ARAPAHOE
COMMUNITY COLLEGE

CATALOG 2006-2007

ARAPAHOE
COMMUNITY COLLEGE

Vision Statement

To be an innovative, learning-centered community college recognized as a vital link in the economic vitality of the community and as a leader in education.

Mission Statement

To provide an accessible, responsive learning environment that facilitates the achievement of educational, professional and personal goals by our students and other members of our communities in an atmosphere that embraces academic excellence, diversity and innovation.

Statement of Values

Learning

We value upholding the highest academic standards and supporting the personal growth of each individual—ideals that nurture lifelong learning and an entrepreneurial spirit.

Integrity

We value the free exchange of ideas in an environment that embraces honesty and personal responsibility, as well as intellectual and cultural diversity.

Collegiality

We value fostering relationships with our students, our communities and our colleagues in an atmosphere of mutual respect, open communication and trust.
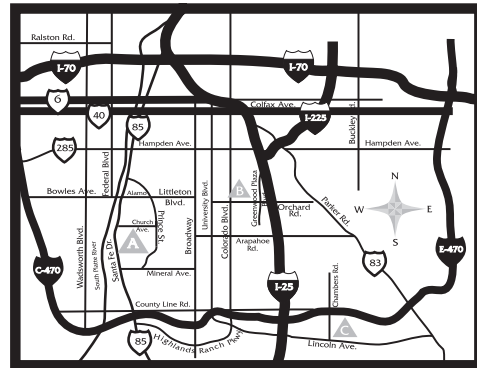
TELEPHONE DIRECTORY

Main College Number. 303-797-4ACC (4222)
DTC Campus 303-734-3701
Admissions Center
(Information Central) 303-797-4ACC (4222)
Admissions and Records. 303-797-5621
                                              Fax 303-797-5970
Announcement Line 303-797-5700 x9
Advising/Counseling Center. 303-797-5664
Art & Design Center 303-797-5958
Arts, Humanities & Social
Sciences Division 303-797-5855
Assessment 303-797-5993
Arapahoe/Douglas Career
& Technical School. 303-797-5080
Bookstore 303-797-5676
Business & Professional Services Division . . 303-797-5717
Campus Police Dept.. 303-797-5800
Career Center 303-797-5805
Cashier's Office. 303-797-5638
Chief Academic Officer 303-797-5702
Chief Operating Officer 303-797-5704
Child Development Center 303-797-5678
Community Education 303-797-5722
Disability Services . . . . v/tty 303-797-5937
Employment and Human Resources. 303-797-5720
Events Line 303-797-5750
Fitness Center 303-797-5850
Financial Aid. 303-797-5661
Foundation 303-734-3711
GED/pre-GED. 303-797-5722
Health, Math, Science &
Engineering Division 303-797-5911
Hope/Lifetime Learning Tax
Credit Hotline 303-797-5637
Information Central. 303-797-4ACC (4222)
Instructional Testing Center 303-797-5993
Library. 303-797-5090
President 303-797-5701
Student Affairs 303-797-5668
Switchboard 303-797-4ACC (4222)
TTY Users Relay Colorado 1-800-659-2656
Tutorial Services . . . . 303-797-5937 v/tty
University Center at Chaparral
(Parker) 303-734-4UCC (4822)
Vice President 303-797-5703
Vice President for Instruction 303-797-5702
Veterans' Programs 303-797-5662

ACC thanks Craig Ferguson–ACC Media Department and Della Shorman–ACC Web Manager for the use of their photographs in this Catalog.
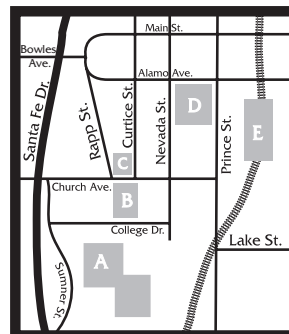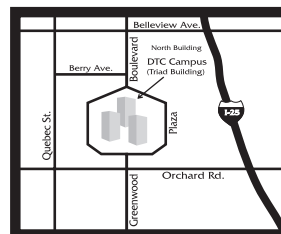
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CAMPUS LOCATIONS

A Main Campus, Annex, North Building, Church Street Building and Art & Design Center

B Arapahoe Community College DTC Campus

C University Center at Chaparral (Parker)

A ACC Main Campus & Annex

B North Building

C Church Street Building

D Art & Design Center

E Light Rail Station

Arapahoe Community College DTC Campus
5660 Greenwood Plaza Blvd.
Triad North Building, Suite 111
303-734-3701
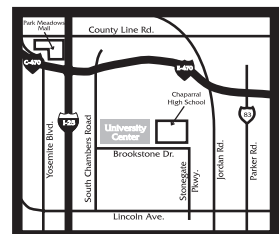
University Center at Chaparral (Parker)
15653 Brookstone Dr., Parker, CO
3 miles east of I-25
303-734-4822

About Arapahoe Community College

Arapahoe Community College, metro-Denver's oldest community college, began in 1964 when a group of Littleton residents began exploring the need for a local junior college. They presented their research to the local school districts. After much effort and dedication by community leaders, business people, school officials and citizens, voters cast their ballots in 1965 to establish the first two-year college in the greater Denver area. The following September, Arapahoe Junior College opened its doors to 550 students.

In 1970, residents voted to have the College join the Colorado Community College and Occupational Education System. The local junior college district was dissolved and Arapahoe Junior College was given the name we know it by today—Arapahoe Community College (ACC).

ACC's 51-acre main campus is located in Littleton, adjacent to the downtown area. From the college, you can enjoy a panoramic view of the Colorado Rockies. Downtown Denver lies just 10 miles due north.

ACC currently has over 7200 students and 130 degree and certificate programs. The majority of classes are held in the Main building completed in 1974. A large Annex added in 1977 houses additional classrooms, laboratories, the Colorado Gallery for the Arts, the automotive technology area and physical education facilities including a gymnasium, swimming pool and Fitness Center.

The West Alamo Center in downtown Littleton was acquired by the College in 1990 and renamed the Art and Design Center. Located within two blocks of the Main building, this unique structure houses ACC's art, fine art, design and some technology programs, as well as the Arapahoe/Douglas Career and Technical School.

ACC expanded into Douglas County in 2000 with the opening of University Center at Chaparral in Parker.

In 2001, ACC completed a $13 million renovation of the main campus building with the Weber Center for Learning Resources (library) as the architectural centerpiece. Included in the renovation were classrooms with the fiber optic technological capability for connecting to global educational resources.

A MESSAGE FROM THE PRESIDENT

Congratulations! You chose wisely when you chose ACC to continue your education. Whether you take advantage of our Great Books program to enhance your knowledge of the humanities, enroll in computer courses to advance your business skills, build a house in our carpentry program, or study photography in France, ACC has everything needed to provide real learning for real life.

ACC has three campuses, high-tech learning formats and over 130 degree and certificate opportunities offering vast possibilities for a successful future. I hope you'll also take advantage of our many student services. Advisors will help to ensure that you meet your educational goals. Experts in financial aid, career testing, student activities and more also can contribute to making your ACC experience exceed everything you planned for.

On behalf of the ACC community, welcome! We wish you complete success. I hope you continue to choose wisely by taking advantage of everything ACC has to offer you. Real learning for real life–the key to success in the real world!

Sincerely,
Dr. Berton L. Glandon
President
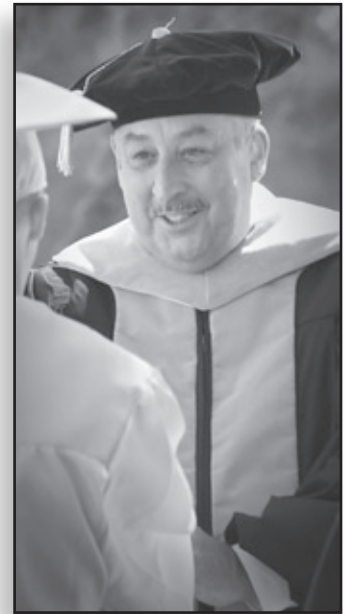
Our door is open

Arapahoe Community College is an open-door admissions institution. If you have a high school diploma, General Education Development (GED) certificate, or are not in high school and 16 years of age or older, you may be admitted. Please remember that admission does not guarantee enrollment in any specific programs and courses. You may be required to meet prerequisites designed to help you successfully complete a course of study.

Admission may be denied in accordance with the State Board for Community Colleges and Occupational Education Board Policy BP 4-10.

Accreditation

Arapahoe Community College is accredited by The Higher Learning Commission of the North Central Association of Colleges and Schools. The Commission can be reached at: 30 North LaSalle Street, Suite 2400, Chicago, IL 60602-2504. Telephone: 312-263-0456 or 800-621-7440. Web address: www.ncahigherlearningcommission.org. Fax: 312-263-7462. E-mail: info@HLCommission.org.

The following programs hold accreditation as listed: Automotive Service Technology, National Automotive Technician Education Foundation Inc. (NATEF); Certified Nursing Assistant, Colorado State Board of Nursing; Emergency Medical Technician, Colorado State Department of Health, Emergency Medical Services Division; Health Information Technology, American Health Information Management Association, Law Enforcement Academy, Colorado P.O.S.T. (Peace Officer Standard and Training Board); Paralegal, American Bar Association; Medical Laboratory Technology, National Accrediting Agency for Clinical Laboratory Sciences; Medical Office Technology, Commission on Accreditation of Allied Health Education Programs on recommendation of the Committee on Accreditation for Medical Assistant Education; Mortuary Science, American Board of Funeral Service Education; Nursing (Registered), Colorado State Board of Nursing; Pharmacy Technician, American Society of Health Systems Pharmacists; Physical Therapist Assistant, Commission on Accreditation in Physical Therapy Education.

Addresses and phone numbers for these accrediting agencies are listed within the description of each specific degree or certificate.

COLLEGE CALENDAR 2006-2007

Summer Semester 2006

April 1	**Graduation Application deadline for Summer Semester**
April 10-Aug. 25	Summer/Fall registration, Touch-tone & CCCWeb (continuing students only)
April 17-Aug. 25	Summer/Fall registration, Touch-tone & CCCWeb (new students begin)
May 22-26	**Walk-in registration on MTWR 8 a.m.-7 p.m.; F 8 a.m.-5 p.m.; S 8 a.m.-noon**
May 27-29	**Memorial Day Holiday–College closed: No services available**
May 30 (Tuesday)	**SUMMER TERM BEGINS (10-week classes begin)**
June 12 (Monday)	**8-WEEK CLASSES BEGIN**
July 4	**Independence Day recognized–College closed: No services available**
August 8 (Monday)	**8-week and 10-week** classes end* August 6 **Weekend** classes end–End of Summer term
August 11	Deadline for Weekend classes grades entered into Web for faculty (noon)

CLASS SESSIONS	SESSION DATES
10-week classes	May 30-August 8
8-week classes	June 12-August 8

Some classes begin and end at other times. Please contact your division assistant for course specific census and withdrawal dates.

*SPECIAL NOTE: Ten-week classes falling on Tuesday will be short one day due to the Independence Day holiday. This will need to be compensated with an extra day on August 15 or extra time scheduled during the term.

Fall Semester 2006

April 24-Aug. 25	Summer/Fall registration, Touch-tone & CCCWeb (continuing students only)
May 1-Aug. 25	Summer/Fall registration, Touch-tone & CCCWeb (new students begin)
July 1	Graduation Application deadline for Fall Semester
August 21-26	Walk-in registration on MTWR 8 a.m.-7 p.m.; F 8 a.m.-5 p.m.; S 8 a.m.-noon; (Faculty Days MTWRF)
August 26 (Saturday)	**FALL SEMESTER BEGINS–Weekend classes begin**
Sept. 2-4	**Labor Day Holiday–College closed: No services available**
October 9	**Columbus Day–College open - classes in session**
November 1	Graduation Application deadline for **Spring Semester**
November 10	**Veterans Day–College open - classes in session**
November 20-21	**In service days, CLASSES NOT IN SESSION**
	(labs and practicums may be scheduled) Offices open 8 a.m.-5 p.m. (Faculty Days)
November 22	**Fall Break, CLASSES NOT IN SESSION, Offices open 8 a.m.-5 p.m.**
November 23	**Thanksgiving–College closed: No services available**
November 24	**Fall Break, College open**–CLASSES NOT IN SESSION, Office open 8 a.m.-5 p.m.
Nov. 25-26	Weekend classes **DO NOT MEET,** College closed: No services available
Dec. 4-6	NCA Reaccreditation Site Visit
Dec. 18 (Monday)	Last day of classes, end of Fall Semester
Dec. 19	**Faculty Day**
December 21	Deadline - grades entered into Web for faculty (noon)
Dec. 25-Jan.1	Holiday Season - College closed: No services available
January 2 (Tuesday)	College open

CLASS SESSION	SESSION DATES
15-week session	August 27-December 18

Some classes begin and end at other times. Please contact your division assistant for course specific census and withdrawal dates.

Spring Semester 2007

November 1	Graduation Application deadline for Spring Semester
Nov. 6-Jan. 15	Spring registration, Touch-tone & CCCWeb (continuing students only)
Nov. 13-Jan. 15	**Spring registration, Touch-tone & CCCWeb (new students begin)**
January 8-19	Walk-in registration on MTWR 8 a.m.-7 p.m.; F 8 a.m.-5 p.m.; S 8 a.m.-noon; (Faculty Days MTWRF)
January 15	Martin Luther King, Jr. Birthday – College open, Faculty Day, *classes not in session. (Offices may close from 8:00 a.m. until 10:00 a.m. if all staff plan on attending the Martin Luther King, Jr. Birthday celebration on campus.)*
January 16 (Tuesday)	**SPRING SEMESTER BEGINS**
February 19	President's Day - College open, classes in session
March 12-18	Spring Break – CLASSES NOT IN SESSION, Offices open 8 a.m.-5 p.m.
April 1	**Graduation Application deadline for Summer Semester**
May 4 (noon)	Deadline for Spring Graduate grades to be entered into Web for faculty
May 7 (Monday)	Last Day of Classes - End of Spring Semester
May 8	Faculty Day
May 11	Deadline - ALL grades due in Web for faculty (noon)
May 12	GRADUATION DAY, Faculty Day

CLASS SESSION	SESSION DATES
15-week session	January 16-May 7

Some classes begin and end at other times. Please contact your division assistant for course specific census and withdrawal dates.

**The facility may be open during holidays for facility rentals and Community Education activities.
Please contact Campus Police for facility availability during holidays.**

Please visit **www.arapahoe.edu** for the most current, updated catalog information.

APPLICATION/REGISTRATION CHECKLIST

1. Apply
Complete the ACC Application for Admission as follows:

> Online: www.arapahoe.edu
> In person: Information Central (M2800)
> Fax: 303-797-5970

If any of the following categories apply to you, you will also need to include the documents indicated. No additional information is needed for high school graduates, GED holders or high school non-graduates who are 18 years of age or older.

You will be notified (by e-mail or letter) of your acceptance and residency status when you have completed the application.

Transfer Students: If you wish to transfer credits toward a degree, your official transfer transcript must be sent directly from the transfer institution to Admissions and Records, Arapahoe Community College, P.O. Box 9002, Littleton CO 80160-9002.

International Students: Completed International Student Application Form; proof of high school graduation from an accredited high school or GED; completed International Student Affidavit of Financial Support; and proof of English proficiency. A complete packet of information on international student admission is available at your request from ACC's International Student Advisor at 303-797-5652.

High School Students: High school students must be at least 16 years of age with either junior or senior status. The statewide agreement among Colorado school districts requires the statewide agreement form be completed and forwarded to Admissions and Records, Arapahoe Community College, P.O. Box 9002, Littleton CO 80160-9002. These forms may be obtained at your high school, or at ACC's Information Central.

2. Financial Aid
Apply for Financial Aid if needed. You will be asked to complete a Free Application for Federal Student Aid (FAFSA).

> In person: Information Central (M2800)
> Online: www.fafsa.ed.gov
> Financial Aid office: Make an appointment at
> 303-797-5661 (M2115)

3. Assessment
Take the Computerized Placement Test (CPT) in the Testing Office (M2280). Call 303-797-5659 for hours. To take the CPT at the DTC Campus, call 303-734-3701 or at UCC (Parker), call 303-734-4UCC (4822) to make an appointment. This no-fail untimed test assesses your readiness for college-level coursework by measuring skills in reading, English and math. It is required by the Colorado Community College System, of which ACC is a member. Results of the assessment are used in developing a plan for academic success at the College and for initial course selection. No computer experience is necessary to take the CPT. All students enrolling in a degree program, recent high school graduates and students enrolling in college-level English or math classes MUST take CPT unless they meet exemption criteria (see Student Services/Information–Assessment–Basic Skills section of this catalog for a list of exemption criteria). To receive an exemption, you must present documentation to an advisor or faculty member.

- No appointment is necessary to take the test on the main campus, but allow approximately 2 hours for CPT completion before closing times at the Testing Center.
- You must present a photo ID when taking the test.
- A $10.00 charge will be assessed for taking the placement test. Results are available immediately.
- CPT test accommodations are provided to qualified students with disabilities by contacting Disability Services in M2710, 303-797-5937 v/tty. For more information, please refer to Student Services/Information-Assessment-Basic Skills section of this catalog.

4. Advising
New Students: Attend a Group Advising Session (dates, times and reservations through the Advising Office at M2010 or 303-797-5651). For academic planning, bring CPT, ACT, SAT scores and/or college transcripts with you.

Transfer and **continuing ACC students: Meet with an Advisor in the Advising Office** at M2010 who will assist you with the application process, transcripts, academic planning, course selection, registration, veterans' benefits, international student assistance and services for students with disabilities.

You may also meet with a program faculty advisor to review your CPT results and discuss course selections. Call 303-797-5664 for walk-in advising times or to set an appointment.

If you are seeking a degree or a certificate, one of the above advising options is strongly recommended. Students taking classes to enhance job skills or for personal interest are welcome, but not required to meet with an advisor.

5. Contact Disability Services
(M2710 or 303-797-5893 v/tty) to request academic accommodations and for specialized consultation if needed. Appropriate documentation is required for accommodations.

6. Register for classes
After you have completed your application you will be notified of your assigned Student Identification Number and PIN and notified when and how to register. More information and instructions are available on the ACC web site.

7. Tuition
Pay for your classes with a credit card through the phone Touch-tone system, the web site or with cash, check or credit card at the Cashier's window (M2300) by the deadline listed in the semester schedule. See the Schedule for information about deferred payments.

8. Parking and ID
Pick up your Parking Permit and Student ID from Parking Services (M2600). Bring your receipt from the Cashier's Office if you paid in person or from Information Central if you paid online or by Touch-tone.

Congratulations! You are now an Arapahoe Community College student! Please take advantage of all of the support services available to you as a student. Read this course catalog through, keep it in a safe place and refer to it often for policies and procedures guidance. Save yourself time, effort and money by consulting with your advisor regularly for your academic and career needs.

Admissions Information for High School Students (Age 16 and Older)

To get a jumpstart on college, you have a variety of options at ACC.

Post-secondary Enrollment Options Act

You must be a junior or senior attending a public high school. Generally under this option, you will receive both high school and college credit for ACC classes that are completed satisfactorily ("C" or better). If approved by your school district, you may also be eligible for prepaid or reimbursed tuition. Generally, student fees, books and transportation are not reimbursable. To pursue this option:

1. Meet with your high school counselor and complete the Statewide Agreement form. Your counselor will forward the form to the appropriate party for approval. Your school district office or counseling department should mail the approved form to Admissions and Records, Arapahoe Community College, P.O. Box 9002, Littleton, CO 80160-9002.
2. Complete an ACC Application for Admission and the items on the Checklist for Application/Registration in this catalog.

High School students not participating in the Post-secondary Enrollment Options Act:

If you wish to take classes at ACC with no expectation of earning high school credit or reimbursement from your school district, complete an ACC Application for Admission and the other items on the Checklist for Application/Registration in this catalog.

Home-schooled students:

If you are home schooled and age 16 or older, this is an excellent opportunity to earn credits toward a college degree while completing your secondary studies. Complete an ACC Application for Admission and the other items on the Checklist for Application/Registration in this catalog. For further information, contact Howard Fukaye at 303-797-5622.

Residency, Tuition and Fees

Residency

You will be classified as an in-state or out-of-state student according to the information provided on your application for admission. You may appeal your classification if you feel you meet the requirements for Colorado residency by submitting a "Petition for In-State Tuition Status" along with the documentation it requests to ACC's Information Central by the deadline date (10th day of the term) for the semester in which you are seeking a classification change. Residency requirements are determined by the Colorado Tuition Classification Law [CRS 23-7-101 et seq. 1973, as amended]. Non-resident tuition represents the cost of your education at public institutions. When a student is classified as a

Colorado resident for tuition purposes, the difference between the non-resident and resident tuition is paid by taxpayers of the State of Colorado. Therefore, tuition classification, as mandated by state statute, is adhered to rigorously at Arapahoe Community College.

Who Qualifies for In-State Status

To qualify for in-state tuition, you (or your parents or legal guardian if you are under 23 years old and not emancipated) must have been domiciled in Colorado for at least one year prior to the first day of the semester that you seek residency. Domicile for tuition purposes is determined by two factors: 1) your ability to show a permanent place of residence in Colorado, and 2) your ability to demonstrate your intent to remain in Colorado. There are several ways you can prove your intent, including providing evidence of:

- Paying Colorado income taxes
- Being permanently employed in Colorado
- Owning residential Colorado real estate
- Holding a Colorado driver's license or vehicle registration
- Registering to vote

If you have been classified as a non-resident for tuition purposes, you may submit a petition for residency, (forms available at Information Central). The deadline to submit a petition is the 10th day of the term for which you are petitioning.

If your residency petition is denied, you may appeal in writing to the Tuition Classification Hearing Board. The Office of Admissions and Records will answer your questions about residency status.

In-State Status for Active Duty Military

Non-resident active duty military personnel and their dependents qualify for in-state status by providing the following documents:

- Certification from your base personnel office that you are on active duty with a permanent duty station in Colorado (TDY and Reserve Duty do not qualify)
- A photocopy of both sides of your military or dependent ID card

Please re-submit your documentation for each semester that you wish to be classified as in-state. You can submit the above forms to Information Central.

WUE

WUE is the Western Undergraduate Exchange, a program of the Western Interstate Commission for Higher Education (WICHE). Through WUE, students in most western states may enroll in many two-year and four-year college programs at a reduced tuition level-150 percent of the institution's regular resident tuition. WUE is considerably less than non-resident tuition.

To be eligible for WUE, a student must be a resident of one of the participating states: Alaska, Arizona, California, Idaho, Montana, Nevada, New Mexico, North Dakota, Oregon, South Dakota, Utah, Washington or Wyoming.

To qualify, a WUE application form must be submitted no later than 10 days from the beginning of the term in which you are enrolling. Applications are available on campus at our Information Central counter or they can be faxed or mailed. Please contact the Admissions and Records Office for further information at 303-797-5624, or e-mail linda. sulsberger@arapahoe.edu.

Information on WUE can be obtained through their web site, www.wiche.edu. General questions about WUE may be sent by e-mail to info-sep@wiche.edu or addressed to Student Exchange Programs, Western Interstate Commission for Higher Education, P.O. Box 9752, Boulder, Colorado 80301-9752 or call 303-541-0214.

Tuition and Fees

Tuition, fees and charges are mandatory and support essential activities and services, student organizations and special events. Tuition is based upon credit load and residency status. For further details on residency status, please see the residency section. Fees and charges are assessed to help defray costs and/or finance student activities and organizations. **Tuition, fees and charges are subject to change without notice.** Students with unpaid debts to ACC or any of its auxiliary enterprises will not be allowed to register until debts have been paid. For detailed tuition and fee rates, please see the Semester Schedule or view at www.arapahoe.edu.

Refunds and Withdrawal Policy

Our refund policy is enforced for several reasons. When you enroll in a class you reserve a space that is no longer available to others. At the same time, the state commits to paying a portion of the costs of offering you that course. Even if you officially withdraw, the state loses its investment in that space—while ACC loses the other percentage of expenses that your tuition and fees cover. That is why we adhere to these guidelines:

Dropping Classes

If you drop a class during the first 15 percent of the class term, you will receive a 100 percent refund. No refunds will be granted after that time. Deadline dates for refunds are listed in the semester class schedules on the syllabus for each class.

Withdrawing from Classes

You can withdraw from a class after 15 percent of the class term has passed and before 80 percent of the class term has passed. You can withdraw on the web site or by submitting a Schedule Adjustment Form to Information Central prior to the deadline date for withdrawals. A "W" grade will appear on your transcript for all official withdrawals. Refunds are not given for withdrawals.

If you withdraw after the first 15 percent of the term and have an unpaid balance, you remain obligated to pay this amount. Unpaid balances are sent to State Collections and a collection fee is assessed.

Complete Withdrawal from the College

Schedule Adjustment Forms are available at Information Central. If illness or other circumstances prevent you from withdrawing in person, you may withdraw via touch-tone or via the Web. Official withdrawal, under any circumstances, does not relieve students of debts to ACC.

See the Financial Aid section under Student Services.

COF Stipend

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 Colorado Opportunity Fund (COF). Under this new law, starting in the fall semester 2005, the State gave this money for the subsidy to students by sending it to the institution the student designates. This money, known as the College Opportunity Fund, is 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.

STUDENT SERVICES/ INFORMATION

Accommodations for Students with Disabilities

In accordance with Section 504 of the Rehabilitation Act and the Americans with Disabilities Act, Arapahoe Community College provides students with documentable disabilities academic accommodations based on an individual needs assessment. Support services may include:

- Test accommodations
- Readers
- Scribes
- Interpreters and/or amplification devices
- Ergonomic furniture and equipment
- Materials in alternative formats
- Note takers
- Assistive computer equipment
- Class assistants

To request accommodations, contact Disability Services located in room M2710 or call 303-797-5937 (v/tty). Students with disabilities are responsible for providing documentation of disability from a qualified professional.

Admissions

Please see Application/Registration section of this catalog.

Address Changes

Please see Student Services/Information–Records section of this catalog. You can update your address information online at www.arapahoe.edu under the Current Students section.

Advising

Academic advising is a crucial first step for new students beginning a college program. Academic advisors help students explore life and career goals and select courses based on basic skill assessment results and programs of study. New and continuing students are strongly encouraged to meet with an advisor every semester to help clarify goals and to stay updated on program changes. In addition to these services, the ACC Academic Advising office offers assistance in:

- The registration process
- Selecting courses based on placement test results
- Choosing a program of study or major
- Course sequencing and prerequisite selection
- Information on the add/drop and withdrawal process
- Selecting courses for transfer to a four-year college or university
- Career exploration and
- Referral information and contacts with outside agencies that may be better prepared to meet specific student needs

Academic advising is also available from faculty program advisors. Consult your division office for contacts.

Annual Required College Disclosures

The following disclosures are annually published on the College's web site at www.arapahoe.edu and /or in the catalog, Student Handbook or other college publications:

- The Campus Security Report
- The consequences of drug and alcohol violations
- The manner in which the College calculates student refunds and repayments
- The graduation and transfer in/out rates

Assessment

Basic Skills

If you are a first-time college student enrolling in a degree or certificate program, or you are planning to enroll in college-level English or math, or you are a recent high school graduate, you must complete assessment in English, reading and mathematics.

The purpose of assessment is to provide you and your advisor with information that will be useful in selecting courses and planning for success in college. The Computerized Placement Test (CPT) provides you with competency scores in English, reading and math. The assessment costs $10, is untimed and takes approximately two hours to complete.

You can take this individualized test at the Testing Center (M2280) on a walk-in basis. (Call Information Central at 303-797-4ACC for Testing Center days and hours.) Please plan to begin testing at least two hours BEFORE the closing time.

Testing is also available at the College's DTC Campus (303-734-3701) and the University Center at Chaparral (303-734-4822).

CPT test accommodations are provided to qualified students with disabilities. To request accommodations, contact Disability Services in M2710 or call 303-797-5937 v/tty.

If you are a new student enrolling in a degree program, you must take the CPT unless you have documents that show you:

- Have achieved these minimum scores on the ACT college entrance exam within the past two years: Mathematics 19, Writing 18 and Reading 17; or:

- Have achieved these minimum scores on the SAT college entrance exam within the past two years: Mathematics 460, Writing 440 and Reading 430; or:
- Have achieved these minimum scores on the CPT (Accuplacer) placement test within the past two years: Elementary Algebra 85, Sentence Skills 95 and Reading Comprehension 80; or:
- Met one of the following criteria for exemption from assessment. Exemptions are granted to students who:
  a. have successfully completed a college-level mathematics and college-level writing course or:
  b. have successfully completed necessary remedial course(s), if required, in mathematics, writing and reading. "Successfully completed" refers to a student who earns a grade of "C" or higher; or:
  c. have earned an associate degree or higher or:
  d. are a concurrently enrolled high school student until matriculated by the institution as a degree-seeking undergraduate or:
  e. are a non-degree seeking undergraduate (unless recent high school graduate referenced above) until becoming degree-seeking.

To receive an exemption, a student must present documentation to an advisor or faculty member. Some programs at ACC require specific minimum CPT scores for admission. Please refer to the specific degree/certificate in this catalog or online at www.arapahoe.edu. A $10 charge will be assessed for all students who wish to take the placement test. This charge is payable at the testing facility. Students are allowed to retake the CPT after 24 hours and then every 30 days after retaking the test the first time. (A $10 charge will be assessed for each portion of the CPT the student wishes to retake.) If you test below college level in two or more of the college placement test subject areas, you will be required to meet with an academic advisor prior to registering and may be required to enroll in certain courses.

The College provides materials for students who want to review skills before taking the CPT. These materials are available online at www.arapahoe.edu on the Testing Center page. Enrolled students can also take advantage of the Peer Mentoring and Tutoring Center to work on skills.

Attendance

Please refer to the Academic Standards Attendance section of this catalog.

Bookstore

The ACC bookstore, located on the first floor of the main campus building, is the official source for new and used required books. You can also order books online at www.efollett.com. Book refund and buy-back policies are detailed in your semester schedule. Also available in the campus bookstore are school supplies, paperbacks, software, ACC gifts and apparel, study guides, greeting cards, technology supplies and other student necessities.

Campus Police Department

The Campus Police Department consists of professional police officers and staff dedicated to working in partnership with the campus community to protect and enhance a positive, secure, learning-centered environment. Campus Police Officers are sworn, commissioned police officers with full

powers of arrest provided to them by Colorado Revised Statutes, Title 24, Article 7, Part 1. Campus Police Officers work seven days a week throughout the year responding to calls for law enforcement and general safety services at the Littleton campus. Campus Police Officers take reports of criminal incidents, respond to alarms, assist in medical emergencies, investigate traffic accidents and criminal acts, provide security for campus social events and present community-oriented policing programs. Campus Police Officers have jurisdiction on the Littleton campus, including the Littleton city streets that run through and are adjacent to the campus properties.

Safety Escort Services

When walking on campus, you are encouraged to walk with another person and use well-lit and well-traveled routes. The Campus Police Department will escort members of the campus community to their cars. To obtain this service, call ext. 5800 or 303-797-5800.

Parking Services

All ACC main campus, Art & Design Center and UCC lots require an ACC permit. Permit costs are automatically charged to your account when you register for classes at ACC. Permits are reissued each year. Parking is on a first-come, first-served basis. Permits allow for parking in all ACC lots, except Lot J, but do not guarantee a parking space. The Art & Design Center Lot J requires a "J" permit. "J" semester permits are ONLY available to current students who are registered for classes at the Art & Design Center. Decal permits are valid in lots A-I and L for current registered ACC students.

To obtain a permit for your vehicle, bring your ACC cashier's receipt to the Parking Services Department. A permit will be issued to you to be permanently affixed to the lower left hand corner, inside front windshield of the vehicle or affixed to a plastic hang-tag and placed over the rearview mirror. One additional semester permit can be purchased at the Parking Services office.

Visitor and short-term, time-controlled parking is available on the streets surrounding the main college campus at no charge. Temporary day passes to park in ACC's lots are available to students, staff and campus visitors for a nominal fee at Parking Services. Permit and other parking violations are enforced at all times. Parking fines range from $15-$100.

Motorist Assistance Program (M.A.P.)

This service is designed to assist the campus community experiencing vehicle problems on the main campus and the Art & Design Center. Services include jump-starting a battery or unlocking a car door. To obtain this service, call extension 5800 or 303-797-5800.

Security Phones

Main campus classrooms are equipped with in-house security phones. The Campus Police Department can be reached by calling ext. 5911. If no immediate answer, call 9-911. The Art & Design Center also has in-house phones in open public areas for those in need to call the Police at the numbers above.

Code Blue emergency phones are located in each parking lot at ACC's main campus and the Art & Design Center. These ADA-compliant phones require simply touching the red button to automatically contact the Campus Police Department. If that office is closed, the phone will ring through to the Littleton Police Department.

Lost and Found

The Campus Police Department houses ACC's Lost and Found. Students at extended campus locations should return found items to, and check for lost items at, the front desk of those facilities. Items found at those locations will be kept there for a short time before being sent to the main campus Lost and Found, located in the Campus Police Office.

Jeanne Clery Disclosure Of Campus Security Policy & Campus Crime Statistics Act

The Clery Act Report is accessible on the ACC web site (www.arapahoe.edu) and printed copies are available through the Campus Police Department. Sex offender information is available at Colorado's Convicted Sex Offender web site, http://sor. state.co.us. The Clery Act covers five main requirements:

1. Campus crime and security policy disclosures
2. Statistical reporting and publication
3. Timely warning provisions
4. Substantive policy, procedural and victims' rights provisions and
5. Open police logs

Please read the report. Get involved by taking an active part in promoting safety and well-being. Be mindful of your personal safety, use common sense and use campus resources to protect that safety. Report crimes, violations, accidents, suspicious persons/incidents and medical assists to the Campus Police Department Office at x5911 or 303-797-5911. If no immediate answer, call 9-911.

Cancellation of Classes

If a class is cancelled, staff will make every effort to notify students before they arrive at class. In addition, notices printed on standardized posters will be posted in or near the classroom. If there is no posted notice and your instructor does not appear, check with the division office (A2000).

Insufficient Enrollment

The Vice President for Instruction may cancel any course with insufficient enrollment. Every effort is made by staff to contact students affected by these cancellations. In addition, notices of classes cancelled for insufficient enrollment are posted on the classroom door.

Weather/Emergency Closures

Please see Closures of College next page.

Career Center

Career Exploration

Trying to choose a career? Career exploration can help you make one of the more important decisions in your life. The self assessments listed below are available for a nominal fee and can help you discover your work-related personal characteristics.

- Myers Briggs Type Indicator (MBTI)
- Strong Interest Inventory (SII)

Career Services

Up-to-date information is provided on career decision making. You can develop a career plan to fit your needs

and focus on the direction you want to go, based on realistic self-knowledge. Services provided include:

- Career planning seminars, offered for a fee, are recommended if you are undecided on a career goal, making a first time career decision, or making a career change. You identify interests and skills, learn about career resources and gain knowledge of job search techniques.
- Computer programs are offered that provide free career assessments, give updated information on current occupations, salary ranges, job outlook, schools offering programs, career videos and career interviews. Information on scholarships is also included.
- Career counseling is available to explore your career options.

Employment Services
We offer the following:

- Full-time, part-time, temporary and seasonal employment postings
- Online career leads
- Resume critique and job search counseling
- On-campus employer recruiting
- Job fairs and special programs
- Job search, resume writing and interview technique seminars

In addition, we are available to answer specific questions about job searching and interviewing.

Child Development Center

Put your child in good hands while you attend class, study or work. If you're an ACC student, staff or community member, you can enroll your child in our Child Development Center (CDC). The Center, staffed by professionals and ACC Early Childhood Education students, is located in the North building on the main campus. It is designed to meet the developmental and educational needs of children aged two and one-half to 13 years old.

Call or drop by the Child Development Center to get on the waiting list. Families will be enrolled from the waiting list on a space-available basis. Names remain on the waiting list for one semester only. CDC registration is held in coordination with the College's semester registration. Charges include a registration fee and block/hourly rates. Tuition includes lunch, snacks and educational materials. For more information, please contact the Center at 303-797-5678.

Closures of College

Call 303-797-5700, ext. 9, or check our web site at www.arapahoe.edu if you have any questions about whether ACC is closed due to extreme weather or other emergency conditions. Major television and radio stations will also be alerted to College closures.

Code of Conduct

Please see Academic Standards – Student Rights, Freedoms and Responsibilities section of this catalog.

Comment Cards

As a learning-centered institution, ACC is committed to listening to and responding to students' compliments,
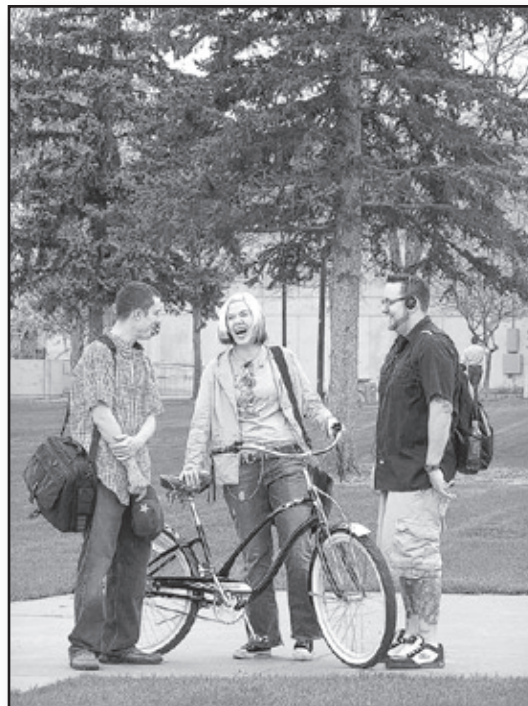
complaints, suggestions and comments. Comment cards are located in each ACC facility as well as an online comment card at www.arapahoe.edu in the About ACC section. Comment cards are collected on a regular basis by the President's Office staff and reviewed by the executive team. They can be submitted anonymously or students can request a personal, direct response.

Credit Evaluation through Published Guides

Experience in the Armed Forces or Industrial and Corporate Training programs may transfer as credit. Check with the Office of Admissions and Records to find out if your experience qualifies.

Credit for Prior Learning (CPL)

You may be able to earn credit for your non-college or experience-based learning that has been attained outside the sponsorship of accredited postsecondary education institutions. Credit for Prior Learning includes learning acquired from work and life experiences; correspondence and extension courses; individual study and reading; civic, community and volunteer work; and participation in formal courses and in-service training sponsored by associations, business, government and industry. CPL is not awarded for experience but for college-level learning, which entails knowledge, skills and competencies that students have obtained as a result of their prior learning experiences. ACC may award a maximum of 50% of credit requirements toward a degree or certificate (maximum of 25% may be used for Portfolio method) for prior learning.

Prior learning credit will be awarded only to courses listed in the ACC catalog. No letter grade is assigned for prior learning credits. Students must be enrolled in at least one credit hour to seek CPL. Credits granted through prior learning are not eligible for financial aid or veterans' education assistance. CPL may not be applied to courses in the core

general education curriculum for the purpose of determining whether the core curriculum has been completed and the transcript should be stamped "core program completed."

Fifty percent of degree requirements may be earned through a combination of the following four methods available for awarding Credit for Prior Learning: Standardized Tests, Institutional Challenge Examinations, Industry Certifications, Published Guides and Portfolios.

1. **National standardized placement tests** such as College Level Examination Program (CLEP), both general and subject examinations; Advanced Placement Program (AP); Defense Activity for Nontraditional Education Support program (DANTES); Regents College Exams; and other nationally recognized testing, training, licensing or certification programs will be used to assess levels of knowledge, skills and competencies of students. The institutional copy of official scores from the national standardized placement test must be submitted to the Office of Admissions and Records.

2. **Institutional Challenge Examinations** such as objective tests, essays and oral, hands-on or simulated demonstrations will be used to evaluate the competency of students in specific courses. Institutional examinations are the equivalent of the comprehensive final examination for the courses challenged.

3. **Experience in the Armed Forces or Industrial** and Corporate Training programs may transfer in as credit after it has been evaluated through published guides.

4. Learning which has been acquired through work and life experiences must be substantiated through a formal **portfolio assessment** program. The learning must be demonstrable, must have both a theoretical and an applied component and must be college level, currently applicable and the equivalent of a specific course to the student's certificate or degree requirements.

For additional information about credit for prior learning options, please call the Graduation Coordinator at 303-797-5630. Additional information is available on the web site.

Drug and Alcohol Abuse Prevention Program

Arapahoe Community College is a state system community college governed by the State Board for Community Colleges and Occupational Education. Board policy requires the College to comply with the Drug Free Schools and Communities Amendments of 1989 (PL 101-226 in Federal law.) A copy of this policy, (BP3-24), is available in the College's Human Resources Office.

E-mail Address

Important college communication is done by e-mail so make sure ACC has your correct e-mail address. By 2007, students will be assigned a College e-mail address through BANNER, the new Colorado Community College System software.

Emergency Messages

There is no paging system at ACC, but emergency message delivery will be provided through the Campus Police Department (303-797-5911). We cannot tell callers where a student can be found, but we will make every effort to locate a student with a message about a REAL emergency (family/medical).

To assist us in locating a particular student as quickly as possible, it is suggested that students give a copy of their current class schedule to their day care providers, child's school or significant other who may need to contact them in case of emergency.

Equal Opportunity

Arapahoe Community College is an equal opportunity employer and does not unlawfully discriminate on the basis of race, sex, creed, color, age, national origin, veteran status or individual disability in the admission or access to, treatment of, or employment in, its educational programs or activities. The College complies with regulations of Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendments Act of 1972 in regard to sex discrimination and Section 504 of the Vocational Rehabilitation Act of 1973 in regard to disability discrimination, as well as other applicable Federal and State laws and regulations pertaining to discrimination.

Inquiries or specific complaints of alleged discrimination concerning the Equal Opportunity policy and/or compliance with Federal and State regulations should be directed to ACC's Chief Operating Officer (who also functions as the ADA Coordinator for Facilities), Arapahoe Community College, 5900 S. Santa Fe Drive, P.O. Box 9002, Littleton CO 80160-9002, phone 303-797-5704. Inquiries or specific student complaints of alleged discrimination concerning academic accommodations provided in the classroom or through ACC's Office of Disability Services should be directed to the College's Dean of Students Services (who also functions as the ADA Coordinator for Academic Accommodations), Arapahoe Community College, 5900 S. Santa Fe Drive, P.O. Box 9002, Littleton CO 80160-9002, phone 303-797-5601. Complaints may also be filed with the Vice President for Legal Affairs and Vocational Education Administration, Colorado Community College System, 9101 E. Lowry Blvd., Denver, Colorado 80230-6011, phone 303-595-1549; or the Office for Civil Rights, U.S. Department of Education, Region VIII, Federal Office Building, 1244 Speer Blvd., Suite 310, Denver, Colorado, 80204, phone 303-844-5695.

FINANCIAL AID AND VETERANS PROGRAMS

ACC offers a variety of VA, financial aid grants, scholarships, student loans, work-study programs and opportunities to assist you with the cost of your college education. In most cases, you can receive financial assistance for tuition and fees, books and supplies, room and board, transportation and miscellaneous expenses. Ask for a copy of ACC's Financial Aid Handbook or visit our web site at www.arapahoe.edu.

How to Apply for Financial Aid

To apply, you must be a U.S. citizen or eligible non-citizen and not be in default on any federal student loans or owe a repayment on a federal grant. Visit the Office of Financial Aid to obtain the Free Application for Federal Student Aid (FAFSA) or apply online at www.fafsa.ed.gov. The ACC FAFSA School Code is 001346. Financial Aid Advisors are available to assist you with completing the online application should you choose this option. Please call 303-797-5661 for an appointment.

If your file is selected in a process called verification, you may be required to provide the following additional information or documents:

- ACC Financial Aid Supplemental Information Form
- ACC Application for Admission
- Your (and your parents') tax returns
- Additional Income & Asset Information (TANF, SSI, Business Income, etc.)
- Verification Worksheets
- Other information as requested

The financial aid priority date is May 1. Students who apply by this date will receive first priority to receive the most funds.

Student Rights and Responsibilities

Students applying for financial aid have certain rights and responsibilities as stated below:

Student Rights: You have the right to:
1. Know what financial assistance is available from Arapahoe Community College, including information on Federal, State and other financial aid programs.
2. Know the deadline or priority dates for submitting applications for each of the financial aid programs available.
3. Know the cost of attending ACC and the refund and repayment policy.
4. Know the criteria used by ACC to select financial aid recipients.
5. Know how the College determines financial need. This process includes how costs for tuition, room and board, books and supplies, travel, personal insurance and miscellaneous expenses are considered in establishing cost of attendance.
6. Know what resources (such as parental contribution, financial aid, private scholarships, income, assets and other resources) are considered in calculating financial need.
7. Know what portion of your financial need, as computed by ACC, has been met.
8. Request an explanation of the various programs included in your financial aid package and appeal for a review of your award if you feel that it does not adequately meet your needs.
9. Know what portion of your financial aid package is a loan that must be repaid. If your award package does contain a loan, you have a right to know the interest rate, the total amount that must be repaid, the repayment procedure, the length of time you have to repay the loan and when the payment is scheduled to begin.
10. Know what portion of your financial aid package is earnings from part-time employment, (Federal or State work-study) and conditions of employment and how and when you will be paid.
11. Know how the College determines whether you are making satisfactory progress in your course of study and what happens to your financial assistance if you do not maintain satisfactory academic progress.
12. Know the completion of graduation rate for students.
13. Know campus security policies and crime statistics.
14. Know what facilities and services are available to students with disabilities.

Student Responsibilities: You have the responsibility to:
1. Complete all application materials on time and make sure the various forms are sent to the right place.
2. Complete your application accurately. Errors can result in delays in your considerations for financial assistance. Intentional misreporting of information on applications for Federal financial aid funds is a violation of the law and is considered a criminal offense subject to penalties under the U.S. Criminal Code.
3. Promptly return all additional information, documentation, verification, and/or corrections requested by either the Office of Financial Aid or the agency to which you submitted your application.
4. Read and understand all documentation you are asked to sign and keep copies for your personal records.
5. Accept full responsibility for agreements you sign.
6. Notify your lender(s) of changes in your name, address, and/or student status if you have borrowed a loan.
7. Perform the work you have agreed to in accepting a College work-study award.
8. Know and comply with the refund/repayment policies and procedures of Arapahoe Community College.
9. Understand the conditions under which each element of your financial aid package is offered and comply with the criteria for retention of your financial aid awards.
10. Notify the Office of Financial Aid if you receive assistance of any kind, from any source, that was not reported on your application for financial aid. This includes, but is not limited to:
    - Private scholarships and/or grants
    - Social Security payments
    - Veterans benefits
    - Aid to Dependent Children
    - Bureau of Indian Affairs (BIA) awards
    - JTPA assistance
11. Students are advised to keep records of tuition and fees charged, books, supplies, etc., for all semesters they attended during a calendar year. Students are required to report financial aid, with the exception of loans, to the Internal Revenue Service as income if the aid received is greater than the tuition and fees charged less the amount paid for books and supplies. Students are strongly encouraged to contact the IRS for specific details.
12. Enroll for classes that apply toward your degree. Classes taken by audit or challenge do not qualify as financial aid hours attempted and will not be considered eligible for aid.
13. Students must prove "ability to benefit." This would include a high school diploma or GED or the student must take a placement test (ASSET or COMPASS) and receive scores designated by the Department of Education.
14. Students cannot have violated any federal or state drug possession or sale law.

Contact Financial Aid for more information: 303-797-5661.

Obtain the ACC Financial Aid Handbook for More Information
Below are some of the federal and state grant, scholarship and work-study programs available. Please visit the Office of Financial Aid for more information or visit online at www.arapahoe.edu.

Grants

Federal Pell Grant

This federally-funded assistance is available to students needing help with college expenses. Awards vary, depending on the amount of support your family can provide. A federal formula determines the size of your award.

Federal Pell Grants are intended to build a base of financial support that can be supplemented with other kinds of assistance if necessary.

Federal Supplemental Education Opportunity Grant (SEOG)

This program is designed to be awarded first to those applicants with extreme need. Priority is given to students who are eligible for the maximum in a Federal Pell Grant.

Colorado Student Grant

State funds are available to Colorado residents with financial need. Awards vary depending upon student's need. Funding is provided by the Colorado General Assembly.

Leverage Education Assistance Program

These funds are awarded to Colorado residents with exceptional financial need. Awards vary per year and are dependent upon the student's need.

Scholarship Search Center

Students are encouraged to visit the ACC Scholarship Search Center in the Financial Aid Office for the many scholarship opportunities available. New scholarships arrive daily. Students are also welcome to access the many free scholarship web sites using one of the computers available at the Search Center. To find out more about ACC scholarships and many others, we recommend the following web site links:

www.arapahoe.edu   www.finaid.org
www.fastweb.com   www.scholaraid.com
www.wiredscholar.com

In general, scholarships do not have to be repaid and are based on merit, talent or academic promise. Visit the Office of Financial Aid for more details or to obtain the ACC Scholarship Brochure.

Loans–Federal Family Educational Loan Program

Federal Stafford Loans

This loan is offered as either subsidized or unsubsidized. The amount of the loan that a student is eligible to apply for is dependent upon year in college, program length, need, dependency status, etc. Students who can demonstrate financial need through the FAFSA are eligible to borrow a subsidized Federal Stafford Loan. Loans that are subsidized do not accrue interest as long as you are enrolled as at least a halftime student. Repayment and a variable interest rate begin six months after the student is no longer enrolled half time. Students who cannot demonstrate financial need for any or all of the maximum loan each year may be eligible to receive an unsubsidized Federal Stafford Loan. The student is required to pay the interest on this loan from the time the loan is disbursed by the lender. The Federal Stafford Loans are provided through private lending institutions such as banks, savings and loans or credit unions. They are guaranteed by the State

of Colorado or another guaranty agency and are reinsured by the Federal Government.

Federal Parent Loan Program (PLUS)

Parents of dependent students may qualify for this loan program authorized by Congress. Check with the Financial Aid Office for details.

Work-Study

Colorado Work-Study

If you're a Colorado resident, you may qualify for this program. Students approved work up to 20 hours per week. The program is funded by the State of Colorado.

Federal Work-Study

Part-time campus employment is available through work-study to assist you with your college expenses. The Federal Government funds this program.

Colorado No-Need Work-Study

Even if you are unable to demonstrate financial need, you may still be eligible for a work-study program if you are a Colorado resident. No-Need Work-Study pay varies per hour and you can work a maximum of 20 hours per week on campus. You must submit a Free Application for Federal Student Aid to apply. Please contact the Financial Aid Office for application forms and additional information.

Federal Financial Aid Return of Title IV Funds Policy

Financial aid students at Arapahoe Community College receiving Title IV funds who completely withdraw, officially or unofficially, within 60 percent of the term may owe a repayment of funds received. Cases will be examined to determine if a repayment is applicable. If so, the refund will be calculated and returned in accordance with Federal legislation.

Students may also be required to repay Title IV Refunds in the following order:

- Unsubsidized Federal Stafford Loan
- Subsidized Federal Stafford Loan
- Federal Parent Loan to Undergraduate Students (PLUS loan)
- Federal Pell Grant
- Federal Supplemental Educational Opportunity Grant
- State of Colorado Student Financial Aid Programs
- Arapahoe Community College Financial Assistance Programs

Contact the Financial Aid Office for specific criteria for all aid programs or visit www.arapahoe.edu.

Veterans' Educational Assistance Programs

ACC has been approved for several education and training programs by the Colorado State Approving Agency for the Veterans' Education Program. Some of those programs include:

- The GI Bill (Chapter 30)
- Active Duty (Chapter 1606)
- Dependents' Benefits for Deceased or Disabled Veterans (Chapter 35)
- Vocational Rehabilitation

To Apply
Visit the Office of Financial Aid & VA to begin the application process. In general, you will need the following before your benefits can be determined and awarded:

- Copy of your DD214
- Suffice Number or NOBE
- Form 22/1990 for New Veterans Obtaining Benefits
- Form 22/1995 for Veterans Continuing their Benefits

Transcript Evaluation Form for Previous Credits
Should you wish to be considered for Advanced Payment, you must complete your application a minimum of 30 days prior to the semester start. Applicants must be prepared to pay their own tuition and fees and books and supplies while the U.S. Veterans Administration processes their certification/application. Please contact the ACC Veterans Certifying Official at 303-797-5662 for more information. See also Academic Standards – Attendance section of this catalog.

Food Services

Cafeteria
The ACC cafeteria in the main campus building offers self-serve and made-to-order foods for breakfast, lunch and dinner. It serves pizza by the slice, deli sandwiches, entrees, grill items, Mexican bar and salad bar along with a variety of beverages. Hours of operation are posted outside the cafeteria. Family members and the general public are welcome to purchase meals and enjoy them in the dining area. A microwave oven is available for students who wish to heat food brought from home. Catering for special meetings and events is available. The DTC Campus houses a deli with limited hours and there are several food locations near UCC.

Vending Machines
Throughout ACC are vending machines containing candy, snacks and hot and cold beverages. If you have problems with these machines on the Main Campus, contact the Cashier's Office on the 2nd floor; problems with vending machines at the Art & Design Center should be taken to AD427E between 8 a.m. and 4 p.m. Difficulties with vending machines at the DTC Campus or UCC facility will be handled with the staff at the front desks.

Starbucks
The cafeteria operates a Starbucks, serving espresso beverages, chai tea, flavored hot teas, coffees, hot chocolate, sweet rolls, biscottis, muffins, iced beverages, sandwiches and other assorted foods, on the Main Campus, 2nd floor lobby.

Grade Reports

Grades are not mailed automatically. Grades are available after they are posted at the end of each semester. Students may access grades through the Touch-tone system 303-389-0058 or through our web site at www.arapahoe.edu. (Requests for fall semester grade mailers are mailed in January due to the College closure over the holidays.) Or you may print a copy of your grades off the Student Information Online terminals in the second floor lobby of the main building.

Housing

Information about off-campus housing is available on a bulletin board on the first floor of the main campus building. To place an advertisement for housing needed or housing available, fill out a card provided on the bulletin board. For more information, contact the Student Affairs Office, M2820 or call 303-797-5668.

Information Central

Information Central, located in the main campus building, provides one-stop enrollment services to prospective, new and continuing students. You can call Information Central at 303-797-4ACC (4222). Check the ACC web site for information and e-mail links at www.arapahoe.edu.

Lost and Found

Please refer to Student Services/Information – Campus Police Department listing for the main campus. Students at the DTC Campus and UCC facility should check with the front desk for assistance with lost/found items. After a period of time, these items are sent to the Lost and Found at the main campus. Please be sure to label your books and personal items.

Mentoring

ACC offers a mentoring program designed to pair students with a staff or faculty mentor. (See Peer Mentoring and Tutoring for additional services.) For more information about this supportive partnership contact the Office of Student Affairs, 303-797-5668.

The peer mentoring program matches students new to ACC with those who have been here for at least one term. Through this relationship, peer mentors provide advice, support and serve as role models. Students can also use this service on a drop-in basis. If you are interested in this program, please call the Student Affairs office at 303-797-5668 or stop by room M2820.

Minority Student Support

Umoja (Unity) Student Alliance was created to enhance cultural diversity at ACC and provide a support system for minority students. Call 303-797-5668 for more information. ACC offers a mentoring program designed to pair students with a staff or faculty mentor. For more information about this supportive partnership, contact the Office of Student Affairs, 303-797-5668.

Name Changes

If your name changes due to marriage, divorce or for other reasons, please contact Information Central immediately. You will need to provide appropriate documentation to process a name change.

Open Computer Lab

The Open Computer Lab is located on the first floor of the main building for ACC student use with a current ID. The computers offer Internet access and Microsoft software as well as specialized instructional software programs. E-mail access is also offered.

Payment Options

Do not wait for a bill. Unless your account is paid in full, or you have a deferred payment plan in place by the semester payment deadline (published in the semester schedule), you may be dropped from your classes for non-payment. Consult your Semester Schedule for payment option details.

Peer Mentoring and Tutoring Center

The Center is operated for students by students to ensure student success and well-being at ACC. Located on the second floor of the main building, the Center serves as a welcoming and gathering place for learning opportunities of all sorts. Please see separate listings under Mentoring and Tutoring for more information, or call the Student Affairs office at 303-797-5669.

Records

Student Academic Records and Access

ACC keeps an active, cumulative record of every student's application, correspondence and other important details. Under the direction of the Registrar, the Office of Admissions and Records keeps the following information in your student file:

- Personal data: Name, address, phone number, gender and student number. Please be sure to keep your address current with Information Central to ensure that all information sent from the College reaches you.
- Educational background: Any high schools or colleges you attended and the transcripts you submitted from those institutions
- Your major and degree expectations
- Degrees you have earned
- Your College transcript, including the hours you attempted, grades, credits and your dates of enrollment
- Courses, credits and hours you are currently taking. Copies of your records can be made for you at a nominal charge.

Once you leave the College, your file is stored under an "inactive" classification. After one year your file is archived and later destroyed in accordance with the regulations of the Colorado State Archives.

Transcripts

Transcript copies are $3 if requested online or $5 if requested by any other means. Same day transcript processing is available for $10 each. You must request them in writing either by mailing your request to Admissions and Records, Arapahoe Community College, P.O. Box 9200, Littleton CO 80160-9002; faxing your request to 303-797-5970; stopping by Information Central to complete a Transcript Request Form; or by filling out the online form at CCC Web through ACC's web site. Please allow two to three business days for processing your request. We cannot release transcripts to students with unmet financial obligations. ACC is not authorized to release or certify transcripts sent from other colleges or universities.

Transfer Transcripts and Official Credit Evaluations

You must be admitted to ACC to have a credit evaluation. To have your transcripts evaluated, complete a Request for Transfer Evaluation form at Information Central. The form is also located on ACC's web site at www.arapahoe.edu. Evaluations will be processed when this form is received and all official transfer transcripts have been received. NOTE: Official transcripts must be sent DIRECTLY to ACC from the institutions you attended. Your transfer credit will be examined course by course based upon your degree or certificate requirements. You will receive confirmation of your applicable credit–generally within two to three weeks after all documentation is received by ACC.

Privacy Act and The Security of Your File

The Office of Admissions and Records takes responsibility for the security of your academic records. Under the Federal Family Educational Rights and Privacy Act, the information in your file may only be released under specific conditions. As a current or former student of ACC, you have complete access to your records [in compliance with the requirements under the Federal Family Educational Rights and Privacy Act of 1974 (Public Law 93-389 Subsection 513,88 Stat. 571; 29 U.S.C. 1232 q). You may view them upon request at the Office of Admissions and Records. If you feel your records contain an error, you may appeal in writing to the Director of Admissions and Records. If necessary, you may also appeal to the Academic Standards Committee.

Your name and enrollment status at ACC are considered public information. ACC will respond to inquiries in this regard, whether they are made in person, by phone or in writing.

Other items, listed below, may appear in college directories and publications or be disclosed by staff to anyone inquiring in person, by phone or in writing:

- Your date of birth
- Your major or division
- Dates of your enrollment
- Number of hours you are currently taking or completed previously
- Degrees you have earned
- Honors you have received

Your name may be released for graduation listings and lists of special awards, honors and events released to the news media.

Your name and degree may be released to employers for follow-up graduate surveys. You can prevent disclosure of those items by filing a written request with the Office of Admissions and Records that they be withheld unless you grant written permission. If a student does not wish the College to release the directory information, a Confidential Hold form must be completed at Information Central. A student who has requested restricted release of information cannot perform any personal business with ACC over the phone or online. These students must conduct all of their business in person to protect the student's privacy. This includes, but is not limited to, using telephone and online registration and grading, calls from the student's family, child's school or daycare, etc.

All other information contained in your records is considered private and not open to the public without your written consent. Only the following individuals, because of their official function, have access to this information:

- ACC officials (A school official is: a. A person employed by the College in an administrative, supervisory, academic, research or support staff position. b. A person employed by or under contract to the College to perform a special task, such as the attorney or auditor. c. A student serving on an official committee, such as disciplinary or grievance committee, or who is assisting another school official in performing his or her tasks).
- Officials at other schools and colleges where you apply
- Officials of Colorado collegiate institutions that have transfer agreements with ACC and who wish to contact graduates
- State or federal education authorities
- Official evaluating your application for financial aid
- State and local officials requesting reporting data
- Organizations conducting studies for educational institutions or agencies
- Accrediting organizations
- Parents of dependent students (proof of dependency is required)
- Veterans Administration

Under the following circumstances, ACC may also provide information without your consent:

- Judicial orders
- Emergencies, where the information contained in your file is needed to protect your safety, health or welfare, or that of other persons

A complete copy of the Family Educational Rights and Privacy Act is available in the Office of Admissions and Records.

Record of Disability

Documentation of disability provided to the office of Disability Services is maintained in a limited-access file. In accordance with the Americans with Disabilities Act, Section 504 of the Rehabilitation Act and the Family Educational Rights and Privacy Act, all documentation is confidential. Under the following circumstances your educational records maintained by Disability Services will be released:

- When other ACC staff or faculty require information from your records for a legitimate educational interest or for the health and safety of yourself or others.
- When you sign a written request asking Disability Services to release your records to a specific ACC department or person.
- To off-campus authorities as authorized by law.

Security Phones

Please refer to Student Services/Information–Campus Police Department–Security Phones listing in this catalog.

Sexual Harassment

State of Colorado and Federal Law and State Board Policies and Procedures prohibit sexual harassment of students and College employees.

The ACC policy, which is based on BP 3-120 and SP 3-120a, is as follows: Board policy requires equal employment opportunity as well as affirmative action and references federal laws protecting the rights of individuals regardless of their sex. Sexual harassment of students and System employees is prohibited. Employees should know that when a power differential between the individuals involved exists, romantic or sexual relationships may lead to charges of sexual harassment.

Sexual harassment is defined as unwelcome sexual advances, request for sexual favors and other verbal or physical conduct of a sexual nature when one or more of the following criteria are met:

1. Submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment or academic status in a course, program or activity.
2. Submission to, or rejection of, such conduct by an individual is used as the basis of employment or academic educational decisions affecting such individual.
3. Such conduct is sufficiently severe, persistent or pervasive to have the purpose or effect of unreasonably interfering with an individual's work/academic educational performance or creating an intimidating, hostile, or offensive working/learning environment.
4. Matters having sexual connotation, which arise as part of the legitimate educational curricula and do not exploit students to a private advantage, would not violate college policy unless used in an improper manner. Examples of sexual harassment may include, but are not necessarily limited to:
   a. Physical assault
   b. Direct or implied threats that submission to sexual advances will be a condition of employment, work status, promotion, grades or letter of recommendation;
   c. Direct proposition of a sexual nature;
   d. Subtle pressure for sexual activity;

e. A pattern of conduct intended to discomfort or humiliate, or both, a reasonable person at whom the conduct was directed that includes one or more of the following:
1. Touching, patting, hugging or brushing against a person's body
2. Remarks of a sexual nature about a person's clothing or body
3. Remarks about sexual activity or speculation about previous sexual experience or
4. The display in the work or educational arena of sexually suggestive objects or pictures.

For further information about this policy or procedures, contact ACC's Office of Human Resources at 303-797-5720.

Smoking

Smoking and the sale of tobacco products are prohibited in all campus buildings pursuant to State Executive Order D003690. Smoke-free building entrances include the following: the Main entrance to the main campus building, the south entrance of the North Building (Child Development Center side) and the 3rd floor balcony of the main building. Smoking is also prohibited on the 4th floor balcony of the main building. Smoking on the North and East second floor balconies of the main building is restricted to the north portion of those balconies.

