, REA 090*

Introduces students to the philosophy of the social work profession including the knowledge, values, ethics, roles and skills inherent to generalist social work.

**SWK 105 Application of Group Counseling**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: MAT 060, ENG 090, REA 090*

Covers the basic techniques, philosophies, and principles of problem solving through group counseling. It teaches group leaders how to apply techniques in working with a variety of client groups.

**SWK 106 Introduction to Alcohol & Drugs**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: MAT 060, ENG 090, REA 090*

Acquaints the beginning student with various issues related to the field of working with substance and alcohol abuse. This course will also introduce the student to the knowledge base, values, ethics, intervention skills, and the diverse population groups served by social workers.

**SWK 180 Internship I**

6 Credit Hours • 240 Contact Hours (15 Lecture, 225 Internship)

*Prerequisite: SWK 222*

Provides work experience in a business or industry, 35 hours per credit hour for a total of 210 hours per semester.

**SWK 181 Internship II**

6 Credit Hours • 240 Contact Hours (15 Lecture, 225 Internship)

*Prerequisite: SWK 222, SWK 180*

Provides work experience in a business or industry, 35 hours per credit hour for a total of 210 per semester.

**SWK 201 Human Behavior in the Social Environment I**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: Human Biology course and completion of SWK 100**Other: This course transfers to CSU-Pueblo*

Focuses on the person in the environment throughout the life span with an examination of the relationship between biological, psychological, social, spiritual and cultural systems

**SWK 202 Human Behavior in the Social Environment II**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: SWK 201**Other: This course transfers to CSU-Pueblo*

Focus in this course is on an understanding and analysis of larger social systems which include the family, groups, communities and organizations. Emphasis is on social systems as an organizing theoretical framework for understanding social functioning and change.

**SWK 205 Social Welfare in the U.S.**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: SWK 100**Other: This course transfers to CSU-Pueblo*

Introduces students to the profession of Social Work and Social Welfare. Students will be presented with an historical and conceptual overview of the social welfare system in the United States. Attention is given to the milieu within which social, political, economic, racial and cultural forces have interacted in the evolution of social welfare.

**SWK 207 Differential Approaches in Social Services**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: MAT 060, ENG 090, REA 090*

Introduces students to some contemporary counseling theories. Provides a basic understanding of treatment modalities to include Reality Therapy, Client Centered Therapy, and Behavior Modification.

**SWK 208 Social Work Case Management**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: MAT 060, ENG 090, REA 090*

Prepares students for work in the area of social services case management. Some of the topics that students will study include client assessment, resource identification, interventions with diverse client populations, counseling, NASW Code of Ethics, linkage, and outcome evaluation.

**SWK 222 Introduction to Social Work Practice**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: SWK 100, SWK 205**Other: This course transfers to CSU-Pueblo*

Application of the foundation of generalist practice skills. Requires 15 clock hours of volunteer work in an approved human service agency.

**SWK 280 Internship III**

6 Credit Hours • 240 Contact Hours (15 Lecture, 225 Internship)

*Prerequisite: SWK 222, SWK 181*

Provides work experience in a business or industry, 35 hours per credit hour for a total of 210 hours per semester.



## Sociology

### **SOC 100 Principles of Practical Sociology**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 060*

Introduces the student to the varied dynamics of human society. Will examine topics such as the impact of social groups of which we are a part on how we act and think, the historical development of sociology, the way sociologists are taught to think, the interaction between humans and their social organizations, the ways in which we operate in and through our social structures, inequality in society, the meaning of culture, the effects of our social institutions, the ways in which social organizations influence each other, order and power in social organizations, the ever-changing dynamics of human social life, and the study of family structures in our society.

### **SOC 101 Introduction to Sociology I: SS3**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 090, REA 090*

Examines the basic concepts, theories, and principles of sociology as well as human culture, social groups, and the social issues of age, gender, class, and race.

### **SOC 102 Introduction to Sociology II: SS3**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 090, REA 090, SOC 101 or faculty consent*

Examines social institutions and organizations from the macro perspective. Emphasizes issues of social change, demography, social movements, and conflicts and trends within education, religion, family, political, and economic structures.

### **SOC 201 Introduction to Gerontology**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: SOC 101 or SOC 102 or PSY 101 or PSY 102*

Acquaints students with the major issues and concepts pertinent to the field of gerontology. The course introduces various theoretical perspectives on aging, the changing trends in life expectancy and other demographic considerations, and the interrelationship between elders and key social institutions. It provides an overview of physical, cognitive, and socioemotional factors associated with aging.

### **SOC 205 Sociology of Family Dynamics: SS3**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 090, SOC 101 or faculty consent*

Develops an understanding of marriage, family and kinship. It examines the family as an institution and how social, cultural, and personal factors influence family relations. The stability and diversity of the family will be explored, along with current trends and some alternative life styles.

### **SOC 212 Research in Social Sciences**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 090 or COMPASS placement score of 8000, SOC 101*

Introduces social research methods with an emphasis on the scientific method and the role of empirical inquiry into sociology. This course will include the study of methodologies of data collection and analysis, the logic of research, the role of theory, measurement, sampling and research designs. Field research and the professional norms and ethics of social research will also be covered.

### **SOC 215 Contemporary Social Problems: SS3**

3 Credit Hours • 45 Contact Hours (Lecture)

Explores current social issues that result in societal problems. It focuses on such issues as civil liberties, gender discrimination, substance abuse, crime, poverty, and social change.

### **SOC 216 Sociology of Gender: SS3**

3 Credit Hours • 45 Contact Hours (Lecture)

Gives students the theoretical and factual background necessary to understand the phenomenon of gender stratification in American and other cultures. Students will be exposed to a history of gender stratification in human societies, theoretical explanations for this, and insights into the consequences of gender differentiation in our world today.

### **SOC 218 Sociology of Diversity**

3 Credit Hours • 45 Contact Hours (Lecture)

Explores the variety of intergroup relations regarding race, nationality, ethnicity, gender, sexual orientation, and other diversity issues. Patterns of prejudice, discrimination and possible solutions to these issues will be addressed.

### **SOC 223 Chicanos in a Changing Society**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 090*

Explores the lives and roles of Chicanos and Chicanas (Americans of Mexican descent). It introduces students to the Chicano community, its historical, political and social development. It explores the ways in which Chicano communities interrelate with Anglo and multicultural societies as well as its future prospects.

### **SOC 231 The Sociology of Deviant Behavior: SS3**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: Completion of ENG 090 or placement scores for ENG 121 and completion of SOC 101 or faculty consent*

Examines the nature, identification, and explanation of deviant categories. Theories, and philosophies as well as methods of treatment related to deviancy will also be considered. The course will study society's attempts to control, change, and institutionalize those acts, individuals, or groups that a population may deem unacceptable.

### **SOC 237 Sociology of Death & Dying**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 090 or placement scores for ENG 121*

Provides an opportunity to familiarize students and professionals with the needs and issues surrounding dying and death. This course will provide sociological, psychological, religious, historical, and anthropological perspectives for interpreting contemporary American customs dealing with dying, death, and bereavement. We will examine the professions associated with death and dying, such as hospice, funeral and crematory institutions, and medical care.

## Spanish

### **SPA 101 Conversational Spanish I**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 090, REA 090*

Offers beginning students the skills necessary to understand and speak Spanish. The material includes basic vocabulary, grammar, and expressions that are used in daily situations and in travel.

### **SPA 102 Conversational Spanish I**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: SPA 101 with a C grade or higher or faculty consent*

Offers students the skills necessary to understand and speak Spanish. The material continues to cover basic conversational patterns, expressions, and grammar.



**SPA 109 Spanish for Travelers**

2 Credit Hours • 30 Contact Hours (Lecture)

Introduces the basic vocabulary and expressions useful to travelers in Spanish speaking countries. The course will concentrate on the customs, traditions, and cultural attitudes to be discovered by a visitor to the destination country. Cultural diversity and global awareness are integral to this course of study. This course does not fulfill Humanities Area Requirements. Not intended for transfer.

**SPA 111 Spanish Language I**

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite: ENG 090, REA 090*

Begins a sequence dealing with the development of functional proficiency in listening, speaking, reading, and writing the Spanish language.

**SPA 112 Spanish Language II**

5 Credit Hours • 75 Contact Hours (Lecture)

*Prerequisite: SPA 111 with a C grade or higher or faculty consent*

Continues Spanish Language I in the development of functional proficiency in listening, speaking, reading, and writing the Spanish language.

**SPA 115 Spanish for the Professional I**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 090, REA 090*

Designed as an introduction to a working knowledge of the Spanish language, cultural behaviors, and values useful in various professional fields such as health care, law enforcement, bilingual education, business, and others.

**SPA 201 Conversational Spanish III**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: SPA 102 with a C grade or higher or faculty consent*

Provides students with the skills necessary to continue their study of understanding and speaking Spanish. The material includes intermediate level vocabulary, grammar, and expressions.

**SPA 202 Conversational Spanish IV**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: SPA 201 with a C grade or higher or faculty consent*

Provides students the skills necessary to continue their study of understanding and speaking Spanish. The material will continue to cover intermediate level conversational patterns, expressions, and grammar.

**SPA 211 Spanish Language III: AH4**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: SPA 112 with a C grade or higher or faculty consent*

Continues Spanish Language I and II in the development of increased functional proficiency in listening, speaking, reading, and writing the Spanish language.

**SPA 212 Spanish Language IV: AH4**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: SPA 211 with a C grade or higher or faculty consent*

Continues Spanish Language I, II and III in the development of increased functional proficiency in listening, speaking, reading, and writing the Spanish language.

**SPA 215 Spanish for the Professional II**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: SPA 115 with a C grade or higher or faculty consent*

Continues SPA 115 in the development of a working knowledge of the Spanish language, cultural behaviors, and values useful in various professional fields such as health care, law enforcement, bilingual education, business, and others.

**SPA 261 Grammar for the Heritage Language Speaker**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: SPA 212 with a C grade or higher or faculty consent*

Provides grammatical instruction in Spanish to bilingual or native speakers to develop their formal proficiency in Spanish.

**SPA 262 Composition for the Heritage Language Speaker**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: SPA 212 with a C grade or higher or faculty consent*

Provides instruction to bilingual or native speakers of Spanish to develop their written proficiency in Spanish.

## Space Science

**SPS 101 Spaceflight**

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces the principles for launching and operating manned spacecraft, unmanned satellites, and permanent space stations.

## Speech – see Communication

## Technical

**TEC 205 Geometric Dimensioning & Tolerancing**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: MAT 108*

Enables students to interpret geometric dimensioning and tolerancing (GDT) in machining or drafting. The course covers math formulas, tolerancing systems, modifiers, symbols, datums, and tolerances of form, profile, orientation, runout, and location. Students learn that generation of a working drawing is a team effort between design, drafting, manufacturing, and quality control.

## Theatre

**THE 105 Introduction to Theatre Arts: AH1**

3 Credit Hours • 45 Contact Hours (Lecture)

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)

*Corequisite: THE 105 is recommended but not required.*

Covers basic acting techniques and approaches including scene study, improvisation, and script analysis. Includes practical application through classroom performance.

**THE 112 Acting II**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: THE 111 or faculty consent. THE 105 is strongly advised.*

Continues to explore basic acting techniques and approaches including scene study, improvisation, and intermediate script analysis. It includes practical application through classroom performance.

**THE 115 Stage Movement for Actors**

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces the vocabulary of human movement, techniques of physical training, and anatomy and kinesiology for the actor. The course includes forms of basic dance and the coordination of movement with vocal delivery.

**THE 116 Technical Theatre**

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces hands-on methods of constructing and painting scenery and properties and operating stage lighting. Students also learn the proper procedures of using shop equipment and serving on stage crews.

**THE 120 Drafting for the Performing Arts**

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

*Prerequisite: THE 116 or faculty consent*

Teaches students to apply basic drafting techniques to various performing arts applications and venues such as ground and lighting plots for stage, film, dance, and music. Other projects will include design layouts, working, detailed, and isometric drawings. Attention will be given to drawing symbols, notations, dimensions, and blueprint reading.

**THE 126 Auditioning for Musical Theater**

3 Credit Hours • 45 Contact Hours (Lecture)

Builds a confident, talented, and exciting audition. It includes a mock video taped audition, and covers resumes, head shots, repertoire choices, stage fright, 16-bar audition, and dressing for success. This course is presented in conjunction with producers from regional theaters providing valuable feedback for the participants.

**THE 130 Safety, Tools & Materials**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: THE 116 or faculty consent*

Addresses basic safety guidelines concerning the operation/use, care and storage of tools and materials. Areas covered include OSHA power tools, hand tools, hardware, lighting and sound equipment, paints, solvents, plastics, woods, steel, aluminum, and ladders.

**THE 131 Theatre Production I**

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

*Prerequisite: ENG 060, REA 090, THE 111, and/or THE 112 or faculty consent*

Allows students to put into practice theories of theatre production. Participation in set construction, scenic artistry, costuming, lighting, sound, acting, stage managing, and administration is available.

**THE 132 Theatre Production II**

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

*Prerequisite: ENG 060, REA 090, THE 111, and/or THE 112 or faculty consent*

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 135 Stage Makeup I**

2 Credit Hours • 45 Contact Hours (15 Lecture, 30 Lab)

Covers makeup design and application techniques. Techniques include basic corrective, character, old age, and fantasy application.