Student Bill of Rights

The General Assembly implemented the Student Bill of Rights (C.R.S. 23-1-125) to assure that students enrolled in public institutions of higher education have the following rights:

1. A quality general education experience that develops competencies in reading, writing, mathematics, technology and critical thinking through an integrated arts and science experience.
2. Students should be able to complete their associate of arts and associate of science degree programs in no more than sixty credit hours or their baccalaureate programs in no more than one hundred twenty credit hours unless there are additional degree requirements recognized by the commission;
3. A student can sign a two-year or four-year graduation agreement that formalizes a plan for that student to obtain a degree in two or four years, unless there are additional degree requirements recognized by the commission;
4. Students have a right to clear and concise information concerning which courses must be completed successfully to complete their degrees;
5. Students have a right to know which courses are transferable among the state public two-year and four-year institutions of higher education;
6. Students, upon successful completion of core general education courses should have those courses satisfy the core course requirements of all Colorado public institutions of higher education;
7. Students have a right to know if courses from one or more public higher education institutions satisfy the students' graduation requirements;
8. A student's credit for the completion of the core requirements and core courses shall not expire for ten years from the date of initial enrollment and shall be transferable.

Student Class Definitions

Your academic year classification is made according to the number of credit hours you have completed. We use the following definitions to determine your classification:

Freshman: A student who has successfully completed fewer than 30 semester credit hours.
Sophomore: A student who has successfully completed 30 or more semester credit hours.

Student Handbook

The Student Handbook is an essential resource for students at ACC. In addition to providing detailed information about renting a locker to posting items on the bulletin boards, this handbook also contains information about Student Rights and Responsibilities and the Code of Conduct. Pick up your free copy at the Student Affairs Office, M2820, and at the front desk of the DTC Campus and UCC facility.

Student ID Cards

You can obtain your Student ID card from the Campus Police. Your ACC Student ID card is required to check out books and materials from the library or to use the pool or Open Computer Lab and to buy/sell books in the bookstore. Your card will be valid for 2 years. Replacement cards are available for a $10.00 charge.

Student Affairs

Student organizations, recreational sports, clubs and activities are an essential part of campus life. The Student Affairs Office is the initial point of contact for student-related grievance filings or judicial affairs issues. For more information on the various ways the Student Affairs Office can help you, please stop by M2820 or call 303-797-5668.

Student Government

The Student Leadership Council is elected by the student body during the spring semester. With the assistance of the Director of Student Affairs, this group works to represent your interests in issues such as student activities, welfare and jurisdiction.

For more information, stop by the Student Leadership Council Office or call 303-797-5871.

Clubs and Organizations

Over 20 different clubs and organizations are available for students. Stop by the Student Affairs office, M2820, for a current listing, information on starting a club, or to pick up a club handbook.

Student Rights, Responsibilities and Code of Conduct

Please see Academic Standards–Students Rights, Freedoms and Responsibilities section of this catalog.

Student Publications

The student newspaper *The Arapahoe Free Press* is written and published by students and is funded with ACC student fees. Call 303-797-5666 for more information.

Progenitor is the nationally-recognized art and literacy magazine produced by ACC students. For more information e-mail progenitor@arapahoe.edu.

Telephones

The main campus building, the Church Street Building and University Center at Chaparral have pay phones for student use. The DTC Campus building and the North building have courtesy phones in the hallways – dial 9 to get an outside line for local calls only. Touch-tone registration phones are also located in the main campus building next to Information Central. All pay phones in the main campus building are wheelchair accessible and some have volume control for those with a hearing loss. A TTY pay phone is located on the first floor just outside of M1950.

Testing

Please refer to Student Services/Information–Assessment section of this catalog.

Tutorial Services

Our function is to provide a student-centered learning environment that will augment instructional offerings at Arapahoe Community College. Tutorial Services is specifically designed to enhance self-directed learning strategies to improve academic achievement and performance.

Free academic assistance in occupational and transfer degree programs is available to students who have a verifiable need. Students must follow CPT course recommendations and/or fulfill prerequisite course requirements to qualify for tutoring.

The Peer Tutoring Center is a comprehensive web-based tutoring service focusing on reading, writing and math. Student deficiencies are assessed and individual education plans are created so students can progress at their own pace. Students can access this service from any computer with the appropriate login information. Call Student Affairs at 303-797-5668 or visit room M2820 for more information.

Wireless Internet Access

ACC provides Internet access for students with laptops from certain areas on campus and from many of the instructional computer classrooms on campus. Please contact Technology Support Services at 303-797-5700 or extension 3199 from a campus phone to learn which areas have access and to learn the steps required to connect personal wireless devices to the ACC network.

LEARNING-CENTERED OPPORTUNITIES

Arapahoe/Douglas Career and Technical School

The Arapahoe/Douglas Career and Technical School is a division of Arapahoe Community College. It is intended to be the career/technical education wing of the home high schools in the school district consortium comprised of Cherry Creek, Douglas County, Englewood, Littleton and Sheridan school districts. Programs offered on a cooperative basis are designed to be an integral part of the program of studies conducted by each school. The curriculum offerings are designed for students who may be planning to enter the labor market upon graduation from high school as well as students who plan to continue their educational endeavors

LEARNING OPTIONS

Accelerated Courses

Accelerated courses require less classroom time than traditional classes. Accelerated classes have additional hours by arrangement with significant outside classroom coursework.

Arrangement (ARGMT) Courses

Arrangement courses require students to complete projects or other required class activities with faculty direction.

FLEX Courses

FLEX courses provide flexibility of learning at your own pace. Instructors will be available during posted hours in the classroom. Instructors will answer your questions, support your progress and promote your success.

Hybrid Courses

Hybrid courses have less classroom time than traditional classes and provide additional online activities and online class content. Students who do not have a computer with Internet access may use computers at the Open Computer Lab on ACC's main campus to meet the online requirements of the hybrid class.

Late Start

Late start classes begin after the second week of the semester. Late start classes are identified in the semester schedule with a special icon.

Online Courses

Online courses are regular college-credit classes courses that are taught online as opposed to in the classroom. Though online courses do require due dates and interaction with other students in the class, they offer flexibility to the busy, highly motivated, self-directed college student. Students wishing to take an online course must have an e-mail address and access to a personal computer with up-to-date hardware and software and Internet connectivity. Students may also use computers at the Open Computer Lab on ACC's main campus.

by enrolling in related fields of study at community colleges and universities. The Carpentry program is also offered to post-secondary students at ACC. For instructional program offerings or further information, visit their web site at www.actsinfo.org or call 303-797-5080.

Academic Achievement Classes

These courses are designed to develop student skills, define goals and build future success in college. Students do better in college when they take these classes: AAA 090 Academic Achievement Strategies; AAA 101 College 101: The Student Experience; AAA 109 Advanced Academic Achievement. Discuss these classes with your advisor.

Auditing Courses

Please refer to the Academic Standards – Auditing Courses section of this catalog.

Bachelor's Degree

By combining on-campus classes at ACC with online courses through Franklin University in Ohio, you can earn a bachelor's degree in the following undergraduate majors: Business Administration; Computer Science; Digital Communication; Health Care Management; Management Information Sciences; Public Safety Management and Technical Management. For more information, call 1-888-341-6237 or visit www.alliance.franklin.edu.

CCC Online

Colleges in the Colorado Community College System are sharing human and financial resources to deliver degree programs via the Internet. CCC Online allows students to earn associate degrees through web site coursework and regular communication with faculty and fellow students who may be anywhere in the world. Students will use tools of the Internet including chat rooms, threaded discussions, audio, video, webliographics and more. CCC Online is located at 9075 E. Lowry Blvd., Denver, CO 80220, 1-800-801-5040. For more information visit the CCC Online web site at www.ccconline.org.

Cultural Opportunities

Performance Opportunities
Students are invited to join the ACC Jazz Band, ACC Orchestra or our Theatre program for performance opportunities.

Colorado Gallery of the Arts (A1300)
The Colorado Gallery of the Arts (CGA) is one of ACC's treasures. The gallery hosts a number of local and regional art exhibitions each year, attracting artists and art lovers from the greater Denver community. CGA also hosts the ACC Art and Graphic Design & Illustration Students' exhibitions each spring. Exhibitions generally last four to five weeks. Admission is free, however, hours are limited. Call 303-797-5649 for dates and times. The Colorado Gallery of the Arts is located on the first floor of the Annex building near the tennis courts.

Diversity
ACC has a number of groups and staff dedicated to enhancing the understanding among diverse groups of people through special events, lectures and other learning-centered initiatives. Contact the ACC College Communications Department at 303-797-5709 for information about upcoming events or check for press releases posted at www.arapahoe.edu.

International Events
Arapahoe Community College joins with Spring International Language Center to present such cultural events as International Day and the annual International Dinner with community host families. These events highlight the cultures of ACC's international student body. Contact the ACC Communications Department at 303-797-5709 for information about upcoming events or check for press releases posted at www.arapahoe.edu.

Jantzen Gallery
(100 Building of Art & Design Center)
The Jantzen Gallery is a smaller gallery hosting exhibitions of art by current students and visiting artists-in-residence. Stop by!

Developmental Studies

Rapid skill development is the goal of developmental studies. If you need to boost your basic skills to succeed in college, you are encouraged to sign up for our courses. Non-English speaking students are encouraged to register for English as a Second Language courses. First time students are encouraged to take AAA 101, a College Orientation course.

Research has shown that students who take recommended courses to build their skills perform better in college. Your academic advisor can help you to determine which courses you need based on your placement test scores.

Specific Developmental Studies courses include:

ENG	060	Writing Fundamentals
ENG	090	Basic Composition
ESL	022	Intermediate Grammar
ESL	043	Advanced Reading
ESL	053	Advanced Composition
MAT	030	Fundamentals of Mathematics
MAT	060	Pre Algebra
MAT	090	Introductory Algebra
MAT	106	Survey of Algebra
REA	060	Foundations of Reading
REA	090	College Preparatory Reading
REA	112	Speed Reading

Those functioning below the secondary level on educational achievement or placement tests, or who need longer-term remedial education, should contact the Developmental Studies Department at 303-797-5825, or the Advising Center at 303-797-5651.

Fitness Center and Swimming Pool

ACC offers fitness programs for people of all abilities. You will have access to exercise equipment, an indoor track and a six-lane, indoor swimming pool with a certified lifeguard on duty at all times. The environment for both areas is supportive. Certified, professional staff are always available for personal guidance in either area. You may begin a fitness center and/or pool membership at any time. Call 303-797-5850 for details on the Fitness Center. Call 303-797-5854 for details on the swimming pool.

Great Books Achievement Awards

ACC is proud to be one of six community colleges nationwide chosen to participate in the National Great Books Consortium. Some sections of transfer courses, labeled "GB," will include some readings from authors identified in the 1990 Great Books series published by the Encyclopedia Britannica and the University of Chicago. The sections differ in no other way from other sections of the same course or equivalent courses at other colleges. Students who complete a Great Books section of a course with a B or better may apply those credits toward a Great Books Achievement Award Certificate, which will be awarded upon completion of 12 credit hours of Great Books sections. In addition, the Great Books sections and the Achievement Award will be noted on their transcripts.

Independent Study

Independent study is to meet your individual needs and to foster strong faculty and student connections. This course

format allows you to learn and study at your own pace under the guidance of an ACC instructor.

Many courses in this catalog can be set up for Independent Study. Courses may also be designed outside of our offerings. All Independent Study programs must be approved by the appropriate division dean.

If you're interested in pursuing an Independent Study course, talk to your advisor or an instructor. You'll need to complete a contract when you register that outlines the course title, credits, learning objectives and strategies. For additional information, please contact the Office of Admissions and Records at 303-797-5621.

Library

Please see the Weber Center for Learning Resources section of this Catalog.

Military Credit

You can be granted ACC credit for satisfactorily completing courses while serving in the military. ACC uses the Guide to the Evaluation of Educational Experiences in the Armed Services, published by the American Council on Education, to determine transferable hours. The credit will appear on your transcripts only after you have completed one semester hour at ACC and it will not be assigned a grade or quality points.

Service Members Opportunity College (SOC)

Arapahoe Community College belongs to the Servicemembers Opportunity College, an organization of over 400 colleges and universities providing educational opportunities to military personnel around the world. As an SOC member, ACC is committed to overcoming the obstacles to education that a military lifestyle presents. Assistance includes easing the transfer of course credits and granting credit for learning through military training and experiences.

SOC has been developed by educational representatives of the Armed Services, the Office of the Secretary of Defense and a consortium of thirteen national higher education associations. It is sponsored by the American Association of State Colleges and Universities (AASCU) and the American Association of Community and Junior Colleges (AACJC).

Phi Theta Kappa

Phi Theta Kappa is a prestigious, international academic honor society for two-year college students. Founded in 1918 by an assembly of two-year college presidents, Phi Theta Kappa today has over 1300 active chapters and 125 alumni chapters. ACC's chapter is Sigma Phi, chartered in 1968. You may qualify for membership if you have:

• Enrolled in a degree program at ACC
• Accumulated twelve credit hours at ACC
• Earned a cumulative GPA of 3.5 or higher at ACC
• Demonstrated moral character, and
• Been recommended by an ACC faculty member.

Candidates are invited to join each spring and fall semester.

Phi Theta Kappa focuses on four Hallmarks: Scholarship, Service, Leadership and Fellowship. Members participate in service-oriented activities, pursue active leadership roles and organize fundraisers and fellowship activities. The Society selects an interdisciplinary, current topic for study every two years. At ACC a transfer credit course based on the Honors Topic, HON 275 is open to all students. Many four-year schools designate transfer scholarships for members of Phi Theta Kappa.

If you are interested in joining Phi Theta Kappa, contact Advisors Erica Johnson at 303-797-5832.

Professional Achievement Awards

ACC's Professional Achievement programs respond to working adults' needs for convenient, short-term educational programs which teach concepts you can use on the job immediately. These are no-nonsense, high impact, application-oriented experiences designed by professional practitioners. Many of these programs can be completed within a year or less, following fast track and accelerated schedules. A "C" or better is required in each class to receive the award. Transfer credit may not exceed 50% of the credits applied to the award. Successful students will receive a "Professional Achievement Award." For more information, consult your semester schedule. See page 70 for list of awards.

Army Reserve Office Training Corps (ROTC)

Under an agreement with the University of Colorado at Boulder, ACC students may enroll in the Army ROTC program. Enrollment in the basic course incurs no military obligation except for Army scholarship recipients. Freshman and sophomores commute to Boulder or other designated locations weekly for classes. ROTC credits apply toward elective credit in both ACC's Associate of Art and Associate of General Studies degrees.

Under the affiliate school agreement, ACC students shall be considered as members of the University of Colorado at Boulder Corps of Cadets and as such, may participate in any military function. Further, such students are eligible for participation in host battalion extracurricular activities. Students who wish to register for Army ROTC classes sign up for them through the normal course registration process. AROTC classes begin with the ARM prefix. For more information, contact an Army ROTC representative (303-492-3549 or 303-492-6495), or send an e-mail to armyrotc@colorado.edu. You can also go to http://www.colorado.edu/AROTC.

Spring International Language Center

Spring International Language Center, a private, intensive English as a Second Language (ESL) program, has been affiliated with ACC since 1979. Spring offers six levels of instruction, 23 hours per week. Students in levels 5 and 6 can take six credits of college classes while completing their English. Graduates of Level Six can enter ACC without a TOEFL score. For information, call 303-797-0100; e-mail spring@spring-usa.com; or visit the web site at www.spring-usa.com.

Telecourses

Telecourses are delivered via televised lectures. These lectures are available on Channel 6, in the ACC Media Center Viewing Room or through a tape rental program.

Weber Center for Learning Resources (Library)

The Weber Center for Learning Resources, the College's library, part of the Learning Resource Center, is located in the main campus building (M2500). Expansive views of the Front Range of the Colorado Rockies are available from the Library. The two-floor, 24,000 square foot Library offers ACC students and the public a full range of college library services and resources designed to effectively make use of the "information explosion."

The Library's collection consists of over 47,000 print books; about 7,300 electronic books; 167 print periodicals; a dozen electronic databases with full-text periodical articles; over 11,000 microform holdings; over 1000 videos and DVDs; about 500 music CD titles. Interlibrary loan service for books and periodicals is also available. Last year saw over 145,000 patron visits to the Library, with over 14,000 items borrowed. During the semester the Library is open seven days a week for a total of 72.5 hours.

The Library has ten public computer workstations for research; a computer lab with 16 computers for student research and word processing. The Library computer lab is the site of over 100 library research instruction sessions held yearly by librarians and instructors. One-to-one teaching and assistance by the Library staff is common. The Library's highly-trained staff includes four professional librarians. The Library also has six group study/meeting rooms that are heavily used during the year.

Please return library books and other materials on time. A fine is charged for overdue items. Transcripts and registration forms will be withheld for library delinquencies.

ACADEMIC STANDARDS

Here is what you can expect of us… and what we will expect of you

Please read this section carefully. If you have additional questions, talk to your counselor, advisor, or someone at the Office of Admissions and Records. Division deans can also assist you in situations requiring an educational judgment. You have the right to appeal any policy interpretation provided by an ACC official.

Academic Load and Limitations

Goals vary from student to student. Many students come to ACC to earn an Associate degree. Others, including continuing education students, seek a certificate or the skills taught in a single course. This section is here to give you an idea of the course load that is right for you.

To earn a "C", the average student should plan to spend two hours out of class studying for every hour in class.

To earn an Associate degree in two years, you must take an average of 15-18 college level credit hours each fall and spring semester. Semesters last about 15 weeks. By taking additional summer courses, you may graduate sooner or carry lighter course loads.

ENROLLMENT STATUS CLASSIFICATION	
Status	Credit Hours
Full Time	12 or more
3/4 Time	9-11.5
1/2 Time	6-8.5
Less than half-time	Less than 6

One semester hour usually requires about 50 minutes in class per week and two hours of preparation. While the amount of time and work needed for success may change from semester to semester, in general, you will be kept busy if you are taking a full student load. We encourage working students or those with below-average grades to take fewer semester credit hours.

If you wish to take more than 18 credit hours in a semester, you will need to obtain permission from an academic advisor and/or the Vice President for Instruction.

Academic Probation/Suspension

(Not Related to Financial Aid Suspension)
Academic Alert
A student who has completed less than 13 credits with a **cumulative** Grade Point Average (GPA) below 2.0 for all classes completed in residence will be placed on **academic alert.**

Academic Probation
A student who has completed at least 13 cumulative credit hours at ACC must maintain a minimum cumulative GPA of 2.0. Transfer credits from other institutions will not be calculated in the GPA. A **cumulative** GPA lower than 2.0 will place a student on **academic probation.**

The Registrar will provide notification to a student placed on academic probation. The probation process includes meeting with an academic advisor during each semester of probation. Probation will be in effect until the student's ACC **cumulative** GPA reaches a minimum of 2.0. Probationary status will be noted on the student's transcript. The status is specific to the home institution and does not transfer or impact a student's enrollment at other Colorado community colleges. Academic Probation/Suspension rules apply to Developmental Studies also.

Probation (initial): **Cumulative** GPA less than 2.0 for all classes completed in residence when 13 hours have been attempted.

Probation (continuing): **Cumulative** GPA less than 2.0 for all classes completed in residence and last **semester** GPA *greater than* 2.00.

Academic Suspension
While on academic probation, the student must maintain a minimum **semester** GPA of 2.0 based on hours completed for EACH semester of attendance. A student who falls below the 2.0 **semester** GPA for any semester while on probation will be placed on **academic suspension.**

A student on suspension will be notified in writing by the Registrar. Suspension denies the student enrollment in credit courses at ACC *for the next semester* following the first suspension, *for the next two semesters* following the second suspension and *for the next two years* following the

third suspension. Academic suspension will be noted on the student's transcript. A student on suspension may register for subsequent semesters (as indicated above) after meeting with an academic advisor.

Appeal of Academic Suspension

A student with unusual circumstances of a compelling nature may appeal suspension by submitting a Suspension Appeal Form to the Dean of Student Services no later than 10 working days after being notified of suspension. The student must complete the Suspension Appeal Form with an advisor prior to submitting it to the Dean. The Dean will deny or approve the student's appeal. If a student's appeal is approved, he/she may enroll under Probationary (continuing) status. This status is specific to the home institution and does not transfer or impact student's enrollment at other Colorado community colleges.

Academic Renewal

Academic Renewal allows for a one-time exclusion of a maximum of 30 semester hours of credit from the calculation of the grade point average. Academic Renewal may be awarded to a student for prior deficient or failing grades earned in ACC coursework.

The following criteria apply for Academic Renewal:
1. Up to 30 hours can be excluded from GPA, but those grades will remain on student's transcript.
2. The student must be out of school for two years to be eligible for Academic Renewal.
3. Student must be enrolled and have completed at least six hours with a minimum 2.0 GPA since returning to ACC.
4. Students can only apply once for Academic Renewal which is not reversible.
5. The original grade received will remain on the official transcript. The following note will be added to the official transcript: "Academic Renewal Awarded (excluded from GPA)".

Academic Renewal request forms are available at Information Central.

Add/Drop

You may add or drop a class during the first 15 percent of the course term. Look for specific dates in the ACC schedule. Schedule Adjustment Forms are available at Information Central. Please refer to our refund policy under Tuition and Fees in this catalog.

Attendance

Students are expected to attend all classes except in the case of illness or emergency. Instructors will inform you of their individual policies. Students who miss too many sessions may be advised to withdraw from a course.

Auditing Courses

You are welcome to take a course without earning credit, but will be charged full tuition and fees (COF not applicable). Your request to audit a course or change back to credit status can be made through the census (drop) deadline of the course. Instructor approval is required after the add/drop period is over. Audit students are expected to follow attendance and withdrawal policies. No credit is earned for courses

taken by audit. Courses taken by audit are not eligible for the College Opportunity Fund, financial aid or veterans' educational benefits. Alternate Grading Option Forms are available at Information Central.

Course Substitutions

If you believe you have mastered the subject matter of a class which is required for your degree or certificate, you may seek to have the course(s) substituted. Obtain a Course Substitution Petition from Information Central and meet with your departmental advisor. Some required courses are eligible to be substituted by the departmental advisor and the appropriate dean; substitutions for other courses must be approved by the advisor, dean and the Academic Standards committee. Your departmental advisor will assist you with determining the correct substitution method. Credit is not granted by a substitution; the petition must include how the credit requirement will be satisfied.

Grading System

The Office of Admissions and Records keeps a permanent academic record of your college progress. If you are attending ACC under VA benefits, we advise you to study the section on Grades and veterans' benefits in the following pages.

Letter Grades

A grading system is used to evaluate the level of your academic achievement. The following letter grades are awarded for each course and entered on your academic record.

A   Excellent or Superior
B   Good
C   Average
D   Deficient, but passing
F   Failure, course requirements not satisfied
I   Incomplete—further work must be completed (see requirements under "Guidelines for Grades and Symbols")
S   Satisfactory—the student has passed at the level of C or above (Satisfactory/Unsatisfactory option)
U   Unsatisfactory—the student has not satisfactorily passed the course. (Satisfactory/Unsatisfactory option)
CR   Credit Awarded—No letter grade
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

These symbols may also appear on your academic records, but they are not awarded by an instructor:

AU   The student audited the course
AW   Administrative Withdrawal. College administration withdrew the student from this course. This course is not calculated in hours completed or GPA.
W   The student withdrew from the course
SP   Satisfactory Progress
Z   or (blank) No grade has been submitted by instructor

Guidelines for Grades and Symbols

ACC faculty use the following guidelines to establish grading criteria. They may be applied differently according to program requirements.

Grade A – Superior

The student has demonstrated superior mastery of achievement of course objectives.

Grade B – Above Average Achievement

The student has demonstrated better-than-acceptable mastery of the course objectives and/or additional objectives.

Grade C – Average

The student has demonstrated acceptable mastery or achievement of the course objectives.

Grade D – Deficient but Passing Grade

The student has demonstrated less-than-acceptable mastery or achievement of course objectives. In some programs it may be necessary to repeat the course in order to advance, as D-level achievement is not satisfactory for advancement in the same or related studies. Credit may not transfer.

Grade F – Failure

The student remained enrolled in the course but has not demonstrated achievement of course objectives.

S – Satisfactory Completion (Used only with the Satisfactory/Unsatisfactory option).

1. The student is adequately prepared to advance to the next class in the sequence. This equates to a grade of "C" or better.
2. The student's overall GPA is not affected even though the student earns credit for the course.
3. No "S" grade may apply to the A.A./A.S. degrees.

U – Unsatisfactory Completion of the Course (Used only with the Satisfactory/Unsatisfactory option).

1. The student has not completed the course satisfactorily.
2. The course will not affect either the student's GPA or total number of credit hours.

Provisions of the Satisfactory/ Unsatisfactory option:

1. You may take any course under the Satisfactory/ Unsatisfactory option but may earn no more than 18 credit hours this way. No "S" grade may apply to the A.A./A.S. degrees.
2. You may select to take a course for a Satisfactory/ Unsatisfactory grade through the withdrawal period of the course. You must complete a form in the Admissions and Records office to select this option.

I – Incomplete.

Incompletes may be given to students who, because of illness or circumstances beyond their control, are unable to complete their course work within the semester.

An Incomplete is given only if you have completed at least 75% of the term with a "C" or better and have provided evidence to the instructor that you are unable to continue.

An Incomplete Grade Form must be filed by the instructor with the Office of Admissions and Records when submitting class grades. The form is a contract that must be signed by both instructor and student.

It will list:
- The work that you must submit to complete the course.
- The time period in which the work must be completed (not to exceed the following semester—Summer excluded), and
- The grade to be assigned if the work is not completed. The grade assigned by the instructor will be posted on the transcript and the "I" removed if the work is not completed in the time period established on the form.

- If a grade is not assigned by the instructor on the incomplete form, or, if an incomplete form is not submitted, the grade will convert to an "F."

AU – Audit

Some students prefer to "audit" a course for self-enrichment or review without earning a grade or college credit. You can request to audit by submitting the appropriate form to Information Central by the census (drop) date for the course. After the add/drop period, you must also obtain your instructor's signature.

Courses taken by audit are not eligible for the College Opportunity Fund, financial aid or veterans' educational benefits.

AW – Administrative Withdrawal

College administration withdrew the student from these courses. These courses are not calculated in hours completed or GPA.

SP – Satisfactory Progress

This symbol is limited to FLEX courses and courses that run longer than a full semester, if the student is progressing satisfactorily at the time grades are due for the given semester. No academic credit is awarded until the course is completed. If the course is not completed by the date it should end, a grade of 'F' will be posted.

W – Officially Withdrawn from a Course.

You may withdraw from a class at any time within the first 80 percent of the class term at the Records Office. The class will still appear on your transcript along with a "W" grade. However, a "W" will not affect your credit or cumulative GPA. Students who do not officially withdraw by the deadline date will be graded by the instructor. **A "W" cannot be submitted as a final grade.**

The College may initiate withdrawal in some instances, such as death, veteran non-attendance, or disciplinary action, or if the student does not meet the specific prerequisite(s).

Z – Grade not submitted by instructor.

No grade has been submitted by instructor. Should a grade not be submitted by the end of the next term, a grade of 'F' will be posted.

Grade Point Average or GPA

1. **Grade Point Average calculation**
   Grade points indicate the achievement for the number of credits completed. To calculate a grade point average, multiply the credits by the points for the grade earned. Total the credits and divide by total credits. The result is your GPA.

Grade	Points
A	4
B	3
C	2
D	1
F	0

2. Only the credits and grade points you earn at ACC will be used to compute the semester and cumulative GPA appearing on your ACC transcript.
3. Grades awarded for developmental courses (courses numbered under 100) will not be included in a student's grade point average. Grading for developmental courses will utilize the Developmental grade mode (S/A, S/B,

S/C, U/D, U/F). The credits will count toward earned and attempted credits. GPA's for term recognition such as President's List and Dean's List will not include developmental courses in the calculation.

Term Academic Honors

Students completing a minimum of 12 credits during the semester can achieve honors designations on their transcripts as follows:

President's List–4.0 term GPA
Dean's List–3.5-3.99 term GPA

Grade Corrections

1. Grades are not grievable.
2. If you find omissions or errors in your grade report, ask the Admissions and Records Office to review the record.
3. If you find a computational error or you wish to have an I (Incomplete) converted to a letter grade, notify your instructor or the appropriate department. All requests to review errors must be filed within one year.
4. The grade of AU (Audit), S (Satisfactory), or U (Unsatisfactory) continues as your permanent grade unless you repeat the course. At that time, you can take it for a letter grade of A, B, C, D, or F, but the original grade will remain on your transcript.

Grade Reports

Your grades will be available to you after grades are posted at the end of each semester. You may access your grades through the Touch-Tone System at 303-389-0058 or via the Student Personal Information system on CCCWeb. After your grades are listed, you will be given the option to have a hard copy mailed to you. Make sure the Records Office has your current address.

Grades and Veterans' Benefits

If you are eligible to receive veterans educational benefits, you must make sufficient academic progress to retain your full educational benefits. Your cumulative GPA will be computed by your A, B, C, D, F and S grades. Grades of "I" or "U" are reported to the VA Regional Office as non-punitive grades. The VA may deny some of your benefits for the semester you received an "I" or "U" grade, unless those grades are corrected by the end of the next regular semester. Under "mitigating circumstances," you may appeal this decision.

Grades of "W" are also reported to the VA Office and include the date of withdrawal. Once again, you may be denied some of your benefits, unless your mitigating circumstances are accepted by the VA.

VA students must earn at least a 2.0 GPA each semester or risk being placed on probation. Those who do not improve their grades by the end of the next semester may be subject to suspension of their benefits.

If your benefits are suspended, reinstate them by 1) undergoing academic progress counseling with The Veterans Affairs Office (M2145), or 2) completing a semester of credit hours equal or greater to the hours you were taking in the semester your benefits were terminated. The VA will certify payment if your cumulative GPA for the semester is 2.0 or above.

Veterans are not awarded benefits for courses assigned an "AU" (Audit) designation or for credit awarded through prior learning (i.e. portfolio, challenge, etc.)

You are responsible for keeping the Veteran's Affairs Office (M2145) informed of any changes in your enrollment status, address and/or phone number while attending ACC. You must make sure that the classes you are registered for apply toward your degree. If you have any questions, contact the Veterans Affairs Office. Failure to do so may affect your monthly check.

Veterans' Attendance

Because the VA's regulations must be strictly enforced, accurate records are kept on veteran progress and class attendance. If you miss class for more than a period of two weeks and do not make arrangements with your instructor, your absences will be reported to the Veterans Affairs Office. This office then certifies this information to the Regional VA Office, which reduces the training time effective to the last day of your attendance. This may result in a change of certification and loss of your benefits.

Repeat Courses

You may repeat any course. A new grade will be recorded under the following guidelines:

If you complete the repeat of a course after June 1, 1987 and before August 27, 2006, you can request that the original course and grade have a notation under the course title which reads "Repeat (excluded from GPA)" If you do not make this request, all instances of the course will remain on the transcript and be calculated into the GPA; however, for graduation purposes, a course will only count once within any single degree or certificate program and will be "flagged" as repeated during the degree check process.

1. If you repeat a course beginning fall semester, 2006, the highest grade will be used in the GPA calculation. There will be no limitations on course grades that are eligible to repeat.
2. All credit hours earned for initial and repeated courses will be deducted from students remaining College Opportunity Fund Stipend eligible hours.
3. "Repeated" courses may be applied only one time to a certificate or degree, except for variable credit courses and other designated courses, such as special topics.

Please make your request to have the previous instance of a course flagged as a repeat by completing the form at Information Central or click on "commonly used forms" at www.arapahoe.edu.

Student Rights, Freedoms, Responsibilities and Code of Conduct

We pride ourselves on college spirit—with this is the commitment to individual rights and freedoms, but also an expectation that students conduct themselves in a responsible manner. We believe that with open communication, collaboration and compromise we can work through problems on an informal basis with all parties directly involved. However, for more serious violations that cannot be resolved informally, a written complaint may be sent to the Student Affairs Coordinator.

Judicial and grievance procedures along with academic honesty policies are delineated in the ACC Student Handbook. The Student Handbook is available in the Student Affairs Office, M2820 or at www.arapahoe.edu.

Graduation

We are ready to help in any way, but you bear the responsibility for fulfilling your graduation requirements. We encourage you to file your graduation application 12 months prior to your projected term of graduation or at least by the semester deadline before you plan to graduate. Please check that you have completed at least 50 percent of your degree or certificate before filing your graduation application.

You can informally check on your degree/certificate through the division of your declared major. If you have not yet declared a major, check with the Advising Office. Also, the Advising Office can do a preliminary graduation evaluation for students completing the A.A., A.S. or A.G.S. degree.

Occasionally, degree requirements change. You will be allowed, however, to go by the requirements listed in any catalog published while you were a student, with the following conditions:

- You must select from a catalog that contains your program
- You cannot combine catalogs
- If you left ACC and returned more than a year later, you may only select from catalogs in effect after your re-admittance

You cannot use a catalog more than six academic years old at the time of your graduation. To obtain a degree from ACC, you must:

1. File an application for graduation at Information Central. Deadline Dates are: Summer Semester–April 1; Fall Semester–July 1; Spring Semester–November 1
2. Achieve a cumulative grade point average of 2.0 or better in coursework applicable to your degree. Some programs also have minimum "C" grade requirements.
3. Fulfill the published course and program requirements applicable to your degree or certificate.
4. If Physical Education is a requirement for your degree, you may also meet this requirement through active military service. Credit will be awarded as recommended by the ACE guide. This requirement may also be substituted, if:
   - You submit a medical exemption from your physician, chiropractor, or podiatrist to the Office of Admissions and Records
   - You are 35 years of age or older at the time of your most recent admission to the college, unless specifically required by your program
   - If you are using a catalog for your graduation requirements that was in effect before your 35th birthday, you must satisfy the physical education requirement (if this requirement is to be substituted, you must complete the appropriate credit to substitute for physical education).
5. Fulfill published degree or certificate residency requirements in ANY of the following ways:
   - All of your program requirements at ACC **or**
   - Fulfill at least 45 semester credits in coursework applicable to the degree at ACC, then complete the remaining program coursework at approved colleges or universities and transfer those applicable credits to ACC **or**
   - Complete your final coursework applicable to the degree at ACC (a minimum of 15 semester credits) after transferring in applicable credits toward your program from approved colleges or universities **or**
   - Complete at least 50% of courses applicable to your degree or certificate credit requirements at ACC.

Special Graduation Considerations:

1. There is a specific policy (AP9-9) governing the awarding of multiple degrees. Before beginning a second degree, please request a copy of the policy from the Office of Admissions and Records or see an academic advisor.
2. Content in a course may change as new information or technology becomes available. Some changes are so critical that dated courses may no longer satisfy current requirements for the degree or certificate. Courses taken within the six year catalog limit will not be subject to this review unless otherwise specified in the catalog by the department.
3. If any of the following apply to you, please refer to the appropriate sections of this catalog for specific requirements and limitations:
   a. Credit for Prior Learning
   b. ROTC Credit
   c. Courses graded as Satisfactory/Unsatisfactory

Graduation Honors

Students with a 3.5 or higher cumulative GPA will graduate with honors. This designation will be transcripted.

GRADUATION CHECKLIST

Students who complete their degree and/or certificate requirements may receive their diplomas at the end of the semester in which they satisfy the requirements, provided they have also completed the graduation application process described below. Cards will be mailed to these students notifying them that they may pick up their diplomas at Information Central. (Diplomas are only mailed to graduating students living outside the Denver metro area.) Graduates may also choose to walk and receive their diplomas at the Commencement exercises.

Students are encouraged to participate in Commencement exercises.

A full semester before you intend to graduate:

__ Complete a Graduation Application available from Information Central or printed off ACC's web site.

__ Submit the completed application, along with the processing charge(s) as indicated on the application, to the Cashier's Office in person or via mail to Cashier's Office, Arapahoe Community College, P.O. Box 9200, Littleton CO 80160-9002 or fax to 303-797-5973.

__ Verify your address with the College. This can be done online from www.arapahoe.edu (Current Students section) or by calling the Office of Admissions and Records at 303-797-5621.

__ Expect a letter or e-mail from the Graduation Coordinator officially informing you of your remaining requirements.

__ Initiate any Course Substitution Petitions.

__ If qualified and interested, join Phi Theta Kappa Honor Society.

During the following Spring Semester (in which you intend to walk at Commencement):

__ Update address (mail and e-mail) with College if necessary (see above).

__ Summer, Fall and Spring semester graduating classes should expect to receive detailed ceremony information via mail or e-mail by the third week of March. If you do not receive a letter by the end of March, call 303-797-5630.

__ Immediately return the Participation Form enclosed within the ceremony information packet to Information Central.

The graduation ceremony will be held on the ACC lawn with unlimited guest seating. The date is published in this document under College Calendar. However, in the event of inclement weather, the location of an alternate indoor site will be provided. Under these circumstances, seating will be limited on a first-come, first-served basis.

__ Register with the ACC Alumni Association by completing and mailing the postage-paid alumni association card included in your information packet.

__ Purchase your cap, gown and tassel for the ceremony from the ACC Bookstore on the date(s) published in the ceremony information packet. You may also choose to purchase a ring and/or invitations (optional).

__ Expect to receive additional information by the end of April with explicit instructions for the day of the ceremony. If you do not receive a letter, call 303-797-5630.

Within 4-6 weeks after the Ceremony:

__ Expect to receive a proof of your graduation photo and order form from the photographer so you may place an order. If you do not receive this after six weeks, and you are interested in seeing your photo, contact the photographer listed in your information packet.

Your A.A. or A.S. Degree May Transfer to all Colorado Public 4-year Colleges and Universities

The agreement among Colorado public colleges and universities guarantees that when you complete your A.A. or A.S. degree with at least 60 credit hours of course work and a grade of "C" or better in every course, your work will transfer to Colorado public colleges and universities.

If you complete the appropriate courses for your major, you may be able to finish your bachelor's degree in an additional 60 credits. However, the transfer of credits from private, non-accredited, out-of-state institutions or the awarding of credit from non-credit bearing courses, or courses that are over 10 years old, may transfer to the four-year school, but are not guaranteed to transfer. Contact the four-year institution for more information. To finish within two years at Arapahoe Community College and in an additional two years at the four-year institution depends on the number of credits you take each semester, the course sequencing in your major and course availability.

This agreement does not apply to Nursing, Business, Teacher Education or Engineering as these majors have state-wide articulations with specific lower division requirements.

Save time by seeing your transfer advisor at your earliest opportunity for "transfer guides." In addition to showing you which lower division courses are required for articulation programs, these guides will tell you which lower division courses will be best suited for your intended major and you can be sure to complete the prerequisites for sequenced coursework before transferring to a four-year school.

The A.A./A.S. transfer agreement applies to courses completed at ACC. Credit earned for prior learning, Advanced Placement, correspondence courses, CLEP and other tested-only credit may not apply. The institution you wish to transfer to will evaluate these credits according to its own policies.

Student Appeal Policy

If disagreement regarding the transferability of credits earned occurs between a student and a receiving two-year or four-year institution, a student may be entitled to an appeal as follows.

If you:
  • Graduated with an A.A. or A.S. degree
  • Completed 35 credits of state-guaranteed general education courses as outlined above
  • Earned a "C" or better in each course
And
  • Your transcript evaluation indicates that you need more than 60 hours to complete your bachelor's degree – *you can file an appeal.*

For complete information on the Colorado Commission on Higher Education's Transfer Policy and the Student Appeals Policy, contact the Arapahoe Community College Advising Center, 303-797-5651.

Colorado's Guaranteed Transfer Courses

In 2001, the Colorado General Assembly established that 35-37 general education credits will transfer among all Colorado public higher-education institutions. In Fall, 2006, the structure of the A.A. and A.S. degrees will change as reflected in the following categories:

General Education Categories and Courses	Sem Hr Credits

Communication: 6
  ENG 121 (GT-CO1)
  ENG 122 (GT-CO2)

Mathematics: (GT-MA1) 3-5
Select one course from the following:
  MAT 120, 121, 122, 123, 125, 135, 155, 156, 201, 202

Arts and Humanities 6-9
Select at least two courses with no more than one course from any one category:

Art and Expressions (GT-AH1): ART 110, 111, 112; MUS 120, 121, 122; THE 105, 211, 212

Literature and Humanities (GT-AH2): HUM 121,122,123; LIT 115, 201, 202, 205, 211, 212, 221, 222;

Ways of Thinking (GT-AH3): PHI 111, 112, 113

Foreign Language (GT-AH4): SPA 211, 212, JPN 211, 212, FRE 211, FRE 212

Social and Behavioral Sciences 6-9
Select at least two courses, one of which must be history, with no more than two courses from any one category:

History Courses:
  HIS 101, 102, 201, 202, 247

Economic or Political Systems (GT-SS1):
  ECO 201, 202; POS 105, 111

Geography Course (GT-SS2):
  GEO 105, 106

Human Behavior, Culture or Social Frameworks (GT-SS3):
Courses:
  ANT 101, 111; PSY 101,102, 235; SOC 101,102

*NOTE: To reach a minimum of 15 credits, select 1 additional course in Arts and Humanities, History or Social and Behavioral Sciences.

Physical and Life Sciences (GT-SC1, GT-SC2) 8
Select two courses from the following:

  AST 101, 102; BIO 105, 111, 112, 201, 202, 204;
  CHE 101, 102, 111, 112; GEY 111, 121;
  PHY 105, 111, 112, 211, 212
  SCI 155, 156

PROGRAMS OF INSTRUCTION

A.A.–Associate of Arts   A.S.–Associate of Science   A.A.S.–Associate of Applied Science   A.G.S.–Associate of General Studies

*Indicates programs that are also offered online

Please visit **www.arapahoe.edu** for the most current, updated catalog information.

DEGREE REQUIREMENTS

Customized Articulation Agreements

In addition to our transferable Associate of Arts and Associate of Science degrees, the College has established customized transfer articulation agreements for the following "normal" nontransferable programs. This allows students to transfer directly into four-year degree programs. Please meet with an advisor to ensure correct course selection to meet transfer agreement requirements.

CCCS articulation agreements can be found at www.cccs.edu/EdService/Transfer.html.

Associate of Arts Degree Core

Students completing any guaranteed Transfer Course as listed on page 26 of the College Catalog are guaranteed acceptance of the course at any public four-year college or university in Colorado.

The new State Guaranteed Transfer Courses and the new Colorado Community College General Education requirements have been incorporated into the degree. Students who complete a 60 credit hour A.A. degree with appropriate course requirements and grades of "C" or better may be able to complete a Baccalaureate degree in 60 additional credits after transferring to a four-year public institution. Consult your ACC Advisor about Colorado's 60 + 60 plans.

NOTE: This guarantee excludes majors in Education, Business, Engineering and Nursing.

General Education Core

I. Communications   **(9 credit hours)**

ENG	121	English Composition I	3
ENG	122	English Composition II	3
SPE	115	Public Speaking OR	
SPE	125	Interpersonal Communication	3

II. Art and Humanities   **(6-9 credit hours)**

Select at least two courses with no more than two courses from any one category:

Art

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

Literature & Humanities

HUM	121	Early Civilizations	3
HUM	122	From Medieval to Modern	3
HUM	123	The Modern World	3
LIT	115	Intro to Literature	3
LIT	201	Masterpieces of Literature I	3
LIT	202	Masterpieces of Literature II	3
LIT	205	Ethnic Literature	3
LIT	211	Survey of American Lit I	3
LIT	212	Survey of American Lit II	3
LIT	221	Survey of British Lit I	3
LIT	222	Survey of British Lit II	3

Ways of Thinking

PHI	111	Intro to Philosophy	3
PHI	112	Ethics	3
PHI	113	Logic	3

Foreign Language

FRE	211	French III	3
FRE	212	French IV	3
SPA	211	Spanish III	3
SPA	212	Spanish IV	3
JPN	211	Japanese III	3
JPN	212	Japanese IV	3

III. Mathematics   **(3 credit hours minimum)**

MAT	120	Mathematics for Liberal Arts	4
MAT	121	College Algebra	4
MAT	122	College Trigonometry	3
MAT	123	Finite Mathematics	4
MAT	125	Survey of Calculus	4
MAT	135	Introduction to Statistics	3
MAT	201	Calculus I	5
MAT	202	Calculus II	5

IV. Social and Behavioral Sciences   **(6-9 credit hours)**

Select at least two courses, one of which must be history, with no more than two courses from any one category.

Economic and Political Systems

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

Human Behavior and Social Systems

ANT	101	Cultural Anthropology	3
ANT	111	Physical Anthropology	3
PSY	101	General Psychology I	3
PSY	102	General Psychology II	3
PSY	235	Human Growth and Development	3
SOC	101	Intro to Sociology I	3
SOC	102	Intro to Sociology II	3

Geography

GEO	105	World Regional Geography	3
GEO	106	Human Geography	3

History

HIS	101	Western Civilization I	3
HIS	102	Western Civilization II	3
HIS	201	U.S. History I	3
HIS	202	U.S. History II	3
HIS	247	Contemporary World History	3

V. Physical and Life Science   **(8 credit hours)**

Select two courses. (Credits over 8 will be applied to the electives category.)

AST	101	Astronomy I	4
AST	102	Astronomy II	4
BIO	105	Science of Biology	4
BIO	111	General College Biology I with Lab	5
BIO	112	General College Biology II with Lab	5
BIO	201	Human Anatomy and Physiology I	4
BIO	202	Human Anatomy and Physiology II	4
BIO	204	Microbiology	4
CHE	101	Introduction to Chemistry I with Lab	5
CHE	102	Introduction to Chemistry II with Lab	5

CHE	111	General College Chemistry I with Lab	5
CHE	112	General College Chemistry II with Lab	5
GEY	111	Physical Geology	4
GEY	121	Historical Geology	4
PHY	105	Conceptual Physics	4
PHY	111	Physics: Algebra-Based I with Lab	5
PHY	112	Physics: Algebra-Based II with Lab	5
PHY	211	Physics: Calculus-Based I with Lab	5
PHY	212	Physics: Calculus-Based II with Lab	5

VI. Electives   **(21 credit hours)**

Courses from the following list must be selected to bring the total credit hours to 60. Please note that in some disciplines only certain courses apply.

ACC (121, 122 only), ANT, ASL (121, 122 only) AST, ART, BIO (100 or above), BUS (115, 216, 217 only), CHE, CIS (only the following: 115, 118), CSC (160, 161, 225, 230 only), ECO, ECE (101, 102, 111, 205, 220, 226, 285 only), EDU, ENG (131 or above), GEO, GEY, HIS, HON, HUM, HWE (108, 124 only), JOU, LIT, MME, MAT (MAT 120 or higher), MUS, PED, PHI, PHR, PHY (PHY 105 or above), POS, PSY, SCI (155, 156), SOC, SPA 114, SPE, THE and any foreign language numbered 111-112, 211-212.

Total   **60**

*Not all independent study or special topics courses may apply.

Associate of Arts Degree–Business Transfer Emphasis

See also A.A.S., Business Administration

The Associate of Arts degree with a Business Transfer Emphasis is designed for the student who wishes to transfer to a Colorado four-year public college or university. Students who complete this program, maintain a minimum 2.0 cumulative GPA and earn a ' or better in all courses shall be fully considered for admission into the business programs offered by state four-year public colleges or universities. This agreement does not guarantee admission to the School of Business. However, it does guarantee that admitted students who follow the condition of this agreement will be guaranteed complete transfer of the A.A. degree up to the maximum allowable course credits. If a student is offered admission, the student will enter with junior standing in the School of Business, provided that the A.A. degree includes all courses specified below.

    Students who have earned two-year degrees other than the A.A. in Business or who have not fully completed the degree requirements will be evaluated on a course-by-course basis. Individual business courses may transfer and count toward the graduation requirements for a four-year business degree, but the transferable courses are limited to the course equivalents of the courses specified in the curricula of the four-year Business Administration degree programs. The four-year college or university will accept all eligible credits earned within ten years of transfer. Courses earned more than 10 years earlier will be evaluated on an individual basis. Students should review the business degree requirements of the four-year college or university of their interest when making plans to transfer.

    This agreement is between the Colorado community colleges and the following Colorado public four-year institutions of higher education: Adams State College, Colorado State University, Colorado State University-Pueblo, Fort Lewis College, Mesa State College, Metropolitan State College of Denver, University of Colorado at Boulder, University of Colorado at Colorado Springs, University of Colorado at Denver, University of Northern Colorado and Western State College.

General Education Requirements (40 credit hours)

Communications			**(9 credit hours)**
ENG	121	English Composition I	3
ENG	122	English Composition II	3
SPE	115	Public Speaking	3
Mathematics			**(8 credit hours)**
MAT	123	Finite Mathematics OR	
MAT	121	College Algebra	4
MAT	125	Survey of Calculus	4
Social Sciences			**(9 credit hours)**
ECO	201	Principles of Macroeconomics	3
ECO	202	Principles of Microeconomics	3

Select one History Elective from the following list:

HIS	101	Western Civilization I	3
HIS	102	Western Civilization II	3
HIS	201	U.S. History I	3
HIS	202	U.S. History II	3
HIS247		Contemporary World History	3
Arts & Humanities			**(6 credit hours)**

Select two Arts & Humanities Electives from the following list:

ART	110	Appreciation	3
ART	111	Art History I	3
ART	112	Art History II	3
HUM	121	Early Civilizations	3
HUM	122	From Medieval to Modern	3
HUM	123	The Modern World	3
FRE	211	French III	3
FRE	212	French IV	3
SPA	211	Spanish III	3
SPA	212	Spanish IV	3
JPN	211	Japanese III	3
JPN	212	Japanese IV	3
LIT	115	Introduction to Literature	3
LIT	201	Masterpieces of Literature I	3
LIT	202	Masterpieces of Literature II	3
LIT	205	Ethnic Literature	3
LIT	211	Survey of American Lit I	3
LIT	212	Survey of American Lit II	3
LIT	221	Survey of British Lit I	3
LIT	222	Survey of British Lit II	3
MUS	120	Music Appreciation	3
MUS	121	Introduction to Music History I	3
MUS	122	Introduction to Music History II	3
PHI	111	Introduction to Philosophy	3
PHI	112	Ethics	3
PHI	113	Logic	3
THE	105	Introduction to Theatre Arts	3
THE	211	Development of Theatre I	3
THE	212	Development of Theatre II	3
Science			**(8 credit hours)**

Select two lab-based science courses from the following list: (Credits over 8 may be applied to the electives category at the four-year institution.)

AST	101	Astronomy I	4
AST	102	Astronomy II	4
BIO	105	Science of Biology	4

BIO	111	General College Biology I with Lab	5
BIO	112	General College Biology II with Lab	5
BIO	201	Human Anatomy and Physiology I	4
BIO	202	Human Anatomy and Physiology II	4
BIO204 Microbiology			**4**
CHE	101	Introduction to Chemistry I with Lab	5
CHE	102	Introduction to Chemistry II with Lab	5
CHE	111	General College Chemistry II with Lab	5
CHE	112	General College Chemistry II with Lab	5
GEY	111	Physical Geology	4
GEY	121	Historical Geology	4
PHY	105	Conceptual Physics	4
PHY	111	Physics: Algebra-Based I with Lab	5
PHY	112	Physics: Algebra-Based II with Lab	5
PHY	211	Physics: Calculus-Based I with Lab	5
PHY	212	Physics: Calculus-Based II with Lab	5
Business Graduation Requirements			**(20 credit hours)**
Accounting			**(8 credit hours)**
ACC	121	Principles of Accounting I	4
ACC	122	Principles of Accounting II	4
General Business			**(12 credit hours)**
BUS	115	Introduction to Business	3
BUS	216	Legal Environment of Business	3
BUS	217	Business Communications	3
BUS	226	Business Statistics	3
Total credit hours for			**60 credit hours**
Associate of Arts Business			

NOTE: This degree will be conferred as an **Associate of Arts.** *Business Transfer Emphasis* will not be listed on student's transcript or diploma, but will be recognized by transfer institutions for program admission.

Associate of Arts, Elementary Education Transfer

Statewide Elementary Education Transfer Agreement

The Associate of Arts degree with an Elementary Education Transfer Emphasis is designed for the community college student who wishes to transfer to a Colorado 4-year public college or university to receive a Bachelor's degree with an Elementary Education teacher licensure. Students who complete the program at the community college, receiving a "C" or better (B- or better in ENG 121) will be considered for admission at Colorado public institutions of higher education.

Student must develop a graduation plan with a Teacher Education advisor that identifies the first 41 hours that are guaranteed to transfer to all teacher education programs at the following Colorado public 4-year institutions of higher education: Adams State College (Interdisciplinary Studies); Colorado State University at Pueblo (Liberal Studies), Fort Lewis College (Interdisciplinary Studies), Mesa State College (Liberal Arts), Metropolitan State College of Denver (Behavioral Science and Human Development), University of Colorado at Boulder (History), University of Colorado at Colorado Springs (English, History/Social Studies, Modern Foreign Languages, Science, Mathematics), University of Colorado at Denver and Health Sciences Center Downtown Denver (Individually Structured Major), University of Northern Colorado (Interdisciplinary Studies), Western State College (Interdisciplinary Studies).

To complete the A.A. graduation requirements, students who have completed or are currently enrolled in courses that will total the first 41 credits will apply to a specific teacher education program and be advised on the final 19 credits guaranteed to transfer.

General Education Requirements			**(36 credit hours)**
English			**(6 credit hours)**
ENG	121	College Composition ("B-" or better)	3
ENG	122	Composition II	3
Speech			
SPE	115		3
Math			**(6 credit hours)**
MAT	155	Integrated Math I	3
MAT	156	Integrated Math II	3
Humanities			**(3 credit hours)**
Choose one from the following:			
LIT	115	Introduction to Literature	3
LIT	201	Masterpieces of Literature I	3
LIT	202	Masterpieces of Literature II	3
LIT	211	Survey of American Literature I	3
LIT	221	Survey of British Literature I	3
Science			**(12 credit hours)**
SCI	155	Integrated Science I	4
SCI	156	Integrated Science II	4
Social Sciences			
(9 credit hours)			
GEO	105	World Regional Geography	3
HIS	201	U.S. History I	3
POS	111	American Government	3
Education Requirements			**(6 credit hours)**
EDU	221	Introduction to Education	3
PSY	238	Child Development	3

Electives based on transfer institution   (19 credit hours)
Consult an advisor and the transfer institution to determine appropriate electives

Total General Education/Education Credits   41

Total Electives determined by transfer institution   19

Associate of Arts, Elementary Education Transfer Total Credits   60

Associate of Arts Degree–Music Emphasis

Core Curriculum Required   (38 credit hours)
May include MUS 120 Music Appreciation, 3 credits
(MUST include MUS 121 and 122 Music History I and II,
   6 credits)

MUS Core Classes:

MUS	110/112*	Music Theory/SS/ET I Lab	4 credits
MUS	111/113	Music Theory/SS/ET II Lab	4 credits
MUS	131**	Music Class	2 credits
Total			**10 credits**

*Students with no background in theory should take Music Fundamentals (MUS 100) or pass an equivalency exam before taking MUS 110/112.
**Piano majors should take Guitar or Voice Class. Voice, Instrumental and Theory/Composition majors should take Piano Class unless already having a strong background in piano, in which case either Guitar or Voice class should be taken.

MUS Area of Emphasis:
Piano/voice/instrument majors:
A) Private lessons: four semesters from MUS 141, 142, 241, 242, 243, 244   (2 credits each)
            OR
Theory/composition majors:
B) Private instrument/voice: two semesters from MUS 141, 142, 241, 242   (2 credits each)
            AND
Private composition: two semesters from MUS 241, 242, 243, 244(2 credits each)   **(8 credit hours)**
            AND
Ensemble (chorus/inst.):
MUS 151, 152, 251, 252 (1 credit each)   **(4 credit hours)**
OR OPTION C
Music industry/business/technology majors
C) Music Business (MUS 167 or 275—course soon to be included in CCCNS) (3 credits)

Private lessons: 4 credits from MUS 141, 142, 241, 242, 243, 244 (2 credits each)

Ensemble: 2 credits from MUS 151, 152, 251, 252 (1 credit each)

Other class or independent study related to subject, such as Music Recording or History of Jazz MUS 125 (3 credits)

Total for option C	**12 credit hours**
Total	**60 credit hours**

NOTE: This degree will be conferred as an **Associate of Arts.** *Music Emphasis* will not be listed on student's transcript or diploma, but will be recognized by transfer institutions for program admission.

Associate of Science Degree Core

Students successfully completing any Guaranteed Transfer Courses are guaranteed acceptance of the course at any public four-year college or university in Colorado.

The State Guaranteed Transfer Courses and the Colorado Community College General Education requirements have been incorporated into the degree. Students who complete a 60 credit hour A.S. degree with appropriate course requirements and grades of "C" or better may be able to complete a Baccalaureate degree in 60 additional credits after transferring to a four-year public institution. Consult your ACC Advisor about Colorado's 60 + 60 agreement.

NOTE: This guarantee excludes majors in Education, Business, Engineering and Nursing.

General Education Core

I. Communications   (9 credit hours)

ENG	121	English Composition I	3
ENG	122	English Composition II	3
SPE	115	Public Speaking OR	
SPE	125	Interpersonal Communication	3

II. Arts and Humanities   (6-9 credit hours)
Select at least two courses with no more than two courses from any one category:

Art

ART	110	Art Appreciation	3
ART	111	Art History 1	3
ART	112	Art History II	3
FRE	211	French III	3
FRE	212	French IV	3
SPA	211	Spanish III	3
SPA	212	Spanish IV	3
JPN	211	Japanese III	3
JPN	212	Japanese IV	3
MUS	120	Music Appreciation	3
MUS	121	Introduction to Music History I	3
MUS	122	Introduction to Music History II	3
THE	105	Introduction to Theatre Arts	3
THE	211	Development of Theatre I	3
THE	212	Development of Theatre II	3

Literature and Humanities

HUM	121	Early Civilizations	3
HUM	122	From Medieval to Modern	3
HUM	123	The Modern World	3
LIT	115	Introduction to Literature	3
LIT	201	Masterpieces of Literature I	3
LIT	202	Masterpieces of Literature II	3
LIT	205	Ethnic Literature	3
LIT	211	Survey of American Lit I	3
LIT	212	Survey of American Lit II	3
LIT	221	Survey of British Lit I	3
LIT	222	Survey of British Lit II	3

Ways of Thinking

PHI	111	Intro to Philosophy	3
PHI	112	Ethics	3
PHI	113	Logic	3

Foreign Language

FRE	211	French III	3
FRE	212	French IV	3
SPA	211	Spanish III	3
SPA	212	Spanish IV	3
JPN	211	Japanese III	3
JPN	212	Japanese IV	3

III. Mathematics   (4 credit hours minimum)

MAT	121	College Algebra	4
MAT	122	College Trigonometry	3
MAT	201	Calculus I	5
MAT	202	Calculus II	5

IV. Social and Behavioral Sciences   (6-9 credit hours)
Select at least two courses, one of which must be history, with no more than two courses from any one category.

Economic and Political Systems

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

Geography

GEO	105	World Regional Geography	3
GEO	106	Human Geography	3

History

HIS	101	Western Civilization I	3
HIS	102	Western Civilization II	3
HIS	201	U.S. History I	3
HIS	202	U.S. History II	3
HIS	247	Contemporary World History	3

Human Behavior and Social Systems

ANT	101	Cultural Anthropology	3
ANT	111	Physical Anthropology	3

PSY	101	General Psychology I	3
PSY	102	General Psychology II	3
PSY	235	Human Growth and Development	3
SOC	101	Intro to Sociology I	3
SOC	102	Intro to Sociology 11	3

V. Physical and Life Science   (8 credit hours)
Select two courses. (Credits over 8 will be applied to the electives category.)

AST	101	Astronomy I	4
AST	102	Astronomy II	4
BIO	111	General College Biology I with Lab	5
BIO	112	General College Biology II with Lab	5
BIO	201	Human Anatomy and Physiology I	4
BIO	202	Human Anatomy and Physiology II	4
BIO	204	Microbiology	4
CHE	101	Introduction to Chemistry I with Lab	5
CHE	111	General College Chemistry I with Lab	5
CHE	112	General College Chemistry II with Lab	5
GEY	111	Physical Geology	4
GEY	121	Historical Geology	4
PHY	111	Physics: Algebra-Based I with Lab	5
PHY	112	Physics: Algebra-Based II with Lab	5
PHY	211	Physics: Calculus-Based I with Lab	5
PHY	212	Physics: Calculus-Based II with Lab	5

VI. Restricted Math/Science Electives   (21 credit hours)
Courses from the following list must be selected to bring the total credit hours to 60. Please note that in some disciplines only certain courses apply. Associate of Science students should work with an advisor to select courses appropriate to their major.

AST, BIO (100 or above), CHE, CIS (only the following:115, 118), CSC (only the following: 160, 161, 225, 230), EGG, GEY, MAT (MAT 121 or above), PHY (*PHY 111 or above).

Total			**60 credit hours**

*Not all independent study or special topics courses may apply.

Associate of General Studies Degree Requirements

I. Communications   (9 credit hours)
Select 2 courses:

*ENG	121	English Composition I	3
*ENG	122	English Composition II	3
ENG	131	Technical Writing I	3

Select 1 course:

SPE	115	Public Speaking	3
SPE	125	Interpersonal Communication	3
SPE	225	Organizational Communication	3

II. Humanities   (9 credit hours)

*ART	110	Art Appreciation	3
*ART	111	Art History I	3
*ART	112	Art History II	3
ART	121	Drawing	3
ART	138	Photography I	3
ART	141	Jewelry and Metalwork I	3
ART	161	Ceramics I	3
ART	211	Painting I	3
ART	231	Watercolor I	3

Foreign Language I-II: ARA, CHI, FRE, JPN, LAT, SPA, 111-112			5
Foreign Language III: FRE, JPN, LAT, SPA 211			3
Foreign Language IV: FRE, JPN, LAT, SPA 212			3
ASL121-122 American Sign Language			5
*HIS	101	Western Civilization I	3
*HIS	102	Western Civilization II	3
*HIS	201	U.S. History I	3
*HIS	202	U.S. History II	3
*HIS	247	Contemporary World History	3
*HUM	121	Early Civilizations	3
*HUM	122	From Medieval to Modern	3
*HUM	123	The Modern World	3
*LIT	115	Intro to Literature I	3
*LIT	201	Masterpieces of Literature I	3
*LIT	202	Masterpieces of Literature II	3
*LIT	205	Ethnic Literature	3
*LIT	211	Survey of American Literature I	3
*LIT	212	Survey of American Literature II	3
*LIT	221	Survey of British Literature I	3
*LIT	222	Survey of British Literature II	3
LIT	255	Children's Literature	3
MUS	100	Fundamentals of Music Theory	3
*MUS	120	Music Appreciation	3
*MUS	121	Intro to Music History I	3
*MUS	122	Intro to Music History II	3
*PHI	111	Intro to Philosophy	3
*PHI	112	Ethics	3
*PHI	113	Logic	3
SPE	115	Public Speaking	3
SPE	125	Interpersonal Communication	3
SPE	225	Organizational Communication	3
*THE	105	Intro to Theatre Arts	3
*THE	211	Development of Theatre I	3
*THE	212	Development of Theatre II	3

III. Social Sciences   (9 credit hours)

*ANT	101	Cultural Anthropology	3
ANT	107	Intro to Archaeology	3
*ANT	111	Physical Anthropology	3
ECO	105	Intro to Economics	3
*ECO	201	Principles of Macroeconomics	3
*ECO	202	Principles of Microeconomics	3
ECO	205	Contemporary Economic Issues	3
*GEO	105	World Regional Geography	3
*GEO	106	Human Geography	3
GEO	107	Physical Geography	3
GEO	165	Human Ecology	3
*HIS	101	Western Civilization I	3
*HIS	102	Western Civilization II	3
*HIS	201	U.S. History I	3
*HIS	202	U.S. History II	3
*HIS	247	Contemporary World History	3
*POS	105	Intro to Political Science	3
*POS	111	American Government	3
POS	125	American State and Local Government	3
POS	205	International Relations	3
POS	216	Comparative Government	3
*PSY	101	General Psychology I	3
*PSY	102	General Psychology II	3
PSY	116	Stress Management	3
*PSY	235	Human Growth and Development	3
*SOC	101	Intro to Sociology I	3
*SOC	102	Intro to Sociology II	3

SOC	205	Marriage and The Family	3
SOC	215	Contemporary Social Problems	3

IV. Sciences   **(3 credit hours)**

*ANT	111	Physical Anthropology	3
*AST	101	Astronomy I	4
*AST	102	Astronomy II	4
*BIO	105	Science of Biology	4
*BIO	111	General College Biology I	5
*BIO	112	General College Biology II	5
BIO	115	Human Genetics	3
*BIO	201	Human Anatomy and Physiology I	4
*BIO	202	Human Anatomy and Physiology II	4
BIO	204	Microbiology	4
*CHE	101	Intro to Chemistry I	5
*CHE	102	Intro to Chemistry II	5
*CHE	111	General College Chemistry I/Lab	5
*CHE	112	General College Chemistry II/Lab	5
CIS	115	Intro to Computer Information Systems	3
CIS	118	Intro to PC Applications	3
CSC	150	Visual Basic Programming	3
CSC	160	Computer Science I (Java)	4
CSC	161	Computer Science II (Java)	4
*GEY	111	Physical Geology	4
*GEY	121	Historical Geology	4
PHY	100	Elementary Physics	3
*PHY	105	Conceptual Physics	4
*PHY	111	Physics: Algebra-Based I	5
*PHY	112	Physics: Algebra-Based II	5
*PHY	211	Physics: Calculus-Based I	5
*PHY	212	Physics: Calculus-Based II	5
SCI	155	Integrated Science I	4
SCI	156	Integrated Science II	4

V. Math (MAT 120 or above)   **(3 credit hours)**

*MAT	120	Mathematics for Liberal Arts	4
*MAT	121	College Algebra	4
*MAT	122	College Trigonometry	3
*MAT	123	Finite Mathematics	4
*MAT	125	Survey of Calculus	4
*MAT	135	Intro to Statistics	3
*MAT	155	Integrated Math I	3
*MAT	156	Integrated Math II	3
MAT	179	Computer Applications for Statistics	1
*MAT	201	Calculus I	5
*MAT	202	Calculus II	5

VI. Electives   **(26 credit hours)**

Selected from any credit-bearing course numbered at or above 100 which is offered by the College.
[1]MAT courses must be numbered 120 or above. ENG courses must be numbered 121 or above. Foreign Language must be numbered 111-112, 211-212, ASL 121-122, SPA 114.
*Courses marked with an asterisk are a part of the General Transfer Curriculum (GT 25).

Total   **61 credit hours**

Associate of General Studies Broadband Technical Management

The following A.G.S. degree in Broadband Technical Management was designed by ACC and Jones/NCTI to provide a degree path for technicians in the broadband industry.

The curriculum in this program is designed for broadband technicians and requires hands-on activities with the supervision of an on-site training coordinator. To participate it is recommended that students be employed by or participate in an internship with a broadband company that subscribes to Jones/NCTI as their training provider. Upon completion, those who wish to continue their education will be accepted as juniors at Franklin University and DeVry University through an articulation agreement between those institutions and Arapahoe Community College, the Indiana Institute of Technology and Jones/NCTI.

The Associate of General Studies (A.G.S.) degree allows students the unique option of building job-specific degrees to suit their career choices.

Major Courses   **(23 credit hours)**

CTC	107	Installer	3
CTC	109	Installer Technician	4
CTC	111	Service Technician	4
CTC	113	System Technician	4
CTC	127	Fiber Installation and Activation	2
CTC	128	Fiber Testing and Maintenance	2
CTC	165	Advanced Technician	4

Choose Three   **(9 credit hours)**

CTC	118	Broadband Digital Installer	3
CTC	119	DSL Installation	3
CTC	117	Computers and Broadband Modems	3
CTC	120	Understanding Voice and Data Networks	3
CTC	124	Troubleshooting Advanced Services	3

General Education Courses   **(31 credit hours)**

BUS	115	Introduction to Business	3
BUS	216	Legal Environment of Business	3
CIS	118	Intro to PC Applications	3
ENG	121	English Composition I	3
MAN	116	Principles of Supervision	3
MAN	226	Principles of Management	3
MAR	216	Principles of Marketing	3
MAT	108	Technical Mathematics or higher	4
PSY	101	General Psychology I OR	
PSY	116	Stress Management	3
SPE	115	Public Speaking OR	
SPE	125	Interpersonal Communication	3

Total   **63 credit hours**

Associate of General Studies Broadband Business Management

This Associate of General Studies degree allows students the unique option of building job-specific degrees to suit their career choices. The A.G.S. combines courses from an Jones/NCTI certificate, based on industry-specific competencies, with electives and general requirements.

To begin, the student completes the courses in a Jones/NCTI certificate of choice and combines them with electives to earn at least 27 credit hours. The remaining credit hours come from general requirement courses. The result is a degree that demonstrates job-specific expertise and general business knowledge, all while providing unparalleled opportunity for success.

Major Courses   **(27–29 credit hours)**
General Education   **(33-35 credit hours)**
I. Communications   **(9 credit hours)**

ENG	121	English Composition I	3

ENG	131	Technical Writing I	3
SPE	115	Public Speaking OR	
SPE	125	Interpersonal Communications	3

II. Humanities (9–11 credit hours)

| PHI | 112 | Ethics | 3 |

Foreign Languages: ARA, CHI, FRE, JPN,
 LAT or SPA 111-112 5
Foreign Languages: FRE, JPN, LAT or SPA 211-212 3

| SPA | 114 | Spanish | 5 |
| ASL121-122 | | American Sign Language | 5 |

Choose Foreign Language and one additional course from the following:

HIS	201	U.S. History I	3
LIT	115	Introduction to Literature I	3
SPE	125	Interpersonal Communication	3

(if not taken to meet the communication requirement)

III. Social Sciences (9 credit hours)

ECO	201	Principles of Macroeconomics	3
PSY	101	General Psychology I OR	
PSY	116	Stress Management	3
SOC	101	Intro to Sociology I	3

IV. Sciences (3 credit hours)

| CIS | 118 | Intro to PC Applications | 3 |

V. Math (3 credit hours)

| MAT121 or higher | | | 3 |
| **Total** | | | **60-64 credit hours** |

Broadband Digital Management

Certificate

Students completing this certificate will be among the elite in the broadband industry, well-suited to supervise those who deploy and service cable modems, constant bit rate (CBR) telephony and digital video in broadband networks. Holders of this certificate can expect to work as managers of field service technicians, bandwidth access technicians, headend technicians, NOC technicians, etc. with broadband companies that are deploying advanced services.

BUS	115	Introduction to Business	3
CTC	107	Installer (or choose one from restricted electives)	3
CTC	109	Installer Technician	4
CTC	111	Service Technician	4
CTC	117	Computers and Broadband Modems	3
CTC	118	Broadband Digital Installer	3
CTC	124	Troubleshooting Advanced Services	3
MAN	116	Principles of Supervision	3

Restricted Electives

CTC	113	Systems Technician	4
CTC	165	Advanced Technician	3
CTC	120	Understanding Voice and Data Networks	3
Total			**26-27 credit hours**

Broadband Telephony Technology Management

Certificate

This certificate is for professionals hoping to advance in the rapidly growing field of broadband telephony. Those completing this certificate can expect to work with broadband cable, RBOCs, LECs, CLECs and DSL companies that are deploying advanced services such as ISDN, DSL, VDSL and digital video. Also, individuals who have worked in the telephone industry will find this option helpful to move beyond POTS into supervision of full service broadband telephony technicians.

Major Courses

| CTC | 107 | Installer (or choose one from restricted electives) | 3 |
| CTC | 109 | Installer Technician | 4 |

Choose CTC 111 or CTC 116

| CTC | 111 | Service Technician | 4 |
| CTC | 116 | Fiber Optics Technician | 3 |

Plus ALL of the following

BUS	115	Introduction to Business	3
CTC	117	Computers and Broadband Modems	3
CTC	119	DSL Installation	3
CTC	120	Understanding Voice and Data Networks	3
MAN	116	Principles of Supervision	3

Restricted Electives

CTC	111	Service Technician	4
CTC	113	Systems Technician	4
CTC	124	Troubleshooting Advanced Services	3
Total			**26–27 credit hours**

Broadband Technical Management

Certificate

Broadband cable industry professionals completing this option will find success as managers of line technicians, maintenance technicians, fiber optics technicians and headend technicians, to name a few. These individuals will manage the personnel, processes and technologies used in design, construction, installation, maintenance and service of broadband coaxial and fiber networks.

CTC	107	Installer (or choose one from restricted electives)	3
CTC	109	Installer Technician	4
CTC	111	Service Technician	4
CTC	113	System Technician	4
CTC	127	Fiber Installation and Activation	2
CTC	128	Fiber Testing and Maintenance	2
CTC	165	Advanced Technician	4
MAN	116	Principles of Supervision	3
MAN	226	Principles of Management	3

Restricted Electives

CTC	117	Computer and Broadband Modems	3
CTC	118	Broadband Digital Installer	3
CTC	120	Understanding Voice and Data Networks	3
CTC	124	Troubleshooting Advanced Services	3
Total			**29 credit hours**

Broadband Customer Service Representative

Certificate

Students will use this option to gain the knowledge they need to perform as effective and efficient customer service representatives, as well as achieve the credibility associated with a college certificate. They will learn the technical and people

skills needed to be the valuable interface between broadband companies and customers.

BTE	100	Computer Keyboarding	1
CIS	118	Intro to PC Applications	3
CIS	145	Complete PC Database	3
CTC	108	Broadband Cable Overview	1
CTC	121	Understanding Broadband Technology	3
MAR	110	Introduction to Sales	1
MAR	160	Customer Service	3
PSY	101	General Psychology I OR	
PSY	116	Stress Management	3
Total			**18 credit hours**

Broadband Customer Service Management

Certificate

This certificate prepares students for careers as broadband customer service managers, giving them both the technical and managerial skills to perform their jobs.

BUS	115	Introduction to Business	3
CIS	118	Intro to PC Applications	3
CTC	121	Understanding Broadband Technology	3
ENG	121	English Composition I	3
MAN	116	Principles of Supervision	3
MAN	226	Principles of Management	3
MAR	110	Introduction to Sales	1
MAR	160	Customer Service	3
PSY	101	General Psychology I OR	
PSY	116	Stress Management	3
Total			**25 credit hours**

Broadband Technical Service Representative

Certificate

Those completing this certificate will be well versed in the technologies used to deploy video, voice and data services through broadband networks. They will also develop the skills needed to provide the initial level of technical support in customer service centers and network operations centers.

BTE	100	Computer Keyboarding	1
CIS	118	Intro to PC Applications	3
CIS	145	Complete PC Database	3
CTC	120	Understanding Voice and Data	3
CTC	121	Understanding Broadband Technology	3
CTC	123	Basic Broadband Troubleshooting	3
MAR	110	Introduction to Sales	1
MAR	160	Customer Service	3
PSY	101	General Psychology I OR	
PSY	116	Stress Management	3
Total			**23 credit hours**

Broadband High-Speed Data Technical Service Representative

Certificate

This certificate is helpful for individuals looking to move into high-speed data call center support and management roles, as well as those in sales, marketing and administrative functions in organizations that offer HSD service. Individuals completing this certificate will possess an in-depth knowledge of the technologies used to deploy, troubleshoot and support data services through broadband networks. Graduates will be uniquely qualified to manage services related to the deployment and initial, intermediate and advanced technical support of high-speed data in customer care and network operations centers.

BTE	100	Computer Keyboarding	1
CIS	118	Intro to PC Applications	3
CTC	120	Understanding Voice and Data	3
CTC	121	Understanding Broadband Technology	3
CTC	123	Basic Broadband Troubleshooting	3
CTC	125	High-Speed Data Customer Service	2
CTC	126	Advanced High-Speed Data Customer Service	3
MAR	110	Introduction to Sales	1
MAR	160	Customer Service	3
PSY	101	General Psychology I OR	
PSY	116	Stress Management	3
Total			**25 credit hours**

Associate of General Studies– Engineering Emphasis

This program is designed for the student who wishes to receive a traditional four-year engineering bachelor's degree by beginning at ACC and then transferring to an engineering school. This program is based on a transfer agreement between ACC and the University of Colorado at Denver (UCD). Credits listed below received at ACC are transferable to UCD within the limits of the agreement. Students completing the curriculum below with satisfactory performance will be able to transfer into the UCD College of Engineering and Applied Science with a junior standing.

Students must choose one of four program options. Please contact the Health, Math, Science and Engineering Division at 303.797.5888 for more information.

Students must meet with the ACC Engineering Department Advisor to plan their program of study. Please contact Henry Weigel at 303.797.5831 or henry.weigel@arapahoe.edu.

General Education			**(50-53 credit hours)**
Mathematics			**(14 credit hours)**
MAT	201	Calculus I	5
MAT	202	Calculus II	5
MAT	203	Calculus III	4
Sciences			**(15 credit hours)**
CHE	111	General College Chemistry I	5
PHY	211	Physics: Calculus Based I	5
PHY	212	Physics: Calculus Based II	5
Communications			**(9 credit hours)**
ENG	121	English Composition I	3
ENG	122	English Composition II	3
SPE	115	Public Speaking	3
Humanities and Social Sciences			**(12-15 credit hours)**

Depending upon program option selection below, either 12 or 15 Humanities and Social Sciences credit hours are required:

6 credit hours from the same area:

ECO	201	Principles of Macroeconomics	3
ECO	202	Principles of Microeconomics	3
POS	105	Introduction to Political Science	3
POS	111	American Government	3
SOC	101	Intro to Sociology I	3
SOC	102	Intro to Sociology II	3

3 credit hours from:

ANT	101	Cultural Anthropology	3
ANT	111	Physical Anthropology	3
PSY	101	General Psychology I	3

6 credit hours from the same area:

HIS	101	Western Civilization I	3
HIS	102	Western Civilization II	3
LIT	201	Masterpieces of Literature I	3
LIT	202	Masterpieces of Literature II	3
PHI	111	Intro to Philosophy	3
PHI	112	Ethics	3

PROGRAM OPTIONS –
see program options below (12-15 credit hours)
Total   **65**

CHOOSE ONE PROGRAM OPTION:

Civil Engineering Option   **(12 credit hours)**
15 credit hours of Humanities and Social Sciences electives required.

EGG	101	Engineering Graphics	3
EGG	211	Engineering Mechanics: Statics	3
EGG	212	Engineering Mechanics: Dynamics	3

Restricted MAT or EGG elective – select from:
CSC160 (C++), MAT 175, 255, 260   3

Computer Science in
Engineering Option   **(15 credit hours)**
12 credit hours of Humanities and Social Sciences electives required.

EGG	105	Logic Design	4
CSC	160	Computer Science I (C++)	4
CSC	161	Computer Science II (C++)	4

Restricted CSC or MAT elective – select from:
CSC 225, MAT 255, 260, 280   3

Electrical Engineering Option   **(15 credit hours)**
12 credit hours of Humanities and Social Sciences electives required.

EGG	105	Logic Design	4
EGG	221	Circuit Analysis I	4
EGG	222	Circuit Analysis II	4

Restricted CSC or MAT elective – select from:
CSC 160 (C++), 233, 255, MAT 255, 260   3

Mechanical Engineering Option   **(12 credit hours)**
15 credit hours of Humanities and Social Sciences electives required.

EGG	101	Engineering Graphics	3
EGG	211	Engineering Mechanics: Statics	3
EGG	212	Engineering Mechanics: Dynamics	3

Restricted CSC or MAT elective – select from:
CSC 160 (C++), MAT 255, 260   3

General Education Requirements for A.A.S. Degrees

The Associate in Applied Science degrees require that a minimum number of courses must be completed from the approved general education list. The Associate of Arts, the Associate of Science and Associate of General Studies degree requirements listed previously already contain the general education options for those degrees.

Definition of General Education

General education for the A.G.S. and A.A.S. degrees is defined by State Board Policy (BP 9-40). General education is "general" in several clearly identifiable ways: it is not directly related to a student's formal technical, vocational or professional preparation; it is a part of every student's course of study, regardless of his or her area of emphasis; and is intended to impart common knowledge, intellectual concepts and attitudes which every educated person should possess.

*ANT	101	Cultural Anthropology	3
ANT	107	Intro to Archaeology	3
*ANT	111	Physical Anthropology	3
ARC	125	History of Architecture	3
*ART	110	Art Appreciation	3
*ART	111	Art History I	3
*ART	112	Art History II	3
ART	121	Drawing	3
ART	138	Photography I	3
ART	141	Jewelry and Metalwork I	3
ART	161	Ceramics I	3
ART	231	Watercolor I	3
*AST	101	Astronomy I	4
*AST	102	Astronomy II	4
*BIO	105	Science of Biology	4
*BIO	111	General College Biology I	5
*BIO	112	General College Biology II	5
BIO	115	Human Genetics	3
*BIO	201	Human Anatomy and Physiology I	4
*BIO	202	Human Anatomy and Physiology II	4
*BIO	204	Microbiology	4
BTE	102	Keyboarding Applications	2
BUS	115	Intro to Business	3
BUS	116	Personal Finance	3
BUS	216	Legal Environment of Business	3
*CHE	101	Intro to Chemistry I	5
*CHE	102	Intro to Chemistry II	5
*CHE	111	General College Chemistry I/Lab	5
*CHE	112	General College Chemistry II/Lab	5
CIS	115	Intro to Computer Information Systems	3
CIS	118	Intro to PC Applications	3
CSC	150	Visual Basic Programming	3
CSC	160	Computer Science I (Java)	4
CSC	161	Computer Science II (Java)	4
ECO	105	Intro to Economics	3
*ECO	201	Principles of Macroeconomics	3
*ECO	202	Principles of Microeconomics	3
ECO	205	Contemporary Economic Issues	3
ELT	100	Basic Electronics	3
*ENG	121	English Composition I	3
*ENG	122	English Composition II	3
ENG	131	Technical Writing I	3
(FOL)	111	Foreign Language I	5
(FOL)	112	Foreign Language II	5
(FOL)	211	Foreign Language III	3
(FOL)	212	Foreign Language IV: ARA, CHI, FRE, JPN, SPA and LAT	3
ASL	121	American Sign Language I	3
ASL	122	American Sign Language II	5
*GEO	105	World Regional Geography	3
*GEO	106	Human Geography	3
GEO	107	Physical Geography	3
GEO	165	Human Ecology	3
*GEY	111	Physical Geology	4

*GEY	121	Historical Geology	4
GDI	145	Video Computer Graphics	3
*HIS	101	Western Civilization I	3
*HIS	102	Western Civilization II	3
*HIS	201	U.S. History I	3
*HIS	202	U.S. History II	3
*HIS	247	Contemporary World History	3
*HUM	121	Early Civilizations	3
*HUM	122	From Medieval to Modern	3
*HUM	123	The Modern World	3
HWE	100	Human Nutrition	3
HWE	103	Standard First Aid-Adult CPR	1
HWE	108	Weight Loss and Nutrition	1
INV	115	Investments/Stocks and Bonds	3
LAW	225	Constitutional and Administrative Law	3
*LIT	115	Intro to Literature I	3
*LIT	201	Masterpieces of Literature I	3
*LIT	202	Masterpieces of Literature II	3
*LIT	205	Ethnic Literature	3
*LIT	211	Survey of American Literature I	3
*LIT	212	Survey of American Lit II	3
*LIT	221	Survey of British Literature I	3
*LIT	222	Survey of British Lit II	3
LIT	255	Children's Literature	3
MAN	116	Principles of Supervision	3
MAN	226	Principles of Management	3
MAR	106	Marketing Your Image	3
MAR	216	Principles of Marketing	3
MAT	090	Introductory Algebra (applicable only to specified vocational degrees)	4
MAT	106	Survey of Algebra	4
MAT	111	Graphing Calculator Techniques	1
MAT	108	Technical Mathematics	4
*MAT	120	Mathematics for Liberal Arts	4
*MAT	121	College Algebra	4
*MAT	122	College Trigonometry	3
*MAT	123	Finite Mathematics	4
*MAT	125	Survey of Calculus	4
*MAT	135	Intro to Statistics	3
MAT	179	Computer Applications for Statistics	1
*MAT	201	Calculus I	5
*MAT	202	Calculus II	5
MUS	100	Fundamentals of Music Theory	3
*MUS	120	Music Appreciation	3
*MUS	121	Intro to Music History I	3
*MUS	122	Intro to Music History II	3
PED		Any physical activity course	1
*PHI	111	Intro to Philosophy	3
*PHI	112	Ethics	3
*PHI	113	Logic	3
PHO	101	Photography I	3
PHY	100	Elementary Physics	3
*PHY	105	Conceptual Physics (does not apply to the A.S. core)	4
*PHY	111	Physics: Algebra-Based I	5
*PHY	112	Physics: Algebra-Based II	5
*PHY	211	Physics: Calculus-Based I	5
*PHY	212	Physics: Calculus-Based II	5
*POS	105	Intro to Political Science	3
*POS	111	American Government	3
POS	125	American State and Local Government	3
POS	205	International Relations	3
POS	216	Comparative Government	3
*PSY	101	General Psychology I	3

*PSY	102	General Psychology II	3
PSY	116	Stress Management	3
*PSY	235	Human Growth and Development	3
*SOC	101	Intro to Sociology I	3
*SOC	102	Intro to Sociology II	3
SOC	205	Marriage and The Family	3
SOC	215	Contemporary Social Problems	3
SPE	115	Public Speaking	3
SPE	125	Interpersonal Communication	3
SPE	225	Organizational Communication	3
*THE	105	Intro to Theatre Arts	3
*THE	211	Development of Theatre I	3
*THE	212	Development of Theatre II	3

*General Education courses marked with an asterisk are a part of the General Transfer Curriculum (GT 25).

Associate of Applied Science Degrees and Certificate Programs

The common goal of all Associate of Applied Science degrees and occupational certificate programs is to prepare students for employment in specific occupations. The programs for the degrees consist of major courses as well as related general education courses. While many of these courses may transfer to a 4-year college or university, the programs themselves do not have transferability as their primary goal. Students are encouraged to discuss career goals and educational objectives with a counselor or advisor prior to enrolling in these programs. Courses numbered below 100 cannot be used to satisfy elective requirements for A.A.S. degrees.

Accounting

Associate of Applied Science Degree
This program is designed to prepare the student for entry-level positions in the bookkeeping/accounting field. This would include clerical positions in specialized areas such as an accounts payable, accounts receivable and payroll, as well as positions with a more total involvement in accounting.

Major Courses   **(32 credit hours)**

ACC	121	Principles of Accounting I	4
ACC	122	Principles of Accounting II	4
ACC	115	Payroll Accounting	3
ACC	131	Income Tax I	3
ACC	135	Spreadsheet Applications for Accounting	3
ACC	226	Cost Accounting	3
ACC	229	Managerial Accounting	3
ACC	287	Cooperative Education OR	
ACC	289	Capstone	3
BUS	217	Business Communications & Report Writing	3
FIN	101	Introduction to Finance	3

General Education Courses   **(15-17 credit hours)**

BUS	216 The Legal Environment	3
ECO 201 or ECO 202		3
ENG 121 or ENG 131		3
MAT 106/111 or higher		3-5
SPE 125 or SPE 225 or SPE 115		3

Restricted Electives   **(13 credit hours)**
Select at least six hours from Area One and six hours from Area Two. The remaining hour may be selected from either area. Please consult with an Advisor for selection of electives best suited to your needs.

Area One: Business Electives
Select at least six hours from any Course with the following prefixes: BTE, BUS, ECO, FIN, INV, MAN, MAR
Area Two: ACC/CIS Electives
Select at least six hours from any course with the following prefix, not already required: ACC, CIS, CNG, CSC

Physical Education[2]		**(1 credit hour)**
PED activity course			1

Total		**61–63 credit hours**

[1] Students without a good background in algebra should take the math requirement prior to taking ACC 122.
[2] The PED requirement will be waived for students who are 35 years of age or older at time of at time of most recent admission to the College. Appropriate credit must be taken to substitute for the hour waived.

Activity Professionals' Training Basic/Advanced

Certificates

The activity profession is unique in health care because the focus is on "what is RIGHT with the person rather than what is wrong." The activity professional is offered flexibility and creativity while improving the quality of life of older adults residing in nursing homes, assisted living facilities, retirement communities and community-based adult day programs.

Students will learn how to meet the psychosocial, physical and cultural needs of the older adult through a diverse activity program. Students will learn program planning, physical and social aspects of aging, regulatory requirements, documentation guidelines and administrative techniques. Classroom instruction will include presentations from a variety of experts in the activity and aging field. After successfully completing the activity professional training program the student is qualified according to federal OBRA regulations to be an activity director employed in a nursing home. This program is the only State-approved training program in Colorado. The student is also a step closer towards national certification by the National Certification Council for Activity Professionals.

The Basic APT classes 101, 102 and 188 are co-requisites that meet for eight-hour sessions three times a month for four months. Practicum experience includes 90 hours working in an activity department under the direction of a certified activity professional. The Advanced Activity Professionals' Training Certificate consists of courses that comprise the advanced curriculum established by the National Certification Council of Activity Professionals and the National Association of Activity Professionals.

The Basic certificate is not eligible for financial aid. Contact the Financial Aid Office for further information. All courses required for this certificate must be completed with a "C' or better.

Basic Activity Professionals'
Training Certificate **(10 credit hours)**

APT	101	Basic Activity Professional Training–Part 1	4
APT	102	Basic Activity Professional Training–Part 2	4
APT	188	Basic Practicum	2
Total			**10 credit hours**

Advanced Activity Professionals'
Training Certificate **(30 credit hours)**

Basic Activity Professionals' Training Certificate			10
APT	201	Advanced Documentation and Regulatory Compliance	2
APT	202	Administrative Practices in Activity Profession	2
APT	203	Volunteer Management	2
APT	204	Community Relations and Communications	2
APT	288	Advanced Management Practicum	2
*HPR	178	Medical Terminology	3

Electives **(10 credit hours)**
Select 10 credit hours from the following:

*ART	110	Art Appreciation	3
*ART	111	Art History I	3
ART	161	Ceramics I	3
CIS	115	Intro to Computer Information Systems	3
ENG	121	English Composition I	3
HPR	240	Role of Death & Bereavement in Society	3
HUM	100	Intro to Arts and Humanities	3
*HWE	100	Human Nutrition	3
MUS	100	Fundamentals of Music Theory	3
MUS	120	Music Appreciation	3
PSY	101	General Psychology I	3
*PSY	235	Human Growth and Development	3
SOC	101	Intro to Sociology	3

*Course available online

Total	**30 credit hours**

Applied Technology

Associate of Applied Science Degree

Students desiring to complete the Associate of Applied Science (A.A.S.) Degree in Applied Technology will complete the technical course work contained in a State-approved career and technical education program certificate * at one of the four area vocational technical schools (AVTS). The four AVTS are: Delta-Montrose Area Vocational Technical Center, Emily Griffith Opportunity School, San Juan Basin Area Vocational Technical School and Pickens Tech Center.

The general education and other degree requirements will be completed at Arapahoe Community College. The A.A.S. degree will be conferred by Arapahoe Community College after the general education and other degree requirements have been completed.

The approved career and technical education certificate programs at the AVTS prepare students with technical, applied academic and employability skills. Credit in varying amounts from these certificate programs will be applicable to the community college's A.A.S. degree in Applied Technology.

Students may enroll concurrently at both institutions, an AVTS and Arapahoe Community College. Students must comply with the regulations and requirements relating to admission and attendance at each institution.

Minimum requirements for the Associate of Applied Science (A.A.S.) Applied Technology degree include:
1. 60 semester credits of course work.
2. Arapahoe Community College will accept up to 42 credit hours of course work from an approved certificate at an AVTS.

3. Cumulative GPA of 2.0 or higher.
4. General education course credits of 15-18 semester credits.
5. Minimum of 18 semester credits earned at Arapahoe Community College to include:

General Education Requirements:	Semester Credits
English: ENG 121 or ENG 131	3
Speech: SPE 115 or SPE 125	3
Humanities: Selected from general education lists	3
Mathematics: MAT 121 or higher	4
Natural Science: Selected from the General Education list	3
Social Science: Selected from General Education list	3
	15-credit minimum

6. Students completing an AVTS certificate of less than 42 hours must complete additional hours at Arapahoe Community College from the approved General Education list. These credit hours should be selected to complement the certificate from the AVTS and be consistent with the student's future plans. Students transferring a certificate with thirty or fewer hours will complete a minimum of twelve hours in a single technology-based discipline.

The disciplines are: Architectural Technology (ARC), Automotive Technology (ATC, AUT), Computer-Aided Drafting, Computer Graphics (CAD), Computer Information Systems (CIS), and Convergent Technologies (CTC), Electronics Engineering Technologies (CTC), and Electronics Engineering Technologies (ELT). The specific courses must be selected in consultation with a department advisor and be approved by the advisor.

*A state-approved career and technical education program is a program that is approved by the State Board for Community Colleges and Occupational Education (SBCCOE) and is current.

Architectural Technology

Associate of Applied Science Degree (A.A.S.)
The Architectural Technology program provides students with the development of skills necessary to become a competent draftsperson. Graduates of the program will be dealing with residential drawings as well as commercial structures. New students are encouraged to talk or meet with an Architectural Technology faculty advisor before first semester registration.

The student will also be introduced to a number of architectural and building trade related topics. From the "History of Architecture" to "Surveying," the student will be expanding his/her knowledge of this industry. Diversified courses within the Architectural Technology program provide a foundation for employment within the varied building design and construction industry.

Major Courses			(48 credit hours)
ARC	101	Intro to Architectural Drawing	5
ARC	102	Residential Architecture	5
ARC	116	Building Materials	3
ARC	121	Building Structure Analysis	3
ARC	125	History of Architecture	3
ARC	205	Commercial Drawing Practice I	4
ARC	215	Architectural Graphics	3
ARC	216	Estimating I	3

ARC	218	Surveying	3
ARC	226	Construction Scheduling	3
ARC	231	Building Service Systems	3
ARC	236	Codes/Zoning/Specifications	3
ARC	278	Seminar	1
ARC	280	Internship	1
CAD	101	Computer Aided Drafting I	3
CAD	102	Computer Aided Drafting II	3

General Education Courses		(16 credit hours)
ART110, 111, or 112		3
ENG121 or 131 English		3
MAT108 Technical Mathematics or higher		4
SPE115, 125, or 225 Speech		3

Elective:

From the General Education Course List - Section I, Communications; IV, Sciences or V, Mathematics.   3

Physical Education	(1 credit hour)
PEDActivity Course*	1

Total Degree Credits	66 credit hours

*The PED requirement may be waived for students who are 35 years of age or older at the time of most recent admission to the College. Appropriate credit must be taken to substitute for the hour waived.

Architectural Drafting

Certificate
The Architectural Drafting certificate provides the education background and basic technical training necessary for the student to seek employment within one of the area's architectural firms. Students will be prepared for a variety of job-entry positions that include draftsperson, or computer aided design technician.

Major Courses			(35 credit hours)
ARC	101	Intro to Architectural Drawing	5
ARC	102	Residential Architecture	5
ARC	116	Building Materials	3
ARC	121	Building Structure Analysis	3
ARC	125	History of Architecture	3
ARC	215	Architectural Graphics	3
CAD	101	Computer Aided Drafting I	3
CAD	102	Computer Aided Drafting II	3
CAD	201	Computer Aided Drafting/Custom	3
MAT	108	Technical Mathematics or higher	4

Architectural Contracts & Materials

Certificate
The Architectural Drafting certificate provides the education background and basic technical training necessary for the student to seek employment within one of the area's architectural firms. Students will be prepared and trained for a variety of job-entry positions that include engineering technician, materials technician, estimator, specification writer or construction supervisor.

Major Courses			(27 credit hours)
ARC	107	Blueprint Reading (Residential/Commercial)	3
ARC	116	Building Materials	3

ARC	216	Estimating I	3
ARC	218	Surveying	3
ARC	226	Construction Scheduling	3
ARC	228	Contracts, Bonds & Insurance	3
ARC	236	Codes/Zoning/Specifications	3
ARC	231	Building Service Systems	3
ENG	131	Technical Writing	3
Total			**27 credit hours**

Residential Drafting

Certificate

Major Courses			**(16 credit hours)**
ARC	101	Intro to Architectural Drawing	5
ARC	102	Residential Architecture	5
CAD	101	Computer Aided Drafting I	3
CAD	102	Computer Aided Drafting II	3
Total			**16 credit hours**

Automotive Service Technology

Associate of Applied Science Degree or Certificate

These 2-year certificate and Associate of Applied Science degree programs are NATEF certified and taught by ASE certified instructors.

The programs are designed to prepare students for employment in the automotive service industry as repair technicians and will help prepare students for the ASE certification examinations. The combination of automotive and academic courses culminates in an A.A.S. degree.

Recent U.S. Department of Labor statistics show a shortage of approximately 30,000 automotive repair technicians nationally. The average technician with 5-8 years experience earns a yearly salary in the range of $40,000-$60,000 with more experienced and more talented technicians earning nearly $100,000 per year.

The automotive training program at ACC is organized into three outstanding "Tracks":

1. General Motors-specific program called GM Automotive Service Educational Program (ASEP)
2. DaimlerChrysler-specific program called DaimlerChrysler College Apprenticeship Program (CAP)
3. The general college program called the Automotive Service Technology Program (ATEC)

The corporate sponsored dealership apprenticeship programs (CAP & ASEP) are manufacturer specific and are degree programs only. In-coming freshmen classes for these programs begin only in the fall semester. These two tracks require the student obtain and maintain an apprenticeship position at a GM or DaimlerChrysler dealership for the duration of the program. Additionally, these students will be taking manufacturer technician training courses and their sponsoring dealership will be receiving training credit for that student upon his or her graduation with the A.A.S. degree.

The general ATEC program can be either the Certificate or the A.A.S. degree; and neither requires the student obtain an industry apprenticeship. However such an apprenticeship is highly encouraged as it strengthens the connection between material learned in school and its application in the real world.

All of these tracks have limited seats available.

Students wishing to pursue one of the corporate tracks must be signed into the respective courses by the department chairman or the course instructor. The classes for the corporate tracks will be filled with dealer sponsored students first and general program students may be allowed to fill any available seats.

Corporate students will be taking many of their required academic courses as part of their scheduled class blocks so enrollment in those academic courses must be allowed by the various academic course requirements. This requirement is so that all corporate students complete their degree program on time with no delay of the sponsoring dealership receiving their training credit.

All students, regardless of their chosen track, should be aware of a few automotive repair industry expectations, specifically:

1. Technicians must drive their customer's vehicles as part of the repair process and thus the technician and the student must have a clean motor vehicle record and valid driver's license.
2. The hiring process at reputable repair shops and dealerships will include a drug screen and may include a thorough background investigation.

If the prospective student has any difficulty with either or both of these expectations they are advised to meet with the Auto Department Chairman prior to enrolling in any Auto courses.

NOTE: A less formal Nissan/Infinity partnership exists between ACC, Nissan of North America and a several participating Nissan and Infinity dealerships. Students who are hired by a Nissan or Infinity dealership before or during their course work will pursue the ATEC track.

NOTE: Any student who completes the A.A.S. degree requirements is also eligible for the Automotive Technology Certificate.

The National Automotive Technician Education Foundation, Inc. which the Automotive Service Technology Program can be reached at 101 Blue Seal Drive, Leesburg VA, 20175, Telephone (703) 669-6650.

Automotive Courses			**(60 credit hours)**
ASE	102	Introduction to the Automotive Shop	2
ASE	110	Brakes I	3
ASE	210	Brakes II	3
ASE	120	Basic Automotive Electricity	2
ASE	123	Battery, Starting and Charging Systems	2
ASE	220	Specialized Electronics Training	2
ASE	221	Body Electrical	4
ASE	130	General Engine Diagnosis	2
ASE	132	Ignition System Diagnosis and Repair	2
ASE	134	Automotive Emissions	2
ASE	231	Automotive Computers	2
ASE	233	Fuel Injection and Exhaust Systems	4
ASE	235	Driveability Diagnosis	1
ASE	140	Suspension and Steering I	3
ASE	240	Suspension and Steering II	3
ASE	250	Automatic Transmission/Transaxle Serv.	1
ASE	251	Automatic Trans/Transaxle Diagnosis	5
ASE	160	Automotive Engine Removal & Install	1
ASE	161	Engine Disassembly, Diagnosis & Assembly	5
ASE	265	Heating & Air Conditioning	5
ASE	150	U-Joint & Axle Shaft Service	2
ASE	151	Manual Transmission/Trans & Clutches	2
ASE	152	Differentials & 4WD/AWD Service	2
Total Automotive Credit Hours			**60**

General Education Courses (17 credit hours)

ENG	121	English Composition I OR	
ENG	131	Technical Writing	3
CIS	118	Introduction to PC Applications	3
MAT	108	Technical Mathematics	
		(or higher alg-based math)	4
PHY	101	Elementary Physics	
		(or higher alg-based physics)	4
SPE	125	Interpersonal Communication	3
Total General Education Credit Hours			**17**

Total	**77 credit hours**

Automotive Service Management

Certificate

This program is designed as a work co-op program for people interested in a job as an automotive service writer/consultant. The academic courses may be taken prior to, in conjunction with, or after the automotive courses. *Dealerships are particularly interested in female service writers as women are under-represented in the automotive service field.

Automotive Courses (33 credit hours)

ASE	102	Introduction to Auto Shop	2
ASE	130	General Engine Diagnosis	2
ASE	110	Brakes I	3
ASE	140	Suspension and Steering I	3
ASE	265	Heating & Air Conditioning	5
ASE	120	Basic Automotive Electricity	2
ASE	123	Battery, Starting and Charging Systems	2
ASE	132	Ignition System Diagnosis and Repair	2
ASE	233	Fuel Injection and Exhaust Systems	4
ASE	250	Automatic Transmission/Transaxle Serv.	1
ASE	134	Automotive Emissions	2
ASE	210	Brakes II	3
ASE	150	U-Joint & Axle Shaft Service	2
Total Automotive Credit Hours			**33**

General Education Courses (13 credit hours)

ENG	121	English Composition I OR	
ENG	131	Technical Writing	3
SPE	125	Interpersonal Communication	3
CIS	117	Intro to PC Applications	2
BUS	115	Intro to Business	3
BTE	100	Computer Keyboarding	1
Total General Education Credit Hours			**12**

Total	**45 credit hours**

Electrical/Electronics, Engine Performance & Brakes–1 Year Certificate

ASE	110	Brakes I	3
ASE	210	Brakes II	3
ASE	120	Basic Automotive Electricity	2
ASE	123	Battery, Starting and Charging Systems	2
ASE	220	Specialized Electronics Training	2
ASE	221	Body Electrical	4
ASE	130	General Engine Diagnosis	2
ASE	132	Ignition System Diagnosis and Repair	2
ASE	134	Automotive Emissions	2
ASE	231	Automotive Computers	2
ASE	233	Fuel Injection and Exhaust Systems	4
ASE	235	Driveability Diagnosis	1
Total			**29 credit hours**

Steering/Suspension, Powertrain, Heating & Air Conditioning–1 Year Certificate

ASE	140	Suspension and Steering I	3
ASE	240	Suspension and Steering II	3
ASE	250	Automatic Transmission/Transaxle Serv.	1
ASE	251	Automatic Trans/Transaxle Diagnosis	5
ASE	160	Automotive Engine Removal & Install	1
ASE	161	Engine Disassembly, Diagnosis & Assembly	5
ASE	265	Heating & Air Conditioning	5
ASE	150	U-Joint & Axle Shaft Service	2
ASE	151	Manual Transmission/Trans & Clutches	2
ASE	152	Differentials & 4WD/AWD Service	2
Total			**29 credit hours**

Business Administration

(See also A.A. Business Transfer Emphasis)

Associate of Applied Science Degree

The Associate of Applied Science degree in Business Administration is designed to provide students with the skills needed in diverse public and private organizations. The program provides the business, management and marketing skills necessary for success in entry-level positions requiring foundations of greater responsibility, authority and leadership. Students who complete the program will be viewed by potential employers as having a broad-based education necessary for today's team-oriented and globally-competitive environment.

The Business Administration program prepares students for careers in business, as well as providing students with instructional resources for the purpose of ongoing enhancement of skills.

This program may transfer to other colleges or universities and apply toward a bachelor's degree. Contact the ACC Counseling Office or a Faculty Advisor in Business Administration for details.

Major Courses (34 credit hours)

ACC	121	Principles of Accounting I	4
BUS	115	Introduction to Business	3
BUS	216	Legal Environment of Business	3
BUS	217	Business Communications/ Report Writing	3
FIN	101	Introduction to Finance	3
MAN	128	Human Relations OR	
MAN	215	Organizational Behavior	3
MAN	224	Leadership	3
MAN	226	Principles of Management	3
MAR	106	Marketing Your Image	3
MAR	160	Customer Service	3
MAR	216	Principles of Marketing	3

General Education Courses (16 credit hours)

BUS	226	Business Statistics	3
CIS		Must be CIS 118 or higher	3
CIS	161	Presentation Graphics	1
ECO	201	Principles of Macroeconomics OR	
ECO	202	Principles of Microeconomics	3
ENG	121	English Composition I	3
SPE	115	Public Speaking	3

Coop Education/Internship (1 credit hour)

BUS	287	Co-op Education/Internship	1

Discipline Emphasis
Student must choose one of the following areas of emphasis:

General Business Option   (9 credit hours)
The General Business Option prepares students for entry-level positions in a broad range of business occupations. It continues the students' exposure to major areas in the business world, as well as giving the student flexibility in designing a program to fit his or her specific needs.

Restricted Electives   (9 credit hours)
Student must choose 9 credit hours from the courses listed below:

BUS	116	Personal Finance	3
BUS	203	Introduction to International Business	3
BUS	241	Cultural Diversity in Business	3
BUS	287	Co-op Education/Internship	3

Any course(s) with the prefixes:
ACC, BTE, BUS, CIS, FIN, MAN, MAR, REE,
or other, with Department Chair approval   3–9

Management Option   (9 credit hours)
The Management Option prepares students for entry-level positions in business, government and nonprofit organizations. For those who are already managers, the emphasis is designed to improve and broaden their skills by keeping abreast of the most current technological and theoretical aspects of Management.

Restricted Electives   (9 credit hours)
Students must take 9 credit hours from the following:

MAN	116	Principles of Supervision	3
MAN	200	Human Resource Management	3
MAN	201	Human Resource Management II	3
MAN	216	Small Business Management	3
MAN	240	Strategic Management	3
MAN	241	Project Management in Organizations	3
MAN	243	Project Management Practicum	3
BUS	287	Co-op Education/Internship	3
CIS	202	Automated Project Management: MS Project	3

Marketing Option   (9 credit hours)
The Marketing Option prepares students for entry-level positions which deal with directing the activities of the organization toward the satisfaction of consumer wants and needs. This involves an understanding of consumer behavior; promotional, sales and pricing strategies; product management; and physical distribution, all of which prepare the student for a wide variety of opportunities.

Restricted Electives   (9 credit hours)
Student must take 9 credit hours from the following:

MAR	111	Principles of Sales	3
MAR	117	Principles of Retailing	3
MAR	126	Merchandising	3
MAR	160	Customer Service	3
MAR	220	Principles of Advertising	3
MAR	235	Consumer Behavior	3
MAR	249	Strategic Marketing	3
BUS	287	Co-op Education/Internship	3

Small Business Management Option (9 credit hours)
The Small Business Management Option is designed to prepare those interested in a career in owning or managing a small business, as well as to enhance the skills of those already involved in entrepreneurship. The courses are designed to stimulate the entrepreneurial spirit by giving the student the knowledge and ability needed to profitably respond to the environment of the small businessperson.

Required Course: (3 credit hours)

MAN	216	Small Business Management	3

Restricted Electives: (6 credit hours)
Student must take 6 credit hours from the following:

BUS	116	Personal Finance	3
BUS	203	Introduction to International Business	3
BUS	241	Cultural Diversity in Business	3
MAR	111	Principles of Sales	3
MAR	117	Principles of Retailing	3
MAR	160	Customer Service	3
MAR	220	Principles of Advertising	3
BUS	287	Co-op Education/Internship	3

Event Management Option   (9 credit hours)
The Event Management Option prepares students for entry-level event management and marketing positions for both large and small businesses and community relations positions for government and nonprofit agencies or for self-employment.

Required Course: (3 credit hours)

MAN	205	Event Planning	3

Restricted Electives: (6 credit hours)
Student must take 6 credit hours from the following:

MAN	216	Small Business Management	3
MAR	111	Principles of Sales	3
MAR	160	Customer Service	3
MAR	220	Principles of Advertising	3
BUS	287	Co-op Education/Internship	3

Real Estate Broker Licensing Option(12 credit hours)
Successful completion of the courses in this option will satisfy the educational requirement of the Colorado Real Estate Commission to sit for the Real Estate Broker's Licensing Examination.

Required Courses: (12 credit hours)

REE	201	Real Estate Broker I	6
REE	202	Real Estate Broker II	6

Real Estate Appraiser Option   (9 credit hours)
Successful completion of REE 118 and REE 119 in this option will satisfy the educational requirement of the Colorado Board of Real Estate Appraisers to sit for the Registered Appraiser Examination.

Required Courses   (9 credit hours)

REE	115	Introduction to Real Estate	3
REE	118	Real Estate Appraisal	4
REE	119	Uniform Standards of Professional Appraisal Practice (USPAP)	1
BUS	287	Co-op Education/Internship	1

Travel And Tourism Option   (9 credit hours)
This option prepares individuals for career opportunities in the Travel and Tourism industry. The program emphasizes travel careers with a variety of employers, as well as the enhancement of the skills of those already employed in the industry.

Restricted Electives   (9 credit hours)
Student must take 9 credit hours from the following:

TRA	120	Travel Reservations	3
TRA	125	Airline Reservations	3
TRA	128	Travel Destinations	3
TRA	141	Leisure Travel	3
TRA	230	Home-based Travel Agent	3
BUS	287	Co-op Education/Internship	3

Business Administration

Certificates
These certificate programs offer opportunities for students to add a wide range of business-related courses to their expertise for advancement in their jobs, to enhance skills needed in the business and/or public workforce sectors, or in endeavors involving self-employment and entrepreneurship.

Advertising Media
This certificate is designed to enhance the knowledge and skills of those interested in graphic design or marketing careers and for entrepreneurs. Marketing and advertising principles are covered with an overview of graphic design technologies and practices.

Required Courses			**(15 credit hours)**
MAR	216	Principles of Marketing	3
MAR	220	Principles of Advertising	3
ART	131	Design I	3
MGD	101	Introduction to Computer Graphics	3
MGD	103	Production Design (prerequisites: ART 131 and MGD 101)	3
Total			**15 credit hours**

Consumer Behavior
This certificate is for individuals who wish to obtain a better understanding of consumer actions and feeling that may influence the development of marketing strategies. Courses can be applied to the A.A.S. in Business Administration.

Required Courses			**(9 credit hours)**
MAR	160	Customer Service	3
MAR	216	Principles of Marketing	3
MAR	235	Consumer Behavior	3
Total			**9 credit hours**

Contemporary Business
For students who wish to gain a basic knowledge of today's business environment. Courses can all be applied to the A.A.S. in Business Administration.

Required Courses			**(9 credit hours)**
BUS	115	Introduction to Business	3
BUS	216	Legal Environment of Business	3
MAN	230	Corporate Responsibility	3
Total			**9 credit hours**

Contemporary Management
This certificate is designed for both line and staff managers in the business and public sectors and for those who wish to learn the planning, supervision and management techniques and skills needed to improve workforce productivity. Courses can be applied to the A.A.S. in Business Administration.

Required Courses			**(9 credit hours)**
MAN	116	Principles of Supervision	3
MAN	226	Principles of Management	3
MAN	240	Strategic Management	3

Customer Service
This certificate is for individuals who are in a business, management or marketing profession and would like to enhance their customer service skills or develop a customer service plan for their organization or business. Courses can be applied to the A.A.S. in Business Administration.

Required Courses			**(12 credit hours)**
MAR	160	Customer Service	3
MAR	111	Principles of Sales	3
MAR	235	Consumer Behavior	3
BUS	217	Business Communication/ RPT Writing	3
Total			**12 credit hours**

Direct Marketing
This certificate is designed for an individual already in a marketing career or an entrepreneur to understand all aspects of direct marketing from using marketing/advertising principles and basic design of direct mail pieces to gathering customer information and developing and maintaining databases.

Required Courses			**(12 credit hours)**
MAR	216	Principles of Marketing	3
MAR	220	Principles of Advertising	3
CIS	167	Desktop Publishing	3
CIS	240	Database Design and Development	3
Total			**12 credit hours**

Human Resource Management
This certificate is designed to enhance the skills of those who are seeking employment that deals with a practical approach to current issues in Human Resource Management, including laws, compensation programs and evaluation policies and procedures. These courses can be applied to the Human Resource Specialist certificate and to the A.A.S. in Business Administration.

Required Courses			**(9 credit hours)**
MAN	200	Human Resource Management I	3
MAN	201	Human Resource Management II	3
MAN	215	Organizational Behavior	3
Total			**9 credit hours**

Human Resource Specialist
This certificate is designed for individuals pursuing careers as Human Resource Specialists in large organizations, or Human Resource Managers in smaller organizations, or those already so employed who wish to upgrade or enhance their skills. The program concentrates heavily on the connection between organizations and productivity and how these are affected by the concepts, issues and practices of contemporary Human Resource Management. Courses can be applied to an A.A.S. degree in Business Administration.

Required Courses			**(30 credit hours)**
MAR	106	Marketing Your Image	3
BUS	216	Legal Environment of Business	3
MAN	116	Principles of Supervision	3

MAN	128	Human Relations	3
MAN	200	Human Resource Management I	3
MAN	201	Human Resource Management II	3
MAN	215	Organizational Behavior	3
MAN	224	Leadership	3
MAN	226	Principles of Management	3
MAN	230	Corporate Responsibility	3
Total			**30 credit hours**

International Business

This certificate is designed for students entering one of the fastest and most challenging segments of business today, the international market. Completion of these courses will provide a good understanding of the interdisciplinary nature of international business. Courses can be applied to the A.A.S. in Business Administration.

Required Courses			**(9 credit hours)**
BUS	115	Introduction to Business	3
BUS	203	Introduction to International Business	3
BUS	241	Cultural Diversity in Business	3
Total			**9 credit hours**

Leadership

This certificate will help individuals assess and develop personal leadership skills, including the increasingly important relationship between effective leadership and the situation. Courses can be applied to the A.A.S. in Business Administration.

Required Courses			**(9 credit hours)**
MAN	215	Organizational Behavior	3
MAN	224	Leadership	3
MAN	230	Corporate Responsibility	3
Total			**9 credit hours**

Management for Professional and Technical Employees

This certificate is designed specifically for individuals who have professional or technical expertise and are in a management position, anticipate moving into a management position, or plan on starting their own business. To qualify for this certificate individuals must:

1. Have a minimum of an Associate of Applied Science degree in a technical area or three years of documented work experience in a technical area, and
2. Complete the required course work at Arapahoe Community College.

Required Courses			**(15 credit hours)**
BUS	115	Introduction to Business	3
BUS	216	Legal Environment of Business	3
MAN	116	Principles of Supervision	3
MAN	128	Human Relations	3
MAN	230	Corporate Responsibility	3

Restricted Electives			**(3-4 credit hours)**
Student must select one course from the following:			
ACC	121	Principles of Accounting	4
MAN	216	Small Business Management	3
MAR	216	Principles of Marketing	3
Total			**18-19 credit hours**

Organizational Behavior

This certificate is for individuals whose professions require them to interact with others on a regular basis, or who are involved in any aspect of organizational development. The certificate focuses on psychological, interpersonal and behavioral dynamics. Courses can be applied to the A.A.S. in Business Administration.

Required Courses			**(9 credit hours)**
MAN	128	Human Relations	3
MAN	215	Organizational Behavior	3
MAN	226	Principles of Management	3
Total			**9 credit hours**

Project Management

This certificate is designed to enable individuals to initiate, plan, execute and control project events and to bring project events to a timely conclusion. The certificate concentrates on teaching task specialists to work cross-functionally and in ad hoc project teams. Courses can be applied to the A.A.S. degree in Business Administration.

Required Courses			**(9 credit hours)**
MAN	241	Project Management in Organizations	3
CIS	202	Automated Project Management – MS Project	3
MAN	243	Project Management in Action	3
Total			**9 credit hours**

Real Estate Appraisal

Successful completion of REE 118 and REE 119 in this certificate will satisfy the educational requirement of the Colorado Real Estate Commission to sit for the Real Estate Appraisal Examination. Courses can be applied to the A.A.S. in Business Administration.

Required Courses			**(8 credit hours)**
REE	115	Real Estate Law and Practice	3
REE	118	Real Estate Appraisal	4
REE	119	Uniform Standards of Professional Appraisal Practice (USPAP)	1
Total			**8 credit hours**

Real Estate Broker

This certificate is designed for students who wish to complete the hours of education requirements of the Colorado Real Estate Commission for Broker Licensing. Individuals who successfully complete this course of study will be awarded an REC 33 Certificate, which will enable them to sit for the State Broker Licensing examination. Courses can be applied to the A.A.S. in Business Administration.

Required Courses			**(12 credit hours)**
REE	201	Real Estate Broker I	6
REE	202	Real Estate Broker II	6
Total			**12 credit hours**

Sales Management

For individuals who are interested in the sales profession as a career, or who are already in the sales profession and wish to enhance their knowledge about this increasingly important segment of American business. Courses can be applied to the A.A.S. in Business Administration.

Required Courses (9 credit hours)

MAR	111	Principles of Sales	3
MAR	160	Customer Service	3
MAR	216	Principles of Marketing	3
Total			**9 credit hours**

Sales Management II

For individuals who are interested in the sales profession as a career in sales and/or sales management. This certificate offers individuals a more comprehensive background in sales and/or sales management. Courses can be applied to the A.A.S. in Business Administration.

Required Courses			(18 credit hours)
MAN	226	Principles of Management	3
MAR	111	Principles of Sales OR	3
MAR	216	Principles of Marketing	3
MAR	160	Customer Service	3
MAR	245	Sales Management	3
MAR	235	Consumer Behavior	3
Total			**18 credit hours**

Small Business Management

This certificate is designed for those who are interested in the entrepreneurial aspect of the business environment and want to develop the knowledge and skills needed to understand and function profitably in the small business environment. The certificate is designed to give the student the basic tools he or she will need for immediate use and the courses required can also be applied to the Small Business Option of the A.A.S. degree in Business Administration.

Required Courses			(27 credit hours)
ACC	235	Computerized Accounting for Small Businesses	3
BUS	216	Legal Environment of Business	3
BUS	217	Business Communications	3
CIS		Must be CIS 118 or higher	3
MAN	216	Small Business Management	3
MAN	230	Corporate Responsibility	3
MAR	111	Principles of Sales	3
MAR	160	Customer Service	3
MAR	216	Principles of Marketing	3

Restricted Electives			(3 credit hours)
Student must select one course from the following:			
MAN	116	Principles of Supervision	3
MAR	117	Principles of Retailing	3
MAR	220	Principles of Advertising	3
SPE	115	Public Speaking	3
Total			**30 credit hours**

Small Business Marketing and Sales

This certificate is designed for individuals who wish to enhance their skills utilizing customer service skills, marketing and advertising principles in small business marketing. Courses can be applied to the A.A.S. in Business Administration.

Required Courses			(15 credit hours)
MAR	111	Principles of Sales	3
MAR	160	Customer Service	3
MAR	216	Principles of Marketing	3
MAR	220	Principles of Advertising	3

Restricted Electives			(3 credit hours)
Student must select one course from the following:			
MAR	117	Principles of Retailing	3
MAR	217	E-Commerce Marketing	3
MAR	249	Strategic Marketing	3
Total			**15 credit hours**

Supervision

This certificate is designed for individuals who wish to enhance their skills in the supervision of people at the front line of management. The course work required for this certificate is especially suited both to those already in a supervisory position and also to those anticipating moving into a supervisory position. Courses can be applied to the A.A.S. in Business Administration.

Required Courses			(9 credit hours)
MAN	116	Principles of Supervision	3
MAN	128	Human Relations	3
MAN	226	Principles of Management	3
Total			**9 credit hours**

Travel And Tourism

The Travel and Tourism certificate is designed to prepare individuals for career opportunities in one of the fastest growing fields in Colorado. In addition to travel agencies, career opportunities exist with airlines, cruise lines, hotels and as corporate travel planners. Courses may also apply to A.A.S. in Business Administration.

Required Courses			(24 credit hours)
MAR	106	Marketing Your Image	3
BUS	217	Legal Environment of Business	3
CIS		Must be CIS 118 or higher	3
MAN	116	Principles of Supervision	3
MAR	111	Principles of Sales	3
TRA	120	Travel Reservations	3
TRA	128	Travel Destinations	3
TRA	141	Leisure Travel	3

Restricted Electives			(6 credit hours)
Student must select two courses from the following:			
ACC	101	Fundamentals of Accounting	3
TRA	125	Airline Reservations	3
TRA	230	Home-Based Travel Agency	3
BUS	287	Internship	3
Total			**30 credit hours**

Web-Based Design/Marketing

This certificate is designed to enhance the knowledge and skills of individuals interested in business careers or entrepreneurs. Marketing, advertising principles and design principles are applied with a basic understanding of developing and maintaining a web site.

Required Courses			(10 credit hours)
MAR	117	Principles of Retailing	3
MAR	217	E-Commerce Marketing	3
CIS	130	Introduction to the Internet	1
MGD	141	Web Design I	3
Total			**10 credit hours**

Business Technologies

Certificates

Administrative Support Specialist

This certificate will prepare the student for entering a business environment to become an office professional. The student will develop skills in touch keyboarding and applications, electronic office procedures, word processing, language skills, electronic information systems and human relations communications.

Major Courses			(25 credit hours)
BTE	102	Keyboarding Applications I	2
BTE	125	Records Management	3
BTE	156	Business Math with Calculators	4
BUS	115	Introduction to Business	3
BUS	217	Business Communication & Report Writing	3
CIS	135	Complete PC Word Processing	3
CIS	118	Intro to PC Applications	3
CIS	140	Microsoft Outlook	1
MAR	106	Marketing Your Image	3

Restricted Electives			(5 credit hours)

Students must select 5 credit hours from the following list:

ACC	101	Fundamentals of Accounting OR	
ACC	121	Principles of Accounting I	3-4
BTE	108	Ten Key by Touch	1
BTE	111	Keyboarding Speed Building I	2
BTE	202	Office Simulation	3
BTE	166	Business Editing Skills	3
BTE	225	Administrative Office Management	3
CIS	167	Desktop Publishing	3
___	___	Any course(s) with the prefixes: ACC, BTE, BUS. CIS, FIN, MAN, MAR, REE.	
Total			**30 credit hours**

Bookkeeping & Office

This certificate will prepare the student for entering the job market in positions in bookkeeping and/or work in an accounting department. The student will develop skills in basic accounting including the accounting cycle, computerized accounting, keyboarding and ten key by touch as well as business math. Also taught are computer skills such as electronic spreadsheets, word processing and electronic office procedures.

Major Courses			(32-33 credit hours)
ACC	101	Fundamentals of Accounting OR	
ACC	121	Principles of Accounting	3-4
ACC	115	Payroll Accounting	4
ACC	235	Computerized Accounting for Small Businesses OR	
ACC	245	Computerized Accounting with a Professional Package	3
BTE	102	Keyboarding Applications I	2
BTE	108	Ten Key by Touch	1
BTE	125	Records Management	3
BTE	156	Business Math with Calculators	4
BUS	217	Business Communication & Report Writing	3
CIS	118	Intro to PC Applications	3
CIS	135	Complete PC Word Processing	1
CIS	140	Microsoft Outlook	1
CIS	155	PC Spreadsheet Concepts: Excel	3
Total			**32-33 credit hours**

Legal Secretary

This certificate will prepare the student to enter a legal office environment to become an office professional. The student will develop skills in keyboarding applications, word processing, language skills, computer applications, human relations, communications and office procedures as they relate to a legal office.

Major Courses			(35 credit hours)
BTE	102	Keyboarding Applications I	2
BTE	103	Keyboarding Applications II	3
BTE	120	Electronic Office Procedures	3
BTE	125	Records Management	3
BTE	166	Business Editing Skills	3
BTE	238	Legal Office Procedures	3
BUS	217	Business Communication & Report Writing	3
CIS	118	Introduction to PC Applications	3
CIS	135	Word Processing Complete	3
CIS	140	Microsoft Outlook	1
PAR	110	Legal Analysis	3
PAR	115	Intro to Law	3
PAR	117	Family Law	3
Total			**36 credit hours**

Carpentry

Certificate

This certificate program provides entry-level skill training in a variety of building trades. This competency-based program features hands-on learning in the actual construction of a house on site. Students will enjoy learning the basic skills of framing, floors, walls and roofs. Students will perform hands-on skills in the trades of siding, roofing, masonry, drywall and interior finish carpentry. Students will be exposed to other building trades such as: plumbing, HVAC, electrical and concrete finishing. Upon completion of this program, students can look forward to employment in the many diversified areas of building trades.

Second year students will go beyond basic skills and/or specialize in trades that include framing, door and window installation, interior and exterior finish, all phases of carpentry and masonry. This includes exposure to residential plumbing, electrical and HVAC. Classroom instruction and evaluation parallels the on-the-job training of students. Paid on-the-job internships are also available through a cooperative component that requires students to work a minimum of 15 hours per week in an approved training station. Credit from the job training will be evaluated on a satisfactory/unsatisfactory basis and classroom credit will be evaluated with a letter grade.

Carpentry I Certificate			(16 credits)
CAR	101	Construction Safety*	1
CAR	102	Hand and Power Tools*	1
CAR	105	Job Site Layout and Blueprint Reading	1
CAR	115	Form and Foundation Systems	1
CAR	121	Floor Framing	1
CAR	122	Wall Framing	1
CAR	123	Roof Framing	1
CAR	125	Roofing Materials and Methods	1
CAR	130	Windows and Exterior Doors	1
CAR	131	Exterior Trim	1
CAR	135	Thermal and Moisture Methods and Materials	1
CAR	145	Interior Finishes-General	1

CAR	146	Interior Finishes-Drywall Construction	1
CAR	151	Interior Trim-Doors and Trim	1
CAR	153	Interior Trim-Cabinets and Countertops	1
CAR	160	Floor Finishes	1
Total			**16 credit hours**

*CAR 101 and CAR 102 are prerequisites to all CAR classes. Offered FALL ONLY.

Carpentry II Certificate			**(15–19 credit hours)**
CAR	215	Form and Foundation Systems II	1
CAR	221	Advanced Floor Systems	2
CAR	222	Advanced Wall Systems	2
CAR	223	Advanced Roofing Systems	2
CAR	250	Advanced Interior Trim-General	2
CAR	251	Advanced Interior Trim-Doors	2
CAR	254	Advanced Interior Trim-Special	2
CAR	275	Special Topics	2–6
Total			**15–19 credit hours**

Computer Aided Drafting

Certificate

This certificate program is for individuals who seek in-depth training on a CAD System as an automated drafting tool. Individuals will be introduced to computer literacy, AutoCAD software, icons, libraries, slides, 3-D applications, customizing, programming and plotting.

Major Courses

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
CAD	249	AutoLisp Programming	3
CIS	118	Introduction to PC Applications	3
MAT	108	Technical Mathematics or higher	4

Drafting/Design elective or portfolio of related work 6-10 experience. Select one of the following groups: a, b, c, or d

    a. ARC 101, 102
    b. MGD 117, 207
    c. DRT 101, 102
    d. IND 111, 211

| **Total Certificate Credits** | **28-32** |

Financial Aid is only available for the coursework in the following three Computer Aided Drafting Certificates as part of the ultimate educational goal of obtaining an A.A.S. degree as indicated on your College application. Please visit the Office of Financial Aid for more details.