**THE 136 Stage Makeup II**

2 Credit Hours • 45 Contact Hours (15 Lecture, 30 Lab)

*Prerequisite: THE 135*

Continues to explore Theatrical makeup design and application techniques. In addition, prosthetics, hair design, and other more advanced applications will be explored.

**THE 140 Stage Dialects**

1 Credit Hour • 15 Contact Hours (Lecture)

Teaches students to develop skills in nine dialects and accents.

**THE 144 Scene Study**

1 Credit Hour • 15 Contact Hours (Lecture)

*Prerequisite: THE 143, THE 111 or faculty consent*

Emphasizes the Stanislavski approach. Students will explore acting skills through advanced material, including avant garde and classical.

**THE 152 Production Stage Management I**

3 Credit Hours • 90 Contact Hours (Lab)

*Prerequisite: THE 116 or faculty consent*

Focuses on the basics of stage management, including making a stage manager's book, organizational methods and protocols of production, calling cues in production, and personnel relationships and responsibilities.

**THE 153 Production Stage Management II**

3 Credit Hours • 90 Contact Hours (Lab)

*Prerequisite: ENG 060, REA 090, THE 131, THE 261 or faculty consent*

Examines the practical and creative side of Production Stage Management from a participatory stance by serving as the Production Stage Manager for a 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 start as much as three months before the semester of enrollment and may last through the first week of the semester of enrollment. This course is a continuation of THE 261.

**THE 181 Internship**

1-3 Credit Hours • 15 Contact Hours per credit (Lecture)

*Prerequisite: THE 143, THE 144, or THE 111 or faculty consent*

Focuses on the selection and preparation of audition materials, including prepared monologues, cold reading, and improvisation techniques. Basics of resume preparation are also discussed.

**THE 182 Internship**

1-3 Credit Hours • 45 Contact Hours per credit hour (Practicum)

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 183 Internship**

1-3 Credit Hours • 45 Contact Hours per credit hour (Practicum)

Allows students to continue to put into practice theories of theatre production. Participation in set construction, scenic artistry, costuming, lighting, sound, acting, stage managing, and administration is available.

**THE 200 Paint, Draw, Render, Model Techs**

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

*Prerequisite: THE 105 or faculty consent*

Introduces art techniques that are needed specifically in Theatrical Design. Techniques will include painting, rendering of scenic, lighting, costume designs, and model construction techniques.

**THE 204 Voice & Articulation I**

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite: ENG 060, REA 090*

Emphasizes vocal development including diction, enunciation, projection, dialects, and vocal interpretation of written materials. Students strive to eliminate regionalisms and tonal faults, e.g., nasality, stridency, sibilance, breathiness.

**THE 205 Voice & Articulation II**

2 Credit Hours • 30 Contact Hours (Lecture)

*Prerequisite: ENG 060, REA 090, THE 204*

Emphasizes vocal development including diction, enunciation, projection, dialects, and vocal interpretation of written materials. Students strive to eliminate regionalisms and tonal faults, e.g., nasality, stridency, sibilance, breathiness. A continuation of THE 204.

**THE 211 Development of Theatre I: AH1**

3 Credit Hours • 45 Contact Hours (Lecture)

Surveys the history and evolution of drama from Ancient Greece to the Renaissance, emphasizing all aspects of the art from period values to analysis of dramatic literature and performance.

**THE 212 Development of Theatre II: AH1**

3 Credit Hours • 45 Contact Hours (Lecture)

Surveys the history and evolution of drama from the Renaissance to the present, emphasizing all aspects of the art from period values to the analysis of dramatic literature and performance.

**THE 213 Intermediate Acting I**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 060, REA 090, THE 112*

Continues THE 112. Emphasis is on artistic concentration of voice and movement. A detailed character biography is required.

**THE 214 Intermediate Acting II**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: ENG 060, REA 090, THE 211*

Emphasizes artistic concentration of voice and movement. Detailed character biography is required. This course is a continuation of THE 211.

**THE 215 Playwriting**

3 Credit Hours • 45 Contact Hours (Lecture)

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 & Design**

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

*Prerequisite: THE 116 or faculty consent*

Focuses on the theory and practice of stage lighting. Topics include basic electrical theory, color theories, rigging, and design of lighting for the performing arts.

**THE 218 Readers Theatre**

3 Credit Hours • 45 Contact Hours (Lecture)

Studies ensemble interpretation of literature—poetry, prose, and drama, primarily through the medium of the spoken word.

**THE 220 Directing I**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: THE 111 or faculty consent*

Covers basic techniques for stage directing in contemporary theatre. Topics to be covered include stage composition, script analysis, work with actors, and the collaborative role of the director.

**THE 221 Set Design for Film & Theatre**

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

*Prerequisite: ENG 060, REA 090*

Emphasizes two- and three-dimensional drawing and designs and color theory. Students construct 3-D models and a theatrical stage set.

**THE 230 Directing II**

3 Credit Hours • 45 Contact Hours (Lecture)

*Prerequisite: THE 220 or faculty consent*

Continues to explore basic technique for stage directing in contemporary theatre. Subjects to be covered are stage composition, script analysis, work with actors, and the collaborative role of the director. Student will direct a one act theatre piece for final project.

**THE 231 Theatre Production III**

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

*Prerequisite: ENG 060, REA 090, THE 111, and/or THE 112 or faculty consent*

Allows students to put into practice theories of theatre production. Participation in set construction, scenic artistry, costuming, lighting, sound, acting, stage managing, and administration is available.

**THE 232 Theatre Production IV**

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

*Prerequisite: ENG 060, REA 090, THE 111, and/or THE 112 or faculty consent*

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 242 Set Dressings: Theory & Practice**

2 Credit Hours • 45 Contact Hours (15 Lecture, 30 Lab)

*Prerequisite: ENG 060, REA 090*

Covers the set dressing theory and practice including plot design, period style, set props, hand props, production paper work, and run exaction of scene changes, acquisition, care, handling, and storage.

**THE 245 Basic Costume Design & Construction**

3 Credit Hours • 90 Contact Hours (Lab)

*Prerequisite: THE 106, THE 108*

Explores the basics of costume design and color theory. Construction techniques using regular and industrial sewing machines will be applied in constructing costumes and accessories. Students will be introduced to pattern drafting.

**THE 246 Rehearsal & Performance**

1 Credit Hour • 30 Contact Hours (Lab)

*Prerequisite: ENG 060, REA 090, THE 131, or faculty consent*

Gives the student actor practical experience in a real acting environment. Through the audition and rehearsal process the student's imagination and creative potential will be 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 production to the public will be the focal point of activities. Previous acting experience is helpful but not required.

**THE 247 Rehearsal & Performance II**

2 Credit Hours • 60 Contact Hours (Lab)

*Prerequisite: ENG 060, REA 090, THE 131, or faculty consent*

Gives the student actor practical experience in a real acting environment. Through the audition and rehearsal process the student's imagination and creative potential will be 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 production to the public will be the focal point of activities. Previous acting experience is helpful but not required.

**THE 248 Rehearsal & Performance III**

3 Credit Hours • 90 Contact Hours (Lab)

*Prerequisite: ENG 060, REA 090, THE 131, or faculty consent*

Gives the student actor practical experience in a real acting environment. Through the audition and rehearsal process the student's imagination and creative potential will be 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 production to the public will be the focal point of their activities. Previous acting experience is helpful but not required.

**Water Quality Management****WQM 100 Introduction to Water Quality**

3 Credit Hours • 45 Contact Hours (Lecture)

Introduces the water and wastewater treatment field and the various applied science concepts that are used to operate, maintain and monitor water quality. Topics include the hydrological cycle, water sources, hydraulics, ecosystems, pollution, water chemistry, water calculations, microbiological aspects of water and water quality control.

**WQM 105 Specific Calculations for Water Quality Management**

4 Credit Hours • 60 Contact Hours (Lecture)

Provides an in-depth study of the calculations associated with water and wastewater treatment. Topics include dimensional analysis, manipulation of conversion factors, geometric figures, velocities, detention time, surface loading, filtration and backwash rates, porosity, weir overflow rates, efficiencies, weight of dry solids, sludge pumping, settleable solids, volatile solids, mean cell residence times, settleability, disinfection and chemical dosage as relating to trickling filters, ponds, RBC, and activated sludge.

**WQM 106 Mechanical – Physical Treatment**

3 Credit Hours • 45 Contact Hours (Lecture)

Serves as a basic introduction into wastewater treatment. Topics include the technician and their responsibility, effects of waste discharges, natural cycles, solids in wastewater, NPDES permits, collection systems, pretreatment, primary treatment, secondary treatment, advanced treatment, flow measuring, solids handling and disposal.

**WQM 109 Water Distribution**

3 Credit Hours • 45 Contact Hours (Lecture)

Covers the purpose, selection and location of water storage facilities and the operation and maintenance of related equipment. Topics include storage facilities and capabilities, booster pumps, water mains and appurtenances, joints, pipe protection and installation, valves, fittings and hydrants. Water quality standards, contaminants and degradation inspection and monitoring, system troubleshooting, surveillance, cross connections, pressure main breaks, corrosion control, disinfection and emergency planning are also covered.

**WQM 116 Conventional Surface Water Treatment**

3 Credit Hours • 45 Contact Hours (Lecture)

Covers coagulation, flocculation, sedimentation, filtering, corrosion and taste and odors. Topics for each process include descriptions, operating procedures, associated calculations, start-up and shut down procedures, laboratory tests, troubleshooting, maintenance, safety and records.

**WQM 118 Wastewater Collections Systems**

3 Credit Hours • 45 Contact Hours (Lecture)

Covers the purpose, components and design of collection systems. Topics include safety procedures, inspection and testing, pipeline cleaning and maintenance, underground repair, lift stations and sewer rehabilitation.

**WQM 119 Basic Water Quality Analysis**

4 Credit Hours • 60 Contact Hours (Lecture)

Relates the results of laboratory control tests to the chemistry of water and wastewater treatment. Students gain the skills and techniques to operate within a laboratory. Topics include laboratory equipment and instrumentation-identification, set-up and calibration, safety, sample collection and preservation, written reports and laboratory tests. Laboratory testing includes hardness, alkalinity, dissolved oxygen, biochemical oxygen demand, chlorine residual, pH, phosphorus, dissolved solids, total solids, suspended solids, turbidity, langier index, fluoride and biomonitoring.

**WQM 126 Safety in Water Quality Industry**

3 Credit Hours • 45 Contact Hours (Lecture)

Covers the safety aspects in the water and wastewater industry. Topics include development of safety policies and programs, job safety orientation, driving practices, CPR/First Aid, confined spaces, safety with energy - electrical, mechanical, thermal and pressure equipment, trenching, street work, laboratory, treatment equipment, construction vehicles/equipment, chlorine and other chemicals.

**WQM 127 Utility Management**

3 Credit Hours • 45 Contact Hours (Lecture)

Designed to introduce students to the fundamental business practices that are utilized in managing a water or wastewater utility. Topics include the functions of a manager, planning, organizing, staffing, public relations, financial management, regulatory compliance, safety, and operations and maintenance from a management perspective.

**WQM 202 Small Water Operation & Maintenance**

3 Credit Hours • 45 Contact Hours (Lecture)

Designed to introduce students to the practical, hands-on aspects of the safe and effective operation and maintenance of small water systems and treatment plants. Topics include the safe operation and maintenance of wells, pumps, disinfection equipment, small water treatment plants, storage facilities, pipes, joints, hydrants, valves, meters, and backflow prevention devices for the small water system operator.

**WQM 203 Small Wastewater System Operations & Maintenance**

3 Credit Hours • 45 Contact Hours (Lecture)

Designed to introduce students to the practical, hands-on aspects of the safe and effective operation and maintenance of small wastewater collection, treatment, and disposal systems. Topics include the safe operation and maintenance of small water treatment plants, lift stations and other facilities, and maintenance and rehabilitation of collection facilities for the small wastewater system operator

**WQM 212 Drinking Water Regulations**

4 Credit Hours • 60 Contact Hours (Lecture)

Provides the knowledge and skills to establish a compliance program for a water treatment facility using ground water, surface water, or ground water influenced by surface water sources. The student will learn all regulatory requirements for microbiological and chemical contamination (organic, inorganic, and radio) for monitoring and reporting operations.



## Welding

### **WEL 106 Blueprint Reading for Welders & Fitters**

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Covers interpreting weld symbols on blueprints, identifying proper layout methods and tools, and proper joint design necessary for various welding processes.

### **WEL 113 Oxyfuel & Plasma Cutting**

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

Outlines the skills needed to set up equipment and perform cutting and gouging operations utilizing the oxyacetylene and plasma arc cutting processes.

### **WEL 114 Oxyacetylene Welding**

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

Teaches the skills necessary to perform safety inspections, make minor repairs, adjust operating parameters, operate oxyacetylene welding equipment, and perform oxyacetylene welding, brazing, and soldering operations.

### **WEL 115 Autobody Welding & Cutting**

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Introduces welding in all positions on light gauge carbon steel using the GMAW and OAW processes on various joint configurations. Student should be familiar with basic metallurgy pertaining to the weldability of metals, structural joints, and safety in the welding industry.

### **WEL 121 Structural Welding I**

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

Covers theory and practice in oxy-acetylene processes with emphasis toward AWS welder qualification with mild steel electrode E-7018 welding in the horizontal and vertical position.

### **WEL 122 Structural Welding II**

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

*Prerequisite:* WEL 121

Continues WEL 121 with final emphasis toward AWS welder qualification with mild steel electrode E-7018 qualification test in the 2G, 3GU, and 4G position.