Computer Aided Drafting–3D

Certificate

Major Courses			**(6 credit hours)**
CAD	202	Computer Aided Drafting/3D	3
CAD	217	3D Studio Viz	3
Total			**6 credit hours**

Computer Aided Drafting–2D

Certificate

Major Courses			**(6 credit hours)**
CAD	101	Computer Aided Drafting I	3
CAD	102	Computer Aided Drafting II	3
Total			**6 credit hours**

Computer Aided Drafting–Custom

Certificate

Major Courses			**(6 credit hours)**
CAD	201	Computer Aided Drafting/Custom	3
CAD	249	AUTOLISP Programming	3
Total			**6 credit hours**

Computer Graphics

See Multimedia/Graphic Design

Computer Information Systems

Associate of Applied Science Degree

The Computer Information System (CIS) degree is a two-year, 60-61 semester hour vocational degree program in business computer usage, management and operations. Emphasis is on learning to use the computer as a tool in a business environment. The CIS graduate will have a solid foundation in both business and information system skills. Job opportunities exist in traditional entry-level business positions as well as the more specialized areas of computer operator, systems analyst trainee, computer salesperson, user support, documentation specialist or data librarian.

General Education Courses			**(28 credit hours)**
ENG	121	English Composition I	3
ENG	122	English Composition II	3
MAT	123	Finite Mathematics	4
SPE	115	Public Speaking	3
HIS	201	U.S. History I	3
PHI	111	Introduction to Philosophy	3
PSY	101	General Psychology I or	
SOC	101	Introduction to Sociology	3
POS	105	Introduction to Political Science	3
POS	111	American Government	3
Total			**28 credit hours**

Students must choose one of the following areas of emphasis in addition to completing the General Education Courses listed above.

Business Emphasis

ACC	121	Principles of Accounting I	4
ACC	122	Principles of Accounting II	4
CIS	118	Intro to PC Applications	3
CIS	240	Database Design and Development	3
CIS	267	Management of Information Systems	3
CIS	268	Systems Analysis and Design I	3
MAN	226	Principles of Management	3
MAT	125	Survey of Calculus I	4
ECO	201	Principles of Macroeconomics	3
ECO	202	Principles of Microeconomics	3
Total			**33 credit hours**

| **Total A.A.S. degree with** | | |
| **Business Emphasis** | | **61 credit hours** |

Computer Information Systems Emphasis

ACC	121	Principles of Accounting I	4
ACC	122	Principles of Accounting II	4
CIS	118	Intro to PC Applications	3
CIS	240	Database Design and Development	3
CIS	267	Management of Information Systems	3
CIS	268	Systems Analysis and Design I	3

CSC	116	Logic and Program Design I	3
CSC	154	Intro to MS Visual Basic .NET	3
OTHER		Electives selected from CIS, CSC	
		or CNG courses	6
Total			**32 credit hours**

Total A.A.S. degree with Computer Information Systems Emphasis   **60**

Database Analyst Emphasis
CSC	116	Logic and Program Design I	3
CSC	154	Intro to MS Visual Basic .NET	3
CSC	160	Computer Science I (JAVA)	4
CSC	233	Object Oriented Programming in C++	3
CSC	253	MS ASP.NET Web Application Development	3
CIS	220	Fundamentals of UNIX (Linux)	3
CIS	240	Database Design and Development	3
CIS	246	Oracle Database Administration I	4
CIS	253	Programming a Microsoft SQL Server 2000 Database	3
CIS	267	Management of Information Systems	3
Total			**32 credit hours**

Total A.A.S. degree with Database Analyst Emphasis   **60**

Business Applications Specialist Emphasis
CIS	124	Intro to Operating Systems	3
CIS	128	Windows Complete	3
CIS	130	Introduction to Internet	1
CIS	135	Complete PC Word Processing	3
CIS	140	Microsoft Outlook	1
CIS	145	Complete PC Database	3
CIS	155	PC Spreadsheet Concepts	3
CIS	161	Presentation Graphics I	1
CIS	167	Desktop Publishing (Publisher)	3
CIS	202	Automated Project management (MS Project)	3
CIS	220	Fundamentals of UNIX (Linux)	3
CIS	240	Database Design and Development	3
OTHER		Electives selected from BUS, CIS, CSC or CNG courses	3
Total			**33 credit hours**

Total A.A.S. degree with Business Applications Specialist Emphasis   **61**

Web Developer in Information Systems Emphasis
CIS	103	Introduction to Internet	1
CIS	240	Database Design and Development	3
CSC	116	Logic and Program Design I	3
CSC	154	Intro to MS Visual Basic .NET	3
CSC	160	Computer Science I (JAVA)	4
CSC	253	MS ASP.NET Web Application Development	3
CWB	110	Complete Web Authoring OR	
MGD	141	Web Design I (Macromedia Flash)	3
CWB	130	Web Editing Tools (FrontPage)	3
CWB	164	XML I	3
MGD	111	Adobe Photoshop I	3
MGD	143	Motion Graphic Design: Flash	3
Total			**32 credit hours**

Total A.A.S. degree with Web Developer in Information Systems Specialist Emphasis   **60**

Computer Network Technology

Associate of Applied Science Degree
The Computer Network Technology program prepares individuals for jobs in the computer networking field. Students in this program gain hands-on experience with computer hardware, software and networks. Upon successful completion of the program, the student will have the needed background to prepare to take the exams for Network+; Security +; Microsoft MCSA/MCSE, CWNA, CWSP, Cisco CCNA or the National Association of Communications Systems Engineers (NACSE) NANS certification; these are the competency standards for network specialists in the computer industry.

Major Courses			**(28 credit hours)**
CIS	124	Intro to Operating Systems	3
CIS	118	Intro to PC Applications	3
CIS	202	Automated Project Mgmt: MS Projects	3
CIS	287	Cooperative Education	3
CNG	121	Computer Technician I: A+	4
CNG	124	Networking I: Network +	3
CNG	125	Networking II: Network +	3
CNG	131	Network Security Fundamentals	3
CNG	224	Microsoft Windows Wireless Network	3

General Education Courses			**(13 credit hours)**
MAT	121	College Algebra or higher	4
SPE	125	Interpersonal Communication OR	
SPE	115	Public Speaking	3
ENG	121	English Composition I OR	
ENG	131	Technical Writing I	3
MAN	230	Corporate Responsibility	3

Electives   **(0-15 credit hours)**
Depending on program emphasis students will select 0-15 credit hours from the CIS, CNG, CWB or CSC program area. Please see faculty advisor for information.

Computer Network Technology Tracks
Choose 1 from the following tracks:

MCSA Windows Server 2003 (MCSA)			**(14 credit hours)**
CNG	211	Windows XP Configuration	3
CNG	212	Managing a MS Windows Server Environment	4
CNG	215	Managing a MS Windows Network Environment	4
CNG	226	Implementing and Managing MS Exchange	3

MCSE Windows Server 2003			**(23-26 credit hours)**
CNG	211	Windows XP Configuration	3
CNG	212	Managing a MS Windows Server Environment	4
CNG	213	Implement a MS Windows Network Infrastructure	4

Microsoft Certified System Engineer Elective Classes (choose 4 of the following):
CNG	214	Plan a MS Windows Server Network Infrastructure	4
CNG	215	Managing a Microsoft Windows Network Environment	3
CNG	216	Plan a MS Windows Server Active Directory Infrastructure	4

CNG	221	Design MS Windows Active	
		Directory and Network Infrastructure	3
CNG	222	Designing a Windows Secure Network	3
CNG	223	Designing a MS Windows	
		2000 Network Infrastructure	3
CNG	226	Implementing and Managing	
		Microsoft Exchange Server 2003	4
CNG	227	Administering a Microsoft SQL	
		Server Database	3
CNG	239	Deploying and Managing Microsoft	
		Internet Security and Acceleration	
		Server 2000	3
CIS	252	Querying a Microsoft SQL	
		Server 2000 with Transact-SQL	3

Cisco Network Administrator (CCNA) (20 credit hours)
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

UNIX Network Administration (16 credit hours)
CIS	220	Fundamentals of UNIX (Linux)	3
CIS	221	UNIX Shell Scripting (Linux)	3
CIS	222	UNIX System Administration	3
CSC	269	Programming in Perl	3
CSC	160	Computer Science I (Language)	4

Computer and Network Security (21 credit hours)
CIS	220	Fundamentals of UNIX (Linux)	3
CIS	221	UNIX Shell Scripting (Linux)	3
CNG	253	Firewalls and How They Work	3
CNG	136	Guide to Disaster Recovery	3
CNG	225	Wireless Network Security	3
CNG	257	Network Defense and Counter Measures	3
CNG	258	Computer Forensics	3
Total			**62–69 credit hours**

Networking Certificates

This program is specifically designed to prepare students as entry-level Microsoft 2003 Network Administrators. Students are encouraged to take the Microsoft Technical Certification tests to receive the MCP, MCSA and MCSE certification from Microsoft.

NOTE: Arapahoe Community College has no control over curriculum changes made by the agencies mentioned above.

Choose one of the following:

Certificate
Microsoft Certified System
Administrator (MCSA) (14 credit hours)
CNG	211	Windows XP Configuration	3
CNG	212	Manage a MS Window Server	
		Environment	4
CNG	213	Implement a MS Windows Network	
		Infrastructure	4
CNG	226	Implementing and Managing	
		MS Exchange	3

Certificate
MCSE Windows Server 2003 (MCSE)
Microsoft Certified Systems Engineer
2003 Core Classes (11 credit hours)
CNG	211	Windows XP Configuration	3
CNG	213	Implement a MS	
		Windows Network Infrastructure	4
CNG	212	Manage a MS Windows Server	
		Environment	4

Microsoft Certified System Engineer
Elective Classes (12-15 credit hours)
(choose four from the following):
CNG	214	Plan a MS Windows	
		Server Network Infrastructure	4
CNG	215	Managing a Microsoft Windows	
		Network Environment	3
CNG	216	Plan a MS Windows Server	
		Active Directory Infrastructure	4
CNG	221	Design MS Windows Active	
		Directory and Network Infrastructure	3
CNG	222	Designing a Windows Secure Network	3
CNG	223	Designing a MS Windows	
		2000 Network Infrastructure	3
CNG	226	Implementing and Managing	
		Microsoft Exchange Server 2003	4
CNG	227	Administering a Microsoft	
		SQL Server Database	3
CNG	239	Deploying and Managing Microsoft	
		Internet Security and Acceleration	
		Server 2000	3
CIS	252	Querying a Microsoft SQL	
		Server 2000 with Transact-SQL	3

Certificate
This program is specifically designed to prepare students as entry-level Cisco Administrators. Students are encouraged to take the Cisco Technical Certification tests to receive the CCNA certification from Cisco.

NOTE: Arapahoe Community College has no control over curriculum changes made by the agencies mentioned above.

Cisco Network Administrator (CCNA) (20 credit hours)
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

Certificate
This program is specifically designed to prepare students as entry-level Cisco Professionals. Students are encouraged to take the Cisco Technical Certification tests to receive the CCNP certification from Cisco.

NOTE: Arapahoe Community College has no control over curriculum changes made by the agencies mentioned above.

Cisco Certified Network Professional
(CCNP) (20 credit hours)
CNG	265	Cisco Network Associate I	5
CNG	266	Cisco Network Associate II	5
CNG	267	Cisco Network Associate III	5
CNG	268	Cisco Network Associate IV	5

DEGREE REQUIREMENTS

Certificate

This program is specifically designed to prepare students as entry-level UNIX administrators. This certificate covers different platforms of UNIX, including Solaris and Linux. This will provide students with the background to prepare for the Solaris System Administrator certification exam.

UNIX Network Administration			(15 credit hours)
CSC	160	Computer Science I (Language)	4
CIS	220	Fundamentals of UNIX	3
CIS	221	UNIX Shell Scripting (Linux)	3
CIS	222	UNIX System Administration	3
CSC	269	Programming in Perl	2

Certificate

This program is specifically designed to prepare students as entry-level Computer/Networking Security Technicians. Students are encouraged to take the CWSP and Security+ tests to receive the industry certifications.

NOTE: Arapahoe Community College has no control over curriculum changes made by the agencies mentioned above.

Computer and Networking Security			(21 credit hours)
CIS	220	Fundamentals of UNIX	3
CIS	221	UNIX Shell Scripting (Linux)	3
CNG	253	Firewalls and How They Work	3
CNG	136	Guide to Disaster Recovery	3
CNG	225	Wireless Network Security	3
CNG	257	Network Defense and Counter Measures	3
CNG	258	Computer Forensics	3

Microcomputer Specialist Certificate

The Microcomputer Specialist certificate program is designed to provide the student with skills in microcomputer usage, including:

1. Selecting, installing, operating and tailoring many of the primary software packages used by today's businesses
2. Developing customized software applications
3. Performing simple hardware tasks
4. Setting up and providing support to users on a local area network
5. Creating and maintaining web pages
6. Providing support and training to other computer users in an office environment

Upon completion, students will be prepared for an entry-level position in computing, such as help desk technician, software trainer, application developer and office computer specialist.

The student must complete 38 hours to obtain the certificate. The major courses consist of 24 credit hours of courses which provide a basic working knowledge of operating systems, software applications, usage of the Internet and network software. In addition to the major courses, students will be required to select and complete all 14 credit hours of courses in one of the two specialization tracks: Applications Development and Support, or Web Page Authoring.

Major Core Courses			(23 credit hours)
CIS	124	Introduction to Operating Systems	3
CIS	128	Windows Complete	3
CIS	130	Introduction to the Internet	1
CIS	145	Complete PC Database	3
CIS	155	PC Spreadsheets Concepts: Excel	3
CIS	287	Cooperative Education	3
CNG	121	Computer Technology I: A+	4
CNG	124	Networking I: Network +	3

Applications Development and Support Track			(13 credit hours)
CIS	161	Presentation Graphics I	1
CIS	218	Advanced PC Applications	3
CSC	150	Visual Basic Programming	3
		**Electives	6

Web Authoring Track			(14 credit hours)
CWB	110	Complete Web Authoring	3
CWB	164	XML	3
MGD	141	Web Design I	3
		**Electives	5
Total			**36-37 credit hours**

**An elective may be any CIS or CSC course not specifically listed as a program requirement. Other electives may be selected with the approval of the program advisor. Program Advisor: 303-797-5886, cisadvising@arapahoe.edu.

Network Specialist

Certificate

A+, Network +, Microsoft and Cisco Certificate
The Network Specialist certificate program prepares individuals for jobs in the computer network field. The student will have a background in computer and network hardware, software and operating systems. Common examples of positions in which a graduate of this program might be employed are network administration specialist for a computer/network systems reseller, in-house network administrator and network consultant.

Students in this program gain hands-on experience with computer hardware, software and networks. Upon successful completion of the program the student is prepared to take the exams for A+; Network+; or the Microsoft MCSE, or Cisco CCNA, the competency standards for network specialists in the computer industry.

Major Courses			35 credit hours
CIS	124	Introduction to Operating Systems	3
CIS	128	Windows Complete	3
CIS	287	Cooperative Education	3
CNG	108	Network Analysis and Design	3
CNG	121	Computer Technology I: A+	4
CNG	122	Computer Technology II: A+	4
CNG	124	Networking I: Network +	3
CNG	125	Networking II: Network +	3
CNG	255	Industry Certification	3
CIS/CNGElectives–May be any CIS or CNG class not previously taken			6

Choose 1 from the following tracks   (9-24 credit hours)

Windows Network Administration			(24 credit hours)
CNG	211	Windows XP Configuration	3
CNG	212	Manage a MS Window Server Environment	4
CNG	213	Implement a MS Windows Network Infrastructure	4

CNG	215	Managing a Microsoft Windows Network Environment	3
CNG	216	Plan a MS Windows Server Active Directory Infrastructure	4
CNG	222	Designing a Windows Secure Network	3
CNG	226	Implementing and Managing MS Exchange	3

Cisco Network Administration (20 credit hours)

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

UNIX Network Administration (12 credit hours)

CIS	220	Fundamentals of UNIX	3
CIS	221	UNIX Shell Scripting (Linux)	3
CIS	222	UNIX for System Administrators	3
CSC	269	Programming in PERL	3

Network Sales (9 credit hours)

CNG	108	Network Analysis and Design	3
MAR	111	Principles of Sales	3
CNG	124	Network+ I	3
CNG	125	Network+ II	3
CNG	131	Networking Security Fundamentals	3
CNG	211	Window XP Configuration	4
CNG	224	Microsoft Windows Wireless Networks	3
CNG	255	Industry Certification	3

General Education Courses (15-16 credit hours)

ENG	121	English Composition I OR	
ENG	131	Technical Writing	3
MAT	121	College Algebra or higher	4
MAN	224	Leadership	3
MAN	230	Corporate Responsibility	3
SPE	115	Public Speaking OR	4
SPE	125	Interpersonal Communication	3

Physical Education (1 credit hour)

PED Activity Course*   1

*The PED requirement may be waived for students who are 35 years of age or older at the time of most recent admission to the College. Appropriate credit must be taken to substitute for the hour waived.

Elective Courses: (9-12 credit hours)

Choose 3 courses from the list below
(Must include at least one programming language)

CSC	157	Advanced Visual Basic .NET Programming	4
CSC	160	Computer Science I	4
CSC	161	Computer Science II	4
CSC	233	Object Oriented Programming in C++	4
CSC	234	C++ Programming	4
CSC	236	C# Programming	4
CSC	237	Advanced C# Programming	4
CNG	251	Anti Virus Concepts	3
MAN	242	Project Management Tools and Techniques	3
MAR	216	Principles of Marketing	3
SPE	225	Organizational Communications	3
Total			**64–68 credit hours**

Computer Technician

Certificate

The Computer Technician program prepares individuals for entry-level jobs in the personal computer industry involving the installation, upgrading and servicing of personal computer systems and computer networks. Three common examples of positions in which a graduate of this program might be employed are retail computer store technician, field service technician for a computer/network systems reseller and in-house computer/network technician for a large company.

Students in this program gain extensive experience with computer hardware, software and networks. Upon successful completion of the program, the student is prepared to take the CompTIA A+ certification exam, the competency standard for service technicians in the computer industry.

Major Courses (25 credit hours)

CIS	118	Intro to PC Applications[1]	3
CIS	124	Intro to Operating Systems	3
CIS	128	Complete Windows	3
CNG	121	Computer Technology I: A+	4
CNG	122	Computer Technology II: A+	4
CNG	124	Networking I: Network+	3
CNG	125	Networking II: Network+	3
CNG	255	Industry Certification	3

Restricted CIS Electives (1 credit hour)

Select any electives totaling at least 2 credit hours from the following prefixes: CIS, CSC, CNG

Total   **27 credit hours**

[1]Students may substitute all of the following courses for CIS 118: CIS 131, CSC 161, CIS 145 and CIS 155. Program Advisor: 303-797-5886, cisadvising@arapahoe.edu.

Microsoft Certified System Engineer (MCSE)

Certificate

This program is specifically designed to prepare students as entry-level Microsoft 2003 Network Administrators. Students are encouraged to take the Microsoft Technical Certification tests to earn the MCP and MCSE certification from Microsoft.

NOTE: Arapahoe Community College has no control over curriculum changes made by the agencies mentioned above.

Major Courses (24 credit hours)

CNG	211	Windows XP Configuration	3
CNG	212	Manage a MS Window Server Environment	4
CNG	213	Implement a MS Windows Network Infrastructure	4
CNG	215	Managing a Microsoft Windows Network Environment	3
CNG	216	Plan a MS Windows Server Active Directory Infrastructure	4
CNG	222	Designing a Windows Secure Network	3
CNG	226	Implementing and Managing MS Exchange	3
Total			**24 credit hours**

Construction Supervision

Associate of Applied Science Degree

Students completing the A.A.S. degree in Construction Supervision have prepared themselves for supervisory/ administrative roles within the construction industry. The curriculum incorporates course work in mathematics, architectural principles, business and construction technology. New students are encouraged to meet with a Construction Supervision faculty advisor before first semester registration.

The student may select from two program options. The student completing Option A may continue his/her education at Colorado State University in the department of Manufacturing Technology. Many of ACC's credits apply to the CSU degree. For details on this transfer agreement the student must contact the department chair at Arapahoe Community College. The student who is intending on transferring to CSU may complete Option B for A.A.S. in Construction Supervision.

Major Courses   **(39 credit hours)**

ACC	121	Principles of Accounting I	4
ARC	101	Intro to Architectural Drawing	5
ARC	107	Blueprint Reading for Building Trades	3
ARC	116	Building Materials	3
ARC	121	Building Structure Analysis	3
ARC	216	Estimating I	3
ARC	218	Surveying	3
ARC	226	Construction Scheduling	3
ARC	228	Contracts, Bonds and Insurance	3
ARC	231	Building Service Systems	3
ARC	236	Codes/Zoning/Specifications	3
CAD	101	Computer Aided Drafting I	3

General Education Courses   **(15 credit hours)**

ENG	121	English Composition I	3
MAN	116	Principles of Supervision	3
MAT	122	College Trigonometry	3
SPE	115	Public Speaking	3

Elective Courses   **(3 credit hours)**
Choose from one of the following:
ART 110, 111; FRE, JPN or LAT 111,112, 211; MUS 100,120; PHI 111,112; THE 105, 212.

Physical Education   **(1 credit hour)**
PED activity course*   1

*The PED requirement may be waived for students who are 35 years or older at the time of most recent admission to the College. Appropriate credit must be taken to substitute for the hour waived.

Restricted Electives
Students must complete option A or option B as listed below:

CSU Transfer (Option A)   **(13 credit hours)**

BUS	216	Legal Environment of Business	3
ECO	202	Principles of Microeconomics	3
MAN	224	Personal Leadership Development	3
MAT	125	Survey of Calculus	4
Option A Program Total			**68 credit hours**

Construction Supervision (Option B)   **(15 credit hours)**

CAR	101	Basic Safety	1
CAR	102	Hand and Power Tools	1
CAR	105	Job Site Layout & Blueprint Reading	1
CAR	115	Form & Foundation Systems	1
CAR	121	Floor Framing	1
CAR	122	Wall Framing	1
CAR	123	Roof Framing	1
CAR	125	Roofing Materials & Methods	1
CAR	130	Windows and Exterior Doors	1
CAR	131	Exterior Trim	1
CAR	145	Interior Finishes-General	1
CAR	146	Interior Finishes-Drywall Construction	1
CAR	151	Interior Trim-Doors & Trim	1
CAR	153	Interior Trim- Cabinets & Countertops	1
CAR	160	Floor Finishes	1
Option B Program Total			**70 credit hours**

Construction Estimating

Financial Aid is only available for the coursework in this certificate as part of the ultimate educational goal of obtaining an A.A.S. degree as indicated on your College application. Please visit the Office of Financial Aid for more details.

Certificate

Major Courses   **(6 credit hours)**

ARC	107	Blueprint Reading (Residential/Commercial)	3
ARC	216	Estimating I	3
Total			**6 credit hours**

Convergent Technologies

Associate of Applied Science Degree or Certificates

This program is designed to help prepare students to work in technical positions in communications fields – including cable television, satellite, telephone companies with communication network applications and other related industries. Program content has been structured to give a basic education to all graduates entering this field. Emphasis has been placed on providing a common core of training for all students due to the convergence of the communication industries.

Major Courses   **(24 credit hours)**

CIS	115	Introduction to Computer Information Systems	3
CTC	150	Data Communications	3
CTC	161	Voice Communications	3
CTC	215	Optical Networks	3
CTC	220	Regulations and Standards	3
ELT	106	Fundamentals of DC-AC	3
ELT	112	Advanced DC-AC	3
MAN	224	Leadership OR	
MAN	116	Principles of Supervision	3

General Education Courses   **(19 credit hours)**

BUS	115	Introduction to Business	3
ECO	201	Principles of Macroeconomics	3
ENG	121	English Composition I OR	
ENG	131	Technical Writing I	3
MAT	108	Technical Mathematics**	4
SPE	115	Public Speaking OR	
SPE	125	Interpersonal Communication OR	
PSY	116	Stress Management OR	
PHI	113	Logic	3

Select one of the following:
BTE 102, BUS 116, ECO 202, MAR 106,
MAR 216, MAN 226   3

**Students taking courses online, may substitute MAT 121
(4 credit hours)

Students must choose one of the following Degree Options
in which to focus. Only Major Courses above, or classes
common to another Option will transfer between Options.
A certificate may be awarded for the completion of the Major Courses and the Option Courses, (without completion of
the General Education courses).

Communication Technology Option
(20 credit hours)

CTC	160	Cable Communications	3
CTC	163	Video Technology	3
CTC	166	Emerging Technologies	2
CTC	275	Special Topics	3
Electives (Choose from the electives below)			9

Network Technician Option   (19 credit hours)

CNG	129	Network Cabling	2
CTC	160	Cable Communications	3
CTC	162	Telecommunications Constructions & OSHA Safety	3
CTC	166	Emerging Technologies	2
CTC	267	Telecommunications Installation, Splicing & Repair	3
Electives (Choose from the electives below)			6

Telecommunications Engineering Option
(21 credit hours)

CAD	101	Computer Aided Drafting I	3
CTC	160	Cable Communications	3
CTC	240	Telecommunications Engineering & Outside Plant	3
CTC	255	Field Studies: Engineering Planning	3
ECO	202	Principles of Microeconomics	3
Electives (choose from the electives list below)			

Central Office Technician Option   (13 credit hours)

CNG	129	Network Cabling	2
CTC	160	Cable Communications	3
Electives (choose from the electives below)			10

Electives   (6 -10 credit hours)

CIS	155	PC Spreadsheet Concepts: Excel	3
CNG	224	Microsoft Windows Wireless Network	3
CNG	131	Network Security Fundamentals	3
CTC	280	Internship: Telecom Engineering and Planning*	3

A Convergent Technologies course not previously taken or a
course from another technical discipline. (Department Chair
approval required.)

Physical Education[1]   (1 credit hour)
PED activity course   1

Total   60–65 credit hours

*Students may substitute equivalent work experience for
CTC 280 with approval from the department chair. A waiver/
substitution form must be submitted to the Records Office.

[1] The Physical Education requirement will be waived for
students who are 35 years of age or older at the time of their
most recent admission to the College. Appropriate credit
must be taken to substitute for the hour waived.

Criminal Justice

Associate of Applied Science Degree
The Criminal Justice A.A.S. Degree is designed for students
seeking a career in Criminal Justice. Semester hours obtained
by students who attend the Law Enforcement Academy can
be applied toward the Restricted Course requirements for this
program. Students must present a copy of their P.O.S.T. certification to Admissions and Records to receive credit.

This program is articulated with Metropolitan State College of Denver (MSCD) for students continuing in the Criminal Justice and Criminology program. Students transferring
to MSCD in the Criminal Justice program should select their
elective courses only after consulting with their advisor. Department guidelines apply.

Major Courses   (27 credit hours)

CRJ	110	Intro to Criminal Justice	3
CRJ	111	Substantive Criminal Law	3
CRJ	112	Procedural Criminal Law	3
CRJ	125	Law Enforcement Operations	3
CRJ	135	Judicial Function	3
CRJ	145	Correctional Process	3
CRJ	210	Constitutional Law	3
CRJ	220	Human Relations/Social Conflict	3
CRJ	230	Criminology	3

General Education Courses   (15-17 credit hours)

PSY	101	General Psychology I OR	
PSY	102	General Psychology II	3
ENG	121	English Composition I	3
ENG	122	English Composition II	3
SPE	115	or 125 or 225	3

CIS118, or ENG 131, or SOC 101 or 102, or SPA 111 or
112, or any other foreign language course   3-5

Restricted Courses   (18 credit hours)
NOTE: This elective and the PED requirement can be met
by those students who complete the Law Enforcement Academy. All other students must select electives from courses
with the prefixes of: ACC, CIS, CRJ, CSC, EMS, PAR, SPA,
or any general education transfer course.

Physical Education*   (1 credit hour)
PED activity course   1

Total   61–63 credit hours

*The PED requirement will be waived for students who are
35 years of age or older at the time of most recent admission
to the College. Appropriate credit must be taken to substitute
for the hour waived.

Crime Analysis

Certificate
Crime analysis is an up-and-coming field within law enforcement. It combines criminal behavior theory, research and data
from police departments and high-level computers to map and
analyze where crime occurs (or might occur in the future) and
to identify, locate and ultimately apprehend criminals.

The Crime Analyst certificate enables professionals to obtain the sometimes overlooked yet necessary skills to work successfully in this field. These courses will be held primarily at the University Center at Chaparral campus.

CRJ	110	Introduction to the Criminal Justice System	3
CRJ	125	Law Enforcement Operations	3
CRJ	140	Crime Analysis I: Fundamentals of Crime Analysis	3
CRJ	200	Crime Analysis II: Tactical Crime Analysis	3
CRJ	228	Crime Analysis III: Mapping	3
CRJ	254	Crime Analysis IV: Computer Applications	3
CRJ	265	Crime Analysis V: Problem Solving	3
CRJ	266	Cooperative Education: Crime Analysis VI	6
Total			**27 credit hours**

Law Enforcement Academy

Certificate
The Law Enforcement Academy is a P.O.S.T. (Peace Officer Standard and Training) certified program accredited through the Colorado P.O.S.T. Board. The Academy enables graduates to become certified as peace officers in Colorado. The Academy program consists of 40 semester credit hours.

CRJ	101	Basic Law Enforcement Academy I	6
CRJ	102	Basic Law Enforcement Academy II	12
CRJ	103	Basic Law Enforcement Academy III	2
CRJ	104	Basic Law Enforcement Academy IV	1
CRJ	105	Basic Law	8
CRJ	106	Arrest Control Techniques	3
CRJ	107	Law Enforcement Driving	3
CRJ	108	Firearms	3
PED	110	Life Fitness/Fitness Center	1
PED	116	Weight Training	1
Total			**40 credit hours**

PREREQUISITE: A personal interview with a member of the Academy staff is required prior to enrolling in the Academy. Contact the Criminal Justice Department in room N1170, 303-797-5793.

Digital Media Technologies

Associate of Applied Science Degree
This program provides students with entry-level skills in fields related to interactive media. Students can earn an Associate of Applied Science or a certificate in Digital Media Technologies with emphasis in Training and Support, Web Design & Authoring, or Digital Media Development. Students are prepared for careers such as web designer, training support specialist, instructional designer, media asset developer, digital media specialist, multimedia content developer, multimedia programmer and digital artist. Students will develop a high level of skill and proficiency with industry software and hardware. Students will design and develop media projects for inclusion in professional portfolios.

This program requires extensive use of a computer for prolonged periods of time, basic computer skills and a balance of analytical and creative abilities. It is strongly suggested that students have a familiarity with the personal computer and file management before entering the program.

All students taking courses in the program must also take a placement exam that covers Macintosh operations and design software literacy. Students whose placement examination scores indicate they do not have the skills must enroll in MGD 101 as a prerequisite, prior to entering the program.

Major Core			**(21 credit hours)**
MAN	241	Project Management in Organizations	3
MGD	102	Introduction to Multimedia	3
MGD	111	Adobe Photoshop I	3
MGD	112	Adobe Illustrator I	3
MGD	141	Web Design	3
MGD	287	Cooperative Education	3
MGD289		Capstone	3

General Education Courses			**(15-16 credit hours)**
ENG	121	English Composition I OR	
ENG	131	Technical Writing I	3
MAT	123	Finite Mathematics OR	
MAT	135	Intro to Statistics OR	
CSC	116	Logic & Program Design	3-4
SPE	115	Public Speaking OR	
SPE	125	Interpersonal Communication	3
Select six (6) additional credit hours from the approved general education list.			6

Training and Support Track			**(25 credit hours)**
CIS	118	Introduction to PC Applications	3
CIS	161	Presentation Graphics	1
CIS	218	Advanced PC Applications	3
CWB	110	Complete Web Authoring	3
EDU	260	Adult Learning and Teaching	3
EDU	261	Teaching, Learning and Technology	3
EDU	262	Assessment of Student Academic Achievements	3
EDU	263	Teaching & Learning Online	3
EDU	265	Instructional Design	3
Total			**61–62 credit hours**

Web Design & Authoring Track			**(24 credit hours)**
CWB	106	Mastering the Web	3
CWB	110	Complete Web Authoring	3
CWB	164	XML	3
CWB	205	Complete Web Scripting	3
MGD	133	Graphic Design I OR	
ART	131	Design I	3
MGD	143	Motion Graphic Design I: Flash	3
MGD	155	LightWave I	3
MGD	164	Digital Video Editing I	3
Total			**60–61 credit hours**

Digital Media Development Track			**(24 credit hours)**
MGD	128	Multimedia Hardware	3
MGD	133	Graphic Design I OR	
ART	131	Design I	3
MGD	143	Motion Graphic Design I: Flash	3
MGD	155	LightWave I	3
MGD	164	Digital Video Editing I	3
MGD	211	Photoshop II	3
MGD	250	Emerging Multimedia Technologies	3
MGD	264	Digital Video Editing II	3
Total			**60–61 credit hours**

Digital Media Development Certificate

MGD	133	Graphic Design I OR	
ART	131	Design I	3
MAN	241	Project Management in Organizations	3
MGD	102	Introduction to Multimedia	3
MGD	111	Adobe Photoshop I	3
MGD	112	Adobe Illustrator I	3
MGD	141	Web Design I	3
MGD	143	Motion Graphic Design I: Flash	3
MGD	155	LightWave I	3
MGD	164	Digital Video Editing I	3
MGD	264	Digital Video Editing II	3
Total			**30 credit hours**

Training and Support Certificate

MAN	241	Project Management in Organizations	3
MGD	102	Introduction to Multimedia	3
CIS	118	Introduction to PC Applications	3
CIS	161	Presentation Graphics	1
CIS	218	Advanced PC Applications	3
CWB	110	Complete Web Authoring	3
EDU	260	Adult Learning and Teaching	3
EDU	261	Teaching, Learning & Technology	3
EDU	262	Assessment of Student Academic Achievement	3
EDU	263	Teaching & Learning Online	3
EDU	265	Instructional Design	3
Total			**31 credit hours**

Web Design & Authoring Certificate

MGD	133	Graphic Design I OR	
ART	131	Design I	3
CWB	106	Mastering the Web	3
CWB	110	Complete Web Authoring	3
CWB	164	XML	3
MAN	241	Project Management in Organizations	3
MGD	102	Introduction to Multimedia	3
MGD	111	Adobe Photoshop I	3
MGD	112	Adobe Illustrator I	3
MGD	141	Web Design I	3
MGD	143	Motion Graphic Design I: Flash	3
Total			**30 credit hours**

Early Childhood Education

Arapahoe Community College has articulation agreements dealing with early childhood and elementary education teacher preparation. Contact Linda Forrest, 303-797-5784 for information.

Students must take the CPT Placement Test before enrolling in ECE/EDU courses. CPT scores of 80 in reading and 95 in writing are strongly recommended.

The Early Childhood Education Program is designed to prepare people to work with young children in a variety of settings. The Group Leader and Director Certificates are designed to meet the educational requirements established by the Colorado Department of Human Services. People who wish to work in licensed early childhood care and education programs may complete the certificate sequence of courses for group leaders or directors and may go on to earn an A.G.S. degree. The Colorado Department of Human Services requires experience with young children in early childhood programs. Contact Linda Forrest for specific information, 303-797-5784.

Group Leader Certificate

Major Courses			**(15 credit hours)**
ECE	101	Introduction to Early Childhood Education	3
ECE	102	Introduction to EC Lab Techniques	3
ECE	103	Guidance Strategies for Children	3
ECE	220	Curriculum Development Methods and Techniques	3
PSY	238	Child Development	3
Total			**15 credit hours**

Director Certificate

Major Courses			**(15 credit hours)**
ECE	101	Introduction to Early Childhood Education	3
ECE	102	Introduction to EC Lab Techniques	3
ECE	103	Guidance Strategies for Children	3
ECE	220	Curriculum Development Methods and Techniques	3
PSY	238	Child Development	3

Administrative Courses			**(9 credit hours)**
ECE	205	Nutrition, Health and Safety	3
ECE	240	Administration of Early Childhood Care and Education Programs	3
ECE	241	Administration: Human Relations for Early Childhood Professions	3

AND
Select six credit hours from the following:(6 credit hours)
ECE 111, 112, 125, 126, 127, 175, 178, 179, 185, 187, 225, 226, 228, 260, 275; EDU 221, 233, 234, 242, 261; LIT 255; PSY 101, 102, 247; SOC 101, 102, 205; ASL 121, 122

Total	**30 credit hours**

Electronics Engineering Technology

Students completing the course work in this program will understand electronics and computer technology and how they work together. They will be able to build, test, repair and troubleshoot electronic systems as well as computers and computer based systems and networks.

Associated of Applied Science Degree
The study of Electronics Engineering Technology leads to employment in research & development, production and service in the electronics industry. Electronics Engineering Technicians build, test, troubleshoot and repair electronic systems in the fields of computer, medical, consumer and industrial electronics, telecommunications, robotics, instrumentation and avionics.

Major Courses			**(41 credit hours)**
ELT	106	Fundamentals of DC/AC	3
ELT	112	Advanced DC/AC	3
ELT	147	Digital Devices I	3
ELT	163	Soldering	1
ELT	215	Operational Amplifiers	3
ELT	261	Microprocessors	3
CIS	124	Intro to Operating Systems	3
CSC	116	Programming and Logic Design OR	
CSC	119	Intro to Programming	3
CNG	121	Computer Tech I: A+	4
CNG	122	Computer Tech II: A+	3

CNG	255	Industry Certification A+	3
CNG	124	Networking I: Network +	3
CNG	224	MS Windows Wireless Network	3
ELT	289	Capstone Project	3

General Education Courses			**(15 credit hours)**
MAT	108	Technical Mathematics	4
ENG	121	English Composition I OR	
ENG	131	Technical Writing I	3
Electives		General Education Approved	8

Restricted Electives	**(3 credit hours)**
Select 3 credits hours (minimum) of CIS, CSC, or CNG	3

Physical Education¹	**(1 credit hour_**
PED Activity Course	1

Total	**60 credits hours**

¹The PED requirement will be waived for students who are 35 years of age or older at the time of most recent admission to the College. If waived, students must substitute 1 credit of General Education Approved elective.

Emergency Medical Services Certificate Programs

Contact the Financial Aid Office for information regarding Financial Aid for any of these programs.

EMT–Basic Certificate	**10 hours**
EMT–Basic Enhanced Certificate	**27 hours**
EMT–Paramedic Certificate	**45 hours**

EMT Basic Certificate

This 10-credit hour certificate program provides the basic skills to work ambulance, apply for firefighting positions, work as an EMT-tech in emergency departments and work ski patrols. EMS 125 satisfies the state requirements for Basic EMT Certification. Those who successfully complete EMS 125 will be eligible to take the Colorado State EMT written examination.

In addition, the student needs to enroll in EMS 170 EMT—Basic Clinical where the student will do up to 45 hours of clinical experience in emergency departments, nursing homes, on fire rescue and ambulance.

Admission Requirements (Prerequisites):
1. Minimum of 18 years of age to be eligible to take the National Registry Examination and to apply to the state to become a State Certified EMT.
2. Current CPR certificate (American Heart Association Health Care provider, or American Red Cross Professional Rescuer).
3. Hepatitis B vaccination, tetanus within 10 years.
4. MMR vaccinations.
5. Colorado Bureau of Investigation (CBI) clean criminal background check.
6. If not exempt, student must take the CPT placement test and score at least 80 in reading and 95 in sentence skills. Call the division office for program guides (303-797-5888).

Accreditation of this program is through the Colorado Department of Health, Emergency Medical Services Division.

This agency may be reached at 4300 Cherry Creek Drive South, Denver, CO 80222-1530. Telephone; 303-692-2980.

Major Courses			**(10 credit hours)**
EMS	125	EMT–Basic	9
EMS	170	EMT–Basic Clinical	1
Total			**10 credit hours**

EMT Basic Enhanced Certificate

This 27-hour EMT–B enhanced certificate provides additional training to improve the EMT's employability and prepare the student for paramedic school. Many of the enhanced certificate classes are prerequisites for entrance into the EMT–Paramedic Program. Consult an advisor for appropriate electives.

Major Courses			**(23 credit hours)**
EMS	125	EMT–Basic	9
EMS	170	EMT–Basic Clinical	1
BIO	201	Human Anatomy and Physiology I	4
BIO	202	Human Anatomy and Physiology II	4
ENG	121	English Composition	3
CCN	230	Basic EKG Interpretation	2

Electives			**(4 credit hours)**
Students must take at least 4 credit hours from the following:			
EMS	130	IV Training	2
EMS	134	The Geriatric Patient	1
EMS	136	EMT/Paramedic Safety Issues in the Field	1
EMS	138	Basic Trauma Life Support	1
EMS	150	Pediatric Education for the Prehospital Professions	1
EMS	213	Prehospital Trauma Life Support	1
HPR	178	Medical Terminology	3
Total			**27 credit hours**

EMT Paramedic Certificate

This program is offered in partnership with HealthONE EMS in Englewood, CO and is accredited by the Commission on Accreditations of Allied Health Educations Programs. This program is offered three times per year: twice as a full-time program (starting in January or July) and once as a part-time program (starting in May).

The student must have the following prerequisites to be considered for entrance into this program:
1. One year of documented EMT Basic or Intermediate field experience
2. Basic ECG Interpretation class
3. IV Certification
4. Current CPR Card
5. HEP B vaccination
6. MMR vaccination
7. Tetanus vaccination
8. CBI criminal background check
9. One year of college-level Anatomy and Physiology (8 credit hours). BIO 201 and 202 will meet this requirement.
10. Must receive an acceptable grade on the HOBIT EKG and EMT—Basic entrance exams

The applicant must apply directly to HealthONE EMS and to the College. Please call HealthONE EMS at 303-788-6317 for more information, or the Health, Math, Science and Engineering Division Office at 303-797-5888.

The Paramedic Program has 4 components: Lecture, Lab, Clinical and Field internships. This is approximately 1200 hours. The student must complete all course work, lecture, lab, clinicals and field internship, as well as pass all academic and practical components before sitting for the National Registry Certification Examination.

Following are many of the topics covered: EMS systems, paramedic roles and responsibilities, injury and illness prevention, medical/legal issues, ethics, pathophysiology, pharmacology, medication administration, patient assessment, trauma management, respiratory system management, cardiovascular management, management of medical emergencies, pediatric management, management of obstetric and gynecologic emergencies, management of emotional crisis, assessment bases management and EMS operations.

Major Courses			(45 credit hours)
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 Preparatory	2
EMS	280	Paramedic Internship I	6
EMS	281	Paramedic Internship II	6
Total			**45 credit hours**

Paramedicine

Associate of Applied Science Degree

This program is offered in partnership with HealthONE EMS in Englewood, CO and is accredited by the Commission on Accreditations of Allied Health Educations Programs. This program is offered three times per year: twice as a full-time program (starting in January or July) and once as a part-time program (starting in May).

The student must have the following prerequisites to be considered for entrance into this program:

1. One year of documented EMT Basic or Intermediate field experience
2. Basic ECG Interpretation class
3. IV Certification
4. Current CPR Card
5. HEP B vaccination
6. MMR vaccination
7. Tetanus vaccination
8. CBI criminal background check
9. One year of college-level Anatomy and Physiology (8 credit hours). BIO 201 and 202 will meet this requirement.
10. Must receive an acceptable grade on the HOBIT EKG and EMT–Basic entrance exams

The applicant must apply directly to HealthONE EMS and to the College. Please call HealthONE EMS at 303-788-6317 for more information, or the Health, Math, Science and Engineering Division Office at 303-797-5888.

The program is designed to train workers in the field of Emergency Medical Services. It begins with an entry level EMT-Basic certificate program and includes an Associates of Applied Science degree in Paramedicine. Students should consult with an Emergency Medical Service faculty advisor early in their college career to explore all of their educational options. Students must earn a "C" or better in all EMS courses to graduate. All students must complete a criminal background check prior to enrolling in this program. Student must use American DataBank's online background check procedures at www.healthcareex.com.

This program assists students in advancing their careers in the EMS systems.

Major Courses			(59 credit hours)
EMS	125	Emergency Medical Technician- Basic	9
EMS	170	Emergency Medical Technician- Basic Clinical	1
EMS	130	EMT Intravenous Therapy	2
CCN	230	Basic EKG Interpretation	2
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 Preparatory	2
EMS	280	Paramedic Internship I	6
EMS	281	Paramedic Internship II	6

General Education Courses			(21 credit hours)
ENG	131	Technical Writing	3
SPE	125	Interpersonal Communication or	
COM	126	Communication in Healthcare	3
MAT	108	Technical Mathematics or higher	4
BIO	201	Human Anatomy and Physiology I	4
BIO	202	Human Anatomy and Physiology II	4
PSY	101	Introduction to Psychology	3
Total			**80 credit hours**

Engineering Technologies with Special Emphasis

Associate of Applied Science Degree (A.A.S.)

An associate degree in this program will provide the educational background and basic technical training necessary for the graduate to seek employment with one of the area manufacturing or engineering industries. Students will be prepared for a variety of job entry positions whose titles include draftsperson, junior designer and computer aided design technician.

General Education Courses   (16 credit hours)
CIS	118	Introduction to PC Applications	3
ENG121 or ENG 131 English			3
MAT	108	Technical Mathematics or higher	4
SPE	115	Public Speaking	3

Electives   (3 credit hours)
From the General Education Course List - Section I Communications; IV Sciences; or V Mathematics.

Physical Education[1]   (1 credit hour)
PED activity course	1

[1]The PED requirement may be waived for students who are 35 years of age or older at the time of most recent admissions to the College. Appropriate credit must be taken to substitute for the hour waived.

Computer Courses   (19 credit hours)
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
CAD	217	3D Studio Viz	3
CAD	249	Auto LISP Programming	3
CIS	130	Introduction to the Internet	1

Choose one of the following sections:
Architecture
ARC	101	Introduction to Architectural Drawing	5
ARC	102	Residential Architecture	5
ARC	107	Blueprint Reading Residential/ Commercial	3
ARC	116	Building Materials	3
ARC	121	Building Structure Analysis	3
ARC	215	Architectural Graphics	3
ARC	231	Building Service System	3
CAD	225	Architectural Desktop/Autodesk	3
Total			**64 credit hours**

Mechanical
DRT	101	Technical Drafting I	3
DRT	102	Technical Drafting II	3
DRT	105	Blueprint Reading	3
DRT	109	Descriptive Geometry	3
MTE	120	Manufacturing Process	3
TEC	201	Engineering Materials	3
TEC	205	Geometric Dimensioning and Tolerancing	3
CAD	254	Mechanical Desktop/Autodesk	3
Total			**60 credit hours**

Financial Services

Associate of Applied Science
This degree provides individuals opportunities in a array of financial services industries such as banking, mortgage banking, insurance and brokerage companies.

Major Courses   (23 credit hours)
ACC	121	Principles of Accounting I	4
ACC	122	Principles of Accounting II	4
BUS	216	Business Law and the Legal Env	3
BUS	217	Business Com & Report Writing	3
BUS	226	Business Statistics	3

FIN	101	Introduction to Finance	3
SPE	115	Speech	3

General Education Courses   (26 credit hours)
ECO	201	Principles of Macroeconomics	3
ECO	202	Principles of Microeconomics	3
ENG	121	English Composition I	3
INV	115	Investments/Stocks and Bonds	3
MAT	121	College Algebra	4
MAT	125	Survey of Calculus	4
Science: One lab-based course that is state guaranteed			4
Arts & Humanities:			
One state guaranteed Arts and Humanities course			3
Total			**26 credit hours**

Emphasis: Student must choose an area of emphasis in Finance, Banking, Mortgage Banking and Insurance as follows:

Physical Education[1]   (1 credit hour)
PED activity course	1

[1]The PED requirement will be waived for students who are 35 years or older at the time of most recent admissions to the College. Appropriate credit must be taken to substitute for the hour waived.

Finance Track   (10-12 credit hours)
The Finance Track prepares students for entry level positions in a broad range of financial occupations.

ACC	118	Analyzing Financial Statements	3
BTE	108	Ten Key by Touch	1
FIN	210	International Finance/Economics	3
FIN	226	Money and Banking	3
FIN	260	Retirement Pension Planning	3
INS	230	Risk Management	3
INV	215	Advanced Investments	3
INS	269	Personal Financial Planning	3
MAN	230	Corporate Responsibility	3
REE	115	Intro to Real Estate	3
FIN	287	Cooperative Education	3

Banking Track   (10-12 credit hours)
The Banking Track prepares students for entry-level positions at commercial banks. Many of the courses are offered at Center for Financial Training Western States.

ACC	118	Analyzing Financial Statements	2-3
FIN	105	Principles of Banking	1-3
FIN	125	Teller Training	1
FIN	131	Intro to Mortgage Banking	3
FIN	205	Consumer Lending Series	1-3
FIN	211	Commercial Lending	2-3
FIN	226	Money and Banking	3
FIN	240	Law and Banking Principles	2-3
FIN	245	Law and Banking Applications	2
FIN	250	Financial Marketing for Bankers	2
FIN	255	Understanding and Selling Bank Products	2
FIN	287	Cooperative Education Training	3
MAN	230	Corporate Responsibility	3
INV	215	Advanced Investment	3

Mortgage Banking Track (10-12 credit hours)

This track prepares students for entry-level positions at mortgage banking firms. Many of the courses are offered at Mortgage Training Institute.

ACC	118	Analyzing Financial Statements	3
FIN	131	Intro to Mortgage Banking	3
FIN	132	Residential Mortgage Loan Origination	1
FIN	133	Residential Mortgage Loan Processing	1
FIN	137	FHA for Loan Officers	.5
FIN	138	FHA for Loan Processors	.5
FIN	226	Money and Banking	3
FIN	237	Advance Loan Processing	.5
FIN	287	Cooperative Education Career Training	3
INV	215	Advanced Investments	3
MAN	230	Corporate Responsibility	3
REE	115	Intro To Real Estate	3

Insurance Track (10-12 credit hours)

This track prepares students for entry-level positions at insurance companies. Many of the courses are offered through LOMA.

ACC	118	Analyzing Financial Statements	3
FIN	287	Cooperative Education Training	3
INS	230	Risk Management	3
INS	200	Property and Liability Insurance	3
INS	201	Personal Insurance	3
INS	202	Commercial Insurance	3
INS	204	Delivering Insurance Services	3
INV	215	Advanced Investments	3
INS	269	Personal Financial Planning	3
MAN	230	Corporate Responsibility	3
Total			**60–62 credit hours**

Financial Services Certificate

This certificate program offers opportunities for individuals changing careers or starting a career and needing updates on skills in financial fields. The certificate will provide career and job opportunities and advancements at many financial organizations: banks, savings institutions, brokerages, insurance, mortgage companies, financing companies and the like.

Major Courses (21 credit hours)

Required courses:

CIS	118	Intro to PC Applications	3
FIN	101	Intro to Finance	3
MAR	160	Customer Service	3
BUS	217	Business Communication and Report Writing	3

Select any 3 of the following courses:

ACC	121	Principles of Accounting I	4
BUS	226	Business Statistics	3
ECO	201	Principles of Macroeconomics	3
ECO	202	Principles of Microeconomics	3
MAN	128	Human Relations	3
MAN	226	Principles of Management	3
MAR	111	Principles of Sales	3
MAR	216	Principles of Marketing	3
INV	115	Investments Stocks and Bonds	3

Please choose 9 credits from one of the following tracks:

Tracks: Students must choose an area of emphasis in Finance and Banking as follows.

Finance Track (9 credit hours)

The Finance Track prepares students for entry-level positions in a broad range of financial occupations.

ACC	118	Analyzing Financial Statements	3
BTE	108	Ten Key by Touch	1
INS	230	Risk Management and Insurance	3
FIN	210	International Finance/Economics	3
FIN	226	Money and Banking	3
FIN	260	Retirement/Pension Planning and Investments	3
FIN	287	Cooperative Education Career Training	3
INV	115	Investments	3
INV	215	Advanced Investments	3
MAN	230	Corporate Responsibility	4
REE	115	Intro to Real Estate	3
INS	269	Personal Financial Planning	3

Banking Track (9 credit hours)

The Banking Track prepares students for entry-level positions at commercial banks. Many of the courses are offered at the Center for Financial Training.

FIN	105	Principles of Banking	1-3
FIN	226	Money and Banking	3
ACC	118	Analyzing Financial Statements	1-3
FIN	250	Financial Marketing for Bankers	2
FIN	240	Law and Banking Principles	2-3
FIN	245	Law and Banking Applications	2
FIN	205	Consumer Lending (Series)	1-3
FIN	255	Understanding and Selling Bank Products	2
FIN	131	Intro to Mortgage Banking	3
FIN	287	Cooperative Education Career Training	3
INV	115	Investments	3
INV	215	Advanced Investments	3
MAN	230	Corporate Responsibility	3
FIN	211	Commercial Lending	3
FIN	125	Teller Training	1

Mortgage Banking Track (9 credit hours)

This track prepares the student for entry-level positions at mortgage banking firms. Many of the courses are offered at Mortgage Training Institute.

REE	115	Intro to Real Estate	3
ACC	118	Analyzing Financial Statements	2-3
FIN	131	Intro to Mortgage Banking	3
FIN	133	Resident Mortgage Loan Processing	1
FIN	132	Resident Mortgage Loan Origination	1
FIN	137	FHA for Loan Officers	.5
FIN	138	FHA for Loan Processors	.5
FIN	237	Advanced Loan Processing	.5
FIN	287	Cooperative Education Training	3
FIN	226	Money and Banking	3
INV	115	Investments	3
INV	215	Advanced Investments	3
MAN	230	Corporate Responsibility	3

Insurance Track   **(9 credit hours)**

This track prepares students for entry-level positions at insurance companies. Many of the courses are offered through LOMA.

ACC	118	Analyzing Financial Statements	2-3
FIN	287	Cooperative Education Training	3
INS	230	Risk Management	3
INS	200	Property and Liability Insurance	3
INS	201	Personal Insurance	3
INS	202	Commercial Insurance	3
INS	204	Delivering Insurance Services	3
INV	115	Investments	3
INV	215	Advanced Investments	3
INS	269	Personal Financial Planning	3
MAN	230	Corporate Responsibility	3
Total			**30 credit hours**

Mortgage Banking

Certificate

This certificate program offers opportunities for individuals changing careers or entering a career in the mortgage banking industry. This certificate will prepare the individual to be a loan originator or loan processor in the mortgage banking field or prepare the individual to start their own mortgage banking firm.

Major Courses   **(30 credit hours)**

MAN	216	Small Business Management	3
FIN	101	Introduction to Finance	3
ACC	121	Principles of Accounting	4
ACC	131	Income Tax 1	3
ACC	235	Computerized Accounting for Small Business	3
BUS	216	Business Law and the Legal Environment	3
ECO	202	Principles of Microeconomics	3
MAN	230	Corporate Responsibility	3
FIN	133	Residential Mortgage Loan Processing	1
FIN	132	Residential Mortgage Loan Origination	1
FIN	237	Advance Loan Processing	.5
FIN	137	FHA for Loan Officers or	
FIN	138	FHA for Loan Processors	.5
ANY CIS class			2
Total			**30 credit hours**

Graphic Design and Illustration

See Multimedia/Graphic Design

For courses taken Summer 2004 under the GDI prefix, please refer to the 2003-2004 course catalog for course descriptions.

Health Information Technology (Medical Records)

Associate of Applied Science Degree

The Health Information Technology (HIT) program enables the student to develop the technical skills necessary for managing health information within the healthcare delivery system. The health information field has employment opportunities in hospitals, long term care, ambulatory care, mental health and other healthcare facilities as well as private industry. Upon successful completion of the program, the graduate is eligible to write the national certification examination and upon successful passing of this examination, receive the RHIT (Registered Health Information Technology) credentials. This program is accredited by the Commission on Accreditation for Health Informatics and Information Management (CAHIIM) in cooperation with the Council on Accreditation of the American Health Information Management Association (AHIMA). AHIMA is located at 919 N. Michigan Avenue, Chicago, IL 60611. Their phone number is 312-787-2672.

The following are the basic requirements for admission to the Health Information Technology (HIT) program:

1. High school graduation or GED equivalence
2. Interview with Chairperson
3. CPT scores of 95 on sentence skills, 80 on reading comprehension and 36 on arithmetic*

*Students who do not achieve the required Math score must complete MAT 030.

Students must contact Annette Bigalk, RHIA, HIT Program Chair for counseling and program planning prior to enrolling in any courses that are part of the HIT curriculum. Contact her at 303-797-5795 or annette.bigalk@arapahoe.edu.

Major Courses   **(50 credit hours)**

HIT	101	Health Information Management Science	6
HIT	105	Physician Practice Coding & Reimbursement	5
HIT	111	Health Data Management	3
HIT	112	Legal Aspects	2
HIT	188	Health Information Practicum	2
HIT	221	ICD-9-CM Coding I	5
HIT	222	Quality Management	3
HIT	288	Health Information Practicum II	2
HIT	225	Health Information Management	3
HIT	231	ICD-9-CM Coding II	5
HIT	241	CPT Coding Basic Principles	2
HPR	178	Medical Terminology	3
MOT	125	Basic Medical Science I**	3
MOT	133	Basic Medical Science II**	3
MOT	135	Basic Medical Science III**	3

General Education Courses   **(15 credit hours)**

ENG	121	English Composition I	3
SPE	115	Public Speaking*** OR	3
SPE	125	Interpersonal Communications***	
CIS	118	Intro to PC Applications	3
PSY	101	General Psychology I	3
General Education Elective			3
Total			**65 credit hours**

All major, general education and other courses required for this degree must be completed with a "C" or better to meet graduation requirements.

All courses are offered online except for HIT 188 and HIT 288.

**Students planning to transfer credits to another institution should complete BIO 201 and BIO 202 (Anatomy & Physiology I & II) and HPR 216 (Pathophysiology) instead of the Basic Medical Science courses.

***Students planning to transfer their speech credit to another institution should complete SPE 115.

Health Information Technology

ICD-9-CM/CPT Coding Certificate

Major Courses			(24 credit hours)
HIT	221	ICD-9-CM Coding I	5
HIT	231	ICD-9-CM Coding II	5
HIT	241	CPT Coding Basic Principles	2
HPR	178	Medical Terminology	3
MOT	125	Basic Medical Science I*	3
MOT	133	Basic Medical Science II*	3
MOT	135	Basic Medical Science III*	3
Total			**24 credit hours**

Optional Course Recommended

HIT	105	Physician Coding and Reimbursement	5

*Anatomy and Physiology may be substituted for the Basic Medical Science courses if previously completed for credit. In this situation, a current HPR 216 course must be completed for this certificate.

All major courses required for this degree must be completed with a "C" or better to meet graduation requirements.

Human Performance Physical Fitness Specialist

Associate of Applied Science Degree or Certificate
The degree program is designed to provide a comprehensive understanding of movement, exercise, nutrition and health. The student will learn how to conduct fitness and health assessments, develop exercise prescriptions and evaluate nutritional needs. Practical hands-on experience in our on-site fitness center provides students with the skills and confidence they need in working with a diverse population. Students are eligible to take National Certifications at the completion of the program.

For additional information contact the Department Chair: Ms. Sophie Mabry at 303-797-5856 or e-mail at: sophie.mabry@arapahoe.edu.

These classes transfer to Metropolitan State College of Denver toward a Bachelor of Science degree in Human Performance and Sport. Specific course sequences and prerequisites apply. Students must pass their classes with a "C" or better.

Human Performance (HUP) A.A.S.

Major courses:			(39 credit hours)
HWE	124	Fitness & Wellness	2
HWE	136	Advanced Weight Training*	2
PER	232	Care and Prevention of Athletic Injuries	3
HWE	245	Physiology of Exercise*	3
PER	275	(Special Topics) Internship*	3
HWE	237	Exercise, Nutrition and Body Composition	3
HWE	248	Guidelines for Exercise Testing & Prescription	2
PED (100-275)		Pick any 4 activity based courses ***	4
HWE	100	Human Nutrition	3
HWE	122	Responding to Emergencies	2
BIO	201	Human Anatomy & Physiology I (includes lab)*	4
BIO	202	Human Anatomy & Physiology II (includes lab)*	4
PTA	176	(Special Topics) Anatomical Kinesiology*	4

General Education Courses			(18 credit hours)
SPE	115	Public Speaking	3
ENG	121	English Composition I**	3
MAT	121	College Algebra**	4
BIO	111	General College Biology I with Lab	5
PSY	101	General Psychology I	3

Restricted/General Elective Courses		(6 credit hours)
PER113 Intro. Physical Education & Sports		2
PER151 Lifeguard Training		2
___ ___ Student Choice		2-3

For other general education classes, see advisor or department chair for approval.
* PREREQUISITE required.
**Students must score an 80 on the reading CPT, 95 on the sentence skills CPT, 85 on the mathematical CPT.
*** Includes one aquatic class.

Total	**63 credit hours**

Physical Fitness Specialist Certificate
This certificate program is designed for students preparing for a National Certification test or those in need of continuing education credits.

Physical Fitness Specialist Certificate			(26-28 credit hours)
BIO	201	Human Anatomy and Physiology I Plus Lab*	4
HWE	124	Fitness and Wellness	2
HWE	245	Physiology of Exercise*	3
HWE	248	Guidelines For Exercise Testing and Prescriptions	2
HWE	122	Responding to Emergencies	2
HWE	136	Advanced Weight Training*	2
BIO	202	Human Anatomy and Physiology II Plus Lab*	4
PER	232	Care and Prevention of Athletic Injuries	3
HWE	237	Exercise, Nutrition and Body Composition	3
PER	275	Special Topics: Internship	1-3
* PREREQUISITE required			
Total			**26-28 credit hours**

Interior Design

Associate of Applied Science Degree
This program emphasizes preparation for a career as an interior designer. The student will learn to develop not only creative abilities and how to express them, but also the methods and processes needed to practice design responsibly and profitably.

Students enrolled in this program can expect additional expenses of approximately $2500 for textbooks, course materials, equipment and project supplies.

Program Admission Requirements:
1. Attend an Interior Design Program Orientation prior to first registration. Call the Division Office at 303-797-5855 for an appointment.
2. Complete CPT assessment with the following minimum scores:
   - 80 on Reading Comprehension
   - 95 on Sentence Skills
   - 57 on Arithmetic

There are **no exceptions** to this Interior Design Program admission requirement. Call the ACC Testing Center at 303-797-5993 to determine procedures, location and/or hours of operation.

3. Students wishing to transfer in General Education credits to fulfill degree requirements must have official transcripts sent to ACC Admissions and Records Office and fill out a request for transcript evaluation form. Call the Admissions and Records at 303-797-5621 for further information about this process.

4. Students wishing to transfer in Interior Design credits to fulfill degree requirements must go through a portfolio review prior to beginning the program. After attending an orientation, call 303-797-5861 for an appointment to review an interior design portfolio only. This will not include a transcript evaluation for General Education.

NOTE: All courses required for this A.A.S. degree must be completed with a grade of "C" or better to meet admission and graduation requirements.

Major Courses			(60 credit hours)
IND	100	Interior Design Fundamentals	4
IND	107	History of Interior Design	3
IND	108	Profession Survey	1
IND	111	Drafting for Interiors	4
IND	112	Graphic Communication	4
IND	114	Space Planning	3
IND	117	Interior Textiles	2
IND	118	Interior Finishes	2
IND	151	Residential Design	4
IND	152	Commercial Design I	2
IND	178	Seminar: Local Market Tour	1
IND	178	Seminar: Design Resume	1
IND	200	Kitchen and Bath Design	4
IND	201	Commercial Design II	4
IND	205	Professional Practice for Interior Designers	2
IND	211	Interior Construction	4
IND	225	Lighting Design	2
IND	278	Workshop: Design Research	1
IND	278	Workshop: Design Portfolio	1
IND	280	Internship	4
IND	289	Capstone: Advanced Design	3
CAD	105	AutoCAD for Interiors	4

General Education Courses			(15 credit hours)
CIS	118*	Introduction to PC Applications	3
ENG	131**	Technical Writing I	3
General Electives***			9
Total			**75 credit hours**

* To waive or challenge CIS 118, contact IdaLynn Gedde (CIS Dept.) at 303-797-5886.
** ENG 131 can be waived under certain circumstances. Call 303-797-5861 for information.
*** A list of approved Elective courses can be found in this ACC Catalog under "General Education Requirements for A.A.S. Degrees."