### **WEL 124 Introduction to Gas Tungsten Arc Welding**

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Covers welding in all positions and on various joint configurations using the GTAW (tig) welding process on carbon steel, stainless steel, and aluminum. Student should be familiar with basic metallurgy pertaining to the weldability of metals, structural joints, and safety in the welding industry.

### **WEL 125 Introduction to Gas Metal Arc Welding**

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Covers welding in all positions and on various joint configurations using the GMAW (mig) welding process on carbon steel, stainless steel, and aluminum. Student should be familiar with basic metallurgy pertaining to the weldability of metals, structural joints, and safety in the welding industry.

### **WEL 200 Advance CAD/CAM Cutting Processes**

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* MAC 215; MAC 240 or faculty consent

Covers designing and generating images using Mastercam Cad software. Student will be able to cut developed images/parts using Koike Monograph CNC Plasma cutting table. Student should be familiar with basic metallurgy pertaining to the plasma cutting of metals and safety in the welding industry.

### **WEL 205 Introduction to Ornamental Iron**

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* as specified by instructor

Covers designing, drawing, and fabricating a welded project. Student will demonstrate his/her ability to use (in a practical application) previously learned techniques using different welding processes.

### **WEL 224 Advanced Gas Tungsten Arc Welding**

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* WEL 124 or faculty consent

Covers welding in all positions on carbon steel, stainless steel, and aluminum plate and carbon steel pipe with the GTAW process. Student should be familiar with basic metallurgy pertaining to the weldability of metals, structural joints, and safety in the welding industry.

### **WEL 225 Advanced Gas Metal Arc Welding**

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* WEL 125 or faculty consent

Covers welding in all positions on carbon steel plate with the GMAW process. Student should be familiar with basic metallurgy pertaining to the weldability of metals, structural joints, and safety in the welding industry.

### **WEL 230 Pipe Welding I**

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* WEL 122, WEL 224, WEL 225 or faculty consent

Covers safety inspections, minor repairs, operating parameters, and operation of SMAW, GMAW, and FCAW equipment in a variety of positions on plain carbon steel pipe joints. Also covers evaluating and solving complex welding and fabrication problems and administering hands on training and supervision to other students during assigned fabrication and welding operations.

### **WEL 231 Pipe Welding II**

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* WEL 230 or faculty consent

*Corequisite:* May be taken concurrently with WEL 230

Covers safety inspections, minor repairs, operating parameters, and operation of SMAW, GMAW, and FCAW equipment in a variety of positions on plain carbon steel pipe joints. Also covers evaluating and solving complex welding and fabrication problems and administering hands on training and supervision to other students during assigned fabrication and welding operations.

### **WEL 240 Pipe Welding Certification**

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* WEL 231 or faculty consent

Introduces theory and practice in modern welding methods of pressure pipe line and pipe systems. Emphasis toward welder qualification under various codes.

### **WEL 250 Layout & Fabrication**

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

*Prerequisite:* WEL 106

Develops welding and associated skills in the use of drawings and blueprints in planning. Includes designing and layout projects.



## Zookeeping

### ZOO 100 Safety/Zoonoses/Hazardous Materials

0.5 Credit Hour • 11.25 Contact Hours (Lecture/Lab Combination)

Prepares students to deal in a safe and effective manner with the hazards and hazardous materials involved in zookeeping.

### ZOO 101 Career Development for Zookeeping

0.5 Credit Hour • 11.25 Contact Hours (Lecture/Lab Combination)

Supplies the tools necessary to be competitive in the zoological job hunt. Provides students with the ability to make realistic decisions concerning education and occupational objectives.

### ZOO 105 Reptile & Amphibian Husbandry

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Teaches herpetology and herpetological husbandry. The emphasis is on developing a working knowledge of the care and management of captive reptiles.

### ZOO 115 Bird Husbandry

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Teaches bird husbandry and supplies the student with a working knowledge of the captive care and management of birds.

### ZOO 117 Animal Conservation in Captivity

3 Credit Hours • 45 Contact Hours (Lecture)

Studies 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 animal's relationships with man, zoo programs, and extinction issues.

### ZOO 125 Mammal Husbandry

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Teaches the student mammal biology and husbandry, and provides the student with a working knowledge of the care and management of captive mammals.

### ZOO 135 Fish & Invertebrate Husbandry

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Teaches students fish and aquatic invertebrate biology and husbandry. Course provides students with a working knowledge of the care of aquatic life, including management of closed systems.

### ZOO 180 Zookeeping Internship – Hoofstock

5 Credit Hours • 225 Contact Hours (Work Experience)

*Prerequisite:* ZOO 100, BIO 150

*Corequisite:* ZOO 125

Provides work experience at the Cheyenne Mountain Zoo or other approved facility for 230 hours over a fifteen-week period (ten-week summer semester). The student will become competent in the care of the animals studied within each internship.

### ZOO 181 Zookeeping Internship – Primates/Carnivores

5 Credit Hours • 225 Contact Hours (Work Experience)

*Prerequisite:* ZOO 100, BIO 150

*Corequisite:* ZOO 125

Provides work experience at the Cheyenne Mountain Zoo or other approved facility for 230 hours over a fifteen-week period (ten-week summer semester). The student will become competent in the care of the animals studied within each internship.

### ZOO 205 Horticulture for the Zookeeper

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

Explores 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.

### ZOO 206 Exhibit Design & Construction

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

Discusses the exhibit design and renovation process through the conceptual, architectural rendering and construction phases. Will discuss small, supervised projects as well as new multi-million dollar projects.

### ZOO 207 Animal Behavior

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

Provides a brief history of ethology, forms of animal communication, the sensory world of animals, programmed vs. learned behavior, navigation, and mating behaviors. Students will be given an in-depth look at how animal behavior is affected by a zoo environment and how to correct stereotypic behaviors that are often seen in captive animals.

### ZOO 212 Elephant Management

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

*Prerequisite:* ZOO 100

This course will cover the natural history of the two current living genera of elephants, status in the wild, status in captivity, and basic husbandry needs. It will include lab experience at 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.

### ZOO 215 Veterinary Zookeeping

4 Credit Hours • 90 Contact Hours (Lecture/Lab Combination)

Explores a wide variety of topics including but not limited to quarantine procedures, immobilization, zoonotic disease, and other important aspects of veterinary animal management.

### ZOO 280 Internship – Birds/Reptiles

5 Credit Hours • 225 Contact Hours (Work Experience)

*Prerequisite:* ZOO 100, BIO 150

*Corequisite:* ZOO 105 and/or ZOO 115

Provides work experience at the Cheyenne Mountain Zoo or other approved facility for 230 hours over a fifteen-week period (ten-week summer semester). The student will become competent in the care of the animals studied within each internship.

### ZOO 281 Internship – Abroad

5 Credit Hours • 225 Contact Hours (Work Experience)

*Prerequisite:* ZOO 100, BIO 150

*Corequisite:* ZOO 105 and/or ZOO 125

Provides work experience at a pre-approved facility for 230 hours over a fifteen-week period (ten-week summer semester). The student will become competent in the care of the animals within a specified area of study.

# College Administrative Staff

## Officers of the College

President ..... Anthony G. (Tony) Kinkel  
 Vice President for Educational Services ..... Edwin Ray, Ph.D.  
 Interim Vice President for Administrative Services ..... Michael Young  
 Interim Vice President for Student Services ..... Colette Berge

## President's Staff

Executive Assistant to the President/  
 Ombudsman ..... Kimberly Barnett  
 Executive Director of Marketing  
 and Communications ..... George Sanchez  
 Executive Director of Foundation, Resource  
 and Community Development ..... Jon Stepleton  
 Director of Human Resource Services ..... Carlton Brooks  
 Director of Strategy Management ..... Dr. Tim Griffin

## Educational Services

Assistant to the VPES for Articulation, Transfer and  
 Teacher Education ..... Wayne Artis  
 Assistant to the Vice President for Educational  
 Services ..... Julie Hazel

## Educational Services Deans

Business, Social and Behavioral Sciences  
 Dean ..... Carla Malmquist  
 Assistant Dean ..... Cindy Buckley  
 Assistant Dean ..... Lonnie Inzer  
 Communications, Humanities, and Technical Studies  
 Dean ..... Deborah Schmitt, Ph.D.  
 Assistant Dean ..... Regina Lewis  
 Health, Environmental, Natural and Physical Sciences  
 Dean ..... Mary Ann Wermers  
 Assistant Dean ..... George Tessmer  
 Languages, Distance Education and Military Programs  
 Dean ..... Peter Heinz, Ph.D.  
 Associate Dean ..... Barbara Graves  
 Mathematics and Technology  
 Dean ..... Carol Jonas-Morrison  
 Associate Dean ..... Gwen Wiley  
 Assistant Dean ..... Carol Ohle  
 Economic and Workforce Development  
 Dean ..... Jerry Fritz

## Directors

Area Vocational Program ..... Chelsey Harris  
 Centennial, Rampart Range  
 and Downtown Studio Campus ..... Robin Young  
 Distance Education ..... Julie Witherow  
 Library Director ..... Carole Olds  
 Military Programs ..... Peter Heinz, Ph. D.

## Coordinators

Accommodative Services and  
 Instructional Support Services ..... Michael Nusen

## Program Administrators

English Language Institute ..... Jean Echevarria  
 Pikes Peak Regional Law Enforcement Academy ..... Ken Hilde

## Administrative Services

### Directors

Auxiliary Services & Business Services ..... Eileen Hogue  
 Facilities Maintenance and Operations ..... Bruce Farnham  
 Financial Services/Controller ..... Terrance Plunkett  
 Information Technology Support Services ..... Cyrille Parent  
 Public Safety ..... Ken Hilde

### Coordinators

Computer Aided Lab ..... Ernest Hughes

### Managers

Bookstore – Assistant Managers ..... Nick Schmidt  
 Jeff Tamblyn  
 Contract and Procurement Manager ..... Rockie Hurrell  
 Student Accounts – ES ..... Gerri Lyons  
 Manager of Technical Support – ITSS ..... Christian Orth  
 Publications and Printing/Copy Center ..... Mark Day

## Student Services

Dean of Students ..... Jennifer Sengenberger

### Directors

Campus Life ..... Dawn Souza  
 Career Planning & Advising ..... Jennifer Sengenberger  
 Child Care Services ..... Cindy Neale-Downing  
 Enrollment Services ..... Steve Ochsner  
 Admissions, Assistant Director ..... Jeff Horner  
 Financial Aid, Assistant Director ..... Sherri McCullough  
 Student Engagement ..... Vacant  
 Student Support Services/TRIO ..... Ed Quesada

### Coordinators

Campus Activities ..... Vacant  
 Child Development Center – CC ..... Judith Russell  
 Child Development Center – RRC ..... Myra Sprague  
 Crisis Counselor ..... Melanie Lindsay-Brisbin  
 Crisis Counselor ..... Misty Hull  
 Fitness Center/Gym ..... Vacant  
 Multicultural Retention Specialist ..... Eddie Hughes  
 OASIS ..... Michael Nusen  
 SCEOC ..... Diane Taste  
 Testing Centers ..... Peggy Hawke