Interior Architecture Certificate
This Certificate is intended for students who have completed an associate degree in Interior Design. It provides extra professional training to make the graduate more versatile and valuable in the field of Commercial Interior Design.

Major Courses			(30 credit hours)
ARC	102	Residential Architecture	5
ARC	116	Building Materials	3
ARC	205	Commercial Drawing Practice I	4
ARC	216	Estimating I	3
ARC	231	Building Service Systems	3
CAD	102	Computer Aided Drafting II	3
CAD	202	Computer Aided Drafting/3D	3
CAD	225	Architectural Desktop/AutoDesk	3
CTC	105	Overview of Telecommunications	3
Total			**30 credit hours**

Showroom Assistant Certificate
This certificate emphasizes preparation for work assisting customers in a retail store or showroom that sells home furnishings or finishes. The student will learn basic elements and principles of design, as well as basic computer and sales skills.

Students enrolled in this program can expect additional expenses of approximately $1000 for textbooks, course materials and equipment and project supplies.

The certificate may be tailored to fit various job types. Specific employers may require additional courses.

Admission Requirements for Showroom Assistant Program:
1. Attend an Interior Design Program Orientation prior to first registration. Call the Division Office at 303-797-5855 for an appointment. Call 303-797-5974 for general information.
2. Complete CPT assessment with the following minimum scores:

      80 on Reading Comprehension
      95 on Sentence Skills
      57 on Arithmetic

3. Exceptions to the require CPT assessment will be made for students who:
   a. achieved equivalent ACT or SAT scores (within the last two years) or
   b. have earned a college degree (associates or higher); or
   c. have completed a college-level mathematics and college-level writing course with a grade of "C" or higher; or
   d. have completed any necessary remedial course(s), if required, with a grade of "C" or higher before taking Interior Design courses.
3. Students must consult with an Interior Design Faculty advisor before enrolling in any elective courses.

NOTE: All courses required for this certificate must be completed with a grade of "C" or better to meet admission and graduation requirements.

Major Courses			(15 credit hours)
IND	100	Interior Design Fundamentals	4
IND	108	Profession Survey	1
IND	117	Interior Textiles	2
IND	118	Interior Finishes	2
MAR	111	Principles of Sales	3
CIS	118	Introduction to PC Applications	3

Elective Courses	(10 credit hours)

Consult with an Interior Design Faculty Advisor before choosing from the list below.

BUS	115	Introduction to Business	3
BUS	125	Marketing Your Image	3
MAR	117	Principles of Retailing	3
MAR	126	Merchandising	3
MAR	160	Customer Service	3
IND	107	History of Interior Design	3
IND	160	Accessorizing	2
IND	175	Special Topics	2
IND	207	Window Treatments	2
ART	110	Art Appreciation	3
Total			**25 credit hours**

Legal Assistant

See Paralegal

Mechanical Drafting

Certificate

A certificate in this program will provide the educational background and basic technical training necessary for the graduate to seek employment with one of the area manufacturing or engineering industries. Students will be prepared for a variety of job entry positions whose titles include draftsperson, junior designer and computer aided design technician.

Major Courses			**(31 credit hours)**
CAD	101	Computer Aided Drafting I	3
CAD	102	Computer Aided Drafting II	3
CAD	201	Computer Aided Drafting/Custom	3
DRT	101	Technical Drafting I	3
DRT	102	Technical Drafting II	3
DRT	109	Descriptive Geometry	3
MAT	108	Technical Mathematics or higher	4
MTE	120	Manufacturing Process	3
TEC	201	Engineering Technologies	3
TEC	205	Geometric Dimensioning and Tolerancing	3

Restricted Electives	**(3 credit hours)**
CAD 202, 249, or 254	3

Total	**34 credit hours**

Medical Laboratory Technology

Associate of Applied Science Degree

The MLT Program is delivered in an online/hybrid format and is available in a 1-year fast track option and 2-year traditional route.

The MLT program is designed to prepare qualified laboratory professionals to perform various laboratory studies in hospital, clinic, or private medical laboratories. Upon successful completion of the program, graduates are eligible to take national examinations to become certified Medical Laboratory Technicians/Clinical Laboratory Technicians.

As a certified MLT/CLT, employment is available in hospitals and clinics as well as veterinary, industrial and environmental laboratories in Colorado or in other states. The program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) and the American Medical Association.

NAACLS can be reached at 8410 W. Bryn Mawr Ave., Suite 670, Chicago, IL 60631-3415, 312-714-8880.

Admission Requirements:
1. High school graduation or GED equivalence
2. Complete MLT program application packet
3. College application
4. Recommend algebra and one year of high school biology or chemistry (or 1 college semester of either)
5. CPT is required for all MLT students
6. Personal interview with the program director is required before assignment to MLT courses
7. Hepatitis vaccination and other immunizations.

More than two years may be taken to complete the program. Students may begin academic classes other than "MLT" at any time, according to published semester schedules.

The cost for lab coats, updated vaccinations, Hepatitis B immunization shots, insurance and student lab supplies is approximately $350.00.

Transfer students: Courses from NAACLS-approved MLT-CLT programs and Military Laboratory Specialists programs will be evaluated on an individual basis. Anyone interested may take specific classes with instructor permission on a space-available basis without being enrolled in the MLT program.

Please refer to MLT Program Guide for CPT placement scores. You can call the Division Office 303-797-5888 or the MLT office, 303-797-5796 for program information.

All major, general education and other courses required for this degree must be completed with a "C" or better to meet graduation requirements.

All MLT didactic courses are offered in an online/hybrid format. Student lab sessions meet on select Fridays from 4:30 p.m. to 8:30 p.m. and on Saturdays 9:30 a.m. to 4:30 p.m.

Major Courses			**(42 credit hours)**
MLT	131	Introduction to Hematology	2
MLT	132	Hematology II	4
MLT	141	Immunology/Immunohematology	4
MLT	142	Urinalysis	2
MLT	180	Internship I, Blood Bank	1
MLT	182	Internship II, Hematology	5
MLT	231	Clinical Microbiology	4
MLT	232	Parasitology/Mycology	2
MLT	241	Introduction to Clinical Chemistry	2
MLT	242	Clinical Chemistry II	4
MLT	243	Clinical Practices	1
MLT	253	Seminar/Comprehensive Exams	1
MLT	280	Internship III, Chemistry	5
MLT	282	Internship IV, Microbiology	5

General Education Courses			**(22 credit hours)**
BIO	201	Human Anatomy & Physiology I	4
BIO	202	Human Anatomy & Physiology II	4
CHE	101	Introduction to Chemistry OR	
CHE	111	General College Chemistry	5
CIS	118	Introduction to PC Applications	3
ENG	121	English Composition OR	
ENG	131	Technical Writing I	3
SPE	115	Public Speaking OR	3
SPE	125	Interpersonal Communication	

Physical Education	**(1 credit hour)**
PED activity course[1]	1

Total	**65 credit hours**

Please visit **www.arapahoe.edu** for the most current, updated catalog information.

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[1]The PED requirement will be waived for students who are 35 years of age or older at the time of most recent admission to the College. Appropriate credit must be taken to substitute for the hour waived. MLT 100 will substitute for PED credit.

Clinical Assistant Certificate

The Clinical Assistant certificate is for individuals currently employed in a clinical laboratory as phlebotomists or specimen processors. The certificate provides the basic knowledge needed to be a productive quality assistant in a clinical laboratory.

Learners interested in obtaining the certificate must pass all courses with a "C" or better. Anyone may enroll in specific classes on a space-available basis without being enrolled in the Clinical Assistant Certificate.

MLT 131, MLT 142, & MLT 241 credits are directly transferable into the Associate of Applied Science Medical Laboratory Technology degree.

Students must first contact the Medical Laboratory Technology Program Director at 303-797-5796.

This certificate is not eligible for financial aid. Contact the Financial Aid Office if further clarification is required.

Major Courses			(8 credit hours)
MLT	120	Clinical Assistant Core	2
MLT	131	Introduction to Hematology	2
MLT	142	Urinalysis	2
MLT	241	Introduction to Clinical Chemistry	2
Total			**8 credit hours**

Phlebotomy Certificate

Phlebotomy is the acquired professional skill of performing venipunctures (drawing blood). The Phlebotomy Certificate is a twelve week class that meets on Tuesday and Thursday evenings during the spring and fall semesters. This eight-credit certificate includes 6 credits of lecture/didactic information and 2 credits of clinical internship.

Students must first contact the Medical Laboratory Technology Program Director at 303-797-5796.

This certificate is not eligible for financial aid. Contact the Financial Aid Office if further clarification is required.

Major Courses			(8 credit hours)
HPR	112	Phlebotomy	4
HPR	113	Advanced Phlebotomy	4
Total			**8 credit hours**

Medical Office Technology

The Medical Office Technology programs are designed to place students in outpatient (ambulatory) care facilities. Students may choose between two certificate and two degree options. The programs are designed in a step manner allowing the students to enter the workforce as soon as possible while continuing their education in class.

The Administrative Assistant (AA) certificate prepares students to perform administrative functions required in an outpatient healthcare setting. This includes front office work, medical billing and ICD-9/CPT coding. The Medical Assistant (MA) certificate includes all required courses for the A.A. certificate plus those courses required to prepare the student to perform clinical skills under the direction of a physician in an outpatient healthcare setting.

Students wishing to advance to a degree may choose either the Medical Assisting option or the Medical Practice Manager (MPM) option. The MA option allows students to become degreed professionals in Medical Assisting. The MPM option prepares students to become managers for outpatient healthcare facilities.

The Medical Assistant certificate is accredited through the Commission on Accreditation of Allied Health Education Programs (CAAHEP), upon recommendation of the Curriculum Review Board of the American Association of Medical Assistants Endowment (CRB-AAMAE) located at 20 N. Wacker Drive, Suite 1575, Chicago, IL 60606 1-800-228-2262.

All health program students must obtain a criminal background check through ACC. Students who enroll in the MA program must obtain CPR for Health Care Providers certification. Additionally, students must obtain professional liability insurance coverage as provided by Arapahoe Community College. Documentation of current immunizations including the Hepatitis B vaccinations is required. Needed supplies include a stethoscope and lab coat.

Admission Requirements for all Medical Office Technology Programs

1. All courses require acceptance into the Program or written approval of the Academic Coordinator except HIT students.
2. Complete Program Application Packet. Download application on the web site or call 303-797-5898.
3. Interview with Academic Coordinator.
4. Complete CPT examination with minimum scores of: Reading 83, Mathematics 61, Sentence Structure 86 (or Academic Coordinator approval). Applicants who hold a degree are exempt from CPT exam.
5. Clear criminal background check.

All major, general education and other courses required for these certificates/degrees must be completed with a "C" or better to meet graduation requirements.

All MOT courses are offered in an online/hybrid format.

Medical Office Technology
Administrative Assistant Certificate

Major Courses			(16 credit hours)
MOT	110	Medical Office Administration[1]	4
MOT	130	Insurance Billing and Coding[1]	3
HPR	106	Law & Ethics for Healthcare Professions	2
HPR	178	Medical Terminology	3
MOT	136	Introduction to Clinical Skills	2

Students must receive Academic Coordinator approval prior to enrolling in their Internship.

MOT	181	Administrative Internship	2
Total			**16 credit hours**

[1]*COREQUISITE:* MOT 110 or instructor permission

Medical Office Technology
Medical Assistant Certificate

Major Courses			(16 credit hours)
MOT	125	Basic Medical Sciences I[1,2]	3
MOT	133	Basic Medical Sciences II[2]	3
MOT	135	Basic Medical Sciences III[2]	3
MOT	138	Laboratory Skills	4
MOT	140	Clinical Skills	4
MOT	182	Clinical Internship	3

HWE	100	Human Nutrition	2
PSY	101	General Psychology I	3
PSY	235	Human Growth & Development	3

Students must complete MOT 181 AND MOT 182 OR MOT 183

MOT	181	Administrative Internship	2
MOT	182	Clinical Internship	3
MOT	183	Medical Assistant Internship	5
Total			**44 credit hours**

[1] PREREQUISITE to MOT 125 is HPR 178
[2] Students must complete MOT 125 Basic Medical Sciences I prior to enrolling in other Basic Medical Science courses.

Associate of Applied Science Degree

Medical Assistant Option

Medical Assistant Certificate			**(44 credit hours)**
General Education Courses			**(16 credit hours)**
ACC	121	Principles of Accounting	4
BUS	217	Business Communication & Report Writing	3
ENG	121	English Composition I	3
MAN	226	Principles of Management	3
SPE	125	Interpersonal Communication	3
Total			**60 credit hours**

Medical Practice Manager Option
Major Courses

HIT	101	Health Information Management Science	6
HIT	105	Physician Practice: Billing and Coding	5
HIT	225	Health Information Management	3
HPR	106	Law & Ethics for Healthcare Professions	2
HPR	178	Medical Terminology	3
MOT	110	Medical Office Administration	4
MOT	125	[1]Basic Medical Sciences I[2]	3
MOT	133	[1]Basic Medical Sciences II[2]	3
MOT	135	[1]Basic Medical Sciences III[2]	3
MOT	225	Medical Practice Management Issues	4

General Education Courses

ACC	121	Principles of Accounting I	4
ACC	122	Principles of Accounting II	4
BUS	217	Business Comm. & Report Writing	3
MAN	226	Principles of Management	3
ENG	121	English Composition I	3
SPE	125	Interpersonal Communication	3
HIT	112	Legal Aspects	2
Total			**61 credit hours**

[1] PREREQUISITE to MOT 125 is HPR 178
[2] Students must complete MOT 125 Basic Medical Sciences I prior to enrolling in other Basic Medical Science courses.

Mortuary Science

Associate of Applied Science Degree

Mortuary Science is a field of human and community service which offers a variety of work, intellectual challenge and satisfaction of helping the bereaved through life's most trying period. The program prepares individuals to become a mortuary science practitioner, funeral director and embalmer.

The program is accredited by the American Board of Funeral Service Education (ABFSE). The Board can be reached at 3432 Ashland Ave., Suite U, St. Joseph, Missouri 64506, 816-233-3747. Upon successful completion of the program students must sit for the National Board Exam before receiving their degree as required by the ABFSE.

Admissions Requirements:
1. Complete a Mortuary Science application
2. Interview with the Mortuary Science Department Chairperson if requested.

Students should review course descriptions for prerequisites and corequisites before enrolling.

Aims and Purposes:
The ACC Mortuary Science Program recognizes mortuary science personnel as:
1. Members of a human services profession.
2. Members of the community in which they serve.
3. Participants in the relationship between bereaved families and those engaged in the funeral service profession.
4. Professionals knowledgeable of and compliant with federal, state and local regulatory guidelines.
5. Professionals sensitive to the responsibility for public health, safety and welfare in caring.

In addition, the program objectives are:
1. To enlarge the background and knowledge of students about the funeral service profession.
2. To educate students in every phase of funeral service and to help enable them to develop the proficiency and skills necessary of the profession.
3. To educate students concerning the responsibilities of the funeral service profession to the community at large.
4. To emphasize high standards of ethical conduct.
5. To provide a curriculum at the postsecondary level of instruction.
6. To encourage research in the field of funeral service.

All major, general education and other courses required for this degree must be completed with a "C" or better to meet graduation requirements (major courses may only be repeated once).

Major Courses			**(38 credit hours)**
HPR	240	Role of Death and Bereavement in Society	3
MOR	100	Intro to Funeral Service	3
MOR	210	Embalming Theory I and Lab	4
MOR	215	Funeral Merchandising	3
MOR	220	Mortuary Law and Compliance	3
MOR	224	Thanatomicrobiology/Pathology	4
MOR	225	Embalming Theory II and Lab	4
MOR	230	Restorative Art and Lab	4
MOR	235	Funeral Directing and Counseling	3
MOR	243	Thanatochemistry*	3
MOR	280	Funeral Service Internship	4

General Education Courses			**(27 credit hours)**
ACC	121	Accounting Principles I	4
BIO	201	Human Anatomy and Physiology I[1]	4
BIO	202	Human Anatomy and Physiology II[1]	4
BUS	216	Business Law and the Legal Environment	3
CIS	118	Intro to PC Applications*	3
ENG	121	English Composition I	3
PSY	101	General Psychology I	3

| SPE | 125 | Interpersonal Communication* OR | |
| SPE | 115 | Public Speaking* | 3 |

Physical Education² **(1 credit hour)**

PED activity course 1

Total **66 credit hours**

¹All science courses cannot have been completed more than seven years prior to enrolling in MOR 210.

²The PED requirement will be waived for students who are 35 years of age or older at the time of most recent admission to the College. Appropriate credit must be taken to substitute for the hour waived.

*Similar courses taken at accredited institutions will be reviewed on a case-by-case basis.

Multimedia/Graphic Design & Illustration

Associate of Applied Science Degree

This program prepares students for entry-level work in the field of print design with additional weight given to either illustration or web design. The curriculum consists of lecture and lab participation involving design theory, typography, production, advertising and portfolio development. Training in the latest design software is emphasized throughout the degree. Restricted electives allow the student to further explore illustration, design for print, or electronic media.

Students entering this program can expect an additional cost of approximately $1,600 for drawing and design materials, computer storage media and color printing. Students should take the Major Courses in the sequence shown below, incorporating the English General Education component during the first term of study. Other General Education and Restricted Elective courses may be taken throughout the program and during the intervening summer term. All students taking courses in the program must take a placement exam that covers Macintosh operations and design software literacy. Students whose placement examinations indicate they do not have these skills must enroll in MGD 101 as a prerequisite prior to entering the program.

Major Courses **(39 credit hours)**

Semester 1
MGD	105	Typography & Layout	3
ART	121	Drawing I	3
MGD	133	Graphic Design I OR	
ART	131	Design I	3

Semester 2
MGD	103	Production Design	3
MGD	112	Adobe Illustrator I	3
MGD	113	QuarkXPress	3
MGD	117	Introduction to Visual Communications	3
MGD	256	Graphic Design Production	3

Semester 3
MGD	111	Adobe Photoshop I	3
MGD	114	Adobe InDesign	3
MGD	207	Illustration I OR	
ART	122	Drawing II OR	
MGD	141	Web Design I	3
MGD	260	Graphic Design Production II	3

Semester 4
| MGD | 289 | Capstone | 3 |

General Education Courses **(15 credit hours)**
ENG	121	English Composition I OR	
ENG	131	Technical Writing I	
		(to be taken during first semester)	3
SPE	115	Public Speaking OR	
SPE	125	Interpersonal Communication OR	
SPE	225	Organizational Communication	3
PSY	101	General Psychology OR	
SOC	101	Intro to Sociology	3
ART	101	Art Appreciation OR	
ART	111	Art History I OR	
ART	112	Art History II	3

One more of the above of your choice (not already taken)

Restricted Electives **(6 credit hours)**

Select 6 credits from the following:
MGD	102	Introduction to Multimedia	3
MGD	141	Web Design I (if not already	
		taken as part of the core)	3
MGD	143	Motion Graphic Design I: Flash	3
MGD	155	LightWave I	3
MGD	208	Illustration II	3
MGD	209	Illustration III	3
MGD	210	Illustration IV	3
MGD	211	Photoshop II	3
MGD	212	Illustrator II	3
MGD	280	Internship	3
MGD	287	Cooperative Education	3
CWB	110	Complete Web Authoring	3
JOU	215	Publications Production and Design	3
MAR	220	Principles of Advertising	3

Total **60 credit hours**

Computer Graphics

Certificate

This certificate prepares students for entry-level positions in desktop publishing, production for print or electronic design, typesetting and for technical jobs in service bureaus and printing companies. Students who wish to pursue a career in design are urged to obtain the Associate of Applied Science degree in Multimedia, Graphic Design and Illustration. If students choose to continue their education, all of the classes in the certificate can be applied to the associate degree. All students taking courses in the program must take a placement exam that covers Macintosh operations and design software literacy to determine if an additional course, MGD 101, is needed before entering the program. Typing and basic math skills are highly recommended.

Please note that the Major Courses are listed in the order in which they should be taken.

Major Courses **(24 credit hours)**
MGD	105	Typography & Layout	3
MGD	133	Graphic Design I OR	
ART	131	Design I	3
MGD	103	Production Design	3
MGD	112	Adobe Illustrator I	3
MGD	113	QuarkXPress	3
MGD	114	Adobe InDesign	3
MGD	111	Adobe Photoshop I	3
MGD	256	Graphic Design Production	3

Restricted Electives **(6 credit hours)**

Select 6 credit hours from the following:
| MGD | 102 | Introduction to Multimedia | 3 |

MGD	117	Introduction to Visual Communications	3
MGD	141	Web Design I	3
MGD	143	Motion Graphic Design I: Flash	3
MGD	155	LightWave I	3
MGD	211	Photoshop II	3
MGD	212	Illustrator II	3
MGD	260	Graphic Design Production II	3
MGD	280	Internship	3
MGD	287	Cooperative Education	3
MGD	289	Capstone	3
Total			**30 credit hours**

Network Specialist

See page 50

Nurse Aide Program

Certificate

This program will prepare the student for employment as a nurse aide in hospital, skilled care and hospice facilities. The entry level skill as a nurse aide is an excellent introduction to the broad range of health professions.

The close personal care requires a sensitive and knowledgeable person who has a good understanding of how to meet the needs of patients as well as how to interact with other members of the healthcare team. Basic nursing and personal care skills, use of assistive devices and recognition of the emotional, social, cultural and individual rights of patients are all competencies that will be covered in the coursework. Students will then have an opportunity to practice these skills in the College lab with transition into healthcare agencies. The 72 hours of clinical experience will be done in hospital, skilled care and hospice agencies. Clinical experiences will be made by arrangement during the first week of classes.

The Nurse Aide program is approved by the State Board of Nursing, located at 1560 Broadway, Suite 880, Denver, Colorado 80202-5146, telephone 303-894-2430.

A clear background check is required for admission to the program. CPR (Basic Life Support for Healthcare Provider or Professional Rescuer), professional liability insurance coverage available through Arapahoe Community College, Hepatitis B vaccinations, documentation of immunizations and current TB test are required for clinical practice. Additionally, students must undergo a background check as required by the Community College System. Upon successful completion of the program, students will be eligible to take the Colorado Nurse Aide Competency and Evaluation Program (NACEP).

Courses required for this certificate must be completed with a "C" or better to meet graduation requirements.

This certificate is not eligible for financial aid. Contact the Financial Aid Office if further clarification is necessary.

Major Courses			**(6 credit hours)**
NUA	101	Certified Nurse Aide Health Care Skills	4
NUA	170	Nurse Aide Clinical	1
NUA	171	Advanced Nurse Aide Clinical	1
Total			**6 credit hours**

Nursing

The Colorado Community College System is revising and standardizing the nursing curriculum. Please visit www.arapahoe.edu or contact the Nursing Department at 303-797-5939 for the most current, updated curriculum information.

Practical Nursing

The Colorado Community College System is revising and standardizing the nursing curriculum. Please visit www. arapahoe.edu or contact the Nursing Department at 303-797-5939 for the most current, updated curriculum information.

PN to RN Advanced Placement Option

The Colorado Community College System is revising and standardizing the nursing curriculum. Please visit www. arapahoe.edu or contact the Nursing Department at 303-797-5939 for the most current, updated curriculum information.

Paralegal

Associate of Applied Science Degree

The goals for this American Bar Association-approved program are:

1. To train students to become paralegals in order to permit them to assist attorneys in effectively delivering legal services.
2. To educate students in a way that will permit them to advance the paralegal profession and to maintain high ethical standards.

While paralegals may not practice law, they work under the supervision of attorneys in private law firms or businesses, as well as in many government agencies. Tasks performed by paralegals include interviewing, investigation, research, preparing legal forms, assisting attorneys in court and other activities. If you have questions, contact the Program Coordinator at 303-797-5878.

The Paralegal Program is approved by the American Bar Association. The American Bar Association may be reached at 321 N. Clark St., Chicago, IL 60610, 312-988-5000. Paralegal courses from other institutions may be transferred to the program ONLY if they were taken from an ABA-approved program.

Students should take PAR 115 and PAR 213 in their first semester of study. Students should have CPT sentence skills score of 95+ and CPT reading score of 80+ to successfully complete PAR 213.

All major, general education and other courses required for this degree must be completed with a grade of "C" or better to meet graduation requirements. To graduate, students must complete an exit interview and apply for graduation. Paralegal courses must be taken within six years of a student's graduation.

Major Courses			**(27 credit hours)**
PAR	115	Introduction to Law	3
PAR	116	Torts	3
PAR	118	Contracts	3
PAR	125	Property Law	3
PAR	201	Civil Litigation**	3
PAR	206	Business Organizations**	3
PAR	213	Legal Research & Writing I	3
PAR	214	Legal Research & Writing II**	3
PAR	287	Cooperative Education*	3

General Education Courses			**(24 credit hours)**
ENG	121	English Composition I	3
ENG	122	English Composition II	3
SPE	115	Public Speaking or	
SPE	125	Interpersonal Communication	3

Students must select twelve credits from the following:
ECO 201 or 202; HIS, HUM, LIT,
PHI, POS, PSY, SOC, SPA   12

Students must select three credits from the following:
AST, BIO (100 or above), CHE, GEO,
PHY or MAT (106 or above)   3

Restricted Electives			**(9 credit hours)**
Any three of the following:			
PAR	114	Computers and the Law	3
PAR	117	Family Law	3
PAR	202	Evidence**	3
PAR	205	Criminal Law**	3
PAR	208	Probate and Estates**	3
PAR	215	Alternative Dispute Resolution**	3
PAR	216	Employment Law**	3
PAR	217	Environmental Law**	3
PAR	218	Bankruptcy Law**	3
PAR	228	Intellectual Property**	3
PAR		Any PAR Elective	3
Total			**60 credit hours**

* This course may be waived and a paralegal elective substituted for students with specific prior legal experience.
**Course has prerequisite.

Paralegal Certificate

Admission Requirement:

A two year Associate of Art, Associate of Science or Associate of General Studies degree or a four-year degree from an accredited college or university, OR 5 years of law-related work experience. An official transcript must be on file in Admissions & Records prior to the release of the paralegal certificate for students who have a degree.

The goals for this American Bar Association-approved program are:
1. To train students to become paralegals, in order to permit them to assist attorneys in effectively delivering legal services.
2. To educate students in a way that will permit them to advance the paralegal profession and to maintain high ethical standards.

While paralegals may not practice law, they work under the supervision of attorneys in private law firms or businesses, as well as in many government agencies. Tasks performed by paralegals include interviewing, investigation, research, preparing legal forms, assisting attorneys in court and other activities. If you have questions, contact the Program Coordinator at 303-797-5878.

If seeking admission based on 5 years of law-related experience, supporting documentation must be submitted to the Department Chair and the student must be formally admitted to the program by letter of acceptance. To graduate, students must complete an exit interview and apply for graduation. Paralegal courses must be taken within six years of a student's graduation.

The paralegal program is approved by the American Bar Association. The American Bar Association may be reached at 321 N. Clark St., Chicago, IL 60610, 312-988-5000. Paralegal courses from other institutions may be transferred to the program ONLY if they were taken from an ABA-approved program.

Students should take PAR 115 and PAR 213 in their first semester of study.

All major, general education and other courses required for this degree must be completed with a grade of "C" or better to meet graduation requirements. To graduate, students must complete an exit interview and apply for graduation. Paralegal courses must be taken within six years of a student's graduation.

Major Courses			**(27 credit hours)**
PAR	115	Introduction to Law	3
PAR	116	Torts	3
PAR	118	Contracts	3
PAR	125	Property Law	3
PAR	201	Civil Litigation**	3
PAR	206	Business Organizations**	3
PAR	213	Legal Research and Writing I	3
PAR	214	Legal Research and Writing II**	3
PAR	287	Cooperative Education*	3

Restricted Electives			**(9 credit hours)**
Any three of the following:			
PAR	114	Computer and the Law	3
PAR	117	Family Law	3
PAR	202	Evidence**	3
PAR	205	Criminal Law**	3
PAR	208	Probate and Estates**	3
PAR	215	Alternative Dispute Resolution**	3
PAR	216	Employment Law**	3
PAR	217	Environmental Law**	3
PAR	218	Bankruptcy Law**	3
PAR	228	Intellectual Property**	3
PAR		Any PAR elective	3
Total			**36 credit hours**

* This course may be waived and a paralegal elective substituted for students with specific prior legal experience.
**Course has prerequisite.

Pharmacy Technician

Certificate

The pharmacy technician program (PHT) will prepare students to assist a pharmacist with the technical tasks which take place in the pharmacy setting. Under the direct supervision of a pharmacist, a pharmacy technician can be employed in a variety of healthcare settings.

The program spans a semester and a half and is divided into 15 weeks of didactic training and 8 weeks internship in both Community (4 weeks) and Institutional (4 weeks) pharmacy settings. More than one year may be taken to complete the program. All classes require acceptance into the program or have written approval of the Academic Coordinator.

A clear background check and a documentation of immunizations are required for Pharmacy Practice courses. Individuals already employed as pharmacy technicians can upgrade their skills and meet continuing education re-certification requirements of the Pharmacy Technician Certification Board (PTCB) by enrolling in specific program courses.

This program is accredited by the American Society of Health-System Pharmacists (ASHP). ASHP can be reached at 7272 Wisconsin Ave., Bethesda, MD 20814, 301-657-3000, x1251.

Download application on the web site, or contact the Academic Coordinator at 303-797-5944.

Admission Requirements:
1. High school diploma or GED
2. Completed PHT program application
3. CPT test
4. Criminal Background Check
5. Interview with academic coordinator

All major courses required for this certificate must be completed with a "C" or better to meet graduation requirements.

All courses for this certificate are offered in an online/hybrid format.

Major Courses			(28 credit hours)
PHT	111	Orientation to Pharmacy	2
PHT	112	Pharmacy Law	1.5
PHT	113	Pharmacy Calculations and Terminology	1.5
PHT	115	Pharmacology of GI, Renal, Reproductive, Immune, Dermatologic and Hematologic Systems	3
PHT	116	Institutional Pharmacy	3
PHT	117	Communication for Pharmacy Technicians	1
PHT	118	Pharmacology of the Nervous, Endocrine, and Musculoskeletal Systems	3
PHT	119	Community Pharmacy	3
PHT	170	Pharmacy Practice II (Institutional Rotation)	4
PHT	171	Pharmacy Practice III (Community Rotation)	4
Total			**28 credit hours**

Physical Therapist Assistant

Associates of Applied Science Degree

A Physical Therapist Assistant (PTA) is a health care provider working under the direction of a Physical Therapist. The PTA is involved in the treatment of individuals with muscular, skeletal, cardiopulmonary and nervous system disorders. The PTA may also be involved in injury prevention or programs specifically targeted toward individual or group wellness. The PTA is able to provide physical therapy services as specified in a care plan developed by a Physical Therapist. Treatment program implementation may include: therapeutic exercise, ambulation training, activities of daily living and administration of physical agents such as heat and cold.

All students must maintain current CPR and First Aid certification. Additionally, students must maintain professional liability insurance coverage and are required to complete a series of Hepatitis B vaccinations. The approximate cost of uniform and vaccination requirements is $175.00. Nominal expenses are incurred during each clinical affiliation for travel within the metro area.

The program is accredited by the Commission for Accreditation of Physical Therapy Education of the American Physical Therapy Association. The Commission can be reached at 1111 N. Fairfax St., Alexandria, Virginia 22314-1488, 1-800-999-2782.

The program is 5 semesters in length with a summer term following the first year. Upon successful completion, the graduate is awarded an Associate of Applied Science degree. Please note: Students are responsible for completing the appropriate Graduation Application in the Records Office by the deadline date.

Admissions Requirements:
1. Contact the Health, Math, Science & Engineering Division Office (Room A2000, 303-797-5888).
2. Applications are accepted beginning February 1 each year. Please refer to the PTA Program Information for application and CPT placement scores. You can contact the Division Office by phone 303-797-5888 for a copy of the PTA Program Information.
3. Individuals with related degrees and training (Athletic Training, military trained PT Techs/Specialists) should contact Paula Provence, paula.provence@arapahoe.edu, for information regarding possible transfer credit and Credit for Prior Learning Options.

All major, general education and other courses required for this degree must be completed with a "C" or better to meet graduation requirements.

Major Core Courses			(50 credit hours)
PTA	110	Basic Patient Care in Physical Therapy	5
PTA	115	Principles and Practices in Physical Therapy	2
PTA	120	Modalities in Physical Therapy	5
PTA	131	Professional Communications I	1
PTA	135	Principles of Electrical Stimulation	2
PTA	140	Clinical Kinesiology	5
PTA	141	Professional Communications II	1
PTA	205	Psychosocial Issues in Health Care	2
PTA	230	Orthopedic Assessment and Management	5
PTA	240	Neurological Assessment and Management	5
PTA	251	Professional Communications III	1
PTA	278	PTA Seminar	2
PTA	280	PTA Internship I	4
PTA	281	PTA Internship II	5
PTA	282	PTA Internship III	5

General Education Courses			(17 credit hours)
BIO	201	Human Anatomy and Physiology I	4
ENG	121	English Composition I	3
PSY	101	General Psychology I	3
SPE	115	Public Speaking 1 OR	
SPE	125	Interpersonal Communication	3
PSY	235	Human Growth and Development	3

Physical Education[2]		(1 credit hour)
PED activity course		1

Special Topic Courses:			(8 credit hours)
PTA	175	Special Topics: Clinical Pathophysiology I	2
PTA	177	Special Topics: Clinical Pathophysiology II	2
PTA	176	Special Topics: Anatomical Kinesiology	4
Total			**75 credit hours**

[1] Students planning to transfer their speech credit to another institution should complete SPE 115.

[2] The PED requirement will be waived for students who are 35 years of age or older at the time of most recent admission to the College. Appropriate credit must be taken to substitute for the hour waived.

Professional Achievement Awards

Your professional world is filled with daily challenges and changing opportunities. Our Professional Achievement programs respond to working adults' needs for convenient, short-term educational programs–teaching concepts that you can use on the job immediately. These are no-nonsense, high impact, application-oriented experiences designed by professional practitioners. Many of these programs can be completed within a year or less, following "fast-track" and accelerated schedules. A "C" or better is required in each class to receive the award. Transfer credit may not exceed 50% of the credits applied to the award. Course substitutions and waivers must be approved in writing by the relevant department chair. Successful students will receive a "Professional Achievement Award."

Please Note: Professional Achievement programs are eligible for financial aid only as the courses apply to degree or vocational certificate programs. A Professional Achievement Award Application Form (available at Information Central or online) will need to be completed for each award and submitted to the Cashier's Office. The Professional Achievement Award Application non-refundable processing charge is $10.00 per award. If a student does not meet the requirements for the award specified, the application and charged amount will be carried over for no more than two additional semesters. After one academic year, the application will be retired and the student will have to submit a new application and incur another processing charge. Please contact the Credentials Evaluator at 303-797-5628 for additional information.

ACCOUNTING

For individuals who wish to gain skills in the area of accounting. These courses prepare students for entry-level job opportunities in bookkeeping, payroll and computerized accounting. ACC 121 should be completed before taking the other accounting courses. For additional information, please call Sara Harris at 303-797-5880.

Accounting Technician I

ACC	121	Principles of Accounting I	4 credits
ACC	135	Spreadsheet Application for Accounting	3 credits
ACC	235	Computerized Accounting for Small Businesses OR	
ACC	245	Computerized Accounting with a Professional Package (Peachtree for Windows)	3 credits

Accounting Technician II

ACC	122	Principles of Accounting II	4 credits
ACC	115	Payroll Accounting	3 credits
ACC	226	Cost Accounting	3 credits

Computer Technology

For additional information regarding Professional Achievement Awards in the Computer Technology area, please call the Program Coordinator at 303-797-5833.

Computer Programming Series

For individuals who wish to get a good foundation in current programming languages. Participants may choose from the following languages to complete a total of 12 credit hours. At least two courses must be selected from the same language.

CSC	150	Visual Basic Programming	3 credits
CSC	156	Visual Basic .NET Programming	4 credits
CSC	157	Advanced Visual Basic .NET Programming	4 credits
CSC	160	Computer Science I (Java)	4 credits
CSC	161	Computer Science II (Java)	4 credits
CSC	160	Computer Science I (C Programming)	4 credits
CSC	160	Computer Science II (C ++)	4 credits
CSC	230	C Language Programming	3 credits
CSC	233	Object Oriented Programming in C++	4 credits
CSC	234	C++ Programming (Data Structures)	4 credits
CSC	236	C # Programming	3 credits
CSC	237	Advanced C # Programming	3 credits
CSC	254	ASP .NET Programming	4 credits
CSC	255	ADO .NET Programming	4 credits

Microsoft Office

For individuals who wish to acquire productivity skills in this integrated software environment. These courses teach word processing, electronic spreadsheet, database application and professional quality graphics. Students who plan to complete all courses in this series within one semester are encouraged to enroll in all six courses at the beginning of the semester to ensure enrollment.

CIS	128	Windows Complete	3 credits
CIS	135	Word Processing	3 credits
CIS	140	Microsoft Outlook	1 credit
CIS	145	Complete PC Database	3 credits
CIS	155	PC Spreadsheet Concepts: Excel	3 credits
CIS	161	Presentation Graphics: PowerPoint	1 credit

Computer Network Administration

For individuals who wish to have both theory and hands-on experience with computer network operations. Participants need knowledge of network concepts, DOS and Windows before beginning any of these series.

UNIX

For individuals who desire theory and hands-on training in UNIX. Participants need a basic knowledge of computers and operating systems.

CIS	220	Fundamentals of UNIX	3 credits
CIS	221	UNIX Shell Programming	3 credits
CIS	222	UNIX for System Administrators OR	3 credits
CSC	269	Programming in Perl	2 credits

A+ Technician

For individuals interested in A+.

CNG	121	Computer Tech I: A+	4 credits
CNG	122	Computer Tech II: A+	3 credits
CNG	255	Industry Certification	3 credits

DEGREE REQUIREMENTS

Network Technician
For computer-literate individuals who wish to gain knowledge and skills needed to work as a computer network technician (A+ certification). Participants need to have knowledge of network concepts and a basic knowledge of computer hardware.

CNG	121	Computer Tech I: A+	4 credits
CNG	122	Computer Tech II: A+	3 credits
CIS	124	Intro to Operating Systems	3 credits
CIS	128	Windows Complete	3 credits
CNG	255	Industry Certification	3 credits

Web Development
For individuals who are interested in developing Web related skills. These courses prepare the student for job opportunities as a web programmer, web developer and webmaster.

CIS	130	Intro to the Internet	1 credit
CWB	110	Complete Web Authoring	3 credits
CWB	164	XML I	3 credits

CHILDHOOD PROFESSIONS

Early Childhood: Group Leader
For individuals already employed in early childhood settings who wish to upgrade their skills and to receive a Group Leader Certificate. Students may earn this Professional Achievement Award by completing ECE 220 and PSY 238 and an additional 6 semester hours in ECE or EDU 234 to equal 12 semester hours of credit. Students wishing to earn the Community Colleges of Colorado Certificate for Group Leader should consult the College Catalog.

Early Childhood Education Administration
For individuals already employed in early childhood settings who wish to be directors of early childhood programs. Students may earn this Professional Achievement Award by completing ECE 205, ECE 240 and ECE 241 to equal 9 semester hours of credit for the Professional Achievement Award. Students wishing to earn the Director Certificate should consult the College Catalog.

English Department: Writing Credentials
Arapahoe Community College offers a 15 credit Professional Achievement Award for students pursuing careers in writing fields. For information contact Dr. Lindsay Lewan at 303-797-5825 or lindsay.lewan@arapahoe.edu.

Required for all Professional Achievement Awards:

ENG	121	English Composition I
ENG	122	English Composition II

For each specialization, students choose 9 credits from among the choices listed.

Fiction Credential
Required Courses:

ENG	221	Creative Writing I	3 credits
ENG	226	Fiction Writing	3 credits

Optional Courses:

ENG	222	Creative Writing II	3 credits
ENG	227	Poetry Writing	3 credits
ENG	231	Literary Magazine	3 credits

LIT	115	Introduction to Literature	3 credits
JOU	105	Introduction to Mass Media	3 credits

Nonfiction Credential
Required Courses:

ENG	221	Creative Writing I	3 credits
ENG	230	Creative Non-Fiction	3 credits

Optional Courses:

ENG	222	Creative Writing II	3 credits
ENG	231	Literary Magazine	3 credits
JOU	106	Fundamentals of Reporting	3 credits
ENG	131	Technical Writing	3 credits
ENG	235	Rhetoric and Propaganda	3 credits
JOU	105	Introduction to Mass Media	3 credits

Screenwriting Credential
Required Courses:

ENG	221	Creative Writing I	3 credits
FVT	250	Writing for Stage & Screen	3 credits

Optional Courses:

ENG	222	Creative Writing II	3 credits
LIT	257	Literature and Film	3 credits
THE	105	Introduction to Theatre Arts	3 credits

Finance
For individuals who wish to gains skills in a specific area of finance. These courses prepare students for entry-level jobs as a customer service representative for mutual fund companies, commercial banks, savings and loans, international companies, financing companies and brokerage companies. For additional information please contact Joan Anderssen at 303-797-5956 or joan.anderssen@arapahoe.edu.

Financial Analyst

FIN	101	Introduction to Finance	3 credits
FIN	235	Analyzing Financial Statements	3 credits
INV	115	Investments OR	
FIN	226	Money and Banking	3 credits

Financial Services Analyst

FIN	101	Introduction to Finance	3 credits
FIN	226	Money and Banking	3 credits
FIN	105	Principles of Banking OR	
FIN	110	Intro to Credit Unions	3 credits

International Analyst

FIN	101	Introduction to Finance	3 credits
FIN	201	International Finance/Economics	3 credits
BUS	203	Intro to International Business	3 credits

Investment Analyst–Series 7

FIN	101	Intro to Finance	3 credits
INV	115	Investments	3 credits
INV	215	Advanced Investments	3 credits

Retirement Planning Analyst–Series 6

FIN	101	Introduction to Finance	3 credits
FIN	226	Money and Banking OR	
INV	115	Investments/Stocks and Bonds	3 credits
FIN	260	Retirement/Pension Planning	3 credits

Mortgage Banker

FIN	101	Intro to Finance	3 credits
FIN	131	Residential Mortgage Lending OR	
REE	115	Intro to Real Estate	3 credits

FIN	132	Residential Mortgage Loan Designation	1 credit
FIN	133	Residential Mortgage Loan Processing	1 credit
FIN	137	FHA for Loan Officers OR	
FIN	138	FHA for Loan Processors	1 credit

OFFICE

Administrative Support Staff

For individuals who are working or wish to work in a modern office environment. All courses also apply to degrees or certificates in the Business Technology program. For additional information, please call 303-797-5681.

BTE	120	Electronic Office Procedures	2 credits
BTE	125	Records Management	3 credits
CIS	135	Word Processing	3 credits

Legal Support Staff

For individuals who are working or wish to work in the legal field as legal support staff. All courses also apply to degrees or certificates in the Paralegal or Legal Secretary programs. For additional information, call 303-797-5681 or 303-797-5884.

PAR	115	Introduction to Law	3 credits
PAR		Elective	3 credits
BTE	238	Legal Office Procedures	3 credits
CIS	135	Word Processing	3 credits

Professional Business Writing

For managers, administrative assistants, supervisors, directors and others who prepare important documents.

| BTE | 166 | Business Editing Skills | 3 credits |
| BUS | 217 | Business Communication and Report Writing | 3 credits |

Visual Communication

Computer Graphics

For graphic designers, illustrators, desktop publishers, animators, etc., who wish to become proficient in the field's most widely-used software. Any three of the following courses constitute a Computer Graphics Professional Series. Participants may earn two Computer Graphics Professional Achievement awards by completing 6 of the courses listed below. Participants need to have completed MGD 101 or have previous Macintosh experience before taking other computer courses. For additional information, please call 303-797-5865.

MGD	101	Intro to Computer Graphics	3 credits
MGD	113	QuarkXPress	3 credits
MGD	112	Adobe Illustrator I	3 credits
MGD	111	Adobe Photoshop I	3 credits
MGD	214	Macintosh Troubleshooting for Designers	3 credits
MGD	155	LightWave I	3 credits
MGD	213	Electronic Prepress	3 credits
MGD	141	Web Design I	3 credits
MGD	161	Director I	3 credits

Technical Communication

For individuals who wish to acquire skills needed to improve presentations and to communicate ideas more effectively. For additional information, please call 303-797-5815.

ENG	131	Technical Writing I	3 credits
SPE	115	Public Speaking	3 credits
BTE	230	Desktop Publishing OR	
MGD	101	Intro to Computer Graphics	3 credits

Great Books Achievement Awards

ACC is proud to be one of six community colleges nationwide chosen to participate in the National Great Books Consortium. Some sections of transfer courses, labeled "GB," will include some readings from authors identified in the 1990 Great Books series published by the Encyclopedia Britannica and the University of Chicago. The sections differ in no other way from other sections of the same course or equivalent courses at other colleges. Students who complete a Great Books section of a course with a B or better may apply those credits toward a Great Books Achievement Award Certificate, which will be awarded upon completion of 12 credit hours of Great Books sections. In addition, students will be noted at graduation and the Great Books sections will be noted on their transcripts.
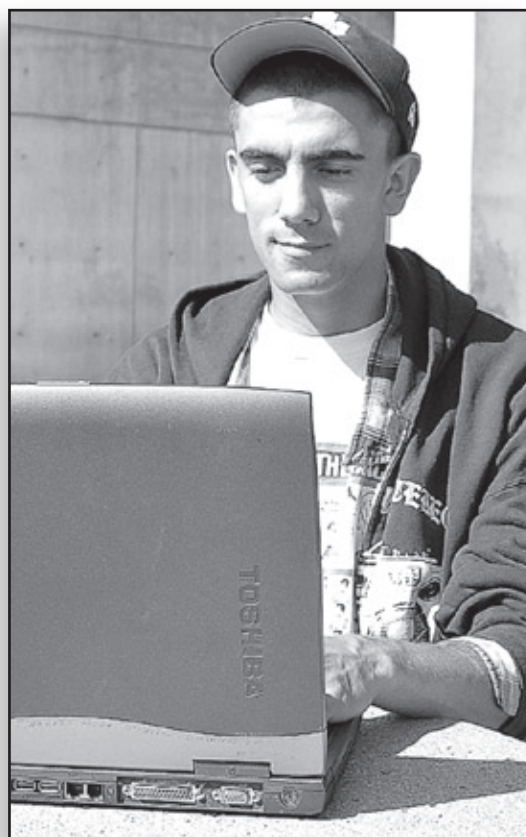
Course Descriptions

Academic Achievement

AAA 090 ACADEMIC ACHIEVEMENT STRATEGIES 3 CREDITS
Students will develop personalized approaches to learning and succeed as they 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. PREREQUISITE: CPT reading score 60-79

AAA 101 COLLEGE 101: THE STUDENT EXPERIENCE 1 CREDIT
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 CREDITS
Students will examine theories and practices associated with successful learning and adopt those that enhance their college success. Critical areas for 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. This course is recommended for new and returning students. PREREQUISITE: CPT reading score 80-120.

Accounting

ACC 101 FUNDAMENTALS OF ACCOUNTING 3 CREDITS
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 CREDITS
Studies federal and stat 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. PREREQUISITES: ACC 101 or 121, or enrolled concurrently or instructor's permission.

ACC 118 ANALYZING AND INTERPRETING FINANCIAL STATEMENTS 3 CREDITS
Introduces accounting and its significant role in making sound business decisions. Designed to teach students how to use financial statements to be wise users of accounting information. Gives practical experience using ratio analysis to make credit and equity decisions. Instructional methods include lecture, case studies, group interaction and Internet research projects.

ACC 121 ACCOUNTING PRINCIPLES I 4 CREDITS
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 CREDITS
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. PREREQUISITES: ACC 121 or equivalent; MAT 106, 111 or higher strongly recommended.

ACC 125 COMPUTERIZED ACCOUNTING 3 CREDITS
Introduces the capabilities of computer applications in accounting. Includes solving accounting problems of a financial nature and hardware and software controls. PREREQUISITES: ACC 101 or ACC 131

ACC 131 INCOME TAX 1 3 CREDITS
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 APPLICATION FOR ACCOUNTING 3 CREDITS
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. PREREQUISITES: ACC 122, CIS 155 or spreadsheet experience (all required).

ACC 211 INTERMEDIATE ACCOUNTING I 4 CREDITS
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 CREDITS
Focuses on the theoretical and practical aspects of accounting for long-term liabilities, stockholders' equity, investments, pensions and leases. Includes income tax allocation, financial statement analysis, cash flow statements and accounting methods changes.

ACC 215 ACCOUNTING, INFORMATION SYSTEMS AND E-BUSINESS 3 CREDITS
Studies the principles, concepts and tools used in the analysis, design, implementation and integration of accounting systems, internal controls systems and accounting software selection and the acquisition and implementation of systems are studied. Techniques and systems for electronic control systems, electronic data interchanges, electronic funds transfer and web commerce are explored.

ACC 226 COST ACCOUNTING 3 CREDITS
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 229 MANAGERIAL ACCOUNTING 3 CREDITS
Focuses on the analysis of financial statements and other accounting data used by management in the planning and control functions. Includes a study of cost behavior,

volume-cost-profit relationships, return on investment and the budgetary process. PREREQUISITE: ACC 122

**ACC 235 COMPUTERIZED ACCOUNTING FOR
SMALL BUSINESSES   3 CREDITS**
Introduces a microcomputer package, such as QuickBooks, One-write Plus or similar accounting application, for use in a small business. Focuses on installation, starting the application and converting a manual accounting system to an electronic system. Includes an easy-to-use bookkeeping system that incorporates all daily transactions and summarizes records in reports for a complete financial picture.

**ACC 245 COMPUTERIZED ACCOUNTING
WITH A PROFESSIONAL PACKAGE 3 CREDITS**
Integrates accounting principles and practices with a computerized accounting package such as Peachtree, DacEasy, or other professional package. Emphasizes computerized functions of the general ledger and integrated accounts payable, accounts receivable, invoicing and payroll systems. PRE-REQUISITES: ACC 121 or 101

ACC 275 SPECIAL TOPICS   1-6 CREDITS
Provides students with a vehicle to pursue in-depth exploration of special topics of interest.

ACC 285 INDEPENDENT STUDY   1–6 CREDITS
Meets the individual needs of students. Students engage in intensive study or research under the direction of a qualified instructor. PREREQUISITE: Instructor's permission

ACC 287 CO-OP EDUCATION   3 CREDITS
Provides an opportunity to gain practical experience in applying occupational skills and/or to develop specific skills in a practical work setting. The instructor works with the student to select an appropriate work site, establish learning objectives and coordinate learning activities with the employer or work site supervisor. For Accounting majors only. PREREQUISITE: Instructor`s permission

ACC 289 CAPSTONE   3 CREDITS
Provides pending accounting graduates with the opportunity to evaluate analysis skills. Using the knowledge acquired from their academic studies, the student evaluates the financial standing of three different companies. Financial analysis using spreadsheet capabilities and written report skills are included. The student works independent of a traditional classroom setting. PREREQUISITES: ACC 122, 131, 135, 226

Activity Professionals' Training

**APT 101 BASIC ACTIVITY PROFESSIONALS'
TRAINING PART I   4 CREDITS**
This course, along with APT 102 and APT 103, satisfies the requirements for state qualification as an accredited program for Activity Professionals. The topics covered include an overview of the activity profession, human development in the late adult years and methods of service delivery. PRE-REQUISITES: High school diploma or GED.

**APT 102 BASIC ACTIVITY PROFESSIONALS'
TRAINING PART II   4 CREDITS**
This course, together with APT 101 and APT 103, satisfies the requirements for state qualification as an accredited training program for activities professionals. The topics covered include: standards of practice, practitioner behavior, regulations, activity care planning of quality of life. PREREQUISITE: APT 101

APT 188 BASIC EDUCATION PRACTICUM   2 CREDITS
This course is the practical experience portion of the APT 100 courses, which together comprise the Basic Education Course curriculum established by the National Certification Council for Activity Professionals and the National Association of Activity Professionals. The student will demonstrate an understanding of the activity program in a long-term care setting and the ability to assist with the quality of life components with geriatric elderly through supervised learning experiences. COREQUISITES: APT 101, 102

**APT 201 ADVANCED DOCUMENTATION AND
REGULATORY COMPLIANCE   2 CREDITS**
This course is one of four courses which together comprise the Advanced Management Curriculum established by the National Certification Council for Activity Professionals (NCCAP) and the National Association of Activity Professionals (NAAP). This course will include an in-depth analysis of documentation and the corresponding regulations. In addition, State and Federal regulations and survey process will be reviewed. This course builds on the skills learned in the APT 100 course; fine tuning care planning and documentation as well as teaching professional writing skills i.e., writing proposals and legislative correspondence. PREREQUISITES: APT 101, 102, 188 or instructor's permission

**APT 202 ADMINISTRATIVE PRACTICES IN
THE ACTIVITY PROFESSION   2 CREDITS**
This course is one of five courses which together comprise the advanced management curriculum established by the National Certification Council of Activity Professionals and the National Association of Activity Professionals. This course focuses on the practical issues in managing an activity department including: management and leadership techniques; personnel issues including recruiting, evaluation and termination; management writing skills; and financial management are discussed. PREREQUISITES: APT 101,102, 188 or instructor's permission

APT 203 VOLUNTEER MANAGEMENT   2 CREDITS
This course is one of five courses which together comprise the advanced management curriculum established by the National Certification Council of Activity Professionals and the National Association of Activity Professionals. This course covers the techniques needed by the Activity Coordinator to develop and manage an effective volunteer program. The student will learn how to recruit, interview, schedule, train, supervise, evaluate and motivate volunteers. PREREQUISITES: APT 101,102, 188 or instructor's permission

**APT 204 COMMUNITY RELATIONS AND
COMMUNICATION IN THE ACTIVITY
DEPARTMENT   2 CREDITS**
This course is one of five courses which together comprise the advanced management curriculum established by the National Certification Council of Activity Professionals and the National Association of Activity Professionals. This course will focus on Public Relations and Community Relations. The student will learn how to sell their activity program to the community and raise the interest of the community. Students will learn effective communication techniques including public speaking, listening and professional writing skills. PRE-REQUISITES: APT 101,102, 188 or instructor's permission

APT 275 SPECIAL TOPICS   1–6 CREDITS
Special Topics courses may be offered to provide students with an opportunity to study special areas in the discipline. Course content will be determined by the instructor with a complete syllabus each time the course is offered.

APT 285   INDEPENDENT STUDY   1–6 CREDITS
Course designed to meet the individual needs of students.
PREREQUISITE: Instructor's permission

APT 288   ADVANCED MANAGEMENT
**   PRACTICUM   2 CREDITS**
This course is the practical experience portion of the APT
200 courses which comprise the advanced management cur-
riculum established by the National Certification Council
of Activity Professionals and the National Association of
Activity Professionals. The student will demonstrate an
understanding of the management skills needed to be an
activity professional through supervised learning experience
in a geriatric-based care enter. PREREQUISITES: APT 100
and at least two of the following; APT 201, 202, 203, 204.
COREQUISITES: APT 201, 202, 203, 204

Air Force ROTC

For additional information concerning ROTC, please call
303-492-6495.

AIR 101   THE AIR FORCE TODAY I   1 CREDIT
Introduces students to the U.S. Air Force and the U.S.A.F.
officer profession. Uses instructor lectures, films videos and
group activities to examine Air Force issues, officer qualities,
military customs and courtesies. Examines the communica-
tion skills necessary for an Air Force officer. 38 Contact
Hours. PREREQUISITE: Instructor's permission

AIR 102   THE AIR FORCE TODAY II   1 CREDIT
Continues the topics of AIR 101. 38 Contact Hours. PRE-
REQUISITES: AIR 101 or instructor's permission

AIR 201   DEVELOPMENT OF AIR POWER I   1 CREDIT
Studies air power from balloons through the jet age and his-
torically reviews air power employment in military and non-
military operations in support of national objectives. Looks
at the evolution of air power concepts and doctrine and intro-
duces the development of communicative skills. 38 Contact
Hours. PREREQUISITES: AIR 102 or instructor's permission

AIR 202   DEVELOPMENT OF AIR POWER II   1 CREDIT
Focuses on the basic characteristics of air doctrine, United
States Air; continues AIR 201. One hour lecture and two
hours lab each week. PREREQUISITES: AIR 201 or instruc-
tor's permission

Allied Health Professions

See Health Professions

American Sign Language

ASL 121   INTRODUCTION TO AMERICAN
**   SIGN LANGUAGE   5 CREDITS**
This course will expose the student to American Sign Lan-
guage. Readiness activities will be conducted focusing on
visual/receptive skills and basic communication.The direct
experience method, using ASL, is used to enhance the learn-
ing process. This course is a prerequisite for ASL 122.

ASL 122   AMERICAN SIGN LANGUAGE II   5 CREDITS
In this course, the student will have an opportunity to develop
syntactic knowledge of American Sign Language (ASL), ba-
sic vocabulary and basic conversational skills. Vital aspects of
deaf culture and community will be incorporated. The direct
experience method, using ASL, will be used to enhance the
learning process. Students must successfully complete this
course prior to being accepted into the Interpreting and Trans-
literating Preparations Program. PREREQUISITE: ASL 121

ASL 275   SPECIAL TOPICS   1–6 CREDITS
Description: Provides students with a vehicle to pursue in-
depth exploration of special topics of interest.

ASL 285   INDEPENDENT STUDY   1–6 CREDITS
Course designed to meet the individual needs of students.
PREREQUISITE: Instructor's permission

Anthropology

ANT 101   CULTURAL ANTHROPOLOGY   3 CREDITS
Studies human cultural patterns and learned behavior. Includes
linguistics, social and political organization, religion, culture
and personality, culture change and applied anthropology.
   This course is one of the Statewide Guaranteed Transfer courses.

ANT 107   INTRODUCTION TO ARCHAEOLOGY   3 CREDITS
This course focuses upon the science of recovering the hu-
man prehistoric and historic past through excavation, analysis
and interpretation of material remains. It includes a survey of
the archaeology of different areas of the old and new worlds.
Also included are the works of selected archaeologists and
discussions of major archaeological theories.

ANT 111   PHYSICAL ANTHROPOLOGY   3 CREDITS
Studies human biology and its effects on behavior. Includes
principles of genetics and evolution, vertebrates and primates,
human origins, human variation and ecology.
   This course is one of the Statewide Guaranteed Transfer courses.

ANT 121   CULTURES OF THE SOUTHWEST   3 CREDITS
The American Southwest provides a natural laboratory for the
study of human cultural development and adaptation, from the
earliest lithic cultures (Clovis and Folsom Hunters) to the vari-
ous Desert Cultures, settled villages and modern cities. The
scope of this study will include the major prehistoric cultures
(Early Man, Desert Cultures, Anasazi, Hohokam, Mogollon and
Sinagua) and the historic cultures (Pueblos, Navajo, Apache,
Pima, Papago, Spanish-Mexican and Anglo-American). Recom-
mended preliminary coursework: ANT 101 or ANT 107. Rec-
ommended subsequent coursework: ANT 215, Anthropology
Field Studies and Special Topics in Anthropology.

ANT 215   INDIANS OF NORTH AMERICA   3 CREDITS
This course studies Indians of North America from the ori-
gins of native peoples in the New World, through the devel-
opment of geographic culture areas, to European contact and
subsequent contemporary Native American issues.

ANT 275   SPECIAL TOPICS IN
**   ANTHROPOLOGY   1–6 CREDITS**
Provides opportunity for off-campus field experience or study
of a special topic in anthropology. Field study may occur at
archaeological sites, museums, host educational institutions,
within ethnographic situations, or other anthropologically
appropriate places. Study of special topic may include that
derived from physical anthropology cultural anthropology,
archaeology, or other anthropological discipline.

ANT 280   AB SOUTHWEST FIELD
**   EXPLORATION   2 CREDITS**
Introduces the social, religious, economic and cultural de-
velopment of the Anasazi. Major ruins, excavation sites and
laboratory facilities in the Four Corners region are explored.
PREREQUISITE: Instructor's permission

ANT 285   INDEPENDENT STUDY   1–6 CREDIT
This course allows the student to independently study certain
aspects of anthropology. It provides opportunity to investigate
an area of interest that developed in an introductory course.
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Arabic

ARA 111   ARABIC LANGUAGE I   5 CREDITS
This course begins a sequence dealing with 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 the individual texts and instructors.

ARA 112   ARABIC LANGUAGE II   5 CREDITS
This courses continues Arabic I in the development of functional proficiency I listening, speaking, reading and writing the Arabic language. NOTE: the order of topics and the methodology will vary according to the individual texts and instructors. PREREQUISITES: ARA 111 or instructor permission

ARA 211   ARABIC LANGUAGE III   3 CREDITS
Arabic III continues Arabic I and II in the development and increased functional proficiency in listening, speaking, reading and writing Arabic.

ARA 212   ARABIC LANGUAGE IV   3 CREDITS
Arabic IV continues Arabic I, II and III in the development and increased functional proficiency in listening, speaking, reading and writing Arabic.

ARA 275   SPECIAL TOPICS   3 CREDITS
Provides students with a vehicle to pursue in-depth exploration of special topics of interests.

Architectural Drafting, Contracts & Materials

ARC 101   INTRODUCTION TO DRAWING   5 CREDITS
Introduces representations in architectural drafting: projections, sectioning, pictorial drawings and architectural representations.

ARC 102   RESIDENTIAL ARCHITECTURE   5 CREDITS
Covers residential planning, wood frame construction, elements of working drawings, free hand sketching, building code requirements, detailing and structural framing. PREREQUISITES: ARC 101 and CAD 102

ARC 107   BLUEPRINT READING RESIDENTIAL/COMMERCIAL   3 CREDITS
The interpretation and reading of blueprints and related documents as used in the building trades industry and architect's office.

ARC 108   BLUEPRINT READING II (CIVIL)   3 CREDITS
The interpretation and reading of civil blueprints. The branch of Engineering dealing with the design and construction of highways, bridges, tunnels and waterworks. PREREQUISITE: MAT 108

ARC 116   BUILDING MATERIALS   3 CREDITS
A general introduction to building materials and methods commonly in use today. Includes interior and exterior materials from foundations to roof systems.

ARC 121   BUILDING STRUCTURE ANALYSIS   3 CREDITS
Analysis of structural components for buildings. Study of vertical and horizontal loadings, shear and movement diagrams, wood, laminated wood and steel beams, wood and steel columns. Student will be able to solve simple structural engineering problems. PREREQUISITE: MAT 108

ARC 125   HISTORY OF ARCHITECTURE   3 CREDITS
A study of architectural styles, structures, architects, engineers and artists from early times to present times. Emphasis is placed upon the influences which determined the architectural characteristics.

ARC 205   COMMERCIAL DRAWING PRACTICE I   4 CREDITS
A study of small commercial and multiple family dwellings. Construction techniques are discussed. Working drawings are prepared through extensive use of references and manufacturers' catalog. PREREQUISITE: ARC 102

ARC 215   ARCHITECTURAL GRAPHICS   3 CREDITS
This course is designed to assist the architectural student in developing techniques of graphic rendering using pencil, ink and color media. Both freehand and mechanical methods are stressed.