### Supervisors

Tutoring Supervisor ..... Sandy Ho

## Faculty & Staff

- ADAMS, Diane  
Administrative Assistant II, Veterans Affairs
- AFFHOLTER, Avery  
Data Specialist, Bookstore
- AGGEN, Teresa, M.A. (Stephen F. Austin State University, 1991)  
Faculty of English, Division of Languages
- AKCADOGAN, Mustafa, M.S. (University of Phoenix, 2003)  
IT Technician II, Information Technology Support Services
- ALFONSO, Kristen  
Administrative Assistant II, Health, Environmental, Natural and Physical Sciences
- ALIRE, Arlene Ann  
Administrative Assistant III, Enrollment Services
- ALLISON, Robin, A.A.S. (Pikes Peak Community College, 2002)  
Administrative Assistant III, Public Safety
- ALLTOP, Marilu  
Faculty of Nursing, Health, Environmental, Natural & Physical Sciences
- ALVARAN, Reginald  
Custodian I, Facilities & Operations
- ALVARADO, Crystal  
Administrative Assistant II, Campus Life
- ANDERSON, Matthew  
Material Handler II, Bookstore
- ARCHULETA, Pamela, B.S. (Regis University, 1995)  
General Professional II, Enrollment Services
- ARFSTEN, Cheri, B.A. (University of Colorado, 2005)  
Office Manager I, Military Programs
- ARKOWSKI, Donna, M.B.S. (University of Colorado, 1997)  
Faculty of Geography, Health, Environmental, Natural & Physical Sciences
- ARTIS, W. Wayne, M.A. (University of Delaware, 1977)  
Associate Professor & Co-Chair, Department of History, Assistant to the VPES for Articulation, Transfer, and Teacher Preparation
- ASHTON, Holly, M.S. (Iowa State University, 1986)  
Faculty of Mathematics, Mathematics & Technology
- ASKVIG, Cynthia S., M.S.N. (Northern Illinois University, 1981)  
Vocational Credentials: Faculty, Registered Nurse  
Professor of Nursing, Health, Environmental, Natural & Physical Sciences
- ASTOR, Jane, M.S.W. (University of Denver, 1993)  
Vocational Credentials: Faculty  
Faculty of Social Services, Business, Social & Behavioral Sciences
- BABIN, Dave  
General Professional II, Enrollment Services
- BAILEY, Sandra, M.Ed. (Colorado State University, 2006)  
Vocational Credentials: Faculty  
Faculty of Computer Information Systems, Mathematics & Technology
- BAKER, Connie, A.A.S. (Pikes Peak Community College, 2007)  
Administrative Assistant II, Office of the Vice President for Educational Services
- BAKER, Karen  
Administrative Assistant III, Enrollment Services
- BAKER, Mary, M.A. (University of Colorado, 1990)  
Faculty of Communication, Communications, Humanities, & Technical Studies
- BANEY, Eileen  
Administrative Assistant III, Enrollment Services
- BARNETT, Barbara, A.A.S. (Pikes Peak Community College, 1991)  
Administrative Assistant II, Enrollment Services
- BARNETT, Kimberly R., A.G.S. (Pikes Peak Community College, 1991)  
Executive Assistant to the President/Ombudsman, Presidents Office
- BARR, Lavone, B.S. (Park University, 2003)  
Accounting Technician I, Financial Services
- BARR, Charles, B.A. (University of Western Illinois)  
Vocational Credentials: Faculty  
Faculty of Automotive Technology, Area Vocational Program
- BARTA, Tim  
General Labor I, Facilities & Operations
- BARTA, Vicki, A.A. (Pikes Peak Community College, 1989)  
Accounting Technician III, Financial Services
- BARTRUM, Raymond, A.A.S. (T.T.I., 1994)  
Administrative Assistant I, Information Technology Support Services
- BATES, Cheryl, A.A.S. (Pikes Peak Community College, 1998)  
Administrative Assistant II, Human Resource Services
- BATES, Elizabeth, A.A. (Pikes Peak Community College, 2006)  
Administrative Assistant II, Career Planning and Advising
- BAUER, Chad, A.A.S. (Pikes Peak Community College, 2005)  
Police Officer I, Public Safety
- BAUER, Patricia  
Administrative Assistant II, Office of the Vice President for Educational Services
- BEARD, William, B.S. (University of Kansas, 1978)  
Faculty of Architecture, Communications, Humanities & Technical Studies
- BECCO, Jo Ellen, M.A. (University of Iowa, 1994)  
Faculty of English, Division of Languages
- BELEW, Karla, Ph.D. (Texas Tech University, 1983)  
Professor of Biology and Chemistry, Health, Environmental, Natural & Physical Sciences
- BELL, Stefanie, M.A. (Goddard College, 1977)  
Faculty of Psychology, Business, Social & Behavioral Sciences
- BEN-AMOTS, Laura, M.F.A. (University of the Arts, 1992)  
Faculty of Art, Communications, Humanities, & Technical Studies
- BENDER, Michelle, B.S. (University of Wisconsin, 1991)  
Vocational Credentials: Faculty  
Faculty of Early Childhood Education, Business, Social & Behavioral Sciences
- BERGACKER, Dawn, M.A. (University of Wisconsin, 1988)  
Reference Librarian, Library
- BERGE, Colette, M.S. (University of Colorado, 1978)  
Interim Vice President for Student Services
- BICKNELL, Gail A., A.A. (Pikes Peak Community College, 2005)  
Administrative Assistant III, Division of Languages
- BIEKER, Sheila, A.A. (Pikes Peak Community College, 1996)  
General Professional II, Career Planning and Advising
- BOEHME, Angela  
Police Officer I, Public Safety
- BOLLING, Linda, A.A.S. (Pikes Peak Community College, 1993)  
Library Technician II, Library
- BOND, Vicki, L.P.N. (St. Mary's School of Practical Nursing, 1976)  
Vocational Credentials: Faculty  
Medical Office Technology Program Coordinator, Health, Environmental, Natural & Physical Sciences
- BOSWORTH, Diane  
Accounting Tech III, Financial Services
- BOWEN, Karen S., M.Ed. (University of Pittsburgh, 1970)  
Faculty of English and Study Skills, Division of Languages
- BOWERS, William  
Structural Trades I, Facilities & Operations
- BOWLES, Charles F., M.B.A. (Pacific Lutheran University, 1977)  
Vocational Credentials: Faculty  
Faculty of Business Management, Business, Social & Behavioral Sciences
- BOYLE, Megan, M.A. (Gonzaga University, 1976)  
Coordinator of Campus Activities, Campus Life
- BRADLEY, Kristine, M.B.S. (University of Colorado, 1997)  
Faculty of Mathematics, Mathematics & Technology
- BRICKER, Robert R., M.A. (University of Northern Colorado, 1973)  
Vocational Credentials: Faculty  
Professor of Management and Marketing, Business, Social & Behavioral Sciences
- BRISTOL, Darrin, A.A.S. (Pikes Peak Community College, 1997)  
Vocational Credentials: Faculty  
Faculty of Culinary Arts, Business, Social & Behavioral Sciences
- BRISTOL, Robert, M.A. (University of New Mexico, 1997)  
Faculty of College Prep English, Division of Languages
- BROOKS, C.R.J., M.P.A. (University of Colorado, 1992)  
Director of Human Resources
- BUCKLEY, Cynthia, M.Ed. (Regis University, 2002)  
Vocational Credentials: Early Childhood Education  
Faculty of Early Childhood Education, Business, Social & Behavioral Sciences
- BURGER, Julie  
Faculty of Nursing, Health, Environmental, Natural and Physical Sciences
- BURKHART-NERO, Gloria, M.F.A. (University of Cincinnati, 1973)  
Library Technician II, Library
- BURKHART, Ronda A., M.B.S. (University of Colorado, 1980)  
Faculty of Anthropology, Business, Social & Behavioral Sciences

- BURLISON, Kay B., B.S., (Mississippi State University, 1983)  
Early Childhood Educator I, Child Development Center
- BURNETT, Lanae  
Administrative Assistant III, Communications, Humanities, & Technical Studies
- BURTON, Robert W., A.A.S. (Pikes Peak Community College, 1998)  
Vocational Credentials: Faculty  
Co-coordinator of Fire Science Technology, Business, Social & Behavioral Sciences
- BUTLER, Sharon, M.S. (Butler University, 1975)  
Assistant Professor of Mathematics, Mathematics & Technology
- CANTU, Antonio  
Police Officer I, Public Safety
- CARLSON-DIGNADICE, Deborah  
Administrative Assistant II, Mathematics & Technology
- CARNE, Glenda L., M.A. (University of Colorado, 1997)  
Program Assistant II, Articulation, Transfer, & Teacher Education
- CARNES, Cassandra  
Early Childhood Educator I, Child Development Center
- CARRINGTON, Sandra  
Early Childhood Educator I, Child Development Center
- CASIAS, Helen, A.A.S. (Pikes Peak Community College, 1997)  
Library Technician II, Library
- CHAVEZ, Anthony, A.A.S. (Pueblo Community College, 1986)  
Administrative Assistant III, Business, Social & Behavioral Sciences
- CHAVEZ, Gustavo  
Custodian I, Facilities and Operations
- CLARKE, Catherine  
Dining Services III, Child Development Services
- CLARKE, William, M.Div. (Union Theological Seminary, 1990)  
Faculty of Mathematics, Mathematics & Technology
- CLOSE, Rocio, B.S. (California State University, 1993)  
Administrative Assistant II, Health, Environmental, Natural & Physical Sciences
- CLOUSE, Rose-Marie,  
Administrative Assistant II, Mathematics & Technology
- COCA, Christopher  
Grounds & Nursery I, Facilities & Operations
- COLLINS, Stephen, Ph.D. (Northwestern University, 2001)  
Professor of Communication, Communications, Humanities, & Technical Studies
- COLEMAN, Patricia, M.S. (Troy State University, 1983)  
Supplemental Services Assistant, Area Vocational Program
- CONOLEY, Ila, M.F.A. (New York University, 2004)  
Faculty of Dance, Communications, Humanities & Technical Studies
- COOK, Vanessa  
Academic Career & Transition Counselor, Military Programs, Ft. Carson
- COOPER, Desiree  
Administrative Assistant II, Testing Center
- CORN, Leland, A.A.S., (Pikes Peak Community College, 1996)  
Vocational Credentials: Faculty  
Faculty of Welding, Communications, Humanities, & Technical Studies
- CORNELIUS, Belenda, M.A. (University of Colorado, 1992)  
Counseling and Human Services Certification  
Recruitment Officer, Marketing & Communications
- CORNISH, Amy, M.A. (Colorado State University, 2000)  
Faculty of French, Division of Languages
- COUTTS, Jean, M.S. (University of Texas, 1998)  
Vocational Credentials: Faculty  
Faculty of Accounting, Business, Social & Behavioral Sciences
- CROWLEY, Nancy,  
Child Care Aide, Child Development Center
- CUNNINGHAM, Casey  
General Labor I, Facilities and Operations
- DAIL, Shawna  
Accounting Technician I, Financial Services
- DAVENPORT, Deric, M.S., (University of Arkansas, 1987)  
Faculty of Mathematics, Mathematics & Technology
- DAVIS, Tara  
Faculty of Interior Design, Communications, Humanities, & Technical Studies
- DAY, Kimberly G., A.A.S. (Pikes Peak Community College, 1997)  
Customer Support Coordinator I, Information Technology Support Services
- DAY, Mark, B.A. (Rockmont College, 1974)  
General Professional IV, Publications & Printing
- DECH, Debra, A.A. (Pikes Peak Community College, 2006)  
Administrative Assistant III, Enrollment Services
- DEHERRERA, James, M.S. Ed (Northern Illinois University, 2000)  
Faculty of Mathematics, Mathematics & Technology
- DEHERRERA, Laurel, M.S. (Northern Illinois University, 1994)  
Faculty of Computer Science, Mathematics & Technology
- DELGESSO, Frank, B.S. (Regis University, 2004)  
Vocational Credentials: Faculty  
Faculty of Dental Assisting, Health, Environmental, Natural & Physical Sciences
- DEMAIO, Alfred  
Custodian I, Facilities & Operations
- DEVAUX, Jason, B.A. (Valparaiso University)  
Vocational Credentials: Faculty  
Faculty of Criminal Justice, Business, Social & Behavioral Sciences
- DODSON, Susan, A.A. (Pikes Peak Community College, 1996)  
Library Technician III, Library
- DOLAWAY, Theresa L. (Vocational Credential in Business Education)  
Office Manager I, Health, Environmental, Natural & Physical Sciences
- DORK, Thomas  
Custodian I, Facilities & Operations
- DORRIS, Susan, B.S. (North Park College, 1976)  
Vocational Credentials: Faculty  
Faculty of Nursing, Health, Environmental, Natural & Physical Sciences
- DOTSON, Rickette Y., B.S., (Metropolitan State College, 1996)  
Administrative Assistant III, Enrollment Services
- DUFFIN, Dennis, Ph.D. (University of Southern California, 1980)  
Career Counselor, Career Planning & Advising
- DUTHIE, Meagan, A.A.S. (Pennsylvania College of Technology, 2002)  
Faculty of EMS, Health, Environmental, Natural & Physical Sciences
- ECHEVARRIA, Jean, M.A. (Colorado State University, 1989)  
Faculty of English Language Institute, Division of Languages
- ELLARD, Cheryl, B.A. (Iowa Wesleyan College, 1975)  
Administrative Assistant III, Learning Assistance Center
- ELLIOTT, Jody  
Early Childhood Educator I, Child Development Center
- ELTHORP, Michele A., A.S. (Pikes Peak Community College, 1997)  
Early Childhood Educator II, Child Development Center
- ENSMINGER, Michael, B.S. (Colorado Christian University, 1996)  
Vocational Credentials: Faculty, Colorado Type C Certificate  
Assistant Professor of Criminal Justice, Business, Social & Behavioral Sciences and Area Vocational Program
- ESPINOZA, Claude, A.A.S. (Pikes Peak Community College, 2002)  
Administrative Assistant II, Enrollment Services
- ESPINOSA, Jose  
Custodian I, Facilities and Operations
- ETAUGH, Heather, A.A.S. (Pikes Peak Community College, 2005)  
Administrative Assistant I, Department of Public Safety
- EVERETT, Jami, A.G.S. (Pikes Peak Community College, 2003)  
IT Professional I, Information Technology Support Services
- FAMBROUGH, Scott  
Vocational Credentials: Faculty  
Faculty of Electronics, Mathematics & Technology
- FIGUERA-CLARKE, Emma, A.A.S. (Pikes Peak Community College, 1995)  
Early Childhood Educator I, Child Development Center
- FLORA, Russell L., M.A. (Rutgers University, 1972)  
Professor of Economics, Business, Social & Behavioral Sciences
- FONTES, Benjamin L.  
Sales Manager I, Bookstore
- FORCE, Jeffery, B.A. (University of Maryland, 1986)  
EMS Program Coordinator, Health, Environmental, Natural & Physical Sciences
- FOSTER, John  
Administrative Assistant II, Enrollment Services
- FOSTER, Nathan  
General Labor I, Facilities & Operations
- FRAZIER, Steve  
Custodian I, Facilities & Operations
- FRITZ, Jerry, M.S. (Indiana University, 1976)  
Dean, Economic & Workforce Development

- FURAU, Vicki M.  
General Professional II, Enrollment Services
- GAITERS-JORDAN, Jacquelyn, M.A. (University of Colorado, 2005)  
Faculty of English, Division of Languages
- GARCIA, Sylvia, B. A. (University of Denver, 1974)  
Administrative Assistant III, Enrollment Services
- GARRELT, Ryan  
Police Officer II, Public Safety
- GENTZEL, Bonnie  
Administrative Assistant II, Health, Environmental, Natural & Physical Sciences
- GERTH, Carolyn, A.A.S. (Pikes Peak Community College, 2003)  
Accounting Technician III, Bookstore
- GERVELL, Patricia, B.S. (Regis University, 1997)  
Accountant II, Financial Services
- GETZ, Christine M., Ph.D. (Colorado State University, 2003)  
Professor, Developmental Studies English Lab, Division of Languages
- GIDDINGS, Larry A., M.A. (Humboldt State University, 1989)  
Faculty of College Prep English, Division of Languages
- GOLD, Steven, M.S. (University of Phoenix, 2004)  
OASIS/CAC Assistant Coordinator, Office of Accommodative Services & Instructional Support
- GRACE, Gayle  
Faculty of Music, Communications, Humanities, & Technical Studies
- GRAVES, Barbara, M.A. (University of Maryland, 1982)  
Associate Dean, Division of Languages & Military Programs
- GRAYSON, James, M.P.A. (University of Colorado, 2001)  
Faculty of Criminal Justice, Business, Social & Behavioral Sciences
- GREY, Joanna C., M.A. (Humboldt State University, 1992)  
Faculty of Sociology, Business, Social & Behavioral Sciences
- GRIFFIN, Timothy, Ph.D. (University of Wisconsin, 1983)  
Director of Strategy Management
- GRUSING, Barbara, A.A. (Pikes Peak Community College, 1992)  
Accounting Tech III, Financial Services
- GUINANE, Jacqueline, B.S. (Murray State University, 2003)  
Childcare Aid, Child Development Center
- HALL-White, Katrina, A.A.S. (Pikes Peak Community College, 2007)  
Administrative Assistant III, Business, Social & Behavioral Sciences
- HAMILTON, Will, B.S. (Colorado State University, 2005)  
Police Officer I, Public Safety
- HANRATTY, Margaret, M.A. (University of Minnesota, 1996)  
Faculty of English, Division of Languages
- HANSON, Christina  
Library Manager, Agilent Library
- HARMS, Richard L., M.S. (Kansas State University, 1968)  
Faculty of Mathematics, Mathematics & Technology
- HARRIS, Chelsy, M.Ed. (Xavier University, 2005)  
Vocational Credentials: Faculty  
Interim Director of Area Vocational Program
- HARTMAN, Tamara, A.A.S. (Pikes Peak Community College, 1984)  
General Professional III, Human Resource Services
- HASTINGS, Rudy  
Structural Trades I, Facilities & Operations
- HAWKE, Marguerite, B.S. (Regis University, 2002)  
Testing Center Coordinator, Administrative Services
- HAZEL, Julie, B.A. (University of Colorado, 2000)  
Assistant to the Vice President for Educational Services
- HAZEL-DESTEFANO, Jeannie, A.A.S. (Pikes Peak Community College, 1998)  
Program Assistant I, Office of Accommodative Services & Instructional Support
- HEFLIN, Nanette  
General Professional II, Marketing & Communications
- HEINZ, Peter, Ph.D. (The Ohio State University, 1993)  
Dean of Division of Languages
- HEMESATH, Michael, A.G.S. (Pikes Peak Community College, 1999)  
IT Technician II, Information Technology Support Services
- HENDERSON, Robert, M.A. (University of California at Los Angeles, 1970)  
Professor of Biology, Health, Environmental, Natural & Physical Sciences
- HENRICH, Cathy, M.A. (University of Connecticut, 1981)  
Faculty of Literature, Division of Languages
- HERNANDEZ, Ernesto, M.S. (Colorado State University, 1992)  
Faculty of Biology, Health, Environmental, Natural & Physical Sciences
- HERRAEZ, Juan-Carlos, M.S. (University of Southern Colorado, 1995)  
Assistant Professor of Chemistry, Health, Environmental, Natural & Physical Sciences
- HERRERA, Christopher  
General Labor I, Facilities & Operations
- HETZLER, Carol, B.S. (Colorado State University, 1981)  
General Professional II, Marketing & Communications
- HICKS, Rebecca, M.Ed. (Marymount University, 1995)  
Faculty of English Language Institute, Division of Languages
- HIDROGO, Laura, A.G.S. (Pikes Peak Community College, 2004)  
Administrative Assistant III, Enrollment Services
- HIJAR, Cynthia  
Office Manager I, Communications, Humanities & Technical Studies
- HO, Sandy  
Tutoring Supervisor, Student Success Services\Learning Assistance
- HOGG, Sharon, B.S. (Slippery Rock State College, 1978)  
Vocational Credentials: Faculty  
Faculty of Radio & Television, Communications, Humanities & Technical Studies
- HOGUE, Eileen, M.S. (Colorado Technical University, 2005)  
Director, Auxiliary & Business Services
- HOLLER, Richard  
Electronics Specialist II, Communications, Humanities, & Technical Studies
- HOLTORF, Stacy A.  
General Professional II, Marketing & Communications
- HORNER, Jeffrey, M.A. (New School University, 1974)  
Assistant Director of Enrollment Services - Admissions
- HUDSON, Robert, A.A.S. (Pikes Peak Community College, 1990)  
Vocational Credentials: Faculty  
Faculty of Culinary Program, Business, Social & Behavioral Sciences
- HUGHES, Ernest  
Computer Assisted Instruction Lab Coordinator, Information Technology Support Services
- HUGHES, Eddie, B.A. (Colorado State University, 1982)  
Multi-Cultural Retention Specialist, Student Support Services
- HULL, Misty, M.A. (Colorado Christian University, 2001)  
Faculty of Psychology, Business, Social & Behavioral Sciences  
Crisis Counselor, Campus Life
- HUMPHREY, Twila, A.G.S. (Pikes Peak Community College, 2004)  
General Professional II, Enrollment Services
- HUMPHRIES, Cecilia, A.A.S. (Pikes Peak Community College, 2003)  
Administrative Assistant III, Mathematics & Technology
- HURRELL, Dennis  
Materials Handler II, Bookstore
- HURRELL, Rockie  
General Professional III, Contracting & Purchasing Department
- INZER, Lonnie D., M.L.S. (Fort Hays State University, 2004)  
Vocational Credentials: Faculty  
Coordinator of Fire Science & Homeland Security Emergency Management Programs, Business, Social & Behavioral Sciences
- IZOLD, Colleen  
Administrative Assistant II, Student Support Services
- IZOLD, Mark, M.S. (Ohio State University, 1993)  
Faculty of Geology/Astronomy, Health, Environmental, Natural & Physical Sciences
- JACOBSON, Chad, A.A.S. (Pikes Peak Community College, 2006)  
Sales Manager I, Bookstore
- JENT, Tom  
Production III, Publications & Printing
- JIROUS, Jennifer, M.B.A. (University of Wisconsin, 2000)  
Vocational Credentials: Faculty  
Faculty of Computer Information Systems, Mathematics & Technology
- JOHANNSEN, Sandra, M.Ed. (University of Virginia, 1971)  
Disability Specialist, Office of Accommodative Services & Instructional Support
- JOHNSON, Janele, M.A. (Oklahoma State University, 1988)  
Faculty of English, Division of Languages
- JOHNSON, Kristen, M.S.E.D. (Purdue University, 2003)  
Faculty of Biology, Health, Environmental, Natural & Physical Sciences
- JOHNSON, Stoney  
Custodian III, Facilities & Operations
- JONAS-MORRISON, Carol, M.S. (New Mexico Institute of Mining & Technology, 1993)  
Dean of Mathematics & Technology



- JONES, Jessica  
Child Care Aide, Child Development Center
- JONES, Lewis  
Custodian I, Facilities and Operations
- JUEL, Jamie  
Administrative Assistant III, Enrollment Services
- KAMILAR, Cindy, Ph.D. (University of Miami, 1993)  
Professor of Psychology, Business, Social & Behavioral Sciences
- KANE, William  
Faculty of Biology, Health, Environmental, Natural and Physical Sciences
- KELLER, Shae L., B.A. (Regis University, 2005)  
General Professional II, Contracting & Purchasing Department
- KELLEY, Terri, A.A.S. (Pikes Peak Community College, 2002)  
Accounting Technician III, Financial Services
- KELLY, Thomas E., M.Ed. (Lesley University, 1995)  
Vocational Credentials: Faculty  
Associate Professor of Architecture, Communications, Humanities, & Technical Studies
- KILGORE, Doyle  
Police Officer I, Public Safety
- KIM, Su Il, Ph.D. (McMaster University, 1985)  
Faculty of Anthropology, Business, Social & Behavioral Science
- KIMBRELL, Judith, B.A. (Hillsdale College, 1996)  
Faculty of Photography, Communications, Humanities, & Technical Studies
- KING, Mark, M.A. (New Mexico State University, 1998)  
Faculty of College Prep English, Division of Languages
- KINKEL, Anthony (Tony) G., Ed.D. (University of Minnesota, 1998)  
President
- KLATASKA, Rickey K., A.A. (Pikes Peak Community College, 1999)  
Police Officer I, Public Safety
- KLISMET, Peter, M.P.A. (University of Southern California, 1979)  
Vocational Credentials: Faculty  
Faculty of Criminal Justice, Business, Social & Behavioral Sciences
- KNIGHT, Dana  
Materials Handler I, Tool Room
- KNIGHT, Wade C.  
Vocational Credentials: Faculty, Colorado Type C Certificate  
Faculty of Automotive Collision Repair, Communications, Humanities, & Technical Studies
- KNUDSEN, Kay, M.A. (University of Denver, 1975)  
Technical Services Librarian, Library
- KORT, Judy, M. Ed. (National College of Education, 1977)  
Learning Disabilities Specialist, Office of Accommodative Services & Instructional Support
- KOSKI, Christine  
Child Care Aide Child, Child Development Center
- KOSTER, Michele, A.A.S., (Pikes Peak Community College, 2005)  
Vocational Credentials: Faculty  
Faculty of Computer Aided Drafting, Communications, Humanities & Technical Studies
- KRAUSE, Steven  
Equipment Mechanic II, Facilities & Operations
- KROUGH, Cynthia D.  
Administrative Assistant II, Enrollment Services
- KRZEMIEN, Gayle, Ph.D. (Colorado State University, 2003)  
Faculty of Mathematics, Mathematics & Technology
- KUEHN, Frank, M.A. (University of Kansas, 1975)  
Vocational Credentials: Faculty  
Faculty of Computer Information Systems, Mathematics & Technology
- LABATE, Fabrizio, A.A.S. (Pikes Peak Community College, 2001)  
Web Services Manager, Information Technology Support Services
- LAIRD, Robert P., Jr.  
Pipe/Mechanic Trades III, Facilities & Operations
- LANGAN, Lynn, A.A.S. (Pikes Peak Community College, 1992)  
Accounting Technician III, Financial Services
- LANOUE, Katherine  
Administrative Assistant II, Communications, Humanities & Technical Studies
- LARISH, Ruth-Ann, M.A. (Colorado College, 2001)  
Vocational Credentials: Faculty  
Faculty of Natural Resources, Health, Environmental, Natural & Physical Sciences
- LARROQUETTE, Linda S., A.G.S. (Pikes Peak Community College, 1995)  
Program Assistant I, Child Development Center
- LAWSON, Cathryn, M.A. (University of Delaware, 2000)  
Faculty of English, Division of Languages
- LEE, Vicki  
Material Handler II, Communications, Humanities & Technical Studies
- LEMA, Melissa, M.S. (Northern Arizona University, 2001)  
Vocational Credentials: Faculty  
Faculty of Natural Resources, Health, Environment, Natural & Physical Sciences
- LEWIS, Regina, M.A. (University of Colorado, 2001)  
Faculty of Communication, Communications, Humanities & Technical Studies
- LICHT, Deborah, Ph.D. (Harvard University, 2001)  
Faculty of Psychology, Business, Social & Behavioral Sciences
- LIKINS, Andrew R., M.A. (Azusa Pacific University, 2001)  
English Language Institute Assistant, Division of Languages
- LIONEL, Jonathan, B.A. (University of California at San Diego, 1992)  
Supplemental Services Assistant, Area Vocational Program
- LOBDELL, Deborah, A.A.S. (Pikes Peak Community College, 1986)  
Administrative Assistant II, Enrollment Services
- LONG, Stephanie, A.A.S. (Pueblo Community College, 1993)  
Data Professional, Strategy Management
- LOPEZ, Michael  
General Labor I, Facilities & Operations
- LUCERO, Cleo  
Material Handler I, Communications, Humanities & Technical Studies
- LUCKENBAUGH, Carolyn, B.S. (Regis University, 1991)  
Accountant III, Financial Services
- LUCKENBAUGH, James  
Technician IV, Facilities & Operations
- LYLE, Nanette, A.A.S. (Pikes Peak Community College, 1987)  
Administrative Assistant II, Facilities & Operations
- LYONS, Geraldine  
Accountant I, Financial Services/Cashiers – Accounts Receivable
- MADDEN, Jane, M.S.N. (Saint Louis University, 1981)  
Vocational Credentials: Faculty  
Professor of Nursing, Health, Environmental, Natural & Physical Sciences
- MADSON, Michael, M.S. (Mississippi State University, 2000)  
Vocational Credentials: Faculty  
Faculty of Geology, Health, Environmental, Natural & Physical Sciences
- MAESTAS, Anne M., B.A. (University of Colorado, 1972)  
Vocational Credentials: Faculty  
Faculty of Dental Assisting, Health, Environmental, Natural & Physical Sciences
- MAGNUSON, Joseph, A.A.S. (Pikes Peak Community College, 1983)  
Vocational Credentials: Faculty, Colorado Type C Certificate  
Faculty of Automotive Technology, Communications, Humanities, & Technical Studies
- MAHAN, Shawna, M.S., (University of Colorado, 1995)  
Assistant Professor of Mathematics, Mathematics & Technology
- MALLORY, Melissa  
Administrative Assistant III, Military Programs
- MALMQUIST, Carla, M.S. (University of Colorado, 1991)  
Dean of Business, Social & Behavioral Sciences
- MALONE, William, M.M. (New Zealand Conservatory of Music, 1980)  
Faculty of Music, Communications, Humanities, & Technical Studies
- MALUIA, Vaalele  
Police Officer I, Public Safety
- MANNERING, Scott, A.A.S. (Pikes Peak Community College, 1997)  
Vocational Credentials: Faculty  
Faculty of Welding, Communications, Humanities, & Technical Studies
- MARQUARDT, Amy  
Child Care Aid, Child Development Center
- MARSHALL, Rebecca, M.B.A. (Colorado Technical University, 2001)  
Data Professional, Strategy Management
- MARTIN, Paul, A.A.S. (Pikes Peak Community College, 2001)  
IT Technician II, Information Technology Support Services
- MARTINEZ, Angel, A.A.S. (Pikes Peak Community College, 2007)  
Child Care Aide, Child Development Center
- MARTINEZ, Nancy  
General Professional III, Facilities & Operations