ARC 216   ESTIMATING I   3 CREDITS
The student will develop skills in estimating the amount and cost of various types of construction. The student will demonstrate these skills by making estimates of material and labor quantities and costs for representative types of construction. Computer applications will be necessary. PREREQUISITES: ARC 107 or ARC 108 with a "C" or better

ARC 218   SURVEYING   3 CREDITS
Course includes the fundamentals of plane surveying and the use of surveying instruments. It emphasizes construction-related aspects of surveying and the development of skills in using surveying field information. Surveying problems are studied in coordinated class and laboratory assignments. PREREQUISITE: MAT 108

ARC 226   CONSTRUCTION SCHEDULING   3 CREDITS
Students will discuss various methods of project scheduling. Emphasis will be placed on CPM techniques and strategies. PREREQUISITES: ARC 107 or instructor's permission

ARC 228   CONTRACTS, BONDS & INSURANCE   3 CREDITS
A study of contracts, graphs, diagrams used in management of construction projects. Management control through the use of CPM will be covered, along with a brief introduction to construction management concepts.

ARC 231   BUILDING SERVICE SYSTEMS   3 CREDITS
An elementary study of the mechanical and electrical systems used in buildings to provide comfort and utility within the structure. Introduces the interrelationship of architecture and engineering considerations and functions. PREREQUISITE: ARC 116

ARC 236   CODES/ZONING/SPECIFICATIONS   3 CREDITS
A study is made of the restrictions, standards and requirements, which in the interest of public safety and welfare, have been established by law to govern the construction of buildings and their materials. Specifications are developed to describe building materials to be furnished and how they are to be installed.

ARC 275 SPECIAL TOPICS IN ARCHITECTURAL TECHNOLOGY   1–6 CREDIT
These courses provide students with opportunities to study topics of special interest that may lie outside of the standard ARC program. A syllabus will specify the content of each course at the time it is offered.

ARC 278 SEMINAR   1 CREDIT
Provides the students with experiential learning opportunities. PREREQUISITE: ARC 205

ARC 280 INTERNSHIP   1 CREDIT
Provides work experience in a business or industry. 45 field-work hours. PREREQUISITE: ARC 205

ARC 285 INDEPENDENT STUDY   1–6 CREDITS
Course designed to meet the individual needs of students. PREREQUISITE: Instructor's permission

Army ROTC

ARM 111 ADVENTURES IN LEADERSHIP I   2 CREDITS
Introduces the student to fundamentals of leadership and the United States Army. Includes Army leadership doctrine, team-building concepts, time and stress management, an introduction to cartography and land navigation, marksmanship, briefing techniques and basic military tactics. Includes lecture and laboratory.

ARM 112 ADVENTURES IN LEADERSHIP II   2 CREDITS
Investigates leadership in small organizations. Covers basic troop leading procedures, military first aid and casualty evacuation concepts, creating ethical work climates, an introduction to Army organizations and installations and basic military tactics. Introduces students to effective military writing styles. Includes lecture and laboratory. PREREQUISITES: ARM 111 or instructor's permission

ARM 211 METHODS OF LEADERSHIP AND MANAGEMENT I   3 CREDITS
Reviews leadership and management concepts including motivation, attitudes, communication skills, problem solving, human needs and behavior and leadership self-development. Students refine written and oral communications skills and explore the basic branches of the Army and officer and NCO duties. Students conduct practical exercises in small unit light infantry tactics and perform as mid-level leaders in the organization. Includes lecture and laboratory. PREREQUISITES: ARM 112 or instructor's permission

ARM 212 METHODS OF LEADERSHIP AND MANAGEMENT II   3 CREDITS
Focuses on leadership and management functions in military and corporate environments. Studies various components of Army leadership doctrine to include the four elements of leadership, leadership principles, risk management and planning theory, the be-know-do framework and the Army leadership evaluation program. Continue to refine communication skills. Includes lecture and laboratory. PREREQUISITES: ARM 211 or instructor's permission

Art (including Photography)

ART 110 ART APPRECIATION   3 CREDITS
This course is an introduction to the visual arts including language, concepts, process and history.
This course is one of the Statewide Guaranteed Transfer courses.

ART 111 ART HISTORY I   3 CREDITS
Provides the knowledge base to understand the visual arts, especially as related to Western Culture. Surveys the visual arts from the Ancient through the Medieval periods.
This course is one of the Statewide Guaranteed Transfer courses.

ART 112 ART HISTORY II   3 CREDITS
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.
This course is one of the Statewide Guaranteed Transfer courses.

ART 113 HISTORY OF PHOTOGRAPHY (FORMERLY PHO 107)   3 CREDITS
Surveys the history of photography from its beginnings to the present. Emphasizes individual photographers who have made significant contributions to the field. Includes technical, artistic, commercial and social development of photography as a form of visual communication.

ART 121 DRAWING I   3 CREDITS
This course is an investigation of various approaches and media designed to develop drawing skills and visual awareness.

ART 122 DRAWING II   3 CREDITS
This course is a study of expression drawing techniques and development of individual expressive style. PREREQUISITE: ART 121

ART 123 WATERCOLOR I   3 CREDITS
Provides an introduction to the basic techniques and unique aspects of materials involved in the use of either transparent or opaque water media or both. Color theory is included. PREREQUISITES: ART 121, 131, its equivalency, or permission of the instructor.

ART 124 WATERCOLOR II   3 CREDITS
Continues the study of watercolor techniques, emphasizing original compositions and experimentation with materials. Color theory is included. PREREQUISITES: ART 123 or its equivalency

ART 131 DESIGN I   3 CREDITS
This course is a study of basic design elements, visual perception, form and composition.

ART 132 DESIGN II   3 CREDITS
This course covers the application of design elements and principles to both two and three dimensional problems. PREREQUISITES: ART 131

ART 138 PHOTOGRAPHY I (FORMERLY PHO 101)   3 CREDITS
This course is an introduction to black and white photography as a fine art medium and develops skills necessary for basic camera and lab operations.

ART 139 PHOTOGRAPHY II (FORMERLY PHO 102)   3 CREDITS
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. PREREQUISITE: ART 138

ART 140 COLOR PHOTOGRAPHY I (FORMERLY PHO 103)   3 CREDITS
This course covers the fundamentals of color photography such as color theory and light, production, processing and printing of color negatives. PREREQUISITE: ART 138

ART 141   JEWELRY AND METALWORK I   3 CREDITS
This course is an introduction to the construction of jewelry designs in metals and small casting techniques.

ART 142   JEWELRY AND METALWORK II   3 CREDITS
This course emphasizes conceptual design development, using casting and specialized techniques. PREREQUISITES: ART 141 or equivalent

**ART 143   DIGITAL PHOTOGRAPHY I
             (FORMERLY PHO 205)   3 CREDITS**
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 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. PREREQUISITES: ART 138 or instructor's permission

**ART 144   NON SILVER PROCESS
             (FORMERLY PHO 145)   1 CREDIT**
Explores several non-silver photographic processes including the Platinotype, Cyanotype and Van Dyke Brown printing techniques. Production of enlarged negatives from 35mm negatives and transparencies as required for contact printing these processes. PREREQUISITES: ART 138 or instructor's permission

ART 156   FIGURE DRAWING I   3 CREDITS
This course is an introduction to the basic techniques of drawing the human figure.

ART 161   CERAMICS I   3 CREDITS
This course is an introduction to traditional and contemporary ceramic forms and processes including handbuilding and throwing on the potter's wheel.

ART 162   CERAMICS II   3 CREDITS
This course is a continuation of Ceramics I with an emphasis on skills, techniques and form. PREREQUISITES: ART 161 or equivalent

ART 205   MUSEUM STUDIES   3 CREDITS
Provides an overview of the museum field. Covers the museum as a business, its history and role in society and planning and implementation of a museum exhibition. PREREQUISITES: ART 110, ART 111, ART 112 or ART 207

ART 207   ART HISTORY-1900 TO PRESENT   3 CREDITS
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 210   LANDSCAPE PAINTING   3 CREDITS
Focuses on specific landscape concerns in the painting media of your choice.

ART 211   PAINTING I   3 CREDITS
This course covers color, composition, materials and techniques of studio painting. PREREQUISITES: ART 121 or 131

ART 212   PAINTING II   3 CREDITS
This course emphasizes experimentation with materials, composition and color. PREREQUISITE: ART 211

ART 213   PAINTING III   3 CREDITS
Advanced students develop a body of work for exhibition and focused inquiry within the painting medium. PREREQUISITES: ART 211, 212 or instructor's permission

ART 214   PAINTING IV   3 CREDITS
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 215   MIXED MEDIA   3 CREDITS
Creative painting with watercolor, gouache, acrylic, inks and dry media, combined with resists and collage.

**ART 220   LANDSCAPE PAINTING &
             DRAWING IN FRANCE   3 CREDITS**
Focuses on specific landscape concerns in the painting media of your choice while working on location in southern France.

**ART 238   PHOTOGRAPHY III
             (FORMERLY PHO 202)   3 CREDITS**
This course further explores photography technique with emphasis on history, theory and assimilation of ideas into the students' creative work. Included is the development of a comprehensive portfolio. PREREQUISITES: ART 138, 139 or demonstrated competency

**ART 239   COLOR PHOTOGRAPHY II
             (FORMERLY PHO 203)   3 CREDITS**
Designed for students who are approaching a personal style and aesthetic in the medium of color photography. It is an extension of Color Photography I. Personal expression will be stressed through individual critiques. PREREQUISITE: ART 140

**ART 240   LARGE FORMAT PHOTOGRAPHY
             (FORMERLY PHO 110)   3 CREDITS**
Introduces the visual aesthetics and techniques of view camera photography. Students receive hands on photographic experience with the 4x5 view camera, process film and produce prints. PREREQUISITE: ART 138

ART 241   JEWELRY & METALWORK III   3 CREDITS
This course focuses upon advanced work and emphasizes experimentation with materials and techniques, individual designs and superior craftsmanship. PREREQUISITE: ART 142

ART 242   JEWELRY AND METALWORK IV   3 CREDITS
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
             (FORMERLY PHO 206)   3 CREDITS**
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. PREREQUISITE: ART 143

**ART 244   DIGITAL PHOTOGRAPHY STUDIO
             (FORMERLY PHO 208)   3 CREDITS**
Introduces digital photography as a fine art medium and develops skills necessary for basic operation of a digital camera and production of digital imagery. PREREQUISITES: ART 138 or instructor's permission

ART 248 DIGITAL DARKROOM
(FORMERLY PHO 226) 3 CREDITS
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. PREREQUISITES: ART 138 or instructor's permission

ART 251 PORTRAIT PHOTOGRAPHY
(FORMERLY PHO 232) 3 CREDITS
Teaches the technical and aesthetic aspects of studio and lo-cation portrait photography. This course explores the personal style of portraiture as a visual language and creative expres-sion. This topic also includes lighting composition, posing and equipment selection. PREREQUISITE: ART 138

ART 252 LANDSCAPE PHOTOGRAPHY
(FORMERLY PHO 209) 2 CREDITS
Focuses on traditional and contemporary approaches to land-scape photography. Examines technical and aesthetic aspects of landscape photography through group discussions, a field study, lectures and print and slide critiques. PREREQUI-SITE: ART 138

ART 253 STUDIO PHOTOGRAPHY
(FORMERLY PHO 211) 3 CREDITS
This course will explore the creative uses of studio lighting from the perspective of fine art photography with an empha-sis on portraiture, three-dimensional object photography and two-dimensional collage photography. PREREQUISITE: ART 138

ART 253 STUDIO PHOTOGRAPHY
(FORMERLY PHO 211) 3 CREDITS
Explores the creative uses of studio lighting from the perspec-tive of fine art photography with an emphasis on portraiture, three dimensional object photography and two dimensional collage photography. PREREQUISITE: ART 138

ART 254 SCULPTING THE FIGURE 1 CREDIT
This is a course for beginning through advanced students in sculpting the human figure using modeling techniques in clay.

ART 256 ADVANCED FIGURE DRAWING II 3 CREDITS
This course provides continuing study of the various methods of drawing the human figure, with emphasis on the descrip-tion of form and individual type. PREREQUISITE: ART 156

ART 261 CERAMICS III 3 CREDITS
This course encourages students to develop an individual style of wheel thrown and hand built ceramic forms with con-tinuing involvement in surface treatment. PREREQUISITE: ART 162

ART 264 MARKETING FOR THE
VISUAL ARTIST 3 CREDITS
This course 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. Theoretical and practical considerations related to portfolio presentation and exhibiting artwork are explored through hands-on activities, readings and discussions.

ART 275-277 SPECIAL TOPICS 0.5–6 VARIABLE CREDITS
Provides the student with a vehicle to pursue in-depth explo-ration of special topics of interest. Includes PHO.

ART 285 INDEPENDENT STUDY 1-6 VARIABLE CREDITS
Provides structured and guided, individualized research that is organized and tailored around the interest needs of the individual student. Includes PHO.

ART 286 INDEPENDENT STUDY 1–6 VARIABLE CREDITS
Provides an opportunity for students to undertake special projects or research in any of the disciplines involving the vi-sual arts, including, but not limited to, gallery or museum ad-ministration, art history, graphic design, or other studio work. Instruction is provided by the instructor and is based entirely on the student's independent study agreement. PREREQUI-SITE: Instructor's permission. Includes PHO.

Astronomy

AST 101 ASTRONOMY I 4 CREDITS
Focuses on the history of astronomy, the tools of the astrono-mer and the contents of the solar system including the plan-ets, moons, asteroids comets and meteoroids. Incorporates laboratory experience.
This course is one of the Statewide Guaranteed Transfer courses.

AST 102 ASTRONOMY II 4 CREDITS
Emphasizes the structure and life cycle of the stars, the sun, galaxies and the universe as a whole, including cosmology and relativity. Incorporates laboratory experience.
This course is one of the Statewide Guaranteed Transfer courses.

AST 275 TOPICS IN ASTRONOMY 1–6 CREDITS
Provides students with a vehicle to pursue in-depth explora-tion of special topics of interest.

AST 285 INDEPENDENT STUDY 1–6 CREDITS
Meets the individual needs of students. Students engage in intensive study or research under the direction of a qualified instructor. PREREQUISITE: Instructor's permission

Automotive Technology

ASE 102 INTRODUCTION TO THE
AUTOMOTIVE SHOP 2 CREDITS
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 CREDITS
Covers basic operation of automotive braking systems. In-cludes operation, diagnosis and basic repair of disc brakes, drum brakes and basic hydraulic systems.

ASE 120 BASIC AUTOMOTIVE ELECTRICITY 2 CREDITS
Introduces automotive electricity and includes basic electrical theory, circuit designs and wiring methods. Focuses on multi-meter usage and wiring diagrams.

ASE 123 AUTOMOTIVE BATTERY, STARTING
AND CHARGING SYSTEMS 2 CREDITS
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. PREREQUISITE: ASE 120

ASE 130 GENERAL ENGINE DIAGNOSIS 2 CREDITS
Focuses on lecture and related laboratory experiences in the diagnosis and necessary corrective actions of automotive en-gine performance factors.

ASE 132   IGNITION SYSTEM AND REPAIR   2 CREDITS
Focuses on lecture and related laboratory experiences in the diagnosis, service, adjustments and repair of various automotive ignition systems. PREREQUISITE: ASE 130

ASE 134   AUTOMOTIVE EMISSIONS   2 CREDITS
Focuses on lecture and laboratory experiences in the diagnosis and repair of automotive emission control systems. PREREQUISITE: ASE 132

ASE 140   SUSPENSION AND STEERING I   3 CREDITS
Focuses on lecture and laboratory experiences in the diagnosis and repair of automotive emission control systems. PREREQUISITE: ASE 132

**ASE 150   AUTOMOTIVE U-JOINT &
            AXLE SHAFT SERVICE   2 CREDITS**
Studies the operating principles and repair procedures relating to axle-shaft and universal joints.

**ASE 151   AUTOMOTIVE MANUAL
            TRANSMISSION/TRANSAXLES   2 CREDITS**
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 CREDITS**
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**
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 CREDITS**
Focuses on lecture and laboratory experiences in the disassembly, diagnosis and reassembly of the automotive engine. Topics include the diagnostic and repair procedures for the engine block and head assemblies.

**ASE 163   AUTOMOTIVE COMPONENT
            REMOVAL AND REPLACEMENT   3 CREDITS**
Practical methods of removal and installation of engines, transmissions, transfer cases, clutch assemblies, bolt and thread repair.

ASE 210   BRAKES II   3 CREDITS
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. PREREQUISITE: ASE 110

ASE 220   SPECIALIZED ELECTRONICS   2 CREDITS
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. PREREQUISITE: ASE 120

ASE 221   AUTOMOTIVE BODY ELECTRICAL   4 CREDITS
Provides a comprehensive study of the theory, operation, diagnosis and repair of vehicle accessories. PREREQUISITE: ASE 120

ASE 231   AUTOMOTIVE COMPUTERS   2 CREDITS
Focuses on lecture and laboratory experiences in the inspection and testing of typical computerized engine control systems. PREREQUISITES: ASE 120, ASE 134, ASE 220

**ASE 233   FUEL INJECTION AND
            EXHAUST SYSTEMS   4 CREDITS**
Focuses on lecture and related laboratory experiences in the diagnosis and repair of electronic fuel injection systems and modern exhaust systems. PREREQUISITES: ASE 120, ASE 134, ASE 231

ASE 235   DRIVEABILITY DIAGNOSIS   1 CREDIT
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 driveability problems. PREREQUISITE: ASE 233

ASE 240   SUSPENSION AND STEERING II   3 CREDITS
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**
Focuses on practical methods of maintaining, servicing and performing minor adjustments on an automatic transmission and transaxle.

**ASE 251   AUTOMATIC TRANSMISSION
            TRANSAXLE DIAGNOSIS AND
            ASSEMBLIES   5 CREDITS**
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. PREREQUISITE: ASE 250; COREQUISITE: ASE 250

**ASE 265   AUTOMOTIVE HEATING
            AND AIR CONDITIONING   5 CREDITS**
Emphasizes lecture and related laboratory experiences in the diagnosis and service of automotive heating and air conditioning systems and their components.

ASE 276   COOPERATIVE EDUCATION   1–9 CREDITS
Develops practical objectives assigned by an automotive employer providing an on-the-job learning experience at an approved automotive repair facility. PREREQUISITE: 24 credit hours of automotive classes

ASE 277   INDEPENDENT STUDY   1–9 CREDITS
Provides laboratory experiences with a variety of work in the areas in which the student received training during previous automotive classes. COREQUISITE: Students must be enrolled in automotive courses totaling at least 6 credit hours.

**ASE 280   CO-OP/INTERNSHIP: BASIC ELECTRICAL
            AND ENGINE PERFORMANCE   1 CREDIT**
Focuses on practical on-the-job, work-related experience that corresponds to the area of study. In this semester, the student takes all related sponsor requirements in (STS) Service Training Standards (General Motors) or (F.A.S.T.) Fundamental Automotive Systems Training (DaimlerChrysler) or others as required by the program track.

**ASE 281   CO-OP/INTERNSHIP; BASIC HEAVY
              DUTY AND POWER TRAIN   1 CREDIT**
Focuses on practical on-the-job, work-related experience that corresponds to the area of study. In this semester, the student takes all related sponsor requirements in (STS) Service Training Standards (General Motors) or (F.A.S.T.) Fundamental Automotive Systems Training (DaimlerChrysler) or others as required by the program track.

**ASE 282   CO-OP/INTERNSHIP:
              GENERAL (SUMMER)   1 CREDIT**
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 (DaimlerChrysler) or others as required by the program track.

**ASE 283   CO-OP/INTERNSHIP: ADVANCED ELECTRICAL
              & ENGINE PERFORMANCE   1 CREDIT**
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 (DaimlerChrysler) or others as required by the program track. The student registers for and takes the (ASE) Automotive Service Excellence-based tests for engine performance and electrical systems.

**ASE 284   CO-OP/INTERNSHIP: ADVANCED
              HEAVY DUTY & POWER TRAIN   1 CREDIT**
Focuses on practical on-the-job, work-related experience that corresponds to the area of study. In this semester, the student takes all related sponsor requirements in (STS) Service Training Standards (General Motors) or (F.A.S.T.) Fundamental Automotive Systems Training (DaimlerChrysler) or others as required by the program track they are enrolled in. The student registers for and takes the ASE-Automotive Service Excellence-based test for brake systems and suspension and steering.

ASE 285   INDEPENDENT STUDY   1–6 CREDITS
Meets the individual needs of students. Students engage in intensive study or research under the direction of a qualified instructor. PREREQUISITE: Instructor's permission

Biology

BIO 104   BIOLOGY: A HUMAN APPROACH   4 CREDITS
Develops a basic knowledge of the structure and function of the human body by studying the body's structure as a series of interrelated systems. Includes cardiovascular, respiratory, digestive, lymphatic, musculoskeletal, nervous, endocrine, reproductive and urinary systems and genetics. Emphasizes disease prevention and wellness. This course includes laboratory experiences.

BIO 105   SCIENCE OF BIOLOGY   4 CREDITS
Designed for non-science students. Examines the basis of biology in the modern world and surveys the current knowledge and conceptual framework of the discipline. Biology as a science–process of gaining new knowledge–is explored as is the impact of biological science on society. This course includes laboratory experiences.
This course is one of the Statewide Guaranteed Transfer courses.

**BIO 111   GENERAL COLLEGE
              BIOLOGY WITH LAB   5 CREDITS**
Examines the fundamental molecular, cellular and genetic principles characterizing plants and animals. Includes cell structure and function and the metabolic processes of respiration and photosynthesis, as well as cell reproduction and basic concepts of heredity. This course includes laboratory experience.
This course is one of the Statewide Guaranteed Transfer courses.

**BIO 112   GENERAL COLLEGE
              BIOLOGY II WITH LAB   5 CREDITS**
A continuation of Biology I. Includes ecology, evolution, classification, structure and function in plants and animals. This course includes laboratory experience. PREREQUISITE: BIO 111
This course is one of the Statewide Guaranteed Transfer courses.

BIO 115   HUMAN GENETICS   3 CREDITS
This course is a study of the inheritance of human traits. It is a non-mathematical study for the non-science major. Topics include Mendelian, non-Mendelian, sex-linked, blood type traits, inherited diseases and ethics. This is an online course.

BIO 143   ECOLOGY OF COLORADO   3 CREDITS
Studies the natural environments in Colorado. Explores the vast natural environments of Colorado and the plants and animals that inhabit the life zones of our majestic plains, mountains and valleys. Discovers the interrelationships of man and his Colorado environment—past, present and future. Through an inquiry approach, the student examines the changing needs and roles of our environments. Field trips include Roxborough State Park, Garden of the Gods, Mt. Evans, Pikes Peak, Deer Creek Canyon, Daniels Park, Barr Lake or others.

**BIO 201   HUMAN ANATOMY AND
              PHYSIOLOGY I   4 CREDITS**
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. PREREQUISITES: BIO 111 or equivalent, or permission of Dept. chair.
This course is one of the Statewide Guaranteed Transfer courses.

**BIO 202   HUMAN ANATOMY AND
              PHYSIOLOGY II   4 CREDITS**
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. PREREQUISITES: BIO 201 or equivalent, or permission of Dept. chair.
This course is one of the Statewide Guaranteed Transfer courses.

BIO 204   MICROBIOLOGY   4 CREDITS
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. PREREQUISITES: BIO 201 or equivalent, or permission of Dept. chair.
This course is one of the Statewide Guaranteed Transfer courses.

COURSE DESCRIPTIONS

BIO 208 GENERAL COLLEGE MICROBIOLOGY 5 CREDITS
Designed for biology and health science majors. Surveys microorganisms with an emphasis on their structure, development, physiology, classification and identification. Includes microbial diversity, functional anatomy, biochemistry, genetics, ecology and disease. Mandatory hands-on laboratory experience covers sterile technique, microscopy, culture procedures and biochemical and genetic analysis.

BIO 220 GENERAL ZOOLOGY 5 CREDITS
Focuses on the study of invertebrate and vertebrate animals and examines structure, evolutionary development, ecology, classification, physiology, reproduction and zoogeography. A survey of zoological diversity emphasizes the characteristics, zoological contributions and classification of animal phyla and major classes. Requires hands-on laboratory and field experience. Designed for biology majors. PREREQUISITES: BIO 111 or equivalent, or permission of department chair.

BIO 221 BOTANY 5 CREDITS
This course is designed for biology majors. It is a study of nonvascular and vascular plants. It emphasizes photosynthetic pathways, form and function, reproduction, physiology, genetics, diversity, evolution and ecology. This course requires mandatory hands-on laboratory and field experience. PREREQUISITES: BIO 111 or equivalent, or permission of department chair.

BIO 224 GENETICS 4 CREDITS
Studies the fundamental laws of heredity and their application to living organisms. Covers the basics of genetics. Focuses on the laws of Mendel, linkage, mutation concepts and molecular genetics. PREREQUISITES: BIO 111 or equivalent or permission of Department chair.

BIO 275 TOPICS IN BIOLOGY 1–6 CREDITS
These short courses will provide a variety of topics and learning activities for the student. Although specific topics are not listed in the catalog, some examples include human sexuality, edible plants, spring wild flowers, identification of birds, identification of trees, human body, biomedicine, sports physiology, nanotechnology, etc. Investigation of contemporary research and current events will be encouraged.

BIO 285 INDEPENDENT STUDY 1–6 CREDITS
Course designed to meet the individual needs of students. PREREQUISITE: Instructor's permission

BIO 287 COOPERATIVE EDUCATION 1–6 CREDITS
Provides an opportunity to gain practical experience in applying occupational skills and/or to develop specific skills in a 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. Attendance at seminars and/or interaction with instructor is required.

Business

BUS 115 INTRO TO BUSINESS 3 CREDITS
Survey of the operation of the American Business System: fundamentals of the economy, careers and opportunities, marketing, management, production, governmental regulations, tools of business and social responsibilities. Guaranteed Business Transfer.

BUS 116 PERSONAL FINANCE 3 CREDITS
Surveys the basic personal financial needs of most individuals. Emphasizes the basics of budgeting and buying, saving and borrowing money, the intricacies of home ownership, income tax and investments and the wise use of insurance, wills and trusts.

BUS 203 INTRO TO INTERNATIONAL BUSINESS 3 CREDITS
Course will provide 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 mechanism 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 216 LEGAL ENVIRONMENT OF BUSINESS 3 CREDITS
This course emphasizes public law, regulation of business, ethical considerations and various relationships which exist within society, government and business. Specific attention will be devoted to economic regulation, social regulation, regulation and laws impacting labor-management issues, environmental concerns and an introduction to contracts. Students will develop an understanding of the role of law in social, political and economic change. Guaranteed Business Transfer.

BUS 217 BUSINESS COMMUNICATION AND REPORT WRITING 3 CREDITS
The course emphasizes effective business writing: letters, memoranda, reports, application letters and resumes. Also, the course will include the fundamentals of business communication and an introduction to international communication. Guaranteed Business Transfer.

BUS 226 BUSINESS STATISTICS 3 CREDITS
Course is intended for business majors and covers statistical study, descriptive statistics, probability and binomial distribution, index numbers, time series, decision theory, confidence intervals, hypothesis testing, testing of two-sample means, chi-square and ANOVA, linear regression and correlation. Guaranteed Business Transfer.

BUS 241 CULTURAL DIVERSITY IN BUSINESS 3 CREDITS
The business person's guide to cultural, travel and information resources needs in the international arena. Specifics in negotiation, communications- verbal and non-verbal, networking and understanding what individual countries' needs are in a business culture.

BUS 275 SPECIAL TOPICS IN BUSINESS 1–6 VARIABLE CREDITS
This course is designed to provide students with a vehicle to pursue special topics of interest in business. The content of this course is designed on an individual needs basis "by arrangement between the instructor and the student." The course may be designed to allow the student to acquire credit for projects in current events. Instructor's approval of material is required.

BUS 285 INDEPENDENT STUDY 1–6 VARIABLE CREDITS
Meets the individual needs of students. Students engage in intensive study or research under the direction of a qualified instructor.

**BUS 287   CO-OP EDUCATION/
                INTERNSHIP   1-6 VARIABLE CREDITS**
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.

Business Technologies

BTE 100   COMPUTER KEYBOARDING   1 CREDIT
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 CREDITS
Designed for students with minimal keyboarding skills. Introduces letters, tables, memos and manuscripts. Emphasizes speed and accuracy. PREREQUISITES: Ability to Keyboard 20 wpm or permission of instructor

BTE 103   KEYBOARDING APPLICATIONS II   3 CREDITS
Reinforces basic keyboarding formats and procedures. Productivity and decision-making skills are exercised. Emphasizes speed and accuracy. PREREQUISITE: BTE 102

BTE 108   TEN-KEY BY TOUCH   1 CREDIT
An introduction to touch control of a ten-key pad. The class emphasizes the development of speed and accuracy using proper technique.

BTE 111   KEYBOARDING SPEEDBUILDING I   2 CREDITS
Designed to increase speed and improve accuracy in keyboarding on the PC through the use of correct techniques and concentrated effort. PREREQUISITES: Ability to keyboard by touch or permission of instructor

BTE 112   KEYBOARDING SPEEDBUILDING II 2 CREDITS
Continues the skill building sets from BTE 111. This course is designed to further increase speed and improve accuracy in keyboarding on the PC through the use of correct techniques and concentrated effort.

**BTE 120   ELECTRONIC OFFICE
                PROCEDURES   2 CREDITS**
Provides instruction in the latest electronic office procedures using business technologies which include: e-mail, FAX, Windows, DOS, presentation graphics, telephone techniques, Internet, electronic calendaring and appointment scheduling

BTE 125   RECORDS MANAGEMENT   3 CREDITS
Instructs on how records are created, stored and retrieved. Covers the basic filing rules—classifying, indexing, coding, storing and retrieving as applied to basic methods—alphabetic, chronological, subject, numeric and geographic. Emphasizes 'hands-on' records management through the use of simulations, which includes manual and/or computer software. PREREQUISITE: Acceptable keyboarding proficiency

**BTE 156   BUSINESS MATHEMATICS
                WITH CALCULATORS   4 CREDITS**
Covers basic business mathematics using the touch system on electronic calculators to solve business problems.

BTE 166   BUSINESS EDITING SKILLS   3 CREDITS
Provides proofreading techniques and reviews spelling, punctuation, grammar and word processing formats on various types of business documents and worksheets.

BTE 202   OFFICE SIMULATION II   3 CREDITS
Provides the student the opportunity to demonstrate and perfect the computer skills, organizational skills and communication skills required to secure employment and/or advancement in the workplace. PREREQUISITES: experience with advanced word processing, spreadsheets, or permission of instructor

**BTE 209   BASICS OF MACHINE
                TRANSCRIPTION   1 CREDIT**
Provides a working knowledge for transcribing from machine dictation using word processing and proficient levels of punctuation, spelling and grammar. PREREQUISITES: Keyboarding and word processing skills or instructor's permission

**BTE 225   ADMINISTRATIVE OFFICE
                MANAGEMENT   3 CREDITS**
Presents new developments, technology, procedures, organization and contemporary terminology used in effective office management. Emphasizes decision making and application of administrative skills.

BTE 238   LEGAL OFFICE PROCEDURES   3 CREDITS
Designed for students who will be working in a legal office either in the private or the public sector. The course covers fundamental office procedures found in both general and specialized law offices.

BTE 275   SPECIAL TOPICS   1-6 CREDITS
Provides students with a vehicle to pursue in-depth exploration of special topics of interest.

BTE 285   INDEPENDENT STUDY 1-6 VARIABLE CREDITS
Course designed to meet the individual needs of students. PREREQUISITE: Instructor's permission

**BTE 287   CO-OP EDUCATION/
                INTERNSHIP   1-6 VARIABLE CREDITS**
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. PREREQUISITE: Instructor's permission

Career Development

PSY 110   CAREER DEVELOPMENT   3 CREDITS
This course assists students in recognizing their career potential, and provides tools for making realistic decisions concerning educational and occupational objectives. This course also helps students develop skills needed for job search, employer search and resume development.

ECG 102   EMPLOYMENT SEMINAR   1 CREDIT
This seminar is designed to assist students in developing skills that are needed in searching for and acquiring a job. Topics include job search, employer research, job application, cover letter, resume development and interviewing.

**ECG 115 PERSONAL GROWTH AND
              CULTURAL AWARENESS   2 CREDITS**
Topics include social class structure in terms of its social, economic and cultural roles. Areas to be discussed include monetary system and handling of finances, dating and marriage, laws and violations, personal hygiene, medical services, course load, Immigration and Naturalization Services, insurance and apartment leases. Course also provides English and math testing.

ECG 285 INDEPENDENT STUDY 1-6 VARIABLE CREDITS
Course designed to meet the individual needs of students.
PREREQUISITE: Instructor's permission

Carpentry

CAR 101 BASIC SAFETY   1 CREDIT
An overview of safety concerns and procedures in the construction field.

CAR 102 HAND AND POWER TOOLS   1 CREDIT
Focuses on basic hand and power tools including stationary tools. Emphasizes a hands-on approach to proper and safe use of these tools as it applies to the construction environment and is taught in conjunction with a lab or framing class.
COREQUISITE: CAR 101

**CAR 105 JOB SITE LAYOUT AND
              BLUEPRINT READING   1 CREDIT**
Introduces blueprint reading and how they apply to the construction site. Includes in-depth introduction to site layout (materials and methods).

CAR 115 FORM & FOUNDATION SYSTEMS   1 CREDIT
Covers materials and methods for concrete forms and foundations. Includes various reinforcement methods such as re-bar and welded-wire fabric.

CAR 121 FLOOR FRAMING   1 CREDIT
Covers framing basics as well as the procedures for laying out and constructing a wood floor using common lumber as well as engineered building materials.

CAR 122 WALL FRAMING   1 CREDIT
Focuses on the procedures for laying out and framing walls and ceilings, including roughing-in door and window openings, construction corners and partition Ts, bracing walls and ceilings and applying sheathing.

CAR 123 ROOF FRAMING   1 CREDIT
Describes the various kinds of roofs and focuses on instructions for laying out rafters for gable roofs, hip roofs and valley intersections. Covers both stick-built and truss-built roofs.

CAR 125 ROOFING MATERIALS METHODS   1 CREDIT
Covers application techniques and estimation of asphalt and wood roofing products and accessories including gutters and flashing.

CAR 130 WINDOWS AND EXTERIOR DOORS 1 CREDIT
Describes the various types of windows, skylights and exterior doors and provides instructions for installing them. Includes instructions for installing weather-stripping and locksets.

CAR 131 EXTERIOR TRIM   1 CREDIT
Teaches cornice and rake construction; corner, window and door trim; installation of soffit, frieze, fascia and similar trim items; and includes estimation and proper selection.

**CAR 135 THERMAL AND MOISTURE
              METHODS AND MATERIALS   1 CREDIT**
This course focuses on selection and installation of various types of insulating materials in walls, floors and attics. Covers the uses and installation practices for vapor barriers and waterproofing materials.

CAR 145 INTERIOR FINISHES–GENERAL   1 CREDIT
Presents an overview of interior finishes. Covers installation and finishing of drywall, suspended ceilings and general painting and other wall covering.

**CAR 146 INTERIOR FINISHES–
              DRYWALL CONSTRUCTION   1 CREDIT**
Covers the use of gypsum wall board and the techniques of concealing joints and fasteners, construction methods, estimation and a variety of texture finishes.

CAR 151 INTERIOR TRIM–DOORS & TRIM 1 CREDIT
Covers interior doors and trim with focus on material choices, methods of work and estimation. Teaches in conjunction with a construction lab experience to provide application of techniques covered in classroom environment.

**CAR 153 INTERIOR TRIM–
              CABINET/COUNTERTOPS   1 CREDIT**
Covers the selection/ installation/terminology of factory built cabinets and countertops. Includes various types and design and examines estimation of cost.

CAR 160 FLOOR FINISHES   1 CREDIT
Covers installation and finishing of hardwood floors, laminate/engineered floors and tile. Includes discussion on advantages and disadvantages of various choices available. PREREQUISITE: Instructor's permission

**CAR 215 FORM AND FOUNDATION
              SYSTEMS II   1 CREDIT**
Builds on course CAR 115 and expands on theories and concepts from the first year class. Offers opportunities to explore more complex systems and form requirements.

CAR 221 ADVANCED FLOOR SYSTEMS   2 CREDITS
Expands upon skills and knowledge learned in CAR 121 and focuses on an in-depth look at floor framing. Allows students to hone skills previously learned. PREREQUISITES: CAR 121 or instructor's permission

CAR 222 ADVANCED WALL SYSTEMS   2 CREDITS
Expands upon those skills and knowledge learned in CAR 122. Covers complex wall framing issues and leadership/foreman responsibilities. PREREQUISITES: CAR 122 or instructor's permission

CAR 223 ADVANCED ROOFING SYSTEMS   2 CREDITS
Builds on skills learned in CAR 123. Offers an opportunity for students to hone skills and apply knowledge to more complex systems of roof framing. PREREQUISITES: CAR 123 or instructor's permission

**CAR 250 ADVANCED INTERIOR
              TRIM–GENERAL   2 CREDITS**
Expands upon the material covered in CAR 150 and includes more advanced techniques and in-depth discussion of various material choices. Covers estimating and efficiency studies.

**CAR 251 ADVANCED INTERIOR
TRIM–DOORS   2 CREDITS**
Expands upon material covered in CAR 151. Includes in-depth study of premium interior doors and trim, including full mortise lock sets, furniture grade trim and techniques for matching existing high-end and antique woodworking. PRE-REQUISITES: CAR 151 or instructor's permission

**CAR 254 ADVANCED INTERIOR
TRIM–SPECIAL   2 CREDITS**
Explores the craftsmanship and fine woodworking involved in many fine homes. Includes mantel and various fireplace designs, custom shelves and closets and custom moulding. PREREQUISITES: CAR 154 or instructor's permission

CAR 275 SPECIAL TOPIC   1–6 CREDITS
Provides students with a vehicle to pursue in-depth exploration of special topics of interest.

Chemistry

CHE 101 INTRO TO CHEMISTRY I   5 CREDITS
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. PREREQUISITE: MAT 060
  This course is one of the Statewide Guaranteed Transfer courses.

CHE 102 INTRO TO CHEMISTRY II   5 CREDITS
Focuses on introductory organic and biochemistry (sequel to Introduction to Chemistry I). This course includes the study of hybridization of atomic orbitals for carbon, nomenclature of both organic and biochemical compounds, physical and chemical properties of various functional groups of organic chemistry and physical and chemical properties of biochemical compounds along with their biochemical pathways. Laboratory experiments are included.
  This course is one of the Statewide Guaranteed Transfer courses.

CHE 111 GENERAL COLLEGE CHEMISTRY I 5 CREDITS
Focuses on basic chemistry and measurement, matter, chemical formulas, reactions and equations, stoichiometry and thermochemistry. This course covers the development of atomic theory culminating in the use of quantum numbers to determine electron configurations of atoms and the relationship of electron configuration to chemical bond theory and molecular orbital theory. The course includes gases, liquids and solids and problem-solving skills are emphasized through laboratory experiments. PREREQUISITES: 1 year high school chemistry or equivalent. COREQUISITES: MAT 121 or instructor's permission
  This course is one of the Statewide Guaranteed Transfer courses.

CHE 112 GENERAL COLLEGE CHEMISTRY II 5 CREDITS
Presents concepts in the areas of solution properties, chemical kinetics, chemical equilibrium, acid-base and ionic equilibrium, thermodynamics, electrochemistry, nuclear chemistry and organic chemistry. This course emphasizes problem solving skills and descriptive contents for these topics. Laboratory experiments demonstrate qualitative and quantitative analytical techniques. PREREQUISITE: CHE 111
  This course is one of the Statewide Guaranteed Transfer courses.

CHE 211 ORGANIC CHEMISTRY I   5 CREDITS
Focuses on compounds associated with the element carbon including structure and reactions of aliphatic hydrocarbons and selected functional group families. The course covers nomenclature of organic compounds, stereochemistry, reaction mechanisms such as SN1, SN2, E1 and E2. Laboratory experiments demonstrate the above concepts plus the laboratory techniques associated with organic chemistry. PREREQUISITE: CHE 112

CHE 212 ORGANIC CHEMISTRY II   5 CREDITS
Continues the investigation into the chemistry of carbon-based compounds, their reactions and synthesis including the structure, physical properties, reactivities and synthesis of organic functional groups not covered in the first semester. The course explores functional groups including alcohols, ethers, aromatics, aldehydes, ketones, amines, amides, esters and carboxylic acids and the reactions and reaction mechanisms of aromatic compounds. An introduction to biochemical topics may be included if time permits. Laboratory experiences demonstrate the above concepts and the laboratory techniques associated with organic chemistry. PREREQUISITE: CHE 211

**CHE 275 SPECIAL TOPICS IN
CHEMISTRY   1-6 VARIABLE CREDITS**
Provides students with a vehicle to pursue in-depth exploration of special topics of interest.

CHE 285 INDEPENDENT STUDY 1-6 VARIABLE CREDITS
Provides the opportunity for the highly-motivated student to engage in intensive study and research on a specified topic under the direction of a faculty member. Allows a student to complete a course in a semester when the course has not been offered or has been canceled. The option to make independent study available is at the discretion of qualified faculty and the department chair. The student is limited to the number of independent study courses taken per semester. PREREQUISITE: Instructor's permission

Computer Aided Design/Drafting

CAD 101 COMPUTER AIDED DRAFTING I   3 CREDITS
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. PREREQUISITES: Students must have Windows File Management skills to create file folders, rename files, delete files, copy and move files.

CAD 102 COMPUTER AIDED DRAFTING II   3 CREDITS
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. PREREQUISITE: Students must have Windows File Management skills to create file folders, rename files, delete files, copy and move files.

CAD 105 AUTOCAD FOR INTERIORS   4 CREDITS
This course will provide an opportunity for the Interior Design student to obtain the basic skills necessary to operate Computer Aided Design (CAD) software. AutoCAD software will be emphasized. PREREQUISITES: CIS 118; IND 100, 111, 112 & 114

CAD 201 COMPUTER AIDED
DRAFTING/CUSTOM   3 CREDITS
This course allows the student an opportunity to develop an understanding and skill in the use of the AutoCAD program as used on a micro-based CAD/D system. Students will demonstrate their competency by plotting completed projects. PREREQUISITES: CAD 102 or instructor's permission

CAD 202 COMPUTER AIDED DRAFTING/3D   3 CREDITS
This course examines 3-D drawing techniques. Students will develop 3-D drawings and construct 3-D models. Student drawings will be plotted. Mechanical and architectural applications will be emphasized. PREREQUISITES: CAD 102 or instructor's permission

CAD 217 3D STUDIO VIZ   3 CREDITS
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. PREREQUISITES: CAD 202 or 225

CAD 225 ARCHITECTURAL
DESKTOP/AUTODESK   3 CREDITS
This course provides students with the software application training in Architectural desktop necessary to produce 3D Architectural drawings utilizing students' 2D drafting skills. PREREQUISITES: CAD 102 or instructor's permission

NOTE: The student MUST have a solid working knowledge of AutoCAD 2000 or AutoCAD 2000i, especially the use of polylines, XREFs and plotting. The instructor will NOT provide remedial instruction on these subjects. A working knowledge of AutoCAD 3D principles and techniques is recommended, but is not required. Additionally, the student MUST have a solid working knowledge of one of the following Microsoft Windows operating systems: Windows 98, Windows NT 4.0 or Windows 2000. Among the required skills, the student must know how to create, move, rename and delete files using the Windows Explorer. This is also an area where the instructor will NOT provide remedial instruction.

CAD 231 LAND DESKTOP/AUTODESK   3 CREDITS
Focuses on the basic command structure and applications of civil mapping concepts utilizing a civil software, to include data collection files, symbols libraries, setting attributes, COGO, layer control, surface modules, road calc and site design. All course work is completed on a CAD system. PREREQUISITES: CAD 102 or instructor's permission.

CAD 249 AUTOLISP PROGRAMMING   3 CREDITS
This course will introduce the students to the development of the AutoLisp programming language. The course covers techniques and concepts needed to utilize the AutoCad software programming capabilities. PREREQUISITE: CAD 102

CAD 254 MECHANICAL DESKTOP/
AUTODESK   3 CREDITS
This course examines 3D Parametric Solid modeling techniques. Students will construct solid models and generate 2D mechanical drawings utilizing these models. PREREQUISITES: CAD 102 or instructor's permission.

CAD 275 SPECIAL TOPICS   1-6 VARIABLE CREDITS
Special Topics courses may be offered to provide students with an opportunity to study special areas in the discipline.

Course content will be determined by the instructor with a complete syllabus each time the course is offered.

CAD 285 INDEPENDENT STUDY 1-6 VARIABLE CREDITS
Course designed to meet the individual needs of students. PREREQUISITE: Instructor's permission.

Computer Information Systems

CIS 103   LEARNING WINDOWS   1 CREDIT
Provides foundational skills in Windows operating system for personal use. This course is designed for the more mature learner and/or those who wish to advance at a slower pace.

CIS 111   INTRODUCTION TO MICROSOFT
ONENOTE   1 CREDIT
Provides introduction to using Microsoft OneNote software to take as well as organize notes. The student will use OneNote to integrate notes with other applications and collaborate with others.

CIS 115   INTRO TO COMPUTER
INFORMATION SYSTEMS   3 CREDITS
This is an overview of the needs for and roles of computer information systems. Emphasis is on computer requirements in organizations, history, hardware functions, programming, systems development and computer operations. Hands-on experience with applications and programming will be included.

CIS 118   INTRO TO PC APPLICATIONS   3 CREDITS
This course introduces computer concepts and components as well as application suite software and the Internet. Includes descriptions of and hands-on experience with word processing, spreadsheets, databases, operating environments and other common PC packages. PREREQUISITES: CIS 103, CIS 115 or familiarity with MS Windows.

CIS 124   INTRO TO OPERATING SYSTEMS   3 CREDITS
Introduces concepts, terminology and hands-on skills in the use of DOS and Windows. Emphasizes navigation, file manipulation, file creation and troubleshooting.

CIS 128   WINDOWS COMPLETE   3 CREDITS
Introduces the functions and capabilities of Microsoft Windows. Includes configuring and modifying the operating system environment.

CIS 130   INTRO TO INTERNET   1 CREDIT
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
(MS WORD 2003)   3 CREDITS
Explores a complete array of word processing skills. The skills needed to create, edit, format and print 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. PREREQUISITE: CIS 128

CIS 136   MICROSOFT OFFICE SPECIALIST
CERTIFICATION: WORD   1 CREDIT
Prepares students for the Microsoft Office Specialist Certification examination for Word. Students will use software to determine strengths and weaknesses and elect to review and prepare for either the Core or Expert level certification exam.

The actual Microsoft Office Specialist certification exam is not included in this course. PREREQUISITES: CIS 135 or instructor permission based on prior experience

CIS 139   MICROSOFT FRONTPAGE   3 CREDITS
FrontPage provides a tool for designing and building web pages that are very easy to use and have a pleasing look. The student will develop web pages using the Microsoft Front-Page program. Use of images, forms, frames, tables, templates and layers will be covered.

CIS 140   MICROSOFT OUTLOOK   1 CREDIT
This course introduces the functions used in Microsoft Outlook including e-mail messages, calendar, contacts, tasks, journals and notes.

CIS 145   COMPLETE PC DATABASE   3 CREDITS
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 149   MICROSOFT OFFICE SPECIALIST
          CERTIFICATION PREP: ACCESS   1 CREDIT**
Prepares students for the Microsoft Office Specialist certification examination for Access. Students use software to determine strengths and weaknesses and elect to review and prepare for the Core level Certification exam. PREREQUISITES: CIS 145 or instructor permission based on prior experience

**CIS 155   PC SPREADSHEET CONCEPTS:
          EXCEL   3 CREDITS**
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 159   MICROSOFT OFFICE SPECIALIST
          CERTIFICATION: EXCEL   1 CREDIT**
Prepares students for the Microsoft Office Specialist certification examination for Excel. Students use software to determine strengths and weaknesses and elect to review and prepare for either the Core or Expert level Certification exam. The MOUS test is not included in this course. PREREQUISITES: CIS 155 or Instructor permission

CIS 161   PRESENTATION GRAPHICS   1 CREDIT
Introduces the development of presentation graphics materials including graphs, charts, illustrations and diagrams. Emphasizes effective communication. PREREQUISITES: CIS 103 or familiarly with MS Windows.

CIS 167   DESKTOP PUBLISHING   3 CREDITS
Introduces the concepts and applications for desktop publishing using word processing software. Emphasizes page layout and design with techniques for incorporating text and graphics and final production of printed documents. PREREQUISITE: Knowledge of word processing

**CIS 169   MICROSOFT OFFICE SPECIALIST
          CERTIFICATION: POWERPOINT   1 CREDIT**
Prepares students for the Microsoft Office Specialist certification examination for PowerPoint. Students use software to determine strengths and weaknesses and elect to review and prepare for the Core level Certification exam. PREREQUISITES: CIS 161 or instructor's permission based on prior experience

**CIS 202   AUTOMATED PROJECT
          MANAGEMENT: MS PROJECT   3 CREDITS**
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.

CIS 218   ADVANCED PC APPLICATIONS   3 CREDITS
This course covers the advanced capabilities of a PC software applications suite. Emphasis is placed on solving business problems by integrating data from all of the software applications that facilitate the production of useful information. Printed documents, reports, slides and forms are produced to communicate information. PREREQUISITES: CIS 118 or CIS 161, 145, 155 and CIS 135 or equivalent experience

CIS 220   FUNDAMENTALS OF UNIX (LINUX) 3 CREDITS
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 221   UNIX SHELL SCRIPTING (LINUX) 3 CREDITS
Continues building upon the skills and commands covered in CIS 220, Fundamentals of UNIX. An emphasis is made on more advanced shell scripting techniques utilizing pipes, advanced filters, control structures, argument passing, quoting, text processing and file processing.

**CIS 222   UNIX SYSTEM ADMINISTRATION
          (LINUX)   3 CREDITS**
Introduces the UNIX/Linux operating system and covers the skills required to install, configure and operate a UNIX/Linux system. PREREQUISITES: CIS 220, 232

**CIS 240   DATABASE DESIGN AND
          DEVELOPMENT   3 CREDITS**
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 245   DATA MODELING & RELATIONAL
          DATABASES   3 CREDITS**
Introduces a systematic approach to database development using entity-relationship models and relational database design. Students learn how to interpret and create ER models and first-cut database designs based on business information requirements. PREREQUISITE: Instructor's permission

**CIS 246   ORACLE DATABASE
          ADMINISTRATION I   4 CREDITS**
Provides a foundation in basic Oracle architecture, storage structure and database administration tasks. Emphasizes the knowledge and skills to create databases and data dictionary views and to manage Oracle instances, tables, tablespaces, data files, control files, redo log files and rollback segments. PREREQUISITES: CIS 240 or instructor's permission

**CIS 252   QUERYING A MICROSOFT SQL SERVER
          2000 WITH TRANSACT-SQL   3 CREDITS**
Provides students with the technical skills required to write basic Transact-SQL queries for Microsoft SQL. PREREQUISITES: Instructor's approval

This course is designed for those students taking classes through ACC's Corporate Learning Division and additional

charges may apply. For more information, please call 303-734-3701.

CIS 266   TOPICS IN COMPUTING   3 CREDITS
Explores social, ethical and legal issues related to computer use in business and within an international context. Incorporates some of the philosophical challenges posed by emerging technologies.

**CIS 267   MANAGEMENT OF
             INFORMATION SYSTEMS   3 CREDITS**
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 AND
             DESIGN I   3 CREDITS**
Introduces the student to the materials, techniques, procedures and human interrelations involved in developing computer information systems. Topics covered include the systems approach, fact gathering techniques, forms design, input/output, file design, file organization, various charting techniques, system audits on controls, project management, implementation and evaluation.

CIS 287   CO-OP EDUCATION   3 CREDITS
This course is designed to provide students an opportunity to gain practical experience in applying their occupational skills and/or to develop specific skills in a practical work setting. The instructors will work with the student to select an appropriate work site, establish learning objectives and to coordinate learning activities with the employer or work site supervisor. Attendance at seminars and/or interaction with the instructor is required.

Computer Networking

CNG 101   INTRO TO NETWORKING   3 CREDITS
Focuses on underlying concepts of data communications, telecommunications, telecommunications and networking. Emphasizes the terminology and technologies in current network environments and provides a general overview of the field of networking as a basis for continued study in the field.

CNG 102   LOCAL AREA NETWORKING   3 CREDITS
Introduces Local Area Networking. Focuses on discussions and demonstrations of planning, installing and supporting networks. PREREQUISITES: CNG 101 or instructor's permission

CNG 103   WIDE AREA NETWORKS   3 CREDITS
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. PREREQUISITES: CNG 102 or instructor's permission

CNG 104   INTRO TO TCP/IP   3 CREDITS
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. PREREQUISITE: CNG 102

CNG 108   NETWORK ANALYSIS AND DESIGN 3 CREDITS
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 CREDITS
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 122   COMPUTER TECHNICIAN II: A+   4 CREDITS
Focuses on operating systems as well as installation of modems, tape backups, CD-ROM drives and SCSI subsystems. Covers operating systems, Windows 9x, Windows NT and Windows 2000 installation, configuration and upgrading. Includes laser printers and backup power systems. This course prepares the student for the CompTIA A+ OS Technologies Exam. PREREQUISITES: CNG 121 or instructor's approval

**CNG 123   NETWORK SERVER BASICS
             SERVER +   3 CREDITS**
Provides students who are preparing for roles as network support technicians with skills training in the support of multi-processor computers and high capacity data storage systems typical of servers used in medium to large-scale networks. Prepares students to take the CompTIA Server+ certification exam.

This course is designed for those students taking classes through ACC's Corporate Learning Division and additional charges may apply. For more information, please call 303-734-3701.

CNG 124   NETWORKING I: NETWORK +   3 CREDITS
Provides students with the knowledge necessary to understand, identify and perform necessary tasks involved in supporting a network. Covers the vendor-independent networking skills and concepts that affect all aspects of networking, such as installing and configuring the TCP/IP. This course also prepares students for the Networking II: Network + course. Students taking this course may be required to undergo a background check at the student's expense.

CNG 125   NETWORKING II: NETWORK +   3 CREDITS
Continues to provide students with the knowledge necessary to implement and support a network. Focuses on the vendor-independent networking skills and concepts that affect all aspects of networking. The Networking I and II: Network + courses prepare students for the Network + certification.

CNG 129   NETWORK CABLING   2 CREDITS
Prepares the student to install and troubleshoot cable, connectors, connecting blocks, patch panels and related hardware as needed to support a local area network.

**CNG 131   NETWORK SECURITY
             FUNDAMENTALS   3 CREDITS**
This course is designed to meet the increasing needs of individuals and organizations to understand, prepare for, respond to and recover from threats to infrastructures. Students will be provided with a comprehensive awareness of existing and potential security threats, vulnerabilities and defensive methods so critical for today's business and technology professionals.

Successful completion of this course will prepare the student for the CompTIA Security + exam.

Students taking this course may be required to undergo a background check at the student's expense.

CNG 136 GUIDE TO DISASTER RECOVERY 3 3 CREDITS
Presents methods to identify vulnerabilities and take appropriate countermeasures to prevent and mitigate failure risks for an organization. It will take an enterprise-wide approach to developing disaster recovery plans.

CNG 137 I-NET+ 3 CREDITS
i-Net+ provides the student with the skills necessary to pursue a career as an Internet specialist. This course prepares the student to take the CompTIA i-Net+ certification exam. PREREQUISITE: CNG 125

CNG 211 WINDOWS XP CONFIGURATION 3 CREDITS
Provides students with the knowledge and skills necessary to address the implementation and desktop support needs of customers who are planning to deploy and support Microsoft Windows XP Professional in a variety of network operating system environments. PREREQUISITES: CNG 124 or instructor's permission

CNG 212 MANAGE A MS WINDOWS SERVER ENVIRONMENT 4 CREDITS
This course provides students with the knowledge and skills that are required to manage accounts and resources, maintain server resources, monitor server performance and safeguard data in a Microsoft Windows Server environment. (Exam 70-290) PREREQUISITES: CNG 124 or instructor's permission

CNG 213 IMPLEMENTING AN MS WINDOWS NETWORK INFRASTRUCTURE 4 CREDITS
This course is for support professionals who are new to Microsoft Windows 2000 and will be responsible for installing, configuring, managing and supporting a network infrastructure that uses the Microsoft Windows 2000 Server products. It also provides students with the prerequisite knowledge and skills required for course CNG 214 Implementing and Administering Windows 2000 Directory Services. PREREQUISITES: CNG 212 or instructor's permission

CNG 214 PLAN A MS WINDOWS SERVER NETWORK INFRASTRUCTURE 4 CREDITS
Provides students with the knowledge and skills necessary to plan and maintain a Windows Server network infrastructure. Students will learn to plan optimize and troubleshoot a TCP/IP physical and logical network, routing, Dynamic Host Configuration Protocol (DHCP), Domain Name System (DNS) Windows Internet Naming Service (WINS) and IPSec network access. PREREQUISITES: CNG 213 or instructor's permission

CNG 215 MANAGING A MICROSOFT WINDOWS NETWORK ENVIRONMENT 3 CREDITS
Provides the knowledge required to implement, manage and troubleshoot existing network and server environments based on the Microsoft Windows 2000 platform. These skills are generally required in medium to large size organizations that maintain 200 to 26,000 user desktops and servers, spanning 2 to 100 physical locations via Large Area Networks (LANs) and the Internet or Intranets. PREREQUISITES: CNG 212 or instructor's permission

CNG 216 PLAN A MS WINDOWS SERVER ACTIVE DIRECTORY INFRASTRUCTURE 4 CREDITS
This course provides students with the knowledge and skills

to successfully plan, implement and troubleshoot a Microsoft Windows Server Active Directory service infrastructure. The course focuses on a Windows Server directory service environment, including forest and domain structure; Domain Name System (DNS); site topology and replication; organizational unit structure and delegation of administration; Group Policy; and user, group and computer account strategies. (Exam 70-294) PREREQUISITES: CNG 212 or instructor's permission

CNG 221 DESIGN MS WINDOWS ACTIVE DIRECTORY & NETWORK INFRASTRUCTURE 3 CREDITS
Provides students with the knowledge and skills to design an Active Directory service and network infrastructure for a Microsoft Windows Server environment. The course is intended for systems engineers who are responsible for designing directory service and/or network infrastructures. PREREQUISITES: CNG 215 or instructor's permission

CNG 222 DESIGNING A WINDOWS SECURE NETWORK 3 CREDITS
Provides students with the knowledge and skills necessary to design a security framework for small, medium and enterprise networks by using Microsoft Windows technologies. Students learn to secure access to Local Network Users, Remote Users and Remote Offices, Partners and to secure access between private and public networks. PREREQUISITES: CNG 212 or instructor's permission

CNG 223 DESIGNING A WINDOWS NETWORK INFRASTRUCTURE 3 CREDITS
Provides students with information and skills needed to create a networking services infrastructure design that supports the required network applications. Each module provides a solution based on the needs of the organization. Covers Windows network solutions that require a single technology, such as DHCP, to provide Internet Protocol (IP) address configurations support. Examines several technology options such as Open Shortest Path First (OSPF), Routing Information Protocol (RIP) and Internet Group Management Protocol (IGMP) to design an IP routing scheme. Prepares student to take the Microsoft Certified Systems Engineer Exam 70-221. PREREQUISITES: CNG 214 or instructor's permission

CNG 224 MICROSOFT WINDOWS WIRELESS NETWORK 3 CREDITS
Provides the student with the Microsoft official curriculum from the Microsoft Regional Academy. Offers detailed instruction on the foundation concepts and technologies of wireless data networking. Upon completion of this course, students are prepared to take the Certified Wireless Network Administrator (CWNP) Certification Exam. PREREQUISITES: CNG 124 or instructor's permission

CNG 225 WIRELESS NETWORK SECURITY 3 CREDITS
This course offers detailed instruction on the security issues related to wireless data networking. Topics include vulnerabilities and attacks, hardware and software solutions, prevention and countermeasures and implementation and management. Upon completion of this course, students should be prepared to take the certified Wireless Security Expert (CWSE) Certification Exam. PREREQUISITES: CNG 224, CWNA Certification, or equivalent documented knowledge and skill level.

CNG 226 IMPLEMENTING AND MANAGING MS EXCHANGE 3 CREDITS
Provides the knowledge and skills necessary to install, configure and administer Microsoft Exchange 2000. Students learn

to use Exchange 2000 in medium to very large computing environments that typically have multiple physical locations, mixed client connection protocols and Internet messaging connectivity. PREREQUISITES: CNG 212 or instructor's permission

CNG 227 ADMINISTERING A MICROSOFT SQL SERVER DATABASE 3 CREDITS
Provides students with the knowledge and skills required to install, configure, administer and troubleshoot the client-server database management system of Microsoft SQL Server. PREREQUISITE: CNG 214

CNG 230 FAST TRACK CCNA 1 & 2 3 CREDITS
Presents the first of two parts of a CCNA certification preparation course for students who already have a solid networking background. It will consist of internetworking, Internet protocols, IP subnetting, introduction to the Cisco IOS, IP routing, EGRIP and OSPF.

CNG 231 FAST TRACK CCNA 3 & 4 3 CREDITS
Presents the second of two parts of the CCNA certification preparation course for students who have completed the CCNA I course. It will consist of VLSM, Layer 2 switching, VLANs, ACLs, PPP, Frame Relay, DDR and ISDN.

CNG 239 DEPLOYING & MANAGING MICROSOFT INTERNET SECURITY AND ACCELERATION SERVER 2000 3 CREDITS
This course provides students with the knowledge and skills to deploy and manage Microsoft Internet Security and Acceleration (ISA) Server 2000 in an enterprise environment. Prepares students to take the Windows 2000 exam #70-227. PREREQUISITES: CNG 215 and CNG 213 or instructor's permission

CNG 241 CISCO SECURE PIX FIREWALL ADVANCED 3 CREDITS
This task-oriented course teaches the knowledge and skill needed to describe, configure, verify and manage the PIX Firewall product family and the Cisco IOS Firewall feature set. It prepares students to take the Cisco Information Systems Security (INFOSEC) Professional exam CSPFA 642-521. PREREQUISITES: CURRENT CISOC CCNA CNG 263 and CNG 231 or instructor's permission

CNG 242 CISCO SECURE VIRTUAL PRIVATE NETWORKS (CSVPN) 3 CREDITS
This task-oriented course teaches the knowledge and skills needed to describe, configure, verify and manage the Cisco VPN 3000 Concentrator, Cisco VPN Software Client and Cisco VPN 3002 Hardware Client feature set. It prepares the student to take the Cisco Information Systems Security (INFOSEC) Professional Exam CSVPN 642-511. PREREQUISITES: Current Cisco CCNA CNG 263 and CNG 231 or instructor's permission

CNG 243 CISCO SECURE INTRUSION DETECTION SYSTEMS (CSIDS) 3 CREDITS
This task-oriented course teaches the knowledge and skills needed to design, install and configure a Cisco Intrusion Protection solution for small, medium and enterprise networks. The course covers CIDS detection platforms including the 4200 series Sensors and the Catalyst 6000 series Intrusion Detection Module (IDSM). The Cisco IDS Host Sensor is introduced but is not discussed in detail. The Cisco Secure Intrusion Detection Host Sensor (CSIHS) course is recommended for those students seeking in-depth discussions and hands-on lab exercises. The IDS Device Manager and IDS

Management center are used to configure and manage Cisco IDS Sensor platforms. The IDS Event Viewer and IDS Security Monitor Center are used to view and respond to IDS alarms. This course prepares the student to take the Cisco Information Systems Security (INFOSEC) Professional Exam CSIDS 9E0-100. PREREQUISITES: Current Cisco CCNA CNG 263 and CNG 231 or instructor's permission

CNG 244 SECURING CISCO IOS NETWORK (SECUR) 3 CREDITS
This task-oriented course teaches the knowledge and skills needed to secure Cisco IOS router networks. It prepares the student to take the Cisco Information Systems Security (INFOSEC) Professional Exam SECUR 642-501. PREREQUISITES: CURRENT Cisco CCNA CNG 263 and CNG 231 or instructor approval

CNG 251 ANTI VIRUS CONCEPTS 3 CREDITS
Prepares the student for virus eradication. The student will learn how viruses work, how they are designed and how viruses are written. Course will focus on virus eradication and cleaning. PREREQUISITES: CNG 131 or instructor's permission

CNG 252 SECURITY MODELING 3 CREDITS
Designs various security models using rights and permissions. Covers Microsoft, Cisco, Novell Netware and UNIX and Standard based security calls. Focuses on security theory with some practical security applications. PREREQUISITES: CNG 131 or instructor's permission

CNG 253 FIREWALLS AND HOW THEY WORK 3 CREDITS
Introduces students to the design and implementation of firewalls. Covers such topics as firewalls using Cisco Routers, Microsoft server platform and UNIX platform. Focuses on how firewalls function in these environments and the basic steps to plan and implement firewalls. PREREQUISITES: CNG 131 or instructor's permission

CNG 254 DATA ENCRYPTION 3 CREDITS
Exposes the student to data encryption models. Examines the differences between data storage including Microsoft, Novell Netware and UNIX. Includes encryption and data transmission. Covers encryption over various networks including the Internet. PREREQUISITES: CNG 131 or instructor's permission

CNG 255 INDUSTRY CERTIFICATION A+ 3 CREDITS
Provides the student with a comprehensive preparation for recognized industry certification exams in personal computer and network technology. Features alternative methods for delivery of instruction, including self-paced instruction assisted by technology.