- MARTINEZ, Nick  
Custodian I, Facilities & Operations
- MATTHEWS, Adam, B.S. (Ithaca College, 1998)  
Vocational Credentials: Faculty  
Faculty of Radio & Television, Communications, Humanities & Technical Studies
- MCADAMS, Rieko, M.A., (University of Colorado, 1997)  
Faculty of Japanese, Division of Languages
- MCALPINE, Kenneth  
Vocational Credentials: Faculty  
Faculty of Criminal Justice, Area Vocational Program
- MCCARTY, Deborah  
Program Assistant I, Institutional Advancement & Development Office
- MCCONE, Yaleni  
Custodian I, Facilities and Operations
- MCCULLOUGH, Michael, B.A. (Regis University, 2000)  
IT Asset Management & Software Compliance Coordinator, Information Technology Support Services
- MCCULLOUGH, Sherri, M.A. (Regis University, 2001)  
General Professional V, Enrollment Services
- MCDONNELL, Alicia  
Administrative Assistant II, Testing Center
- MCGOVERN, William  
IT Technician II, Information Technology Support Services
- MCKEAN, Ann, M.F.A. (Fort Hayes State University, 1999)  
Faculty of Art, Communications, Humanities & Technical Studies
- MCMULLEN, Robert W., Ph.D. (Utah State University, 1984)  
Professor of Biology, Health, Environmental, Natural & Physical Sciences
- MEDINA, Stanley  
Custodian I, Facilities & Operations
- MEHLHOSE, Greg, B.S. (University of Missouri, 1999)  
IT Professional II, Information Technology Support Services
- MEIKLEJOHN, Nancy, M.A. (University of Colorado, 2002)  
Vocational Credentials: Faculty  
Faculty of Computer Information Systems, Mathematics & Technology
- MEYER, Sharon, M.B.A. (University of Colorado, 1989)  
Vocational Credentials: Faculty  
Faculty of Business Management, Business, Social & Behavioral Sciences
- MICHAEL, Jane, Ph.D. (University of Denver, 2000)  
Faculty of Communication, Communication, Humanities & Technical Studies
- MIELKE, Patricia  
Accounting Technician III, Financial Services
- MILLER, Sandra, M.A. (University of Northern Colorado, 1971)  
Faculty of College Prep English, Division of Languages
- MILLER, Sylva, M.S. (Utah State University, 2001)  
Faculty of English, Division of Languages
- MILLIGAN, Steve, M.A. (University of Denver, 1976)  
Reference Librarian, Library
- MISKELL, Ronald  
Police Officer III, Public Safety
- MOLINA, Doris  
Administrative Assistant II, Area Vocational Program
- MONAGHAN, Joanne, A.A.S. (Pikes Peak Community College, 1990)  
Program Assistant I, Auxiliary Services
- MONTGOMERY, Anne, M.S. (University of Oklahoma, 1987)  
Faculty of Biology, Health, Environmental, Natural & Physical Sciences
- MORGAN, Lori E., B.S. (University of Colorado, 2001)  
Vocational Credentials: Faculty  
Emergency Medical Services, Clinical Coordinator, Health, Environmental, Natural & Physical Sciences
- MORRIS, Kenneth, M.P.A. (University of Colorado, 1989)  
Vocational Credentials: Faculty  
Faculty of Criminal Justice, Business, Social & Behavioral Sciences
- MOTTON, Sheila, A.A. (Pikes Peak Community College, 2005)  
Administrative Assistant II, Enrollment Services
- MULLIKEN, Taffy H., M.A.T. (Colorado College, 1992)  
Faculty of Art, Communications, Humanities, & Technical Studies
- MYERS, Cindy, A.A. (Pikes Peak Community College, 2004)  
Administrative Assistant III, Library
- NEALE-DOWNING, Cynthia, B.S. (Colorado Christian University, 1998)  
Vocational Credential: Faculty, Licensed Child Care Center  
Director of Child Care Services
- NIFONG, Mary, M.S. (East Carolina University, 1992)  
Vocational Credentials: Faculty  
Nursing Program Coordinator, Health, Environmental, Natural & Physical Sciences
- NIKOLAI, Gloria, M.A. (University of Colorado, 1992)  
Faculty of Sociology, Business, Social & Behavioral Sciences
- NUSEN, Michael, B.S. (University of Southern Colorado)  
Office of Accommodative Services & Instructional Support Coordinator /  
Computer Access Center Coordinator
- OLDS, Carole, M.L.S. (Emporia State University, 2004)  
Director of Library Services and Educational Effectiveness
- OHLE, Carolyn, M.A. (Webster University, 1990)  
Vocational Credentials: Faculty  
Faculty of Computer Science, Mathematics & Technology
- OLSEN, Jean, M.A.T. (Western New Mexico University, 1977)  
Faculty of College Prep Math, Mathematics & Technology
- OLSEN, Richard J., A.A.S. (Pikes Peak Community College, 1986)  
LTC Operations I, Facilities & Operations
- OLSON, Robert, B.F.A. (Kansas City Art Institute, 1978)  
Vocational Credentials: Faculty  
Faculty of Multimedia Graphic Design, Communications, Humanities, & Technical Studies
- OMDAHL, Deborah, B.S. (University of Southern Colorado, 1996)  
Administrative Assistant III, Office of Accommodative Service & Instructional Support
- ORNDORFF, John A., Jr.  
Police Officer II, Public Safety
- ORNDORFF, Laura  
Program Assistant I, Learning Assistance Services
- ORTH, Christian  
IT Professional IV, Information Technology Support Services
- ORTH, Jennifer, B. S. (Colorado State University, 2006)  
Administrative Assistant III, Career Planning and Advising
- OSWANDEL, David, B.A. (University of Hawaii, 1988)  
Laboratory Coordinator, Health, Environmental, Natural & Physical Sciences
- PADEWAY, Patricia  
General Professional I, Human Resource Services
- PAGE, Francine  
Vocational Credentials: Faculty  
Faculty of Medical Office Technology, Health, Environmental, Natural & Physical Sciences
- PAGEL, Teresa, M.A. (University of Colorado, 2000)  
Faculty of Humanities, Communications, Humanities & Technical Studies
- PAJO, Lourdes, M.Ed. (Southwest Texas State, 2003)  
Faculty of Mathematics, Mathematics & Technology
- PARADISO, Michael  
Faculty of Culinary Arts, Business, Social & Behavioral Sciences
- PARCHA, Michael, M.A. (Eastern Michigan University, 1990)  
Faculty of College Prep Mathematics, Mathematics & Technology
- PARENT, Cyrille, M.A. (University of Paris VII, 1995)  
Director, Information Technology Support Services
- PARKER, Carol A.A.S. (Pikes Peak Community College, 2002)  
Lab Coordinator I, Office of Accommodative Services & Instructional Support
- PARRISH, Renee, A.A.S. (Pikes Peak Community College, 2000)  
Program Assistant II, Information Technology Support Service
- PATTERSON, Charles  
Custodian I, Facilities & Operations
- PATTERSON, Donnette, M.A. (Hyles-Anderson, 1997)  
Vocational Credentials: Faculty  
Faculty of Deaf Prep., Division of Languages
- PAULEY, Stephanie, B.S. (University of Southern Colorado, 1997)  
Laboratory Coordinator II, Health, Environmental, Natural & Physical Sciences
- PHARRIS, Karey, B.S. (UTSA, 1994)  
Learning Services Coordinator/Math Specialist, Student Support Services
- PIERCE, Stephen  
Custodian I, Facilities & Operations
- PIERING, Mary, M.A.T. (Colorado State University, 1976)  
Faculty of English, Division of Languages
- PLUNKETT, Terrence, M.A. (University of Colorado, 1980)  
Director, Financial Services/Controller, Financial Services

- POTES, Brittney, B.A. (California State University, 2005)  
Administrative Assistant II, Division of Languages
- POTTS, David A., A.S. (Pikes Peak Community College, 1978)  
Vocational Credentials: Faculty, Colorado Type C Certificate  
Faculty of Automotive Technology, Area Vocational Program
- POWELL, Laura A., A.G.S. (Pikes Peak Community College, 1995)  
Program Assistant I, Human Resource Services
- PRESUHN, Jennifer R., B.A. (University of Wisconsin – Eau Claire, 1992)  
General Professional II, Enrollment Services
- PRITCHETT-HILLARD, Nichole  
Transfer/Transition Coordinator, TRIO Student Support Services
- PURTSCHER, Daniel, M.S. (University Marycrest College, 1985)  
Faculty of Reading, Division of Languages
- PUTNAM, Susan, B.A. (University of Colorado, 1973)  
Administrative Assistant II, Area Vocational Program
- QUESADA, Edmond D., M.A. (University of Colorado, 1986)  
Director of Student Support Services
- RAY, Edwin, Ph.D. (University of Washington, 1974)  
Vice President for Educational Services
- RAYBORN, Richard, M.S. (Columbia Pacific University, 1992)  
Military Academic Advisor, Military Programs
- RAYMOND, Joseph P., A.A.S. (Colorado Technical College, 1976)  
Police Officer I, Public Safety
- REDFERN, Mary, A.S. (Pikes Peak Community College, 1992)  
Administrative Assistant III, Enrollment Services
- REED, Cassandra  
Early Childhood Educator I, Child Development Center
- REYNOLDS, Richard, B.S. (City College of New York, 1974)  
Vocational Credentials: Faculty  
Faculty of Computer Information Systems, Mathematics & Technology
- RIDDLE, Ken, M.S. (Colorado Technical University, 2000)  
Vocational Credentials: Faculty  
Faculty of Computer Science, Mathematics & Technology
- RILEY II, Leonard, M.P.A. (University of Colorado, 1991)  
Faculty of Political Science, Business, Social & Behavioral Sciences
- RIPPE, Kama,  
Early Childhood Educator I, Child Development Center
- RIZZI, Paula, B.S. (California State University, 1993)  
General Professional II, Enrollment Services
- ROBERTS, Gary  
Sales Assistant I, Bookstore
- ROBERTSON, Donald  
Structural Trades II, Facilities and Operations
- ROBINSON, Constance, B.S.B.A. (Regis University, 2004)  
Office Manager I, Business, Social & Behavioral Sciences
- ROBINSON, Leonard  
Vocational Credentials: Faculty  
Faculty of Auto Collision Repair, Communications, Humanities & Technical Studies
- ROCCO, Jim, A.A.S. (Pikes Peak Community College, 1986)  
Police Officer I, Public Safety
- RODIE, Karla J., B.S.B.A. (Colorado State University, 1977)  
Vocational Credentials: Faculty/Teacher-Coordinator, Colorado Type A Certificate  
Faculty of Computer Information Systems, Mathematics & Technology
- ROLLINS, Diane  
Program Assistant II, Office of the Vice President for Educational Services
- ROOT, Sandra  
Administrative Assistant II, Enrollment Services
- ROTH, Douglas, M.S. (University of Texas, 1996)  
Mathematics Faculty, Mathematics & Technology
- ROUTH, Lisa, Psy.D. (California Coast University, 2006)  
Faculty of Psychology, Business, Social & Behavioral Sciences
- RUSSELL, Judith, B.A. (University of Northern Colorado, 1986)  
Coordinator of Child Development Center – Centennial Campus
- RUSSO, Marilyn, M.S. (College of St. Francis, 1986)  
Vocational Credentials: Faculty  
Faculty of Nursing, Health, Environmental, Natural & Physical Sciences
- RUYBALID, Andrew  
Custodian I, Facilities & Operations
- SANCHEZ, George, B.S. (University of Southern Colorado, 2000)  
Executive Director of Marketing & Communications
- SANDOVAL, Virginia  
Administrative Assistant II, Facilities & Operations
- SCHMIDT, Nick  
Sales Manager II, Bookstore
- SCHMITT, Deborah, Ph.D. (Indiana University, 1997)  
Dean of Communications, Humanities, & Technical Studies
- SCHNEIDER, Chris, A.A.S. (Pikes Peak Community College, 1994)  
Program Assistant I, Office of the Vice President for Educational Services
- SCHOOLCRAFT, Deidre, M.A. (University of Northern Colorado, 1992)  
Faculty of English, Division of Languages
- SENGENBERGER, Jennifer M., B.A. (Colorado State University, 1982)  
Director, Career Planning & Advising
- SHAFFER, Patricia, B.S. (Regis University, 1994)  
Vocational Credentials: Faculty  
Faculty of Economics, Business, Social & Behavioral Sciences
- SHAW, Daniel, Ph. D. (Northwestern University, 1987)  
Faculty of Philosophy, Communications, Humanities & Technical Studies
- SHEARN, Jenna, B.A. (Cornell College, 1989)  
Vocational Credentials: Faculty  
Faculty of Multimedia Graphic Design, Communications, Humanities, & Technical Studies
- SHIELDS, Ron, M.S. (University of Northern Colorado, 1997)  
Program Coordinator, Military Programs
- SHUMAN, Fred, M. Div. (Illif School of Theology, 1992)  
Faculty of Philosophy, Communications, Humanities & Technical Studies
- SIMPSON, Michael A., M.S. (University of Colorado, 1988)  
Faculty of Computer Science, Mathematics & Technology
- SMITH, Claudia  
Arts Professional I, Publications & Printing
- SMITH, Joann  
Administrative Assistant III, Testing
- SNYDER, Bernard  
Custodian I, Facilities and Operations
- SOUZA, Dawn, B.A. (University of Northern Iowa, 1983)  
Director, Campus Life
- SPANKS, Jerry, A. A.S. (Pikes Peak Community College, 2001)  
Police Officer I, Public Safety
- SPENCER, Carrie, M.A. (University of Colorado, 2001)  
Faculty of History, Communications, Humanities & Technical Studies
- SPRAGUE, Myra, M.A. (University of Colorado, 2002)  
Coordinator of the Child Care Center - Rampart Range Campus
- STAFFORD, Jenny, M.P.A. (University of Colorado, 2003)  
Development Officer, Foundation & Development, Presidents Office
- STANSBERY, Michael, M.Div. (Andovar Neceston Theological School, 1977)  
Professor of Theatre, Communications, Humanities & Technical Studies
- STEEN, Gordon  
Electrical Trades II, Facilities & Operations
- STEPHENSON, Eric, M.A. (University of Colorado, 1996)  
Faculty of English, Division of Languages
- STEPLETON, Jon, M.B.A. (University of Dayton, 1983)  
Executive Director, Foundation Resource & Community Development,
- STOCKWELL, Patricia  
Library Technician III, Library
- STRATTON, Pamela, A.A.S. (Pueblo Community College, 1994)  
Administrative Assistant II, Enrollment Services
- STREBEL, Cheri  
Accounting Tech III, Financial Services
- STURDEVANT, Katherine, M.A. (San Francisco State University, 1981)  
Professor of History, Communications, Humanities, & Technical Studies
- SUTTER, Jennifer, M.A. (University of Wyoming, 1998)  
Faculty of English, Division of Languages
- SUE, Nadia, A.A.S. (Pikes Peak Community College, 1990)  
Administrative Assistant II, Mathematics & Technology
- SWANSON, Gina, M.A. (University of Wyoming, 1998)  
Faculty of Sociology, Business, Social & Behavioral Sciences
- SWARTZ, Nancy, B.S. Ed. (Taylor University, 1967)  
Faculty of College Prep Math, Mathematics & Technology