CNG 257 NETWORK DEFENSE AND COUNTER MEASURES 3 CREDITS
Examines the tools, techniques and technologies used in the technical securing of information assets. This course provides in-depth information of the software and hardware components of Information Security and Assurance. Topics include firewall configurations, hardening UNIX and NT servers, Web and distributed systems security and specific implementation of security modes and architectures. The curriculum maps to the Security Certified Network Professional (SCP) Network Defense and Countermeasures exam.

CNG 258 COMPUTER FORENSICS 4 CREDITS
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 CREDITS
Introduces network fundamentals, the OSI model and industry standards, IP addressing (subnet masks) and basic network design. PREREQUISITES: CNG 124 or instructor's permission

CNG 261 CISCO NETWORK ASSOCIATE II   5 CREDITS
Focuses on router theory and technologies, including router configurations, protocols, network management and introductory LAN switching. PREREQUISITE: CNG 260

CNG 262 CISCO NETWORK ASSOCIATE III   5 CREDITS
Focuses on advanced routing and switching configurations, LAN switching, network management and advanced network design. PREREQUISITE: CNG 261

CNG 263 CISCO NETWORK ASSOCIATE IV   5 CREDITS
Focuses on project-based learning, including advanced network design projects and advanced management projects. This course and CNG 260, 261 and 262 prepare students for the Cisco Certified Network Associate (CCNA) certification exam. PREREQUISITES: CNG 262

CNG 265 CISCO NETWORK PROFESSIONAL I   5 CREDITS
Focuses on using Cisco routers connected in LANs and WANs typically found at medium to large network sites. Emphasizes selection and implementation of the appropriate Cisco IOSTM services required to build a scalable, routed network. Includes theories and tasks that network managers and administrators need to use and perform when managing access and controlling overhead traffic in growing, routed networks once connectivity has been established. This course is the first in a series of four semesters pertaining to CCNP Certification. PREREQUISITES: Current Cisco CCNA Certification or Department Approval

CNG 266 CISCO NETWORK PROFESSIONAL II   5 CREDITS
Focuses on using and configuring Cisco routers remotely connected in WANs found in medium to large network sites. Emphasizes how to select WAN topologies, devices, protocols and implement the appropriate Cisco IOS services required for remotely accessing network resources. Includes selecting WAN components, configuring asynchronous modems, PPP, Frame Relay and ISDN protocols, NAT, X.25; TACACS+ Server, Dial Backup and Managing Network Performance with Queuing and Compression together with requisite router configurations. This is the second course in a series of four semesters pertaining to CCNP Certification. PREREQUISITE: CNG 265

CNG 267 CISCO NETWORK PROFESSIONAL III   5 CREDITS
Focuses on using and configuring Cisco routers and switches to connect LANs and WANs found at medium to large network sites. Covers the selection and implementation of the appropriate Cisco IOS services required to build scalable, routed, switched and multi-layered switched networks. Includes theories and tasks that network managers and administrators need to perform when managing access and controlling overhead traffic in growing, routed networks once connectivity has been established. This is the third course in a series of four semesters pertaining to CCNP Certification. PREREQUISITES: CNG 265, CNG 266

CNG 268 CISCO NETWORK PROFESSIONAL IV   5 CREDITS
Focuses on methodologies that provide systematic and efficient approaches to troubleshooting and support of networks and network components. Emphasizes troubleshooting tools, software testing products, protocol overviews, TCP/IP features, LAN switching, VLAN broadcasts and security, routing and switching architectures, Frame Relay, ISDN, Novel IPX, AppleTalk, EIGRP, OSPF and BGP. This is the fourth course in a series of four semesters pertaining to CCNP Certification. PREREQUISITES: CNG 265, CNG 266 and CNG 267

Computer Science

CSC 116 LOGIC AND PROGRAM DESIGN   3 CREDITS
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 INTRO TO PROGRAMMING   3 CREDITS
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 150 VISUAL BASIC PROGRAMMING   3 CREDITS
This course introduces programming and applications development for the Microsoft Windows Programming environment using Visual Basics for Windows. PREREQUISITES: CSC 116 or equivalent experience or instructor's permission

CSC 151 ADVANCED VISUAL BASIC PROGRAMMING   3 CREDITS
This course is a continuation of CSC 150. You will develop more involved applications, work with more advanced controls and deal with more advanced topics. PREREQUISITES: CSC 150 or instructor's permission

CSC 154 INTRODUCTION TO MS VISUAL BASIC.NET (OOP)   3 CREDITS
Provides students with the knowledge and skills needed to develop application 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. PREREQUISITES: CSC 116 or instructor's permission

CSC 157 ADVANCED VISUAL BASIC .NET PROGRAMMING   4 CREDITS
This course continues the structured Algorithm Development and problem solving techniques begun in CSC 154. The more advanced features of the Visual Basic. NET programming languages are introduced. This course will explore the relationships between VISUAL BASIC.NET and the .NET framework and introduces some important .NET services. Collections, copying and comparing objects and how the .NET framework interfaces to XML will be introduced.

Content will focus on writing clear, properly structured and well-documented programs using VISUAL BASIC. NET and object oriented methodology. PREREQUISITE: CSC 156

CSC 160 COMPUTER SCIENCE I (JAVA OR C++ OR C) 4 CREDITS

This course will introduce students to the discipline of computer science. Topics covered will include algorithm development, data representation, arithmetic and logical expressions, sub-programs and input/output operations using a structured programming language. PREREQUISITES: CSC 116 and MAT 106 or instructor's permission

CSC 161 COMPUTER SCIENCE II (JAVA OR C++ OR C) 4 CREDITS

This course continues the structured algorithm development and problem solving techniques begun in CSC 160. Data structures will be emphasized. Intensive computer laboratory experience required. 45 hours lecture, 30 hours lab. PREREQUISITES: CSC 106

CSC 225 COMPUTER ARCHITECTURE ASSEMBLY LANGUAGE PROGRAMMING 4 CREDITS

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: WINDOWS 3 CREDITS

Students are introduced to the C programming language, which is a "mid-level" language whose economy of expression and data manipulation features allow a programmer to deal with the computer at a "low level." PREREQUISITES: MAT 121 and any programming language course

CSC 233 OBJECT-ORIENTED PROGRAMMING IN C++ 4 CREDITS

Students are introduced to the C++ programming language. All syntactical components of the language are covered, including arrays, structures, pointers, functions and classes. Content will focus on writing clear, properly structured and well-documented programs using C++ and object oriented methodology. PREREQUISITES: CSC 116 and MAT 106 or instructor's permission

CSC 234 C++ PROGRAMMING 4 CREDITS

This is an advanced level computer programming course. Although it teaches C++ as a complete language, it presumes knowledge of at least one similar language such as "C" or Pascal. Prior knowledge of C at an advanced level as well as fundamental concepts of algorithms and data structures is highly recommended. PREREQUISITES: CSC 233 or instructor's permission

CSC 236 C# PROGRAMMING 4 CREDITS

Students are introduced to the C# programming language. All syntactical components of the language are covered, including arrays, structures, functions and classes. Content will focus on writing clear, properly structured and well-documented programs using C# and object oriented methodology. PREREQUISITES: Familiarity with the C++ programming language or permission of the instructor.

CSC 237 ADVANCED C# PROGRAMMING 4 CREDITS

This course continues the structured algorithm development and problem solving techniques begun in CSC 236. Students are introduced to more advanced features of the C# programming language. This course will explore the relationships between C# and the .NET Framework and introduces some important .NET services. Students will learn collections, copying and comparing objects and how the .NET framework interfaces to XML. Content will focus on writing clear, properly structured and well documented programs using C# and object oriented methodology. PREREQUISITES: familiarity with the C# Programming Language or instructor's permission

CSC 240 JAVA PROGRAMMING 3 CREDITS

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. PREREQUISITES: MAT 106 or equivalent experience, or permission of instructor

CSC 241 ADVANCED JAVA PROGRAMMING 3 CREDITS

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. PREREQUISITES: CSC 240 or permission of instructor

CSC 250 PROGRAMMING WITH MS ADO.NET 3 CREDITS

Teaches students to build data-centric applications and Web services with Microsoft ADO.NET, Microsoft SQL Server 2000 and the Microsoft.NET Framework. Includes designing and building data-centric, distributed applications. PREREQUISITES: CSC 154, 236 or equivalent knowledge and experience.

CSC 251 PROGRAMMING IN VISUAL BASIC.NET 3 CREDITS

Provides students with the knowledge and skills needed to develop Microsoft .NET-based applications by using Visual Basic .NET. Focuses on Visual Basic .NET (a significant upgrade to Visual Basic) and incorporates new features and framework goals of the .NET architecture. Enables the student to create enterprise applications for the .NET Platform and to create more traditional Visual Basic applications that take advantage of the enhancements to the language. PREREQUISITES: CSC 154 or equivalent knowledge and experience.

CSC 252 MS VISUAL BASIC.NET APPLICATION DEVELOPMENT 3 CREDITS

Provides Visual Basic programmers with the skills required to create Windows Forms applications by using the .NET Framework. Covers major topics for Windows client application programming on the .NET Framework. Includes Windows Forms, GDI+, simple data access, interoperating with unmanaged code, threading and asynchronous programming issues, simple remoting, Web access, XML Web services consumption, debugging, security and deployment issues for desktop applications. PREREQUISITES: CSC 251 or equivalent knowledge and experience.

CSC 253 MS ASP.NET WEB APPLICATION DEVELOPMENT 4 CREDITS

Teaches programmers and beginning Web developers the fundamentals of Web application site implementation by using Microsoft ASP.NET and Microsoft Visual Basic.NET. Focuses on using the Microsoft Visual Studio.NET environment and the Microsoft.NET platform to create an ASP.NET Web application that delivers dynamic content to a web site. PREREQUISITE: Experience in programming in Microsoft's .NET framework.

CSC 261 PROGRAMMING WITH C# 3 CREDITS
Provides students with the knowledge and skills they need to develop C# applications for the Microsoft.NET Platform. Focuses on C# program structure, language syntax and implementation details. PREREQUISITE: Instructor's permission

CSC 262 MS C#.NET APPLICATION DEVELOPMENT 3 CREDITS
Provides C# programmers with the skills required to create Windows Forms applications by using the .NET Framework. Covers the major topics for Windows client application programming on the .NET Framework. Includes Windows Forms, GDI+, simple data access, interoperating with unmanaged code, threading and asynchronous programming issues, simple remoting, Web access, Web Services consumption, debugging, security and deployment issues for desktop applications. PREREQUISITE: CSC 261

This course is designed for those students taking classes through ACC's Corporate Learning Division and additional charges may apply. For more information, please call 303-734-3701.

CSC 263 MS ASP.NET XML WEB SERVICES DEVELOPMENT 3 CREDITS
Provides students with the knowledge and skills that are required to develop XML Web services-based solutions to solve common problems in the distributed application domain. Focuses on using Microsoft Visual Studio .NET, Microsoft ASP.NET and Universal Description, Discovery and Integration (UDDI) to enable students to build, deploy, locate and consume Extensible Markup Language (XML) Web services. PREREQUISITE: CSC 262

This course is designed for those students taking classes through ACC's Corporate Learning Division and additional charges may apply. For more information, please call 303-734-3701.

CSC 269 PROGRAMMING IN PERL 2 CREDITS
This course introduces the knowledge and skills necessary to be able to write programs in the perl programming language. Will offer a brief introduction of writing CGI programs using Perl. PREREQUISITE: Previous programming experience.

Computer–Web Based

CWB 106 MASTERING THE WEB 3 CREDITS
Focuses on creating and managing web sites, the tasks and tools involved in building and maintaining a web site and the web administrator's responsibilities and challenges. PRE-REQUISITES: XML

CWB 110 COMPLETE WEB AUTHORING 3 CREDITS
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 (FRONTPAGE) 3 CREDITS
Introduces advanced web editing techniques to control web page layout. In addition students learn to create and manage web sites using a Graphical Web Design program such as FrontPage or DreamWeaver. Provides tools used for designing and building web pages that are easy to use and have a pleasing look. The student will develop web pages using the Microsoft FrontPage program. Use of images, forms, frames, tables, templates and layers will be covered.

CWB 164 XML 3 CREDITS
Provides students with an introduction to the XML language 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. PREREQUISITES: CWB 110 or instructor's permission

CWB 205 COMPLETE WEB SCRIPTING 3 CREDITS
Explores the complete set of web scripting skills needed to develop Web Applications. Includes variables, data types, arithmetic operations, logical operations, looping, creating and reading cookies, creating an array, displaying data based on a cookie value, setting flags, working with frames, creating objects in a hidden frame, using the History Object, writing HTML to another window, determining browser and detecting keystrokes.

Convergent Technologies

CTC 107 INSTALLER 3 CREDITS
Teaches the proper procedures for performing aerial, underground and interior CA TV drop installations.

This course is only available for students who are in a degree and/or certificate program through the partnership between Jones NCTI and ACC. Additional charges may apply to these courses. For additional information please call 303-797-5989.

CTC 108 BROADBAND CABLE OVERVIEW 1 CREDIT
This course provides technical, sales/marketing, customer service, dispatch and management personnel with general understanding of CATV System equipment operation and terminology.

This course is only available for students who are in a degree and/or certificate program through the partnership between Jones NCTI and ACC. Additional charges may apply to these courses. For additional information please call 303-797-5989.

CTC 109 INSTALLER TECHNICIAN 4 CREDIT
This course teaches an experienced installer the CATV signal level fundamentals, test equipment, signal leakage detection procedures and servicing single and multiple dwelling unit drops.

This course is only available for students who are in a degree and/or certificate program through the partnership between Jones NCTI and ACC. Additional charges may apply to these courses. For additional information please call 303-797-5989.

CTC 111 SERVICE TECHNICIAN 4 CREDITS
This course teaches a trained Jones NCTI Installer Technician the basic characteristics and functions of the feeder line system active and passive devices, the fundamentals of cable powering, basic test equipment operation, signal leakage basics, coaxial cable and connectorization and an overview of fiber optics. The study of AC electronic theory provides the foundation for understanding the lessons on coaxial cable, passive devices, amplifiers and cable powering. PREREQUISITE: CTC 109

This course is only available for students who are in a degree and/or certificate program through the partnership between Jones NCTI and ACC. Additional charges may apply to these courses. For additional information please call 303-797-5989.

CTC 113 SYSTEM TECHNICIAN   4 CREDITS
This course teaches a trained Jones NCTI Service Technician how to activate, test and troubleshoot the RF trunk system. It covers RF trunk and distribution amplifier theory of operation. It includes testing and measurement standards and procedures.

This course is only available for students who are in a degree and/or certificate program through the partnership between Jones NCTI and ACC. Additional charges may apply to these courses. For additional information please call 303-797-5989.

CTC 116 FIBER OPTICS TECHNICIAN   3 CREDITS
Provides information on fiber optic system overview, applications, rackmount optical transmitters and receivers, forward and return optical node operations and activation, fiber optic design topologies, fiber design cost studies, fiber optic system design, fiber construction, fiber tests and documentation and optical test equipment.

This course is only available for students who are in a degree and/or certificate program through the partnership between Jones NCTI and ACC. Additional charges may apply to these courses. For additional information please call 303-797-5989.

**CTC 117 COMPUTERS AND
          BROADBAND MODEMS   3 CREDITS**
Introduces personal computer hardware and software to use as an interface device. Focuses on the fundamentals of personal computers and requires no prior technical background or experience. Explains the operation of cable modems and how they work in a broadband cable network. Covers the client-server functions of CMTS and cable modems. Provides course material that is appropriate as a reference tool to understand more about personal computer concepts and terminology. Enables individuals to gain a comprehensive understanding of personal computer technology and how the PC works with broadband modems. COREQUISITE: Employment in the Broadband Industry

This course is only available for students who are in a degree and/or certificate program through the partnership between Jones NCTI and ACC. Additional charges may apply to these courses. For additional information please call 303-797-5989.

CTC 118 BROADBAND DIGITAL INSTALLER 3 CREDITS
Introduces the basics of digital video and high-speed Internet access services by presenting the typical features and functions of digital set-top terminals and cable modems. Covers computer hardware and operating system setup basics. Enables students to learn how to certify the reliability of the drop prior to performing the extensive step-by-step installation procedures. Teaches how to effectively educate customers to use these new digital services reducing unnecessary repeat service calls and improving customer satisfaction. Covers installation procedures for twisted-pair inside wiring and constant bit rate telephony equipment. Incorporates information on communication service competitors to answer customer questions regarding competitive technologies offering similar digital services. COREQUISITE: Employment in the Broadband Industry

This course is only available for students who are in a degree and/or certificate program through the partnership between Jones NCTI and ACC. Additional charges may apply to these courses. For additional information please call 303-797-5989.

CTC 119 DSL INSTALLATION   3 CREDITS
Introduces the basic operations of the telephone network, DSL technology, today's computer system hardware and software and the Internet. Describes the procedures of installing twisted-pair inside wiring and connecting the premises to the phone network. Examines techniques on the proper use and maintenance of the tools necessary for installation and examines the step-by-step process of installing internal and external DSL modems. Provides practical techniques for applying customer service skills and instructing new customers how to get the most from their DSL service and the Internet. COREQUISITE: Employment in the Broadband Industry

This course is only available for students who are in a degree and/or certificate program through the partnership between Jones NCTI and ACC. Additional charges may apply to these courses. For additional information please call 303-797-5989.

**CTC 120 UNDERSTANDING VOICE
          AND DATA NETWORKS   3 CREDITS**
Introduces telecommunications technology and terminology and develops a broad knowledge base for a career in the telecom industry. Requires no prior technical background or experience in the field. Enables a student to gain a comprehensive understanding of telecommunications technologies and their applications and implications for business. Combines computer, electrical engineering and business aspects of telecommunications, providing a thorough, up-to-date presentation of the latest technologies as well as practical industry applications. COREQUISITE: Employment in the Broadband Industry

This course is only available for students who are in a degree and/or certificate program through the partnership between Jones NCTI and ACC. Additional charges may apply to these courses. For additional information please call 303-797-5989.

**CTC 121 UNDERSTANDING
          BROADBAND TECHNOLOGY   3 CREDITS**
Provides a thorough grounding in the fundamental concepts of broadband technology. Includes an overview of the underlying technologies of the entire broadband network from signal source to the customer premises. Focuses on a review of digital video, telephony and high-speed data services. Addresses safety and regulatory issues. COREQUISITE: Employment in the Broadband Industry

This course is only available for students who are in a degree and/or certificate program through the partnership between Jones NCTI and ACC. Additional charges may apply to these courses. For additional information please call 303-797-5989.

**CTC 123 BASIC BROADBAND
          TROUBLESHOOTING   3 CREDITS**
Teaches students to diagnose and resolve technical problems for customers over the phone. Provides a thorough understanding of the drop system, interconnection between devices and other problems faced by broadband customers. Trains customer service representatives to distinguish problems that can be solved over the phone and not require a technician to be dispatched. COREQUISITE: Employment in the Broadband Industry

This course is only available for students who are in a degree and/or certificate program through the partnership between Jones NCTI and ACC. Additional charges may apply to these courses. For additional information please call 303-797-5989.

**CTC 124 TROUBLESHOOTING
ADVANCED SERVICES 3 CREDITS**

This course helps make the transition from analog to digital services troubleshooting. This course teaches how digital signals are transported, explains the use of test equipment used to test digital signals in the cable plant and teaches specific techniques for troubleshooting digital video, telephony and cable modem services. COREQUISITE: Employment in the Broadband Industry

This course is only available for students who are in a degree and/or certificate program through the partnership between Jones NCTI and ACC. Additional charges may apply to these courses. For additional information please call 303-797-5989.

**CTC 125 HIGH SPEED DATA
CUSTOMER SERVICE 2 CREDITS**

Focuses on high-speed data services, equipment, operations and troubleshooting. Covers cable modems and personal computer hardware 92 and software used in high-speed data services. Provides an understanding of data networking, the Internet and how cable modems interface with it, TCP/IP and the open system interconnection model, cable modem termination systems and the return paths effect on high speed data service. COREQUISITE: Employment 93 in the Broadband Industry

This course is only available for students who are in a degree and/or certificate program through the partnership between Jones NCTI and ACC. Additional charges may apply to these courses. For additional information please call 303-797-5989.

**CTC 126 ADVANCED HIGH SPEED
DATA CUSTOMER SERVICE 3 CREDITS**

Covers cable modems, computer systems and troubleshooting of personal computers. Emphasizes the boot process, software, the system board, memory management, floppy and hard drives, input/output devices, return path fundamentals and data communications. Explores and compares the technology related to wide area networks and broadband access including packet switching, frame relay, SMDS, ISDN, SONET and ATM. PREREQUISITE: CTC 125 High Speed Data Customer Service; COREQUISITE: Employment in the Broadband Industry

This course is only available for students who are in a degree and/or certificate program through the partnership between Jones NCTI and ACC. Additional charges may apply to these courses. For additional information please call 303-797-5989.

**CTC 127 FIBER INSTALLATION AND
ACTIVATION 2 CREDITS**

Fiber Installation and Activation provides the student with current information on the development of fiber in optical broadband networks. The student will learn the basics of light transmission through optical fibers, how fibers are combined into optical cables and how fiber networks are designed and constructed. Network architecture, topology and design will be covered. Training will also prepare the student to splice fibers using mechanical and fusion methods. The course teaches the topics required to provide the student with the ability to install and activate fiber optic networks. It assumes previous knowledge and experience in RF Broadband Technology. COREQUISITE: Employment in the Broadband Industry

This course is only available for students who are in a degree and/or certificate program through the partnership between Jones NCTI and ACC. Additional charges may apply to these courses. For additional information please call 303-797-5989.

**CTC 128 TESTING AND MAINTENANCE
FOR FIBER TECHNICIANS 2 CREDITS**

Testing and Maintenance for Fiber Technicians provides the student with an understanding of the application of fiber optic theory on the job. The course concentrates on the test equipment and procedures necessary to perform test and turn-up for new Fiber Optic links, troubleshoot service outages and restoring fiber optic links to their original standards. The course also describes the process of Fiber Optic restoration planning and implementing preventive maintenance regiments in an HFC network. COREQUISITE: Employment in the Broadband industry

This course is only available for students who are in a degree and/or certificate program through the partnership between Jones NCTI and ACC. Additional charges may apply to these courses. For additional information please call 303-797-5989.

CTC 150 DATA COMMUNICATIONS 3 CREDITS

This course will provide the student with an overview of network systems. The architecture of each network, transmission modes, functions, uses, protocols and advantages of each will be discussed in detail. Synchronous as well as Asynchronous data systems will also be addressed.

CTC 160 CABLE COMMUNICATIONS 3 CREDITS

This course will provide the student with an overview of cable communication systems and their attributes. Areas of discussion will include: architecture, satellite applications, coaxial cable attributes, typical systems from tap to TV and common construction practices. Applicable math skills will also be included. PREREQUISITES: ELT 106, ELT 110 or instructor's permission

CTC 161 VOICE COMMUNICATIONS 3 CREDITS

Provides students with an overview of telephone communication systems. Addresses the components and processes used in a public switched network, residence, business and special telephone service, class 5 switching centers, outside telephone plants, video delivery and video conferencing. Operation and application of pagers will also be covered. PREREQUISITES: ELT 106, ELT 110 or instructor's permission

**CTC 162 TELECOMMUNICATION CONSTRUCTION
& OSHA SAFETY 3 CREDITS**

Emphasizes the constant awareness of safety issues. Enables the student to understand safety issues for situations in buildings, in the field and vehicles. PREREQUISITES: ELT 106, ELT 110 or instructor's permission

CTC 163 VIDEO TECHNOLOGY 3 CREDITS

This course will provide the students with an overview of video technology including the principles, colored as well as black and white signal construction, fundamentals of color and color mixing and color signal construction. Wave form analysis will be discussed as well as both interlaced and non-interlaced scanning schemes. Distortion, signal processing, measurements and video data compression will also be covered. PREREQUISITES: ELT 106, ELT 110 or instructor's permission

CTC 165 ADVANCED TECHNICIAN 3 CREDITS

This course teaches a trained Jones NCTI System Technician how to set up, operate and maintain the headend. The study of communication electronics theory provides a foundation for understanding broadcast TV, microwave, satellite and data communication systems. Essentials for headend equipment setup and maintenance, video baseband and RF FCC

proof-of-performance tests and NCTA Recommended Practices provide the necessary technical knowledge to operate and maintain sophisticated broadband cable system headends. The assumed cable system knowledge/skills for enrolling in the advanced Technician course are those in the Jones NCTI system Technician course. PREREQUISITE: Employment in the Broadband Industry

This course is only available for students who are in a degree and/or certificate program through the partnership between Jones NCTI and ACC. Additional charges may apply to these courses.

CTC 166   EMERGING TECHNOLOGIES   2 CREDITS
This course will provide the student with an opportunity to study concepts and applications of related technologies that are being reviewed and experimented with today. The course will be supplemented with presentations by industry experts. Student presentations or research on projects will address areas of interest in developing technologies. Applications and implications of new discoveries will be discussed.

CTC 215   OPTICAL NETWORKS   3 CREDITS
This course is an introduction to optical networks, which is the next great bandwidth provider. It addresses optical networking from a practical point-of-view, making it clear that although optical networks offer enormous bandwidth solutions, they are not the only answers to evolving transport challenges. This course describes and compares alternatives such as ISDN, xDSL, cable modems and wireless local loop offerings such as LMDS, MMDS< and satellite and copper-based transport schemes, such as T1, T3 SONET and SDH. PREREQUISITE: CTC 161

CTC 220   REGULATIONS AND STANDARDS   3 CREDITS
This course will provide the students with an overview of the regulations and standards that pertain to technicians in the communication industries. Regulated as well as unregulated business operations will be discussed. The function and control of local regulatory agencies will be addressed. PREREQUISITES: CTC 150, 161 215

CTC 240   TELECOMMUNICATIONS ENGINEERING OUTSIDE PLANT   3 CREDITS
This course covers the components of engineering the telephone outside plant. It covers the fundamentals of transmission, resistance design and distribution cable design in serving a customer area. PREREQUISITES: CAD 101, CTC 161, CTC 215

CTC 255   FIELD STUDIES: ENGINEERING PLANNING   3 CREDITS
The student will have the basic knowledge to articulate the tactical planning functions performed within capacity provisioning. The student will be able to access and apply the various tactical planning tools and data elements to supporting documentation. PREREQUISITE: CTC 240

CTC 267   TELECOMMUNICATIONS INSTALLATIONS, SPLICING & REPAIR   3 CREDITS
This course provides students with an understanding in the basic phone installation from pedestal to customer premise equipment (CPE). Troubleshooting and testing skills to maintain the integrity of the phone service are included. Students will also receive instruction in print reading, safety, cable locating, fault location and splicing. PREREQUISITES: CTC 161, 215

CTC 275   SPECIAL TOPICS   3 CREDITS
Provides students with opportunities to study topics of special interest that are not addressed in the standard CTC program. Contact the CTC department chair for additional details.

CTC 280   CO-OP EDUCATION CAREER TRAINING   3 CREDITS
This course is designed to provide students an opportunity to explore a career. The purpose of the course is to acquaint students with the tasks and working environment of specific occupations. The instructors will work with the student to select an appropriate work site, establish learning objectives, and to coordinate learning activities with the employer or work site supervisor. Attendance at seminars and/or interaction with the instructor is required.

Criminal Justice

CRJ 101   BASIC LAW ENFORCEMENT ACADEMY I   6 CREDITS
The curriculum is designed to conform to P.O.S.T. 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. PREREQUISITE: Permission of Academy Director

CRJ 102   BASIC LAW ENFORCEMENT ACADEMY II   12 CREDITS
The curriculum is designed to conform to P.O.S.T. 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. PREREQUISITE: Permission of Academy Director

CRJ 103   BASIC LAW ENFORCEMENT ACADEMY III   2 CREDITS
The curriculum is designed to enhance 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. PREREQUISITE: Permission of Academy Director

CRJ 104   BASIC LAW ENFORCEMENT ACADEMY IV   1 CREDIT
The curriculum is designed to enhance 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. PREREQUISITE: Permission of Academy Director

CRJ 105   BASIC LAW   8 CREDITS
The curriculum is designed to conform to P.O.S.T. 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 United States Constitution, arrest, search and seizure, interrogation and confessions, rules of evidence, Colorado Criminal Code, Colorado Children's code, Colorado Traffic Code, Liquor code and controlled substances. PREREQUISITE: Permission of Academy Director

CRJ 106   ARREST CONTROL TECHNIQUES   6 CREDITS
Provides the skills, knowledge and abilities required to deploy defensive tactics and maintain arrest control. Students

will demonstrate those skills as outlined and required by the P.O.S.T. "Arrest Control Training Program."

CRJ 107   LAW ENFORCEMENT DRIVING   3 CREDITS
Provides the skills, knowledge and abilities required for operation of a law enforcement vehicle. Defensive driving will be stressed. Students will demonstrate skills by driving a law enforcement vehicle under simulated law enforcement conditions while attending the Law Enforcement Training Academy or the P.O.S.T. required Mini Skills Academy.

CRJ 108   FIREARMS   3 CREDITS
The skills, knowledge and abilities necessary to safely use police firearms will be discussed. Students will demonstrate skills by firing weapons on a firing range. The student will demonstrate basic safety techniques and will explain the firearms role in the continuum of force.

**CRJ 110   INTRODUCTION TO
            CRIMINAL JUSTICE   3 CREDITS**
A study of the agencies and processes involved in the criminal justice system-legislature, the police, the prosecutor, the public defender, the courts and corrections. 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 CREDITS
Legal definition of crime and defenses, purposes and functions of the substantive criminal law, historical foundations, the limits of the criminal law.

CRJ 112   PROCEDURAL CRIMINAL LAW   3 CREDITS
This course covers constitutional and procedural considerations affecting arrest, search and seizure and includes analysis of criminal cases from arrest through final appeal.

CRJ 125   LAW ENFORCEMENT OPERATIONS 3 CREDITS
An in-depth examination of the complexity and multidimensional aspects of the police role and career, police discretion, police values and culture in modern America. The role and functions of the police in occupational, social, political and organizational context.

CRJ 135   JUDICIAL FUNCTION   3 CREDITS
Examines the criminal court system and criminal process with an analysis of the major judicial decision-makers, i.e., prosecutors, defense attorneys, judges and the discretionary aspects of adjudication.

**CRJ 140   CRIME ANALYSIS I: FUNDAMENTALS
            OF CRIME ANALYSIS   3 CREDITS**
An in-depth introduction to the underlying concepts of crime analysis, understanding criminal behavior, including modus operandi and crime pattern theory. The course will emphasize the foundations of critical thinking and reading comprehension.

CRJ 145   CORRECTIONAL PROCESS   3 CREDITS
Post-conviction correction process; the development of a correctional philosophy, theory and practice; a description of institutional operation, programming and management; community-based corrections, probation and parole.

**CRJ 200   CRIME ANALYSIS II: TACTICAL
            CRIME ANALYSIS   3 CREDITS**
The application of research methods where students will learn to interpret the data and the statistics involved in crime analysis, including descriptive, inferential and multivariate statistics. PREREQUISITE: CRJ 140

CRJ 210   CONSTITUTIONAL LAW   3 CREDITS
A study of the powers of government as they are allocated and defined by the United States Constitution; intensive analysis of United States Supreme Court Decisions.

**CRJ 220   HUMAN RELATIONS/
            SOCIAL CONFLICTS   3 CREDITS**
Highlights the environmental, organizational and sociopsychological dimensions of social control. Includes the study of individual attitudes, beliefs and behavior involved in role conflicts, community relations and conflict management in a social structure.

CRJ 228   CRIME ANALYSIS III: MAPPING   3 CREDITS
This course will focus on using temporal and spatial analysis by utilizing crime mapping software (GIS) to identify, demographic and trend analysis and redistricting. PREREQUISITES: CRJ 140, GIS 101 or instructor's permission

CRJ 230   CRIMINOLOGY   3 CREDITS
Examination of the question of crime causation from legal, social, political, psychological and theoretical perspectives; history and development of criminology.

**CRJ 254   CRIME ANALYSIS IV: COMPUTER
            APPLICATIONS   3 CREDITS**
This course will focus on using readily available computer software (especially Microsoft Office) to assist in different facets of crime analysis. PREREQUISITES: CRJ 140, CIS 118 or instructor's permission

**CRJ 265   CRIME ANALYSIS V:
            PROBLEM SOLVING   3 CREDITS**
Practical application and implementation of problem-oriented policing, including but not limited to COMPSTAT and the behind-the-scenes analysis work that is needed to make problem-oriented policing happen. PREREQUISITES: CRJ 140, GIS 101 or instructor's permission

**CRJ 266   CRIME ANALYSIS VI: CO-OPERATIVE
            EDUCATION   6 CREDITS**
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 the student to select an appropriate work site, establish learning objectives and to coordinate learning activities with the employer or work site supervisor. PREREQUISITE: Instructor's permission

CRJ 275   SPECIAL TOPICS   1-6 VARIABLE CREDITS
Special Topics courses may be offered to provide students with an opportunity to study special areas in the discipline. Course content will be determined by the instructor with a complete syllabus each time the course is offered.

CRJ 285   INDEPENDENT STUDY 1-6 VARIABLE CREDITS
Course designed to meet the individual needs of students. PREREQUISITE: Instructor's permission

CRJ 287   CO-OPERATIVE EDUCATION   6 CREDITS
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 the student to select an appropriate work site, establish learning objectives and to coordinate learning activities with the employer or work site supervisor. PREREQUISITES: CRJ 266 and instructor's permission

COURSE DESCRIPTIONS

Drafting

DRT 101   TECHNICAL DRAFTING I   3 CREDITS
Introduces the student to basic engineering graphics technology principles through development of basic entry-level drafting skills. Enables the student to develop skills in sketching, reading drafting scales, interpreting line types, lettering techniques, geometric construction, orthographic projection and drawing reproduction.

DRT 102   TECHNICAL DRAFTING II   3 CREDITS
Introduces students to auxiliary views, pictorials, sections, threads and fasteners, springs and intersections and developments. PREREQUISITES: DRT 101, CAD 102, or permission of instructor

DRT 105   BLUEPRINT READING   3 CREDITS
Focuses on interpretation of shop and working drawings. Examines drawing formats, view selection, hardware, dimensioning and tolerancing systems using the ANSI standards and symbols. Addresses interpretation, calculation and placement of tolerances.

DRT 109   DESCRIPTIVE GEOMETRY   3 CREDITS
Enables the student to develop the ability to visualize points, lines and surfaces in space, to relate them to each other and to apply these relationships in the solution of drafting assignments. PREREQUISITES: DRT 102 or instructor's permission

Early Childhood Education

Arapahoe Community College has articulation agreements dealing with early childhood and elementary education teacher preparation. Contact Linda Forrest at 303-797-5784 for information.

ECE 101   INTRO TO EARLY
**   CHILDHOOD EDUCATION   3 CREDITS**
This course provides an introduction to Early Childhood Education. Topics include the eight key areas of professional knowledge: Child Growth & Development; Health, Nutrition & Safety; Developmentally Appropriate Practices; Guidance; Family & Community Relationships; diversity; Professionalism; Administration & Supervision. Ages addressed: birth through age 8. ECE 101 is a pre or corequisite for ECE 102

ECE 102   INTRODUCTION TO EARLY
**   CHILDHOOD LAB   3 CREDITS**
This course includes a classroom seminar and a 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. Ages addressed: birth through age 8. Background checks required by the Colorado Department of Human Services may be needed. PREREQUISITES: ECE 101 or COREQUISITE ECE 101

ECE 103   GUIDANCE STRATEGIES
**   FOR CHILDREN   3 CREDITS**
Explores guidance theories, applications, goals, techniques and factors that influence expectations, classroom management issues and prosocial skills. Addresses ages birth through age 8.

ECE 111   INFANT AND TODDLER
**   THEORY AND PRACTICE   3 CREDITS**
This course presents an overview of theories, applications (including observations) and issues pertinent to infant and toddler development in group and/or family settings. State requirements for licensing, health, safety and nutrition issues are included. Ages addressed: prenatal through age 2.

ECE 112   INTRODUCTION TO INFANT/
**   TODDLER LAB TECHNIQUES   3 CREDITS**
This course includes a classroom seminar and a placement in an infant and/or toddler setting. The supervised placement provides the student with the opportunity to observe, to practice appropriate interactions and to develop effective guidance and nurturing techniques with infants and/or toddlers. Ages addressed: prenatal through age 2. PREREQUISITES: ECE 111, health screening, including TB and HiB tests

ECE 125   SCIENCE/MATH AND THE
**   YOUNG CHILD   3 CREDITS**
Examines theories of cognitive development as a framework for conceptualizing the way young children acquire scientific and mathematical skills, concepts and abilities. Enables students to research and develop appropriate individual and group scientific/mathematical activities for young children.

ECE 126   ART AND THE YOUNG CHILD   2 CREDITS
This course prepares students to plan and implement a comprehensive and developmentally appropriate art program for young children. Students will also investigate the development of self-taught art techniques in young children.

ECE 127   MUSIC/MOVEMENT FOR
**   THE YOUNG CHILD   1 CREDIT**
Focuses on the purposes of incorporating music and movement into the early childhood curriculum. Through active participation with hands-on experiences, students work with the concepts of age and developmental appropriateness when designing fun activities with both subjects.

ECE 155   FAMILY AND PARENTING ISSUES   1 CREDIT
Explores the types of family organizations, functional roles of family members, different parenting styles and other issues impacting children's development that families and parents are experiencing in today's society.

ECE 175   SPECIAL TOPICS   1–6 CREDITS
Explores current topics, issues and activities related to one or more aspects of the early childhood profession.

ECE 178   WORKSHOP   1–6 CREDITS
Provides students with an experiential learning opportunity. COREQUISITE: Seminar ECE 179

ECE 179   SEMINAR   1–6 CREDITS
Provides students with an opportunity to examine aspects of early childhood education in detail. COREQUISITES: Workshop ECE 178

ECE 185   INDEPENDENT STUDY   1–3 CREDITS
Focuses on structured, guided and individualized research that is organized and tailored around the interests and needs of the individual student. PREREQUISITE: When appropriate COREQUISITE: When appropriate

ECE 187   CO-OP EDUCATION   1–12 CREDITS
A college-to-work based experience that draws on combined efforts of educators and employers to produce outcomes related to student career objectives.

ECE 205   NUTRITION, HEALTH AND SAFETY   3 CREDITS
This course focuses on nutrition health and safety as key factors for optimal growth and development of young children. Content includes nutrient knowledge, menu planning, food

program participation, health practices, management and safety, appropriate activities and communication with families. Ages addressed: prenatal through age 8.

ECE 220 CURRICULUM DEVELOPMENT: METHODS AND TECHNIQUES 3 CREDITS
This course provides an overview of early childhood curriculum development. The content includes processes for planning and implementing developmentally appropriate environments, materials and experiences and quality in early childhood programs. Ages addressed: birth through age 8.

ECE 225 LANGUAGE AND COGNITION FOR THE YOUNG CHILD 3 CREDITS
This course examines theories of cognitive and language development as a framework for conceptualizing the way children acquire thinking skills. The content includes observing, planning, facilitating creative representation and evaluating strategies within the context of play. Content areas are language, science and math, problem solving and logical thinking. Ages addressed: birth through age 8.

ECE 226 CREATIVITY AND THE YOUNG CHILD 3 CREDITS
This course provides an emphasis on encouraging and supporting creative self expression and problem solving skills in children. The content explores creative learning theories and research. It focuses on developmentally appropriate curriculum strategies in all developmental domains. Ages addressed: birth through age 8.

ECE 228 LANGUAGE AND LITERACY 3 CREDITS
Presents strategies for optimum language development. Supports children's language and literacy (including English language learners) in home, classroom and community settings. Provides appropriate teacher/children) verbal interactions, classroom environments and activities. Addresses ages birth through age 8.

ECE 240 ADMINISTRATION OF EARLY CHILDHOOD CARE AND EDUCATION PROGRAMS 3 CREDITS
This course examines Colorado's minimal licensing requirements, as well as optimal standards pertaining to the operation of programs for young children. Course content focuses on new directors' administrative skills and role as a community advocate for young children.

ECE 241 ADMINISTRATION: HUMAN RELATIONS FOR THE EARLY CHILDHOOD PROFESSIONS 3 CREDITS
This course focuses on the human relations component of an early childhood professional's responsibilities. Course content includes director-staff relationships, staff development, leadership strategies, parent-professional partnerships and community interaction.

ECE 260 EXCEPTIONAL CHILD 3 CREDITS
This class presents an overview of typical and atypical developmental progression. The content 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. Ages birth through age 8. PREREQUISITES: ECE 226 or PSY 238

ECE 275 SPECIAL TOPICS I 1–6 VARIABLE CREDITS
Seminars on special topics that relate to the area of early childhood education. Topics may be general to be of interest to educators or specific to parents, family child care providers, infant-toddler caregivers, preschool/child care educators, kindergarten and/or primary level educators.

ECE 278 WORKSHOP 1–6 VARIABLE CREDITS
Provides students with an experiential learning opportunity. COREQUISITE: Seminar ECE 279 when appropriate

ECE 279 SEMINAR 1–6 VARIABLE CREDITS
Provides students with an opportunity to examine aspects of early childhood education in detail. COREQUISITE:: When appropriate

ECE 285 INDEPENDENT STUDY 1–6 VARIABLE CREDITS
Course designed to meet the individual needs of students. PREREQUISITES: Instructor's permission

ECE 287 CO-OP EDUCATION 1–12 CREDITS
A college-to-work-based experience that draws on combined efforts of educators and employers to produce outcomes related to student career objectives.

Economics

ECO 101 ECONOMICS OF SOCIAL ISSUES 3 CREDITS
Through a historical perspective this course examines the major socio-economic issues of the past century. Issues that are discussed include: global poverty and economic growth, education, health care, pollution, discrimination, crime, big business and trade protection. A chronological structure is used to study the progression of these issues and changes of them through time. Analytical tools are used to determine how these issues were dealt with in the past and how they can be interpreted in different manners.

ECO 105 INTRO TO ECONOMICS 3 CREDITS
This course is a survey of economics. It is designed as a beginning economics class. The course covers economics theories, supply and demand, national income accounting, money and banking, market structures and contemporary economic issues.

ECO 201 PRINCIPLES OF MACROECONOMICS 3 CREDITS
Focuses on the study of the American economy, stressing the interrelationships among household, business and government sectors. Explores saving and investment decisions, unemployment, inflation, national income accounting, taxing and spending policies, the limits of the market and government, public choice theory, the Federal Reserve System, money and banking and international trade.
This course is one of the Statewide Guaranteed Transfer courses.

ECO 202 PRINCIPLES OF MICROECONOMICS 3 CREDITS
Studies the firm, the nature of cost and how these relate to the economy as a whole. Analyzes economic models of the consumer, perfect competition, monopoly, oligopoly and monopolistic competition. Explores economic issues including market power, population growth, positive and negative externalities, income distribution, poverty and welfare, discrimination and international economic interdependence.
This course is one of the Statewide Guaranteed Transfer courses.

ECO 245 ENVIRONMENTAL ECONOMICS 3 CREDITS
Introduces students to contemporary environmental issues and policies meant to reduce environmental degradation. Includes market failures, analytical tools, government pollution

reduction policies for air, water and natural environments and their effectiveness

This course is one of the Statewide Guaranteed Transfer courses.

ECO 275   SPECIAL TOPICS   1–6 VARIABLE CREDITS
Provides students with a vehicle to pursue in-depth exploration of special topics of interest.

ECO 285   INDEPENDENT STUDY   1–6 VARIABLE CREDITS
Meets the individual needs of students. Students engage in intensive study or research under the direction of a qualified instructor. PREREQUISITES: Instructor's permission

Education

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**EDU 131   INTRODUCTION TO
                ADULT EDUCATION   3 CREDITS**
Introduces the student to the basic concepts in the instruction of adults. Emphasis 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 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 CREDITS**
This course will cover 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 CREDITS**
This course will 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 level.

**EDU 134   TEACHING ENGLISH AS A SECOND
                LANGUAGE TO ADULT LEARNERS 3 CREDITS**
In this course, the student will be introduced to the development and implementation of a program to teach English to adults whose first language is not English. Topics will range 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 CREDITS**
Introduces the students to the philosophy and theory behind family literacy, as well as giving practical advice on the development and implementation of family literacy programs. 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 175   SPECIAL TOPICS   1–6 CREDITS
Provides students with a vehicle to pursue in-depth exploration of special topics of interest. PREREQUISITE: Instructor's permission

**EDU 170   ENRICHING CONTENT CLASSES
                FOR SECONDARY ELL STUDENTS   4 CREDITS**
Prepares teachers with strategies to develop English language learner's social and academic English and support their transition to U.S. culture and schools. This course provides the students with instructional strategies and approaches to assist ELL learners in achieving academic competence, with multiple opportunities to apply new knowledge and strategies to different content areas.

EDU 185   INDEPENDENT STUDY   1–6 CREDITS
Meets the individual needs of students. Students engage in intensive study or research under the direction of a qualified instructor. PREREQUISITE: Instructor's permission

EDU 187   COOPERATIVE EDUCATION   1–2 CREDITS
A college-to-work-based experience that draws on combined efforts of educators and employers to produce outcomes related to student career objectives.

EDU 188   PRACTICUM I   1–6 CREDITS
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 221   INTRO TO EDUCATION   3 CREDITS
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. PREREQUISITES: College-level reading and writing as demonstrated on college level placement scores; COREQUISITE: Field-Experience component, if not embedded in the class

**EDU 233   ENGLISH LANGUAGE
                LEARNING (K–6)   3 CREDITS**
A course designed for teachers of K-6 students with limited English skills. Course provides strategies to support the social and academic needs of these ELLS in their transition to U.S. culture and school. Appropriate for preservice teachers as well as for those in mainstream, bilingual or self-contained ESL classrooms. PREREQUISITES: A Child Development Course or permission of the instructor

EDU 234   MULTICULTURAL EDUCATION   3 CREDITS
Focuses on the need to recognize and understand the similarities and differences among people and develop a respect for all individuals and groups. Assists teachers to recognize the special learning needs of children from different racial, ethnic, cultural and socioeconomic groups and to encourage teachers to integrate multicultural/diversity teaching into the school curriculum.

**EDU 242   EXPRESSIVE ARTS IN THE
                ELEMENTARY CLASSROOM   3 CREDITS**
Explores the integration of visual arts, music and physical education/movement into the self-contained elementary classroom curriculum based upon the theory of multiple intelligences. Familiarizes the student with the Colorado Model Content Standards for each area, basic curriculum development and the opportunities to practice their skills with students through field experiences.

EDU 260   ADULT LEARNING AND TEACHING   3 CREDITS
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 AND
                TECHNOLOGY   3 CREDITS**
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. PREREQUISITES: EDU 221 or EDU 260

**EDU 262   ASSESSMENT OF STUDENT
                ACADEMIC ACHIEVEMENT   3 CREDITS**
Focuses on assessment as fundamental to the improvement of student academic achievement in the 21st century learning college. Analyzes methods for assessing academic achievement at the classroom, course, program and institutional level. Defines measurable outcomes, evaluates student academic achievement and uses the results to improve teaching methods, curriculum design and outcomes. PREREQUISITES: EDU 221 or EDU 260

EDU 263   TEACHING AND LEARNING ONLINE 3 CREDITS
This online course will provide faculty with the knowledge and skills necessary to design, develop and deliver courses in a distance format. Assessment and evaluation methods and methods to incorporate interactive, collaborative and expanded learning activities will be included. PREREQUISITES: EDU 221 or EDU 260 or permission of instructor

EDU 264   FACULTY MENTORING   3 CREDITS
This course will provide the student with an understanding of and skills in mentoring new teachers/faculty in an academic institution. Students will explore the six dimensions of effective mentoring, mentoring phases, how to establish and build the mentor/mentee relationship and constructive feedback techniques. Student must designate a potential mentee for practical experience throughout this course. PREREQUISITES: EDU 221 or EDU 260 or instructor's permission

EDU 265   INSTRUCTIONAL DESIGN   3 CREDITS
This course introduces the student to a systematic approach to Instructional Design and to designing instruction with multimedia. Students will incorporate learning and instructional theory into course/training design to ensure the quality of instruction. A process of goal analysis and learning needs coupled with the development of a delivery system to meet those needs will be determined. This course includes the development of instructional materials and activities as well as the evaluation of all instruction and learner activities. PREREQUISITES: EDU 221 or EDU 260 or instructor's permission

EDU 275   SPECIAL TOPICS   1–6 VARIABLE CREDITS
Provides students with a vehicle to pursue in-depth exploration of special topics of interest.

EDU 285   INDEPENDENT STUDY 1–6 VARIABLE CREDITS
Meets the individual needs of students. Students engage in intensive study or research under the direction of a qualified instructor. PREREQUISITE: Instructor's permission

**EDU 287   COOPERATIVE EDUCATION
                        1–12 VARIABLE CREDITS**
A college-to-work based experience that draws on combined efforts of educators and employers to produce outcomes related to student career objectives PREREQUISITE: Instructor's permission

EDU 288   PRACTICUM II   1–6 VARIABLE CREDITS
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. PREREQUISITE: Instructor's permission

Electronics Engineering Technology

This program is being discontinued. No new students are being admitted to this program.

ELT 101   SURVEY OF ELECTRONICS   3 CREDITS
An introduction to electronics for consumers, individuals working in related fields and those exploring Electronics Engineering Technology as a career option. The course covers fundamental concepts, circuit diagrams, construction of circuits, test instruments, basic troubleshooting and the operation of common electronic systems and circuits. 23 hours lecture, 46 hours lab. PREREQUISITE: High school algebra

ELT 106   FUNDAMENTALS OF DC/AC   3 CREDITS
An introductory course that provides the basic skills needed for many careers in electronics and related fields. Covered are the operations and applications of basic DC and AC circuits, consisting of resistors, capacitors and inductors. The use of common test instruments in troubleshooting is emphasized. 23 hours lecture, 46 hours lab. PREREQUISITE: Minimum CPT algebra score of 45; COREQUISITE: MAT 116

ELT 109   QUALITY BUSINESS PRACTICES   1 CREDIT
This course covers current business practices designed to improve productivity and quality in the workplace. It addresses practices affecting materials and process control as well as personnel-related issues of performance and work teams. 15 hours lecture.

ELT 112   ADVANCED DC/AC   3 CREDITS
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. 23 hours lecture, 46 hours lab. PREREQUISITE: ELG 106

ELT 113   ADVANCED CIRCUIT ANALYSIS   4 CREDITS
Serves as an advanced course in the analysis of passive AC circuits. Emphasizes the use of complex algebra and network analyses. 30 hours lecture, 60 hours lab. PREREQUISITES: ELT 112, MAT 117

ELT 136   INTRODUCTION TO TRANSISTORS 2 CREDITS
An introduction to the operation and applications of bipolar transistors, JFETs and MOSFETs. Included are switching circuits, single-stage small-signal amplifiers and troubleshooting. 15 hours lecture, 30 hours lab. PREREQUISITE: ELT 106

ELT 137   ADVANCED TRANSISTORS   3 CREDITS
A continuation of ELT 136 with specifications and additional applications of bipolar transistors, JFETs and MOSFETs.

Covered are voltage regulation, common-collector and power amplifiers. Also included are analysis of single and cascaded amplifier stages. Troubleshooting is emphasized. 23 hours lecture, 46 hours lab. PREREQUISITE: ELT 136

ELT 138   POWER CONTROL DEVICES   2 CREDITS
Covers the specifications and operation of SCRs, triacs, diacs, unijunction transistors, PUTs and solid-state relays. Enables the student to construct and test circuits with power control devices. Troubleshooting is emphasized. 15 hours lecture, 30 hours lab. PREREQUISITE: ELT 136

ELT 139   OPTOELECTRONIC DEVICES   2 CREDITS
Focuses on a study of the specifications and operation of the LED, IRED, photoconductive cell, photodiode, phototransistor, optocoupler and vacuum-fluorescent display. Addresses fiber optics and lasers. Enables students to construct and test circuits with optoelectronic devices. Troubleshooting is emphasized. 15 hours lecture, 30 hours lab. PREREQUISITE: ELT 136

ELT 147   DIGITAL DEVICES I   3 CREDITS
This course introduces the operation and application of gates, flip-flops, counters, shift registers, encoders-decoders and LED displays. Also covered are binary numbers, Boolean algebra and troubleshooting. 23 hours lecture, 46 hours lab. PREREQUISITE: ELT 112

ELT 148   DIGITAL DEVICES II   3 CREDITS
A continuation of ELT 147. Covered are the operation and application of programmable logic devices, synchronous counters, multiplexers, liquid crystal displays, ROM and RAM. Included are also specifications of ICs, display multiplexing and design and minimization of circuits. Troubleshooting is emphasized. 23 hours lecture, 46 hours lab. PREREQUISITE: ELT 147

ELT 149   DIGITAL DEVICES:
**   TROUBLESHOOTING   2 CREDITS**
After detailed circuit analysis of a digital system that is not microprocessor based, the course focuses on troubleshooting to the component level. PREREQUISITE: ELT 148

ELT 161   ELECTROMECHANICAL
**   TROUBLESHOOTING   1 CREDITS**
An introduction to troubleshooting electromechanical systems consisting of switches, relays and motors. Teamwork is emphasized. 8 hours lecture, 16 hours lab. PREREQUISITES: ELT 101 or 106

ELT 163   SOLDERING   1 CREDIT
This course covers the theory and practice of high-reliability hand-soldering in the electronics field. Soldering practice includes wire and terminal soldering as well as PCB soldering of through-hole and surface-mount devices. 8 hours lecture, 16 hours lab.

ELT 215   OPERATIONAL AMPLIFIERS   3 CREDITS
A study of integrated operational amplifiers and their applications. Troubleshooting is emphasized. 23 hours lecture, 46 hours lab. PREREQUISITE: ELT 136

ELT 216   ANALOG INTEGRATED CIRCUITS   2 CREDITS
Introduces the operation and applications of integrated voltage regulators, timers, phase-locked loops, analog-to-digital and digital-to-analog converters. Emphasizes troubleshooting. 15 hours lecture, 30 hours lab PREREQUISITES: ELT 147, 215

ELT 225   COMMUNICATION ELECTRONICS I   3 CREDITS
Focuses on a basic analog communication course emphasizing the elements of a communication system, radio frequency analysis and characteristics, radio frequency circuits, AM and FM modulation techniques and AM and FM transmitters and receivers. 23 hours lecture, 46 hours lab. PREREQUISITE: ELT 137

ELT 227   FCC LICENSE PREPARATION   1 CREDIT
A review of electronics, to enable students to pass the General Radiotelephone Operator examination for the FCC Commercial Radiotelephone license. Emphasis will be on questions from Elements 1 and 3 provided by the FCC. A General Radiotelephone Operator license is required to adjust, maintain, or internally repair FCC licensed radiotelephone transmitters in the aviation, maritime and international fixed public radio services. 15 hours lecture. PREREQUISITE: ELT 225

ELT 261   MICROPROCESSORS   3 CREDITS
Basic operation and applications of microprocessors. The student will be able to write machine and assembly language programs, interface microprocessors to various devices and troubleshoot microprocessor-based systems. 23 hours lecture, 46 hours lab. PREREQUISITE: ELT 148

ELT 265   MICROCONTROLLERS   2 CREDITS
This course will provide the necessary software and hardware knowledge and skills for the development of microcontroller systems. The student will use programming tools and a development software. 15 hours lecture, 30 hours lab. PREREQUISITE: ELT 261

ELT 267   INTRODUCTION TO ROBOTICS   1 CREDIT
Introduces basic robotics. Enables the student to program a robot in a higher-level language to perform various tasks. Covers building and interfacing of sensor circuits. 8 hours lecture, 16 hours lab PREREQUISITES: ELT 101 or ELT 106

ELT 275   SPECIAL TOPICS   1–6 VARIABLE CREDITS
These courses provide students with opportunities to study topics of special interest that may lie outside the standard ELT program. A syllabus will specify the content of each course at the time it is offered.

ELT 285   INDEPENDENT STUDY 1–6 VARIABLE CREDITS
Course designed to meet the individual needs of students. PREREQUISITE: Instructor's permission

Emergency Medical Sciences

CCN 230   BASIC EKG INTERPRETATION   2 CREDITS
Develops the ability of the health care provider to read and interpret the electrocardiogram. Requires critical thinking and analytical skills.

EMS 125   EMT BASIC   9 CREDITS
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 by completion of 50% of the class to do clinicals. COREQUISITE: EMS 170

EMS 126   EMT BASIC REFRESHER   3 CREDITS
Provides required didactic and skills review for renewing EMT students. Accommodates the needs of the re-entry EMT student. PREREQUISITES: Current CPR card, current or less than 36 months expired EMT Basic certification.

EMS 130 IV FOR THE EMT   2 CREDITS
This course provides basic understanding of intravenous therapy principles and administration. Topics include the roles and responsibilities of the EMT, legal issues, shock principles of fluid and blood replacement, 50% Dextrose, IV equipment, IV administration and venipuncture techniques. PREREQUISITES: Current State EMT B Certification, all Hepatitis B vaccinations and current CPR card.

EMS 134 ADVANCED EKG   2 CREDITS
This class will build upon basic EKG interpretation. 12 lead EKG interpretation including the diagnosis of myocardial infarction will be studied.

**EMS 136 EMT/PARAMEDIC SAFETY
          ISSUES IN THE FIELD   1 CREDIT**
This class will provide the EMT and Paramedic with the skills needed to quickly assess the scene for potential hazards to themselves. Introducing topics on scene safety, evaluation of potential problem patients, verbal communication control techniques, physical control techniques for the problem patient and specific techniques for scene control. PREREQUISITES: State EMT B Certification or instructor's permission

**EMS 150 PEDIATRIC EDUCATION FOR
          PRE-HOSPITAL PROFESSIONALS   1 CREDIT**
Provides the student with core knowledge and skills necessary to provide emergency care to the pediatric patient. PREREQUISITES: EMT-Basic or approval from Program Coordinator

EMS 170 EMT BASIC CLINICAL   1 CREDIT
Provides the EMT student with the clinical experience required of initial and some renewal students. COREQUISITES: EMS 125 or EMS 126, depending on student status

**EMS 213 PRE-HOSPITAL TRAUMA
          LIFE SUPPORT   1 CREDIT**
Provides basic and/or advanced trauma life support information and skill practice. PREREQUISITE: EMT Basic or higher

EMS 214 BASIC TRAUMA LIFE SUPPORT   1 CREDIT
Provides students with information and skill practice to treat trauma patients in the pre-hospital environment. PREREQUISITE: EMT Basic or higher

**EMS 225 FUNDAMENTALS OF
          PARAMEDIC PRACTICE   3 CREDITS**
Serves as the first course of the National Standard Paramedic Curriculum as approved by the Colorado State Department of Health and Environment. PREREQUISITES: EMT Basic or EMT Intermediate–other requirements vary with site

**EMS 226 FUNDAMENTALS OF PARAMEDIC
          PRACTICE–LAB   2 CREDITS**
Serves as the lab experience to coincide with EMS 225 topics. PREREQUISITE: Acceptance in paramedic program-site specific; COREQUISITE: EMS 225

**EMS 227 PARAMEDIC SPECIAL
          CONSIDERATIONS   3 CREDITS**
Focuses on a comprehensive study of Advanced Life Support Practice. PREREQUISITE: Acceptance into paramedic program-site specific

**EMS 228 PARAMEDIC SPECIAL
          CONSIDERATIONS LAB   2 CREDITS**
Serves as the lab experience for those students enrolled in

EMS 227. PREREQUISITE: Acceptance to paramedic program-site specific; COREQUISITE: EMS 227

EMS 229 PARAMEDIC PHARMACOLOGY   3 CREDITS
Focuses on a comprehensive study of emergency pharmacology. PREREQUISITE: Acceptance in paramedic program-site specific

**EMS 230 PARAMEDIC PHARMACOLOGY
          LAB   2 CREDITS**
Serves as the required lab course in the paramedic education program. PREREQUISITE: Acceptance to paramedic program-site specific

EMS 231 PARAMEDIC CARDIOLOGY   5 CREDITS
Addresses cardiology topics as presented in the National Standard Curriculum for paramedics. PREREQUISITE: Acceptance to paramedic program-site specific

EMS 232 PARAMEDIC CARDIOLOGY LAB   1 CREDIT
Incorporates a hands-on application of principles of cardiac care in the hospital environment. PREREQUISITE: Acceptance to paramedic program-site specific

**EMS 233 PARAMEDIC MEDICAL
          EMERGENCIES   4 CREDITS**
Focuses on a comprehensive study of adult medical emergencies. PREREQUISITE: Acceptance to paramedic program-site specific

**EMS 234 PARAMEDIC MEDICAL
          EMERGENCIES LAB   1 CREDIT**
Focuses on a clinical study of adult and pediatric medical emergencies. PREREQUISITES: Acceptance to paramedic program-site specific

**EMS 235 PARAMEDIC TRAUMA
          EMERGENCIES   4 CREDITS**
Focuses on a comprehensive study of adult and pediatric trauma emergencies. PREREQUISITE: Acceptance to paramedic program-site specific

EMS 236 PARAMEDIC TRAUMA LAB   1 CREDIT
Serves as a lab presenting various acute trauma scenarios. PREREQUISITE: Acceptance to paramedic program-site specific

**EMS 237 PARAMEDIC INTERNSHIP
          PREPARATORY   2 CREDITS**
Reviews concepts and techniques used in the pre-hospital setting. PREREQUISITE: Acceptance to paramedic program-site specific

EMS 270 CLINICAL: EMS INTERMEDIATE   3 CREDITS
Provides the EMT-I student with the required field experiences as required by the Colorado Department of Health. PREREQUISITES: EMS 203–205; COREQUISITE: EMS 205 as needed.

EMS 275 SPECIAL TOPICS   0.5–10 CREDITS
Provides students with a vehicle to pursue in-depth exploration of special topics of interest.