TABOR, Mary Ann, A.A.S. (Pikes Peak Community College, 1985)  
Office Manager I, Division of Languages

TAGGART, Jacqueline, Ph.D. (Union Institute and University, 2000)  
Vocational Credentials: Faculty  
Faculty of Business, Business, Social & Behavioral Sciences

TAMBLYN, Jeffrey D., A.G.S. (Pikes Peak Community College, 1995)  
Sales Manager III, Bookstore

TANAKA, Kathe  
Administrative Assistant II, Testing Center

TASTE, Diane, A.A. (Pikes Peak Community College, 1997)  
Program Coordinator SCEOC, Student Success Services

TAYLOR, Alice W.  
Custodian II, Facilities & Operations

TAYLOR, Kina, A.A. (Pikes Peak Community College, 1999)  
Administrative Assistant III, Enrollment Services

TERRELL, Kendra, A. A.S. (Pikes Peak Community College, 1995)  
Early Childhood Educator II, Child Development Center

TESSMER, George, M.S. (Iowa State University, 1975)  
Faculty of Biochemistry, Health, Environmental, Natural & Physical Sciences

THEARD, Cynthia, A.G.S. (Pikes Peak Community College, 2005)  
Administrative Assistant III, Enrollment Services

THIRION, Rodney, M.B.A. (Business Administration, 2001)  
Faculty of Business, Business, Social & Behavioral Sciences

THORSON, Kathleen M., B.A. (Colorado State University, 1992)  
Administrative Assistant II, Communications, Humanities & Technical Studies

THRELFALL, Albert L., M.S. (University of Alabama at Birmingham, 1991)  
Professor of Biology, Health, Environmental, Natural & Physical Sciences

TIERNEY, Geri, B.S.N. (Regis University, 1997)  
Vocational Credentials: Faculty  
Coordinator of Nursing Simulation Lab, Health, Environmental, Natural & Physical Science

TOLLIVER, Gary  
Technician III, Facilities & Operations

TOMRDLE, Jacqueline, B.A. (University of Colorado, 2002)  
Television Station Manager, Distance Education

TONER, Cici  
General Professional II, Enrollment Services

TOTAKHAIL, Soraiya E., B.A. (University of Kubul, Afghanistan, 1977)  
General Professional II, Library

TOTH, Jessica  
Early Childhood Educator I, Child Development Center

TOTH, Vicki  
Early Childhood Educator I, Child Development Center

TOURJEE, Charlie, A.A.S. (Pikes Peak Community College, 2004)  
Dining Services III, Child Development Center

TRUMBULL, Michael, Ph.D. (The Union Institute Graduate School, 1993)  
Faculty of Psychology, Business, Social & Behavioral Sciences

TRUSSELL, Richard, M.Div. (Pacific Lutheran Theological Seminary, 1982)  
Faculty of Philosophy, Communications, Humanities, & Technical Studies

VIGIL, Alfred  
Materials Handler I, Facilities & Operations

VIGIL, Gary  
Grounds & Nursery III, Facilities & Operations

VIGIL, Glenda J.  
Administrative Assistant II, Business, Social & Behavioral Sciences

VOLLEBERG, Edward  
Structural Trades III, Facilities & Operations

WADMAN, Nathan, B.S. (Colorado State University, 1996)  
Vocational Credentials: Faculty  
Faculty of Computer Networking, Mathematics & Technology

WAGNER, Karen, Ph.D. (University of Toronto, 1995)  
Associate Professor of History, Communications, Humanities, & Technical Studies

WALTER, Wesly, A.G.S. (Columbia College, 1990)  
Police Officer III, Public Safety

WALTERS, David, A.A.S. (Pikes Peak Community College, 1996)  
Vocational Credentials: Faculty  
Faculty of Computer Networking, Mathematics & Technology

WALTH, Stephen, B.A. (University of Colorado, 1972)  
Vocational Credentials: Faculty  
Faculty of Computer Information Systems, Mathematics & Technology

WATSON, Basil, A.A.S. (Pikes Peak Community College, 1983)  
Custodian III, Facilities & Operations

WATSON, Michael, A.A.S. (Pikes Peak Community College, 2000)  
IT Technician II, Information Technology Support Services

WEIXELMAN, Susan, M.A. (University of Colorado, 1975)  
Vocational Credential: Faculty  
Faculty of Early Childhood Education, Area Vocational Program

WELLESLEY, Fay  
Accounting Technician III, Financial Services

WERMERS, Mary Ann, R.N., M.S.N. (St. Louis University, 1970)  
Dean of Health, Environmental, Natural & Physical Sciences

WHITEMAN, Sylvia, A.A.S. (Pikes Peak Community College, 1993)  
Office Manager I, Mathematics & Technology

WILEY, Gwen, M.A. (Pennsylvania State University, 1979)  
Associate Dean, Mathematics & Technology

WILKINSON, Dixie  
Data Specialist, Human Resource Services

WILLIS, Debra, A.A. (Blair College, 1999)  
Office Manager I, Campus Life

WILSON, Janet, A.A.S. (Pikes Peak Community College, 1991)  
Vocational Credentials: Faculty  
Faculty of Computer Aided Drafting, Communications, Humanities, & Technical Studies

WITHEROW, Julie F., M.A. (Ball State University, 1978)  
Director of Distance Education

WITT-AGNEW, Sheila  
Administrative Assistant III, Distance Education

WOLFE, David, M.A. (University of Tennessee, 1975)  
Faculty of College Prep Math, Mathematics & Technology

WULF, Gina, A.A. (Pikes Peak Community College, 1999)  
Child Care Aide, Child Development Center

YOUNG, J. Michael, B.S.B.A. (University of Southern Colorado, 1992)  
Interim Vice President for Administrative Services

YOUNG, Robin M., B.S.B.A. (University of Southern Colorado, 1993)  
Campus Director

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### Pikes Peak Community College Catalog Team

Curriculum	Chris Schneider
Publication Coordination	Mark Day & George Sanchez
Layout/Graphic Design	Claudia A. Smith
Cover Design/Illustration	Cover by Bubba Art

# Campus Directory

	Centennial Campus	Downtown Studio Campus	Rampart Range Campus
	Room • Phone:	Room • Phone:	Room • Phone:
Administrative Services, Vice President	A-324 • 502-2100		S-202 • 502-2100
Admissions	A-107 • 502-3000	DO-S100 • 502-3000	S-102 • 502-3000
Advising (see Career Planning & Advising Center)			
Area Vocational Program (AVP)	A-220 • 502-3111		
Art Gallery		DO-S107 • 502-4040	
Bookstore	B-205 • 502-2665	DO-S104 • 502-2663	N-101 • 502-2664
Business, Social & Behavioral Sciences Division	F-300 • 502-3300		E-213 • 502-3300
Campus Activities	A-210 • 502-2091	DO-N106b • 502-2091	S-207 • 502-2091
Campus Center Meeting Rooms	A-210 • 502-2089		
Campus Director	A-324 • 502-2333	• 502-2333	• 502-2333
Campus Life Information Desk	A-210 • 502-2522	DO-N106b • 502-2538	S-207 • 502-2577
Campus Life Main	A-210 • 502-2500		
Career Planning & Advising Center	A-119 • 502-3232	DO-S102 • 502-3232	S-201 • 502-3232
Cashier	A-101 • 502-2444	DO-S100a • 502-2444	S-102 • 502-2444
Catering	262-4485 • e-mail <a href="mailto:catering@uccs.edu">catering@uccs.edu</a>		
Center for Excellence in Teaching & Learning (CETL)	A-222 • 502-3072		
Child Development Centers	CDC • 502-2323		CDC • 502-2424
Communications, Humanities & Technical Studies Division	F-300 • 502-3200	DO-S210 • 502-3200	W-119 • 502-3200
Computer Access Center (OASIS)	A-309 • 502-3030		
Computer Labs	A-300 • 502-2442	DO-N106a • 502-2443	E-203 • 502-2408
Copy Center	B-234 • 502-2111		
Credit for Prior Learning	A-106 • 502-2052		
Disability Services, Student (OASIS)	A-115 • 502-3333	DO-S126 • 502-333	S-101 • 502-3333
Distance Education	A-209 • 502-3555		
Economic & Workforce Development		DO-S206 • 502-3452	
Educational Services, Vice President	A-324 • 502-3100		S-202 • 502-4100
English Language Institute	A-229 • 502-3535		
Enrollment Services (Velocity Center)	A-107 • 502-3000	DO-S100 • 502-3000	S-102 • 502-3000
Facilities Maintenance & Operations	B-229 • 502-2800	DO-N103 • 502-2800	N-107 • 502-2800
Financial Aid	A-106 • 502-3000	DO-S100 • 502-3000	S-102 • 502-3000
Financial Services	A-101 • 502-2300		
First Aid/Medical Assistance	A-100 • 502-2911	DO-S101 • 502-2911	N-104 • 502-2911
Fitness Center/Gymnasium	A-262 • 502-2555		
Food Services	A-211 • 502-2038		W-103 • 502-2042
Foundation, Resource & Community Development	A-324 • 502-2016		
Health, Environmental, Natural & Physical Sciences Division	F-300 • 502-3400		W-209 • 502-3400
High School Articulation	A-220 • 502-3111		
Human Resource Services	C-201 • 502-2600		



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	<b>Centennial Campus</b>	<b>Downtown Studio Campus</b>	<b>Rampart Range Campus</b>
	<b>Room • Phone:</b>	<b>Room • Phone:</b>	<b>Room • Phone:</b>
Information Technology Support Services (ITSS) Computer Labs Help Desk	A-111 • 502-2438 A-300 • 502-2443 A-111 • 502-4800	DO-N105 • 502-2560 DO-N106a • 502-2408	E-206 • 502-2449 E-203 • 502-2408
Interpreting Services (Sign Language)	A-115 • 502-3026		
KEPC Radio	A-153 • 502-3166		
Languages Division	F-200 • 502-3500		W-119 • 502-3171
Learning Assistance Center (Tutoring)	A-212 • 502-3444	DO-S126 • 502-3444	S-101 • 502-3444
Library	A-201 • 502-2400		N-201 • 502-2440
Mailroom	B-229 • 502-2230		N-105 • 502-2240
Marketing & Communications	A-324 • 502-2020		
Math Lab	A-316 • 502-3250	DO-S212 • 502-3270	N-204 • 502-3260
Mathematics & Technology Division	F-200 • 502-3600		E-213 • 502-3600
The Meadow (Pantry)	A-211 • 502-4555		
Military Programs			S-202 • 502-4100
Newsletter–PPCC E-News	A-324 • 502-2019		
Office of Accommodative Services & Instructional Support (OASIS)	A-115 • 502-3333	DO-S126 • 502-3333	S-101 • 502-3333
Ombudsman	A-324 • 502-2012		
Pikes Peak News	A-257 • 502-3540		
Pikes Peak Regional Law Enforcement Academy	F-300 • 502-3191		
Post Secondary Enrollment Options (PSEO)	A-220 • 502-3111		
President's Office	A-324 • 502-2200		S-202 • 502-4100
Procurement (Purchasing)	B-309 • 502-2008		
Public Safety Administration	A-100 • 502-2900	DO-S101 • 502-2900	N-106 • 502-2900
Public Safety Emergency Line	A-100 • 502-2911	DO-S101 • 502-2911	N-106 • 502-2911
Publications & Printing	B-234 • 502-2111		
Records	A-106 • 502-3000	DO-S100 • 502-3000	S-102 • 502-3000
Recreation & Sports	A-262 • 502-2555		
Skills USA	A-220 • 502-3111		
Southern Colorado Educational Opportunity Center (SCEOC)	A-115 • 502-3028		
Strategy Management	A-324 • 502-2320		
Student Crisis Counseling	C-205 • 502-4782		S-207 • 502-4782
Student Government	A-204 • 502-4141	DO-N106b • 502-2103	S-207 • 502-2098
Student Support Services/TRIO	A-117 • 502-3222		
Television Station-ITFS (WLX-245)	A-209 • 502-3555		
Testing Center	A-117 • 502-3370	DO-S102 • 502-3390	S-101 • 502-3380
Transfer Agreements & Programs		DO-S122 • 502-3237	
Veteran's Affairs	A-105 • 502-3000		
Veteran's Upward Bound	A-116 • 502-4545		
Videoconferencing Services	A-111 • 502-2438		
Women's Reentry Program	A-302 • 502-4044		
Writing Center	A-312 • 502-3510	DO-S212 • 502-3530	N-202 • 502-3520

# INDEX

## A

Academic Fresh Start.....	20
Academic Honesty.....	25
Academic Honors.....	21
Academic Probation/Suspension/Dismissal.....	20
Academic Standards.....	18
Accounting.....	80,117
Accreditation.....	5
Activities, Campus Life.....	37
Administrative Assistant.....	86
Advancing Academic Achievement.....	42,118
Adventure Guide.....	105,118
Agriculture Crops & Soils.....	118
AIDS Policy.....	27
Alternative Delivery Methods/Distance Learning Options.....	44
American Culture Studies.....	54
American Sign Language.....	118
Anthropology.....	54,119
Application for Certificate or Degree.....	21
Arabic.....	120
Architectural Drafting.....	81
Architecture.....	120
Architecture & Construction Technology.....	81
Area Vocational Program.....	41
Art.....	55,121
Assessment for Student Success.....	21
Associate of Applied Science (AAS).....	78
Associate of Arts (AA).....	50
Associate of General Studies Degree (AGS).....	77
Associate of Science Degree (AS).....	72
Astronomy.....	126
Athletics.....	37
Automotive Collision Technology.....	82,126
Automotive Service Technology.....	128
Automotive Technology/Diesel.....	83,129

## B

Basic Skills Assessment Matrix.....	13
Biological Sciences.....	73
Biology.....	130
Books.....	15
Business.....	85,131
Business & Technology Education.....	132
Business Transfer.....	56

## C

Campus Crime & Security Report.....	28
Campus Center.....	37
Campus Directory.....	211
Campus Life.....	37
Career & Technical Education Programs.....	8
Career Planning & Advising Center.....	32
CCC Online (Sections C11, C21).....	44
Certificates of Achievement.....	78
Change of Major/Program.....	18

Chemistry.....	73,132
Child Development Centers.....	32
Cisco Certified Network Associate.....	88
Class Schedule.....	12
Classroom Attendance Procedure.....	26
Clinical Office Assistant.....	102
College Administrative Staff.....	203
College Calendar.....	10
College Facilities, Use of.....	8
College Opportunity Fund (COF).....	3,6,14
College Preparatory Programs.....	42
Communication.....	56,134
Computer Aided Drafting (CAD).....	89,133
Computer Information Systems.....	90,135
Computer Networking Technology.....	90,137
Computer Science.....	74,138
Computer Web Based.....	139
Conduct in College Buildings.....	26
Copy Center.....	32
Course Descriptions.....	116
Course Numbering System.....	116
Credit by Examination.....	18
Credit for Prior Learning (CPL).....	45
Criminal Justice.....	91,139
Crisis Counseling.....	32
Culinary Arts.....	93,142
Customer Service.....	85

## D

Dance.....	57,144
Deaf Prep.....	43,146
Degree & Certificate Criteria.....	41
Degree Eligibility.....	41
Dental Assisting.....	95,147
Department of Public Safety.....	33
Developmental Courses.....	116
Diesel Power Mechanics.....	148
Disability Services, Student (OASIS).....	33
Downtown Studio Gallery.....	39
Drugs & Alcohol.....	26

## E

Early Childhood Education.....	58,96,149
Easy Steps to Registration.....	3
Economic & Workforce Development.....	39
Economics.....	150
Education.....	151
Educational Services.....	203
Electronics Technology.....	97,152
Elementary Education Teacher Preparation.....	58
Emergencies & Crime Reporting.....	28
Emergency Management & Planning.....	153
Emergency Medical Services.....	97,153
Employment Opportunities.....	16
Engineering Graphics Technology.....	155
English.....	59,155
English as a Second Language.....	43,156
English Preparatory Program.....	42
Entrepreneurial.....	85

Environmental Science.....	157
Environmental Studies.....	60
Ethnic Studies.....	157
Executive Assistant.....	86

## F

Facilities Maintenance Technology.....	98,157
Faculty & Staff.....	204
Farrier Science.....	99,157
Finance.....	158
Financial Aid.....	15
Fire Science Technology.....	99,158
Firearms on Campus.....	27
Fitness Center.....	37
Foreign Languages.....	61
French.....	160

## G

Geographic Information Systems.....	100,160
Geography.....	61,161
Geology.....	74,161
German.....	161
Getting Started.....	12
Grade Changes.....	20
Grading Options.....	19
Grading System.....	18
Graduation Honors.....	21
Grants.....	16

## H

Health & Wellness.....	162
Health Information Technology.....	100,162
Health Professional.....	163
Heating, Ventilation, & Air Conditioning.....	164
High School Articulation Agreements.....	42
High School Programs.....	41
History.....	62,164
History of the College.....	8
Homeland Security/Emergency Management.....	100
HOPE Tax Credit.....	16,30
Hospitality Management.....	166
House Bill 1023.....	15
Humanities.....	62,166

## I

ID Cards.....	37
Independent Study Courses.....	44,116
Information Technology Support Services.....	33
Integrated Circuit Fabrication.....	167
Interactive Television (Section 1TV).....	44
Interior Design.....	101,167
International & Multicultural Education.....	39
International Business.....	86
International Students.....	12
Interpreting Services.....	33
Interpreter Preparation.....	169
Italian.....	170

**J**

Japanese .....	170
Journalism .....	63,170

**K**

KEPC Radio .....	39
------------------	----

**L**

Law Enforcement Academy .....	109
Learning Assistance Center/Tutoring.....	34
Library.....	34
Literature.....	64,171
Loans .....	16
Locations & Facilities .....	9

**M**

Machining Technology .....	172
Management.....	86,173
Manufacturing Technology.....	174
Marketing .....	86,174
Math Labs .....	35
Mathematics.....	75,174
Mathematics Preparatory Program .....	42
Maximum Course Load.....	18
Medical Assistant.....	102
Medical Office Technology.....	102,177
Medical Receptionist .....	103
Medical Transcriptionist .....	103
Men's Multicultural Retention Program .....	35
Meteorology .....	178
Military Programs.....	45
Mission Statement .....	8
Multimedia Graphic Design .....	103,178
Music.....	65,180

**N**

Natural Resource Management .....	78
Natural Resource Technology .....	105,182
New Students .....	12
Nondiscrimination Statement .....	5
Nursing.....	106,183
Nursing Assistant.....	107,184
Nursing: Track One - Registered Nurse .....	106
Nursing: Track Two - LPN Advanced Placement .....	106

**O**

OASIS .....	32
Off Campus Courses .....	116
Officers of the College.....	203
Ombudsman .....	34
Open-Entry/Open-Exit Courses.....	44
Orientation Program for New Students.....	35

**P**

Paralegal/Legal Assistant .....	107,185
Para-Professional Education.....	116
Parking & Traffic Regulations .....	27
Pharmacy Technician.....	108,185
Philosophy .....	65,187
Phlebotomy.....	103
Photography .....	55
Physical Education .....	188
Physical Education & Recreation.....	190
Physics .....	75,190
Pikes Peak News .....	35
Pikes Peak Regional Law Enforcement Academy .....	109
Placement Testing.....	12
Political Science .....	66,191
Post-Secondary Enrollment Options (PSEO).....	42
PPCC Hybrid Classes .....	44
PPCC Online .....	44
Pre-Allied Health.....	76
Pre-Engineering .....	114
Pre-Med Professions .....	76
President's Staff .....	203
Program Directory .....	48
Psychology .....	67,191
Public Security Management .....	192
Purpose & Goals .....	42

**R**

Radio & Television .....	109,192
Radiological Technology.....	194
Reading Preparatory Program .....	43,194
Readmit Students.....	12
Real Estate .....	88,194
Records.....	35
Recreation/Sports Clubs.....	37
Reference & Research Service.....	34
Refunds/Adjustments.....	15
Registration .....	14
Repeated Courses.....	20
Report of Criminal Offenses.....	28
Required Disclosures .....	8
Residency Classification Appeals.....	15
Restricted Attendance.....	26
Rioting Offenses.....	28
Russian.....	194

**S**

Scholarships .....	16
Science .....	195
Secondary Education Teacher Preparation.....	114
Selected Topics .....	116
Services for Students.....	32
Services for the Community .....	39
Sex Offender Registration .....	28
Sexual Harassment .....	26
Sign Language Interpreter Preparation.....	111
Smoking in College Buildings .....	27
Social Services Technician .....	111,195

Social Work Transfer .....	68
Sociology .....	68,196
Southern Colorado Educational Opportunity Center (SCEOC).....	35
Southwest Studies .....	69
Space Science .....	197
Spanish.....	196
Standards of Conduct.....	23
State-Guaranteed Curriculum .....	116
Student Activity Fees.....	14
Student Clubs & Organizations.....	37
Student Complaints/Grievances .....	25
Student Conduct .....	23
Student Disciplinary Procedure.....	23
Student Government .....	37
Supervision.....	86

**T**

Technical .....	197
Technical Writing & Communication .....	70
Testing Center .....	36
Theatre.....	71,197
Transfer Programs .....	8
Transfer Students .....	12
Transfer to PPCC.....	18
TRIO-Student Support Services .....	36
Tuition.....	14
Tuition & Fees.....	14

**U**

ULifeline .....	35
-----------------	----

**V**

Veterans Affairs Office.....	36
Video Conference Classes .....	44
Vision Statement .....	8
Visitation Program (Four-year Colleges & Universities).....	36

**W**

Water & Wastewater Management.....	112,200
Water Quality Management.....	200
Weekend College.....	44
Welding.....	113,201
Work Experience Courses.....	116
Writing Centers .....	36

**Z**

Zookeeping.....	114,202
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**COLLEGE OPPORTUNITY FUND**

The College Opportunity Fund (COF) provides a stipend to eligible undergraduate students. The stipend pays a portion of your total in-state tuition. You must apply via the internet at [www.CollegeinColorado.org](http://www.CollegeinColorado.org) in order to receive this stipend.

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

**COMPLETE FOR COLORADO RESIDENCY CLASSIFICATION**

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

CURRENT AGE

**If you are under 23:**  
 **YOUR PARENT or**  
 **LEGAL GUARDIAN**

**and**

**YOU**

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

mo  day  yr to  mo  day  yr

mo  day  yr to  mo  day  yr

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

mo  yr to  mo  yr

mo  yr to  mo  yr

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

yr and  yr

yr and  yr

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

Employer \_\_\_\_\_ State  mo  yr to  mo  yr

Employer \_\_\_\_\_ State  mo  yr to  mo  yr

Employer \_\_\_\_\_ State  mo  yr to  mo  yr

Employer \_\_\_\_\_ State  mo  yr to  mo  yr

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

mo  yr New  # \_\_\_\_\_  
Renewal

mo  yr New  # \_\_\_\_\_  
Renewal

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

mo  yr and  mo  yr

mo  yr and  mo  yr

Date of Colorado Voter Registration.....

mo  yr

mo  yr

If you are NOT a U.S. Citizen, please attach a photocopy of your parent's/legal guardian's Visa, I-551 (Resident Alien Card) (both sides) or I-94 (Arrival-Departure Record).

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

mo  yr

Response to this question is voluntary, will not affect the admission process, and is used only to determine residency status.

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

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 tuition reclassification 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**

COLORADO COMMUNITY  
COLLEGE SYSTEM