EMS 280 PARAMEDIC INTERNSHIP I   6 CREDITS
Serves as the preceptor/internship program for paramedic students. PREREQUISITE: Acceptance to paramedic program-site specific

EMS 281   PARAMEDIC INTERNSHIP II   6 CREDITS
Serves as the continuation of EMS 240, preceptor program for paramedic students. PREREQUISITE: Acceptance to paramedic program site specific

EMS 285   INDEPENDENT STUDY 1–6 VARIABLE CREDITS
Course designed to meet the individual needs of students. PREREQUISITES: Instructor's permission employment strategies

Employment Strategies

COM 101   EMPLOYMENT STRATEGIES   1 CREDIT
This course is designed to assist students with the development of skills that are needed to search for and acquire a job. Topics include surveying job markets, building resumes, applying for jobs and interviewing for positions.

Engineering

EGG 100   INTRODUCTION TO ENGINEERING   1 CREDIT
Introduces the math and science required in a variety of engineering disciplines. The particular engineering disciplines examined are: Civil Engineering, Mechanical Engineering, Electrical Engineering, Industrial Engineering and Computer Science. For each discipline the course will examine certification requirements, program of study, types of work and tasks in each discipline and compensation ranges. Tours and speakers will be arranged. PREREQUISITE: Two years of high school algebra

EGG 101   ENGINEERING GRAPHICS I   3 CREDITS
Provides an application of engineering graphics as a communication form and a tool to solve three-dimensional problems. Topics include: Orthographic, axonometric and isometric projections; sections and auxiliary views; the geometry of lines, planes and curved surfaces. This course is an introduction to PC-based, menu driven, 3D Computer Aided Design Systems, Spreadsheets and Freehand Drawing. PREREQUISITES: MAT 121, 122 or equivalent

EGG 105   LOGIC DESIGN   4 CREDITS
Covers the design of Combinatorial and sequential circuits. Topic include: Boolean Algebra, Boolean Function Minimization Techniques, Combinatorial Circuit Analysis and Synthesis, Synchronous Sequential Circuit Analysis and Synthesis, Algorithmic State Machine Design, Asynchronous Sequential Circuit Analysis, Algorithmic State Machine Design, Asynchronous Sequential Circuit Analysis and Synthesis. Use of computer aided design tools facilitating design, simulation and implementation of digital systems using field programmable logic devices is an integral part of the course. Laboratory experiments included. PREREQUISITES: MAT 121, 122 or equivalent

EGG 211   ENGINEERING MECHANICS I
**   (STATICS)   3 CREDITS**
Focuses on the vector and calculus treatment of forces systems. Covers concurrent and noncurrent force systems. Includes calculating moments of friction, trusses, centroids and moments of inertia. PREREQUISITES: MAT 201, PHY 211. COREQUISITE: MAT 202

EGG 212   ENGINEERING MECHANICS II
**   (DYNAMICS)   3 CREDITS**
Focuses on vector and calculus treatment of the dynamics and rigid bodies using Newton's laws. Includes work-energy impulse momentum and free and forced oscillations. PREREQUISITES: EGG 211, MAT 202, PHY 211

EGG 221   CIRCUIT ANALYSIS I   4 CREDITS
Covers the basic theorems of circuit analysis. Transient solution of circuits by classical techniques. Steady-state sinusodial solutions by means of phasors will be introduced. Basic electrical circuit measurements and experimentation using oscilloscopes, various meters and function generators will be performed in the lab. PREREQUISITES: MAT 202, PHY 212

EGG 222   CIRCUIT ANALYSIS II   4 CREDITS
Familiarizes students with advanced methods of circuit analysis including computer simulations. Laplace transforms, frequency domain analysis, steady state solutions, two part network, Fourier series, pulses, impulses and computer-aided analysis will be applied to circuits. Data acquisition, digital-to-analog and analog-to-digital converters will be covered. Laboratory experiments are included. PREREQUISITE: EGG 221

EGG 275   SPECIAL TOPICS   1–6 VARIABLE CREDITS
Provides students with a vehicle to pursue in-depth exploration of special topics of interest.

EGG 285   INDEPENDENT STUDY 1–6 VARIABLE CREDITS
Meets the individual needs of students. Students engage in intensive study or research under the direction of a qualified instructor. PREREQUISITE: Instructor's permission

English

All of the degree programs at ACC require students to successfully complete English composition courses; different programs require different courses. Before students enroll in composition courses, the students must demonstrate their writing competencies by means of a placement test. The test will be validated by an impromptu writing sample during the first week of class. Test results normally dictate where students will start in their writing programs. The faculty believe that students succeed more consistently in all their courses when they develop college-level competencies in reading and writing.

English 121-122 is the traditional college-level freshman composition program. The courses are sequential and acceptable for college transfer. All A.A. and A.S. students must complete this sequence; however, those students who demonstrate deficiencies in their writing competencies will be required to begin their writing programs in the Developmental Studies sequence: ENG 060 and/or ENG 090, REA 060 and/or REA 090.

English 131 is a college-level course designed especially for students interested in occupational or technical fields. Many occupational programs require English 131; however, some students may need English 090 before enrolling in English 131.

LITERATURE courses (listed separately) provide continued opportunities for refinement of reading, writing and critical-thinking skills. See also JOURNALISM, MASS COMMUNICATIONS, FILM AND VIDEO.

ENG 060   LANGUAGE FUNDAMENTALS   3 CREDITS
This course will focus on paragraph structure and development and will introduce the formal essay. Students will review and improve grammar, usage and punctuation skills while employing critical thinking strategies and the writing process to respond to a wide variety of writing situations. PREREQUISITE: CPT sentence skills score 50–69. COREQUISITE: concurrent enrollment in REA 060/090 strongly recommended

ENG 090 BASIC COMPOSITION 3 CREDITS
This course will emphasize critical thinking as students explore writing for specific purposes and audiences. Students will develop skills required for college-level writing while reviewing paragraph structure and focusing on essay development. PREREQUISITES: ENG 060 or CPT sentence skills score 70-94. COREQUISITE: concurrent enrollment in REA 090 strongly recommended

ENG 121 ENGLISH COMPOSITION I 3 CREDITS
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. PREREQUISITES: ENG 090 with a grade of "C" or better or CPT sentence skills score of 95+ and reading score of 80+.
This course is one of the Statewide Guaranteed Transfer courses.

ENG 122 ENGLISH COMPOSITION II 3 CREDITS
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. PREREQUISITE: ENG 121 with a grade of "C" or better
This course is one of the Statewide Guaranteed Transfer courses.

ENG 131 TECHNICAL WRITING I 3 CREDITS
This course develops skills one can apply to a variety of technical documents. Students learn principles for organizing, writing and revising clear, readable documents for industry, business and government. Introduces research strategies. PREREQUISITES: ENG 090 with a grade of "C" or better or CPT sentence skills score of 95+ and reading score of 80+

ENG 221 CREATIVE WRITING I 3 CREDITS
This course teaches techniques for creative writing. Students explore imaginative uses of language through writing short stories, drama, poetry, and/or literary nonfiction. PREREQUISITES: ENG 121 with a "C" or better or instructor's permission

ENG 222 CREATIVE WRITING II 3 CREDITS
This course continues development of written expression in such forms as poetry, fiction and/or nonfiction writing. PREREQUISITES: ENG 221 or instructor's permission

ENG 226 FICTION WRITING 3 CREDITS
This course teaches techniques for creating fiction, including study and appreciation of the language and forms of the short story. PREREQUISITES: ENG 221 or instructor's permission

ENG 227 POETRY WRITING 3 CREDITS
Teaches techniques for creating poems, including study of figurative language, forms and sound patterns of poetry.

ENG 230 CREATIVE NONFICTION 3 CREDITS
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 CREDITS
This course teaches the editorial process involved in preparing a literary magazine for publication. Covers the process of selection of material (fiction, non-fiction, 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 AND PROPAGANDA 3 CREDITS
This course examines in some depth classical and modern theories of rhetoric, understood as effective, ethical means of persuasion, then seeks to examine the ways in which propaganda departs from these means. Students will apply theories of rhetoric and propaganda to examples of presidential rhetoric, Nazi and Soviet propaganda and other examples of persuasive writing. The course will include the study of visual rhetoric; students will construct criteria for identifying visual propaganda and will study the complex relationship, historically and in the present, between propaganda, democracy, advertising and mass media.

ENG 275 SPECIAL TOPICS: RHETORIC 1–6 VARIABLE CREDITS
Explores special topics in rhetoric, such as applied rhetoric, styles, ethics, advanced composition, advanced argument and expository techniques.

ENG 285 INDEPENDENT STUDY 1–6 VARIABLE CREDITS
Meets the individual needs of students. Students engage in intensive study or research under the direction of a qualified instructor.

English as a Second Language

ESL 022 INTERMEDIATE GRAMMAR 3 CREDITS
This course will review beginning grammar structures and introduce intermediate structures. It will provide practice of structures through a variety of oral and written exercises.

ESL 043 ADVANCED READING 3 CREDITS
This course is for the international student who is enrolled in full-time academic study or the immigrant who wishes to pursue a college degree. It emphasizes reading and note taking skills to prepare students for academic reading assignments. Oral, listening, writing and study skills are also practiced. PREREQUISITE: Michigan placement test score of 74 or below

ESL 053 ADVANCED COMPOSITION 3–4 CREDITS
Reviews paragraph organization and develops the skill of writing essays using selected rhetorical modes. Emphasizes accurate use of advanced grammatical structures. Includes summarizing, paraphrasing and research writing. PREREQUISITES: ESL 043 or appropriate placement score.

ESL 275 SPECIAL TOPICS 1–6 VARIABLE CREDITS
Provides students with a vehicle to pursue in-depth exploration of special topics of interest.

ESL 285 INDEPENDENT STUDY 1–6 VARIABLE CREDITS
Meets the individual needs of students. Students engage in intensive study or research under the direction of a qualified instructor. PREREQUISITE: Instructor's permission

Film and Video Technology

FVT 250 SCRIPTWRITING FOR FILM AND VIDEO 3 CREDITS
Develops screen writing skills, focusing on the basic format of the craft, scene construction, genre conventions, three act structure, characterization and idea generation. Students complete a 30-minute script suitable for shooting.

Finance

FIN 101 INTRO TO FINANCE 3 CREDITS
This course provides an in-depth study of the monetary system of the United States, the role of banks as financial intermediaries and the types of financing available in our

monetary system. Other topics include: international financial markets and international financial instruments used in exporting and importing, analysis of stock and bond values, the role and process of the stock and bond market and the derivative marketplace. The student also learns how to produce a cash budget, analyze financial statements including all financial ratios used in credit analysis and how to determine capital requirements and financing arrangements.

FIN 105   PRINCIPLES OF BANKING   2–3 VARIABLE CREDITS
Explores nearly every aspect of banking as a solid foundation for any career in the financial services industry. Just as the industry is constantly changing, this course is continually being revised to provide specific up-to-date information.

FIN 110   INTRO TO CREDIT UNIONS   2 CREDITS
This course is an introduction to the credit union movement. It includes an explanation of the nature of credit unions, their history and a review of affiliated organizations. The legal basis for the operation of a credit union as well as the powers and characteristics of credit unions will be discussed. Roles and functions of credit union management and volunteers will be examined. Bonding, insurance and the developing credit union financial system will be discussed.

FIN 113   CREDIT UNION ACCOUNTING PROBLEMS   2 CREDITS
Explains terms and procedures basic to accounting and unique to credit unions. Topics covered in this course include concepts of credit union accounting, general records and the general ledger, reserves and undivided earnings, the statement of financial condition, the balancing of other subsidiaries, closing the books, various accounting situations and the credit union cycle.

FIN 125   TELLER TRAINING   1 CREDIT
This course is designed to prepare students to be a teller at any financial institution. The student will learn how deposit accounting works, the handling of cash, balancing a cash drawer, recording debits and credits, handling of commercial accounts, reviewing bank policy on large deposits and placing holds on large deposits. The student will also learn customer service, how to handle problem customers, developing relationships with customers and cross-selling other bank services.

FIN 131   INTRO MORTGAGE BANKING   2 CREDITS
Focuses on the entire mortgage loan process. Enables the student to apply the components of the mortgage loan process to a simulated workplace situation beginning with origination and the sale of the loan through the secondary market or to a private investor.

FIN 132   RESIDENTIAL MORTGAGE LOAN ORIGINATION   1 CREDIT
Introduces the basic procedures of Residential Mortgage Loan Origination for Conventional, Conforming/ Non-Conforming government loans. Enables the student to determine the acceptability of a loan for underwriting and evaluate the market conditions that affect the loan process.

FIN 133   RESIDENTIAL MORTGAGE PROCESSING   1 CREDIT
Introduces the basic guidelines and functions of Residential Mortgage Processing. Incorporates analysis of documentation required to assess and process Conventional and Government loans to be sold in the secondary market or held by a public or private financial institution in its own portfolio.

FIN 137   FHA FOR LOAN OFFICERS   .5 CREDIT
Presents the proper use of FHA loans, discusses FHA terminology and the descriptions of the Act that apply. The student learns how to calculate maximum loan limits and MIP funds, allowable closing costs, what type of loan is best for a buyer, Energy Efficient Mortgage program guidelines and acceptable credit sources. All forms of refinancing are discussed, plus all supporting documentation.

FIN 138   FHA FOR LOAN PROCESSORS   .5 CREDIT
Presents the student with the proper use of FHA loans for loan officers and FHA terminology. Students learn qualifying guidelines, the credit alert system, acceptable credit documentation and alternative documentation sources. Student will be able to complete the Mortgage Credit Analysis Worksheet, calculate loan limits and MIP refunds and be able to work with FHA Connection online.

FIN 205   CONSUMER LENDING   2 CREDITS
Provides an introduction to the field of consumer credit and consumer lending activities performed by savings association personnel. Designed for students with little or no background in consumer credit.

FIN 210   INTERNATIONAL FINANCE   3 CREDITS
Examines the basics of the foreign exchange market and exchange rate determination. The course will discuss creating and adjusting currency positions covering hedging, currency options, forecasting of exchange rates and the principles of parity. Topics covered include the balance of payments, past and present international monetary arrangements, the role of the International Monetary Fund and the World Bank, import and export financing, financial management of the multinational firm, the international money market and macroeconomic policy in an Open Economy.

FIN 211   COMMERCIAL LENDING   3 CREDITS
Presents a basic course in commercial loan origination designed to enable students to acquire the skills needed to evaluate business loan applications and to correctly document loans when they have been approved. The course focuses on both the financial and human relations skills essential to commercial lending.

FIN 212   CREDIT AND COLLECTIONS   2 CREDITS
Covers the fundamentals of credit operations and the role of the financial institutions in granting and collecting loans. Includes types of available credit, laws and regulation, business and personal credit and the function of credit in foreign trade. Emphasizes evaluation techniques for and regulations concerning collections from the perspective of credit management. PREREQUISITES: FIN 110 or instructor's permission

FIN 226   MONEY AND BANKING   3 CREDITS
Presents a fundamental treatment of how money functions in the U.S. and world economies. Includes the concept of money supply, the Federal Reserve System, the role banks play as a money creator and participant in the nation's payment mechanism. Examines how the various types of financial institutions operate, the working of monetary and fiscal policies and the role of a Central Bank and International Banking.

FIN 235   ANALYZING FINANCIAL STATEMENTS   2–3 VARIABLE CREDITS
Provides a practical understanding of financial statement analysis for a business borrower in order to assess repayment capacity. This course may be taught as a c-credit accelerated course. PREREQUISITES: ACC 121, 122

FIN 237 ADVANCE LOAN PROCESSING .5 CREDIT
Develops advance levels and functions of residential mortgage processing. Incorporates analysis of the documentation required to assess and process conventional and government loans to be sold in the secondary market or held by a public or private financial institution in its own portfolio. This class teaches students how to reduce underwriting conditions and speed up closings.

FIN 240 LAW AND BANKING PRINCIPLES 2 CREDITS
Serves as a banker's guide to law and legal issues with special emphasis on the Uniform Commercial Code. Examines sources and applications of banking law, contracts, bankruptcy, torts and crimes, real and personal property and the legal implications of consumer lending.

FIN 245 LAW AND BANKING APPLICATIONS 3 CREDITS
Introduces the laws pertaining to secured transactions, letters of credit and the bank collection process. Enables the student to explain the concept of negotiability, analyze the concept of holder-in-due-course status, define and explain the nature of the letter of credit, describe the nature of primary and secondary contractual liability on an instrument, identify the issues related to secured transactions and discuss the legal issues related to bank collections and check losses.

FIN 250 FINANCIAL MARKETING
FOR BANKERS 3 CREDITS
This course looks at what motivates customers to purchase financial services and teaches bankers how to develop a successful marketing plan. The student will learn to recognize consumer motivation and buying behavior. Also, he/she will learn to integrate public relations, advertising, sales promotion, selling and service distribution functions in the bank's overall marketing plan. The course conducts situational analysis and formulates a master marketing strategy. Also, the student develops ways to monitor and evaluate marketing performance and objectives.

FIN 255 UNDERSTANDING AND
SELLING BANK PRODUCTS 3 CREDITS
Focuses on the six human relations skills that encourage smooth, clear and personal communication with the customer. Emphasizes the basic steps of selling, information about bank products and product benefits (rather than the features) and how to spot clues about customer needs. Covers the importance of cross-selling, how to recognize the typical prospects for various categories of bank products and how to suggest products and overcome resistance to conclude the sale.

FIN 260 RETIREMENT/PENSION PLANNING
AND INVESTMENT 3 CREDITS
Focuses on Defined Contribution and Defined Benefit Pension Accounts and Individual Retirement Accounts such as SEPPS and Keoghs. Covers the difference between qualified and non-qualified pension accounts and deferred benefit accounts. Addresses the regulations involving participation and withdrawal. Includes the types of investments that can be made through the different retirement vehicles and the tax ramifications of various types of accounts.

FIN 275 SPECIAL TOPICS 1–6 VARIABLE CREDITS
Special Topics courses may be offered to provide students with an opportunity to study special areas in the discipline. Course content will be determined by the instructor with a complete syllabus each time the course is offered.

FIN 285 INDEPENDENT STUDY 1–6 VARIABLE CREDITS
Course designed to meet the individual needs of students. PREREQUISITE: Instructor's permission

FIN 287 CO-OP EDUCATION 1-6 VARIABLE CREDITS
Provides students an opportunity to gain practical experience in applying their skills and/or 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. PREREQUISITES: Instructor's permission and completion of half of program coursework

French

Independent Studies are also available.

FRE 101 CONVERSATIONAL FRENCH I 3 CREDITS
This is the first course in a sequence for beginning students who wish to understand and speak French. The material will include basic vocabulary, grammar and expressions that are used in daily situations and in travel.

FRE 102 CONVERSATIONAL FRENCH II 3 CREDITS
This is the second course in a sequence for beginning students who wish to understand and speak French. The material will continue to cover basic conversational patterns, expressions and grammar. PREREQUISITES: FRE 101 or instructor's permission.

FRE 111 FRENCH I 5 CREDITS
Begins a sequence dealing with the development of functional proficiency in listening, speaking, reading and writing the language. NOTE: The order of the topics and the methodology will vary according to the individual texts and instructors.

FRE 112 FRENCH II 5 CREDITS
Continues French I in the development of functional proficiency in listening, speaking, reading and writing the language. NOTE: The order of the topics and the methodology will vary according to the individual texts and instructors. PREREQUISITES: FRE 111 or instructor's permission

FRE 201 CONVERSATIONAL FRENCH III 3 CREDITS
This is the third course in a sequence for students who wish to continue their study of understanding and speaking French. The material will cover intermediate level vocabulary, grammar and expressions. PREREQUISITES: FRE 102 or instructors permission

FRE 202 CONVERSATIONAL FRENCH IV 3 CREDITS
This is the fourth course in a sequence for students who wish to continue their study of understanding and speaking French. The material will continue to cover intermediate level vocabulary, grammar and expressions. PREREQUISITES: FRE 201 or instructor's permission

FRE 211 FRENCH III 3 CREDITS
Continues French I and II in the development of increased functional proficiency in listening, speaking, reading and writing the language. NOTE: The order of the topics and the methodology will vary according to individual texts and instructors. PREREQUISITES: FRE 112 or instructor's permission
This course is one of the Statewide Guaranteed Transfer courses.

FRE 212   FRENCH IV   3 CREDITS
Continues French I, II and III in the development of increased functional proficiency in listening, speaking, reading and writing the language and introduction to literature. NOTE: The order of the topics and the methodology will vary according to individual texts and instructor's. PREREQUISITES: FRE 211 or instructor's permission

FRE 275   SPECIAL TOPICS   1–6 VARIABLE CREDITS
Provides students with a vehicle to pursue in-depth exploration of special topics of interest.

FRE 285   INDEPENDENT STUDY 1–6 VARIABLE CREDITS
Course designed to meet the individual needs of students. PREREQUISITE: Instructor's permission

Geographic Information Systems

**GIS 101   INTRODUCTION TO GEOGRAPHIC
            INFORMATION SYSTEMS   3 CREDITS**
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 210   INTERMEDIATE GIS   3 CREDITS
Build upon the spatial analysis principles and concepts of GIS 101. Students work with more advanced analytical tools and develop skills in spatial problem solving.

Geography

GEO 105   WORLD REGIONAL GEOGRAPHY   3 CREDITS
This course is an introductory course designed to facilitate an understanding of spatial relationship between and among the geographic regions of the world. Included are demographics and cultural (political, economic, historic) forces related to the physical environments of selected regions. Methods of study include analysis of interrelationships between developed regions and the interactions between human societies and natural environments.
   This course is one of the Statewide Guaranteed Transfer courses.

GEO 106   HUMAN GEOGRAPHY   3 CREDITS
An introduction to geographic perspectives and methods with applications to the study of human activities. Special emphasis is placed on the distribution of humans, adjustments to the natural environment and land use practices.
   This course is one of the Statewide Guaranteed Transfer courses.

GEO 107   PHYSICAL GEOGRAPHY   3 CREDITS
Physical Geography is the study of the spatial relationship between humans and the natural environment. The course is divided into 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. This course is recommended for students interested in environmental studies, earth science and geography.

GEO 165   HUMAN ECOLOGY   3 CREDITS
(Formerly GEO 101 Intro to Environmental Science)
Provides a current outlook for the global environment, describing the threats imposed on different natural ecological systems. Enables the student to develop a set of intellectual

tools and ways of thinking about the environment to evaluate for themselves how serious a given environmental problem will be.

GEO 275   SPECIAL TOPICS   1–6 VARIABLE CREDITS
Provides students with a vehicle to pursue in-depth exploration of special topics of interest.

GEO 285   INDEPENDENT STUDY 1–6 VARIABLE CREDITS
Course designed to meet the individual needs of students. PREREQUISITE: Instructor's permission

Geology

GEY 111   PHYSICAL GEOLOGY   4 CREDITS
Studies the materials of the earth, its structure, surface features and the geologic processes involved in its development. This course includes laboratory experience.
   This course is one of the Statewide Guaranteed Transfer courses.

GEY 121   HISTORICAL GEOLOGY   4 CREDITS
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 life forms and physical events, all within the framework of shifting crustal plates. Course includes laboratory experience. PREREQUISITES: GEY 111 or instructor's permission
   This course is one of the Statewide Guaranteed Transfer courses.

GEY 135   ENVIRONMENTAL GEOLOGY   3 CREDITS
Introduces geology and its relationship to man's environment. Covers geological hazards such as floods, landslides, avalanches, earthquakes and volcanoes. Focuses on surface and groundwater resources in terms of exploitation and man's responsibility to protect these resources from contamination. The geological aspects of land use practices, as well as mineral and energy resource exploitation, are reviewed and related to legislation regarding environmental law.

GEY 205   GEOLOGY OF COLORADO   3 CREDITS
Covers the geological history of Colorado, with emphasis on the formation of mountain ranges, igneous, sedimentary and metamorphic rock types, ore deposits and landforms. Incorporates field experience and/or classroom lectures. PREREQUISITE: Instructor's permission

GEY 275   SPECIAL TOPICS   0.25-3 CREDITS
Presents an overview of the special topic including one aspect of the earth and its history as recorded in rocks and rock formations. May also include current changes and impact of historical events and exploration of current topics, issues and activities related to one or more aspects of the named discipline.

GEY 285   INDEPENDENT STUDY 1-6 VARIABLE CREDITS
Meets the individual needs of students. Students engage in intensive study or research under the direction of a qualified instructor. PREREQUISITE: Instructor's permission

Graphic Design & Illustration

See multimedia/graphic design

For Graphic Design courses taken the Summer Semester, 2004, under the GDI prefix, please refer to the 2003-2004 course catalog.

Health Professions

**HPR 106   LAW & ETHICS FOR
HEALTH PROFESSIONS   2 CREDITS**
Advances student knowledge in the study and application of medico-legal concepts in medical careers and establishes a foundation for ethical behavior and decision making. PRE-REQUISITES: Determined by individual program guides. COREQUISITES: Determined by individual program guides.

HPR 112   PHLEBOTOMY   4 CREDITS
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. COREQUISITE: HPR 113

HPR 113   ADVANCED PHLEBOTOMY   4 CREDITS
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 theoretical content and clinical opportunities. COREQUISITE: HPR 112

HPR 178   MEDICAL TERMINOLOGY   3 CREDITS
This course introduces the student to the structure of medical terms with emphasis on combining and using the most common prefixes, roots and suffixes. Includes terms related to clinical laboratory, diagnostic imaging, nuclear medicine and oncology as well as major body systems. Classroom structure provides accepted pronunciation of terms and relative use in the health care setting.

HPR 216   PATHOPHYSIOLOGY   4 CREDITS
Focuses on the functions of the human body systems with emphasis on their interrelationships and adaptation to stress and disease. PREREQUISITES: BIO 201, 202 or instructor's permission

**HPR 240   ROLE OF DEATH &
BEREAVEMENT IN SOCIETY   3 CREDITS**
Examines death from the perspectives of the dying individual, the bereaved and the caregivers. The course will focus on sociological, cultural, spiritual development and psychological aspects of dying and bereavement. It will also include study of various groups and their relationships to death and disposition, funerals and other rites. PREREQUISITE: PSY 101

HPR 275   SPECIAL TOPICS   1–6 CREDITS
Special Topics courses may be offered to provide students with an opportunity to study special areas in the discipline. Course content will be determined by the instructor with a complete syllabus each time the course is offered.

HPR 285   INDEPENDENT STUDY   1–6 CREDITS
Course designed to meet the individual needs of students. PREREQUISITE: Instructor's permission

Health and Wellness Education

HWE 100   HUMAN NUTRITION   3 CREDITS
Introduces basic principles of nutrition with emphasis on personal nutrition. Satisfies nutrition requirement of students entering health care professions.

HWE 108   WEIGHT LOSS   1 CREDIT
Focuses on combining a healthy diet and exercise to shed unwanted pounds and inches. The course will include classroom sessions that will focus on personal habits including diet that lead to weight gain and exercise session in the Fitness Center.

HWE 122   RESPONDING TO EMERGENCIES   2 CREDITS
Provides advanced first aid and CPR-PR-AED skills, with a more in-depth look at sudden illness, specific disease and emergencies. An American Red Cross certification is awarded upon successful completion of class.

HWE 124   FITNESS AND WELLNESS   2 CREDITS
Provides information on fitness and wellness and serves as a guide to design, implement and evaluate a complete personal fitness and wellness program. The course integrates the basic components of fitness and wellness in understanding human health in order to achieve well being. This course offers current information in the health field and provides self assessments for health risk and wellness behaviors.

**HWE 237   EXERCISE, NUTRITION AND
BODY COMPOSITION   3 CREDITS**
Discusses the concepts of improved performance in all fitness areas. Emphasis is placed upon updated information associated with nutrition and human performance. Measurement of body composition is used as it correlates to training and diet/exercise programs.

HWE 245   PHYSIOLOGY OF EXERCISE   3 CREDITS
This course is designed to provide the student basic skills, practice and theory in physical fitness. Major components of muscle strength, muscle endurance, cardiovascular endurance, flexibility and body composition are discussed in detail. Exercise prescription skills, assessment skills, administration skills and leadership skills will also be addressed in this course. PREREQUISITE: BIO 201, "C" or better

**HWE 248   GUIDELINES FOR EXERCISE TESTING
AND PRESCRIPTION   2 CREDITS**
This course is designed to provide the student with the opportunity to conduct laboratory fitness assessments, evaluate test results and develop exercise prescriptions. In addition, the student will be expected to become knowledgeable about the promotion and marketing of fitness programs.

**PER 113   INTRODUCTION TO PHYSICAL
EDUCATION AND SPORTS   2 CREDITS**
Focuses on the field of physical education and sports. Includes trends, precedents and their effects in the health and total wellness of those involved. Career exploration will be covered.

PER 151   LIFEGUARD TRAINING   2 CREDITS
This course is designed to provide the necessary minimum knowledge and skills training for a person to quality as a non-surf lifeguard. The course content and activities prepare lifeguard candidates to recognize emergencies, respond quickly and effectively to emergencies and prevent drowning and other incidents. The course also teaches other skills an individual needs to be a professional lifeguard. American Red Cross certification awarded upon successful completion of class. PREREQUISITE: PED 109 Advanced Swimming

**PER 232   CARE & PREVENTION OF
ATHLETIC INJURIES   3 CREDITS**
Focuses on techniques in prevention, care and basic rehabilitation of athletic injury.

PER 275   SPECIAL TOPICS: INTERNSHIP   3 CREDITS
This is a course designed for majors in Human Performance and provides the student "on-the-job training". The student will have the opportunity to further integrate academic knowledge and apply those skills gained through the Human Performance degree curriculum. Working in various capacities within the ACC Fitness Center/Swimming Pool, Employee Wellness Program and Physical Education Department will be required. Students should achieve entry-level proficiency at the completion of this course. Graded as Satisfactory/Unsatisfactory. PREREQUISITES: HWE 245 and Department Chair permission

Health Information Technology (Medical Records)

**HIT 101   HEALTH INFORMATION
MANAGEMENT SCIENCE   6 CREDITS**
An introduction to the health care field in general and the Health Information Management field in particular. This course addresses organizational structures, regulatory agencies and health care reform. The health record is analyzed for content as it relates to quality, health care personnel responsibility and documentation requirements. Retrieval systems are studied as well as retention regulations. PREREQUISITE: acceptance into HIT Program

**HIT 105   PHYSICIAN PRACTICE: CODING
AND REIMBURSEMENT   5 CREDITS**
This entry-level course is designed to provide the student with opportunities to apply basic ICD-9-CM, CPT and HCPCS principles and guidelines to code outpatient visits. Topics will include physician documentation requirements and guidelines for different payer classes and fraud and abuse issues. PREREQUISITES: HPR 178, MOT 125, 135; COREQUISITE: MOT 133

HIT 111   HEALTH DATA MANAGEMENT   3 CREDITS
A study of the computation of statistical data compiled by health care facilities. Special attention is paid to recognized terminology, accurate computation of formula and computerized statistical methods and accompanying reports. PREREQUISITES: CIS 118, HIT 101

HIT 112   LEGAL ASPECTS   2 CREDITS
The student is introduced to the legal system, identifies the roles of participants in that system and learns appropriate courtroom behavior. The course considers the medical record as a legal document; it deals with privileged information, confidential information and communication, release of information and consent and authorization. Specific federal/state laws as they relate to release of information will be explored. Special attention is paid to court decisions which affect health care facilities, their employees and the medical staff. PREREQUISITE: HIT 101

**HIT 188   HEALTH INFORMATION
PRACTICUM I   2 CREDITS**
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. PREREQUISITES: HIT 101,105,111,112, HPR 178, MOT 125,133,135

**HIT 221   CLINICAL CLASSIFICATION
SYSTEMS I   5 CREDITS**
A study of nomenclatures and classification systems with emphasis on the most recent revisions of ICD-9-CM. Students will study the ICD-9-CM coding conventions and principles. These skills are then applied to the coding of medical records. Further experience will include sequencing of diagnoses, DRG assignment and abstracting. PREREQUISITES: completion of all first year HIT courses, HPR 178, MOT 125, 133, 135

HIT 222   QUALITY MANAGEMENT   3 CREDITS
This course is designed to introduce the student to the concepts of quality assessment/quality improvement, utilization review and risk management. JCAHO, state and federal regulations for quality management will be studied. PREREQUISITES: HIT 101, 105, 111, 112, 188, 221

**HIT 225   HEALTH INFORMATION
MANAGEMENT   3 CREDITS**
A comprehensive course designed to give the student a background in the principles of management as they relate to organization and administration of a health information management department. PREREQUISITES: HIT 101, 105, 111, 112, 188, 221, 231, MOT 125, 133, 135

**HIT 231   CLINICAL CLASSIFICATIONS
SYSTEMS II   5 CREDITS**
An intermediate study of ICD-9-CM coding conventions and principles. Reimbursement issues also studied. PREREQUISITES: completion of all first year HIT courses and HIT 221

HIT 241   CPT CODING BASIC PRINCIPLES   2 CREDITS
This entry-level course is designed to provide the student with skill sets to apply the current procedural terminology (CPT) and HCPCS code set principles and guidelines for application in reporting/communication information and data about clinical services provided to patients by health care providers. Topics include understanding what the cpt nomenclature is, how and why it is used and guidelines for each code category and how it is to be applied to represent services within each code category. PREREQUISITES: HIT 221, 231, HPR 178, MOT 125, 133 135

HIT 275   SPECIAL TOPICS   1–6 VARIABLE CREDITS
Special Topics courses may be offered to provide students with an opportunity to study special areas in the discipline. Course content will be determined by the instructor with a complete syllabus each time the course is offered.

HIT 285   INDEPENDENT STUDY 1–6 VARIABLE CREDITS
Course designed to meet the individual needs of students. PREREQUISITE: Instructor's permission

**HIT 288   HEALTH INFORMATION
PRACTICUM II   2 CREDITS**
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. PREREQUISITES: Completion of all first and second year HIT courses: MOT 125, 133, 135

History

HIS 101   WESTERN CIVILIZATION I   3 CREDITS
Explores a number of events, peoples, groups, ideas, institutions and trends that have shaped Western Civilization from the prehistoric era to 1650. Reflects the multiple perspectives of gender, class, religion and ethnic groups. Focuses on

developing, practicing and strengthening the skills historians use while constructing knowledge in this discipline.

This course is one of the Statewide Guaranteed Transfer courses.

HIS 102   WESTERN CIVILIZATION II   3 CREDITS
Explores a number of events, peoples, groups, ideas, institutions and trends that have shaped Western Civilization from 1650 to the present. Reflects the multiple perspectives of gender, class, religion and ethnic groups. Focuses on developing, practicing and strengthening the skills historians use while constructing knowledge in this discipline.

This course is one of the Statewide Guaranteed Transfer courses.

HIS 201   UNITED STATES (U.S.) HISTORY I   3 CREDITS
Explores events, trends, peoples, groups, cultures, ideas and institutions in North America and United States history, including the multiple perspectives of gender, class and ethnicity, between the period when Native American Indians were the sole inhabitants of North America and the American Civil War. Focuses on developing, practicing and strengthening the skills historians use while constructing knowledge in the discipline.

This course is one of the Statewide Guaranteed Transfer courses.

HIS 202   UNITED STATES (U.S.) HISTORY II   3 CREDITS
Explores events, trends, peoples, groups, cultures, ideas and institutions in United States History, including the multiple perspectives of gender, class and ethnicity, between the period of the American Civil War and the present. Focuses on developing, practicing and strengthening the skills historians use while constructing knowledge in the discipline.

This course is one of the Statewide Guaranteed Transfer courses.

HIS 225   COLORADO HISTORY   3 CREDITS
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 247   CONTEMPORARY WORLD HISTORY 3 CREDITS
Investigates the major political, social and economic developments; international relationships; scientific breakthroughs; and cultural trends that have shaped the various global regions and nation-states from 1900 to the present. Emphasizes the interactions of global regions and nation-states.

This course is one of the Statewide Guaranteed Transfer courses.

HIS 275   SPECIAL TOPICS   1–5 VARIABLE CREDITS
Focuses on the exploration of current topics, issues and activities related to one or more aspects of history.

HIS 285   INDEPENDENT STUDY 1–5 VARIABLE CREDITS
Incorporates structured and guided, individualized research that is organized and tailored around the interests and needs of the individual student. PREREQUISITE: Instructor's permission

Honors

HON 275 SPECIAL TOPICS   1–6 VARIABLE CREDITS
This course provides seminars on special topics. Topics may be of general interest, or may relate to the honors topic of Phi Theta Kappa. Each year the current honors topic will be offered. The 2004-2005 topic is "Popular Culture: Shaping and Reflecting Who We Are". PREREQUISITE: Instructor's permission

HON 285 INDEPENDENT STUDY 1–6 VARIABLE CREDITS
Course designed to meet the individual needs of students. PREREQUISITE: Instructor's permission

Humanities

HUM 103 INTRODUCTION TO FILM ART   3 CREDITS
This course studies the relationships among film's stylistic systems, narrative systems and audience reception. Students view, discuss and critically analyze a variety of films which represent key historical and aesthetic periods as well as a variety of genres and themes. The course incorporates the vocabulary stylistic systems (for instance, cinematography, editing and art direction) and narrative systems.

HUM 115 WORLD MYTHOLOGY   3 CREDITS
This course introduces students to the mythologies of various cultures with a special emphasis on Greek, Asian and North American examples. Common themes are illustrated and some artistic reactions are used as examples.

HUM 118 RELIGION IN AMERICAN CULTURE 3 CREDITS
Investigates the various ways in which religion and American culture interact. It begins with the religion of Native Americans, which existed in a pre-modern society where religion went unchallenged as the preeminent organizing principle, to our post-modern era, where religion competes with a multiplicity of other belief systems in a complex societal matrix. This course pays close attention to the sundry ways in which religion and American culture interface.

HUM 121 EARLY CIVILIZATIONS   3 CREDITS
Introduces students to the history of ideas in Western cultures through a study of the visual arts, literature, drama, music and philosophy of early civilizations, Greek and Roman antiquity and Christian eras. Emphasizes connections among the arts, values and diverse cultures.

This course is one of the Statewide Guaranteed Transfer courses.

HUM 122 FROM MEDIEVAL TO MODERN   3 CREDITS
Examines the Medieval, Renaissance and Baroque periods through a study of the visual arts, literature, music and philosophy. Compares and contrasts diverse cultural ideas and feminine and masculine viewpoints.

This course is one of the Statewide Guaranteed Transfer courses.

HUM 123 THE MODERN WORLD   3 CREDITS
Examines the cultures of the 17th through the 20th centuries by focusing on the inter-relatedness of the arts, ideas and history. Considers the influences of industrialism, scientific development and non-European peoples.

This course is one of the Statewide Guaranteed Transfer courses.

HUM 164 AMERICAN CINEMA   3 CREDITS
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, anesthetically and culturally to reinforce and challenge America's national self image.

HUM 201 TWENTIETH CENTURY
               AMERICAN ART   3 CREDITS
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 220 THE CULTURAL HISTORY
               OF ROCK AND ROLL   3 CREDITS
This course will survey the social and cultural fabric of post-WWII America and England through the prism of rock and roll music. By placing this tradition of popular music in its historical context, the course will look at the interrelated

themes of music, business, politics, gender, race, class and culture.

HUM 275 SPECIAL TOPICS   1–6 VARIABLE CREDITS
This course is designed to provide students with opportunity to pursue in-depth special areas of interest in the Humanities. The content of the course will be determined by the instructor(s) who will provide a complete syllabus.

HUM 285 INDEPENDENT STUDY 1–6 VARIABLE CREDITS
Course designed to meet the individual needs of students. PREREQUISITE: Instructor's permission

Interior Design

IND 100   INTERIOR DESIGN FUNDAMENTALS   4 CREDITS
An introduction to design elements, principles and theory. Application techniques, emphasizing design relationships and composition, will be explored. Basic skills and techniques of both visual and oral presentations will be introduced. PREREQUISITES: Attend an Interior Design Orientation; Minimum CPT scores: 80 for Reading Comprehension; 95 for Sentence Skills and 57 for Arithmetic or equivalent (see interior design degree program)

IND 107   HISTORY OF INTERIOR DESIGN   3 CREDITS
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. PREREQUISITES: IND 100; CIS 118

IND 108   PROFESSION SURVEY   1 CREDIT
Guest speakers share experiences and insights concerning job types and opportunities; business practices; current work; professional organizations; tools, methods and educational requirements necessary for various positions; and prevailing professional attitudes. PREREQUISITES: Attend an Interior Design Orientation; Minimum CPT scores: 80 for Reading Comprehension; 95 for Sentence Skills and 57 for Arithmetic or equivalent (see interior design degree program)

IND 111   DRAFTING FOR INTERIORS   4 CREDITS
Introduction to 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. PREREQUISITES: Attend an Interior Design Orientation; Minimum CPT scores: 80 for Reading Comprehension; 95 for Sentence Skills and 57 for Arithmetic or equivalent (see interior design degree program)

IND 112   GRAPHIC COMMUNICATION   4 CREDITS
Students will learn 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. PREREQUISITES: IND 100, 111

IND 114   SPACE PLANNING   3 CREDITS
Students will learn the principles and factors of space planning and practice the space planning process through residential and light commercial applications. Students are introduced to interior architecture. Use of bubble diagrams and freehand ink presentation techniques are also included. PREREQUISITES: IND 100, 111

IND 117   INTERIOR TEXTILES   2 CREDITS
Emphasizes the study of fabrics, fibers, weaves, finishes, dying and printing methods for residential and commercial fabrics and carpets. Resources are discussed and developed. PREREQUISITES: Attend an Interior Design Orientation; Minimum CPT scores: 80 for Reading Comprehension; 95 for Sentence Skills and 57 for Arithmetic or equivalent (see interior design degree program)

IND 118   INTERIOR FINISHES   2 CREDITS
Examines finish materials for residential and commercial interior design; preparation and installation techniques; introduction to specifications and estimating. PREREQUISITES: Attend an Interior Design Orientation; Minimum CPT scores: 80 for Reading Comprehension; 95 for Sentence Skills and 57 for Arithmetic or equivalent (see interior design degree program)

IND 151   RESIDENTIAL DESIGN   4 CREDITS
Student learns and applies the preliminary project phases of the residential design process. Project documentation is introduced and practiced. At least one portfolio project is produced. PREREQUISITES: IND 100, 111, 112, 114, 117, 118: 107 and 205 recommended

IND 152   COMMERCIAL DESIGN I   2 CREDITS
Introduction to commercial design space planning and procedures. Students will study and apply space planning, code requirements and design documentation techniques for a variety of commercial project types through a series of short exercises. Emphasis will be placed on programming and schematic design. Hand drafting, sketching and various office computer software applications will be utilized. PREREQUISITES: CIS 118, IND 100, 111,112, 114, 117, 118; IND 205 recommended; COREQUISITES: IND 151 (strong drafting and space planning skills recommended if 151 taken with 152)

IND 160   ACCESSORIZING   2 CREDITS
Student learns how to assist clients in selection of art, antiques and accessories to aid in defining the character of a space. Styles and the eclectic mix of styles are covered, as well as placement and effective use of themes.

IND 175   SPECIAL TOPICS   1–4 VARIABLE CREDITS
Explores current topics, issues and activities related to one or more aspects of the named discipline.

IND 178   SEMINAR–DESIGN RESUME   1 CREDIT
This course provides students with an experiential learning opportunity. PREREQUISITES: IND 100, 108, 114; CIS 118; ENG 131

IND 178   SEMINAR– MARKET TOUR   1–6 VARIABLE CREDITS
This course provides students with an experiential learning opportunity. PREREQUISITES: IND 100, 111, 117, 118

IND 200   KITCHEN AND BATH DESIGN   4 CREDITS
The specialized design process and documentation requirements of kitchen and bath design are introduced and applied using NKBA guidelines. Student becomes familiar with trade resources supporting this design field. At least two portfolio projects are produced. Students will be encouraged to produce project documents using a variety of computer software applications. PREREQUISITES: IND 151, 205, 211, 225; ENG 131; COREQUISITES: IND 211, 225

IND 201 COMMERCIAL DESIGN II 4 CREDITS
Emphasis is on commercial design. Student will study and apply ADA requirements, codes, building systems, office landscape systems and components; produce commercial project drawings and documentation; and prepare both graphic and oral presentations. Student is encouraged to use the Internet for research and to produce project documents using a variety of computer software applications. PREREQUISITES: IND 151, 152, 200, 205, 211, 225; CAD 105; ENG 131; COREQUISITES IND 200, 225

IND 205 PROFESSIONAL PRACTICE FOR INTERIOR DESIGNERS 2 CREDITS
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. PREREQUISITES: IND 100, 108, 111, 114, 117, 118; CIS 118

IND 207 WINDOW TREATMENTS 2 CREDITS
Discusses and demonstrates the hard and soft window treatments used in today's market place. Measuring, installing, pricing, ordering and resource development are investigated. Fabric weaves and weights, trims and linings are discussed and creative treatments are designed and specified.

IND 211 INTERIOR CONSTRUCTION 4 CREDITS
This course introduces the student to interior building systems and assemblies, construction documents and details and codes applicable to interior architecture. Student will apply this knowledge to various graphic projects and is encouraged to produce course projects using the computer and CAD software. PREREQUISITES: IND 100, 111, 112, 114, 118; CAD 105; CIS 118

IND 225 LIGHTING DESIGN 2 CREDITS
Student studies and applies basic knowledge of interior lighting technology and design. Content includes lamp classifications, color rendition, how lighting sources affect the perception of space, how to compute and control proper lighting levels and how to communicate design information using a reflected ceiling plan and luminaire schedule. Students are encouraged to produce projects using a variety of computer software applications. PREREQUISITES: IND 100, 111, 112, 114, 118; CIS 118

IND 275 SPECIAL TOPICS 1–6 VARIABLE CREDITS
These special topics courses are separately designed for specific educational purposes: to offer more in-depth training/instruction in a particular subject; to cover material not found in other IND courses; or to study timely issues. They are offered as time, student demand, facilities and faculty availability permit, often during summer semester. PREREQUISITES: see advisor and/or semester course schedule

IND 278 WORKSHOP–DESIGN PORTFOLIO 1 CREDIT
Provides students with an experiential learning opportunity. PREREQUISITES: IND 178 (RESUME), 200, 201; ENG 131

IND 278 WORKSHOP–DESIGN RESEARCH 1 CREDIT
Provides students with an experiential learning opportunity. PREREQUISITES: IND 151,152, 200, 205, 211, 225; ENG 131; COREQUISITES: IND 200, 211, 225

IND 280 INTERNSHIP 4 VARIABLE CREDITS
Provides work experience in a business or industry; 45 fieldwork hours per credit hour. PREREQUISITES: IND 178 Resume, 200, 201; ENG 131

IND 281 INTERNSHIP II 1–4 VARIABLE CREDITS
Provides work experience in a business or industry; 45 fieldwork hours per credit hour. PREREQUISITES: IND 280

IND 289 CAPSTONE: ADVANCED DESIGN 3 CREDITS
Student completes an advanced design project that aligns with a chosen career path. Scope and content vary. Focus is on synthesizing and demonstrating skills and knowledge gained in prior course work. A final portfolio-quality project is produced and orally presented. PREREQUISITES: IND 200, 201, 278 (DESIGN RESEARCH); ENG 131

Insurance

INS 200 PROPERTY AND LIABILITY INSURANCE PRINCIPLES 3 CREDITS
Presents a one-semester course designed for individuals wishing to obtain a general knowledge of property and liability insurance principles. The course is an overview of insurance fundamentals, insurance operations and insurance contracts, loss exposures and risk management.

INS 201 PERSONAL INSURANCE 3 CREDITS
Presents an one-semester course designed for individuals wishing to obtain a general knowledge of personal insurance. The course is an overview of the loss exposures faced by individuals and families and the type of insurance that is available to treat those loss exposures.

INS 202 COMMERCIAL INSURANCE 3 CREDITS
Presents a one-semester course designed for individuals wishing to obtain a general knowledge of commercial insurance. The course is an overview of the loss exposures faced by businesses and other organizations and the type of insurance that is available to remedy those loss exposures.

INS 204 DELIVERING INSURANCE SERVICES 3 CREDITS
Presents a one-semester course designed for individuals wishing to obtain a general knowledge of how insurance companies can deliver quality customer service. The course is an overview of insurance fundamentals and how an insurance customer service representative applies that knowledge to effectively serve his/her customer base.

INS 230 ESSENTIALS OF RISK MANAGEMENT 3 CREDITS
Provides an understanding of the nature, purpose and steps of risk management; identifies and analyzes the loss exposures of individuals and organizations; examines alternative risk management techniques; and develops rules for choosing risk management techniques.

INS 269 PERSONAL FINANCIAL PLANNING 3 CREDITS
Presents a one-semester course designed for individuals wishing to obtain a general knowledge of personal financial planning. The course is designed to provide the students with a detailed analysis of personal financial planning, including areas of investment planning, income tax planning, planning for retirement and estate planning.

Investments

INV 115 INVESTMENTS/STOCKS & BONDS 3 CREDITS
Provides the student with a broad range of investment opportunities. The curriculum includes information about common stocks, corporate bonds, mutual funds, insurance and real estate. The student will receive the basic general business concepts and information necessary to make a rational decision in the management of personal funds. This course covers the

investment process using brokers, discount brokers, online trading or investment bankers. Also, students will learn how to price stocks and bonds and understand the concept of time value of money and transaction costs. The student will also understand derivative securities and mutual funds and long versus short term transactions. The student will understand how to build an investment portfolio.

INV 215   ADVANCED INVESTMENTS   3 CREDITS
Provides the skills necessary to enter the investment industry. It prepares the student for the series 7 exam. Thus, it covers in detail the money market, capital market and derivative market. This course covers the investment process using brokers, discount brokers, online trading or investment bankers. Also, students will learn how to price stocks and bonds and understand the concept of time value of money and transaction costs. The student will also understand derivative securities and mutual funds and long versus short term transactions. The student will understand how to build an investment portfolio. The student will also understand how to value all investments for holding period return. PREREQUISITES: an accounting course or investment course; or instructor's permission

INV 285   INDEPENDENT STUDY 1–6 VARIABLE CREDITS
Meets the individual needs of students. Students engage in intensive study or research under the direction of a qualified instructor. PREREQUISITE: Instructor's permission

Japanese

JPN 111   JAPANESE I   5 CREDITS
Japanese I begins a sequence dealing with the development of functional proficiency in listening, speaking, reading and writing Japanese.

JPN 112   JAPANESE II   5 CREDITS
Japanese II continues Japanese I in the development of functional proficiency in listening, speaking, reading and writing Japanese. PREREQUISITES: JPN 111 or instructor's permission

JPN 211   JAPANESE III   3 CREDITS
Continues Japanese I and Japanese II in the development of increased functional proficiency in listening, speaking, reading and writing Japanese. NOTE: The order of the topics and the methodology will vary according to texts and instructors. PREREQUISITE: JPN 112
   This course is one of the Statewide Guaranteed Transfer courses.

JPN 212   JAPANESE IV   3 CREDITS
JPN 212 continues JPN 111, JPN 112 and JPN 211 in the development of increased proficiency in listening, speaking, reading & writing the language. This class includes an interdisciplinary overview of Japanese culture and society. Topics in literature, the arts, contemporary society, corporate culture are explored. PREREQUISITES: JPN 211 or instructor's permission.
   This course is one of the Statewide Guaranteed Transfer courses.

JPN 275   SPECIAL TOPICS   1–6 VARIABLE CREDITS
Provides students with a vehicle to pursue in-depth exploration of special topics of interest.

JPN 285   INDEPENDENT STUDY 1–6 VARIABLE CREDITS
Course designed to meet the individual needs of students. PREREQUISITE: Instructor's permission

Journalism and Mass Communications

JOU 105   INTRO TO MASS MEDIA   3 CREDITS
This survey course places the mass media in a historical and cultural perspective to study the relationship between mass media and society. This course also introduces students to some of the ethical, legal and economic issues that affect the mass media and their consumers.

JOU 106   FUNDAMENTALS OF REPORTING   3 CREDITS
This is an introductory course in news writing, reporting and interviewing, with an emphasis on clarity, accuracy, timeliness and fairness. PREREQUISITE: ENG 121

JOU 275   SPECIAL TOPICS   1–6 VARIABLE CREDITS
Courses offered under the Special Topics heading address special issues in reporting and editing.

JOU 285   INDEPENDENT STUDY 1–6 VARIABLE CREDITS
Course designed to meet the individual needs of students. PREREQUISITE: Instructor's permission

Latin

LAT 111   LATIN I   5 CREDITS
This course begins a sequence in the development of functional proficiency in listening, speaking, reading and writing the language.

LAT 112   LATIN II   3 CREDITS
Latin II continues Latin I in the development of functional proficiency in listening, speaking, reading, translating and writing Latin. The order of topics and methodology will vary according to the individual texts and instructors. PREREQUISITE: LAT 111

LAT 211   LATIN III   3 CREDITS
Latin III continues Latin I and II in the development of increased functional proficiency in reading, translating and writing Latin, as well as listening and speaking Latin to the extent allowed by the nature of a classical language. This course provides the students with an opportunity to examine, compare and contrast language systems and understand the culture and values of the classical world. PREREQUISITE: LAT 112

LAT 212   LATIN IV   3 CREDITS
Latin IV continues Latin I, II and III in the development of increased functional proficiency in reading, translating and writing Latin, as well as listening and speaking Latin to the extent allowed by the nature of a classical language. This course provides the students with additional opportunity to examine, compare and contrast language systems and understand the culture and values of the classical world. PREREQUISITE: LAT 211

LAT 275   SPECIAL TOPICS   1–6 VARIABLE CREDITS
Provides students with an in-depth exploration of special topics of interest.

Law Courses

See Paralegal

Literature

Recommended: College-level reading ability

LIT 115   INTRODUCTION TO LITERATURE   3 CREDITS
Introduces students to fiction, poetry and drama. Emphasizes active and responsive reading.
   This course is one of the Statewide Guaranteed Transfer courses.

LIT 201   MASTERPIECES OF LITERATURE I   3 CREDITS
Examines significant writings in world literature from the ancients through the Renaissance. Emphasizes careful reading and understanding of the works and their cultural backgrounds.
This course is one of the Statewide Guaranteed Transfer courses.

LIT 202   MASTERPIECES OF LITERATURE II 3 CREDITS
Examines significant writings in world literature from the Seventeenth Century to the present. Emphasizes careful reading and understanding of the works and their cultural backgrounds.
This course is one of the Statewide Guaranteed Transfer courses.

LIT 205   ETHNIC LITERATURE   3 CREDITS
Focuses on significant texts by ethnic Americans, including African-American, Native American, Latino and Asian Americans. Emphasizes careful reading and understanding of the cultural and literary elements of the works.
This course is one of the Statewide Guaranteed Transfer courses.

LIT 211   SURVEY OF AMERICAN LIT I   3 CREDITS
This course is an overview of American literature from its beginnings through the Civil War. It explores ideas, historical and social contexts, themes and literary characteristics of works in various genres by major writers.
This course is one of the Statewide Guaranteed Transfer courses.

LIT 212   SURVEY OF AMERICAN LIT II   3 CREDITS
This course is an overview of American literature from the mid-Nineteenth Century to the present. It explores ideas, historical and social contexts, themes and literary characteristics of works in various genres by major writers.
This course is one of the Statewide Guaranteed Transfer courses.

LIT 220   JEWISH–AMERICAN LITERATURE   3 CREDITS
Surveys some of the major achievements in literature and film by American Jews in late-nineteenth through the twentieth century. We will proceed chronologically, focusing on the fiction of the immigrant experience, on the politicized literature of the 1930s and the 1940s, on the literature of the post-WWII era and its struggle to fashion an adequate response to the Holocaust and on questions surrounding assimilation, acculturation and identity politics.

LIT 221   SURVEY OF BRITISH LIT I   3 CREDITS
This course is an overview of British literature from the Anglo-Saxon period into the Eighteenth Century. It explores ideas, historical and social contexts, themes and literary characteristics of works in various genres by major writers.
This course is one of the Statewide Guaranteed Transfer courses.

LIT 222   SURVEY OF BRITISH LIT II   3 CREDITS
This course is an overview of British literature from the Eighteenth Century to the present. It explores ideas, historical and social contexts, themes and literary characteristics of works in various genres by major writers.
This course is one of the Statewide Guaranteed Transfer courses.

LIT 225   INTRO TO SHAKESPEARE   3 CREDITS
This course 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 232   GOTHIC LITERATURE   3 CREDITS
Provides an overview of Gothic literature from the 1750's to the present. The course emphasizes careful reading, analysis, interpretation and understanding of the works and their cultural and historical backgrounds. Critical thinking, discussion and writing about significant works of Gothic literature will be used as tools to develop discriminating reading skills for lifetime enjoyment of the genre.

LIT 235   SCIENCE FICTION   3 CREDITS
Examines the techniques and issues of science fiction through a close reading of a variety of writers in the genre.

LIT 240   POETS AND THEIR POEMS   3 CREDITS
Teaches strategies for reading, interpreting, discussing and evaluating a variety of poems with particular attention to a study of selected major poets in depth.

LIT 245   LIT OF THE AMERICAN WEST   3 CREDITS
This course examines works in various genres by writers of the American West. It investigates the dominant themes and social and historical backgrounds.

LIT 255   CHILDREN'S LITERATURE   3 CREDITS
This course examines the criteria for selecting appropriate literature for children. Discussion topics explore age levels, values taught through literature and literary and artistic qualities.

LIT 257   LITERATURE AND FILM   3 CREDITS
This course examines the relationship between literature and motion pictures, emphasizing film techniques and the interpretive function of filmmakers.

**LIT 259   SURVEY OF AFRICAN
            AMERICAN LITERATURE   3 CREDITS**
This course is an overview of African American Literature from 1750 to the present. It explores ideas, historical and social contexts, themes and literary characteristics of works in various genres by major writers.

LIT 266   INTRODUCTION TO C.S. LEWIS   3 CREDITS
An introduction to the essays, fiction and literary criticism of C.S. Lewis. Emphasis is on the careful reading and understanding of the works, on class discussion and on the writing of interpretive and critical essays.

LIT 267   THE BIBLE AS LITERATURE   3 CREDITS
An introduction to the Bible as the textual centerpiece of Western literature. Students will encounter the various literary genres represented in Biblical texts, the process of canonization, ways in which the Bible has been read by its various interpretive communities and some impacts of the Bible in such areas as law, poetry, fiction, psychology, ethics and theology.

**LIT 269   POPULAR LITERATURE
            AND CULTURE   3 CREDITS**
Explores special interests in literature, such as Detective Fiction and Science Fiction.

LIT 275   SPECIAL TOPICS   1–6 VARIABLE CREDITS
Explores particular authors, topics, themes in depth, such as Ibsen, Faulkner or Twain, great fiction of the Nineteenth Century, the Gothic Novel or Literature of the Holocaust.

LIT 285   INDEPENDENT STUDY 1–6 VARIABLE CREDITS
Course designed to meet the individual needs of students.
PREREQUISITES: Instructor's permission

Management

MAN 116 PRINCIPLES OF SUPERVISION   3 CREDITS
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 128 HUMAN RELATIONS
IN ORGANIZATIONS   3 CREDITS**
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   3 CREDITS**
This course provides the student with a broad overview of the contemporary issues, theories and principles used to effectively manage human resources. Topics include hiring, compensation, development, employee relations and legal issues.

**MAN 201 HUMAN RESOURCE
MANAGEMENT II   3 CREDITS**
This course offers further discussion of concepts of Human Resource Management. Topics covered include techniques and procedures in resources planning, appraising performance, selection and staffing, training and development, job enrichment and wage and salary administration.

MAN 205 EVENT PLANNING   3 CREDITS
This course systematically presents the components of event planning: organization, personnel, finances, site selection, transportation, program design, promotion, arranging exhibits and evaluation.

MAN 215 ORGANIZATIONAL BEHAVIOR   3 CREDITS
The course examines the behaviors of groups and individual members of organizations and how that behavior can be influenced. Course emphasis is on the tools managers use to achieve organizational effectiveness.

MAN 216 SMALL BUSINESS MANAGEMENT   3 CREDITS
This course examines the elements necessary for the successful formulation of a new small business. Its also designed to enhance the skills of those already involved in the operation of a small business. The course includes the development of a complete small business plan.

MAN 224 LEADERSHIP   3 CREDITS
Focuses on the leadership skills necessary to bring about change in an organization. Students learn to develop and communicate a shared vision, to empower employees, to manage conflict, to negotiate and to develop organizations so that all are working toward common goals.

MAN 226 PRINCIPLES OF MANAGEMENT   3 CREDITS
A survey of the principles of management. Emphasis will be on the primary functions of planning, organizing, staffing, directing and controlling with a balance between the behavioral and operational approaches.

MAN 230 CORPORATE RESPONSIBILITY   3 CREDITS
This course examines the concept of corporate responsibility and the extent to which an organization's resources should be used to identify and respond to social problems. Included in the course will be topics of corporate and social responsibility and the concept of servant leadership.

MAN 240 STRATEGIC MANAGEMENT   3 CREDITS
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 241 PROJECT MANAGEMENT
IN ORGANIZATIONS   3 CREDITS**
This course is designed to introduce students to the planning, implementation and control activities of Project Management, including project and performance evaluation, quality control and work flow analysis. Emphasis will be on the initiating, planning, executing, controlling and closing activities of Project Management.

**MAN 243 PROJECT MANAGEMENT
IN ACTION   3 CREDITS**
Brings into focus the subject material covered in MAN 241 and CIS 202. Emphasis will be placed on melding general concepts of project management with practical applications of software to complete a project management assignment. PREREQUISITES: MAN 241 and CIS 202 or instructor's permission

MAN 275 SPECIAL TOPICS   1–6 VARIABLE CREDITS
This course is designed to provide students with the opportunity to study topics in management in greater depth than provided by regular course offerings.

Manufacturing Technology

MTE 120 MANUFACTURING PROCESSES   3 CREDITS
Provides the student an overview of the different methods, tools and machines which are used to manufacture industrial and consumer products.

**MTE 141 PRINTED CIRCUIT BOARD
ECAD/CAM   3 CREDITS**
Introduces the student to the basic computer concepts of creating a production file for the design and manufacture of a printed circuit board. Topics include the computer applications for design capture, PCB library management, databases, integration tools, packaging, design rules and production documents. PREREQUISITE: Instructor's permission

Marketing

MAR 106 MARKETING YOUR IMAGE   3 CREDITS
Teaches students how to market themselves to prospective employers, clients, professional groups and audiences of all types. Major emphasis will be placed on skills used to gain employment (resumes, interviewing and professional appearance) and on skills used to achieve continued personal success (professional behavior and attitude). This course will include at least one simulated interview.

MAR 110 INTRODUCTION TO SALES   3 CREDITS
Broadband specific e-learning targeting the following areas: Fundamental Selling, Selling Against the Competition, Selling Broadband Services and Business Solutions Selling. COREQUISITE: Employment in the Broadband Industry

MAR 111 PRINCIPLES OF SALES   3 CREDITS
This course 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 CREDITS
This course is a study of the basic principles and techniques of merchandising, operations, layout, store organization, site location and customer service with an emphasis on retailing operations.

MAR 126 MERCHANDISING   3 CREDITS
This course emphasizes facility/store organization and merchandising techniques. The study of what makes a store appealing includes layout, product mix and techniques of display.

MAR 160 CUSTOMER SERVICE   3 CREDITS
This course 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. (This course was previously MAR 136).

MAR 216 PRINCIPLES OF MARKETING   3 CREDITS
The analysis of theoretical marketing processes and the strategies of product development, pricing, promotion and distribution and their applications to business and the individual consumer.

MAR 217 E-COMMERCE MARKETING   3 CREDITS
Explores new marketing strategies that have emerged as areas of information technology and the Internet have evolved. This course examines traditional marketing concepts of buying behavior, promotion, production and others, then redefines them as they apply to marketing on the World Wide Web. Web fundamentals, e-marketing trends, strategies, models and research will be examined.

MAR 220 PRINCIPLES OF ADVERTISING   3 CREDITS
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 235 CONSUMER BEHAVIOR   3 CREDITS
Enables the student to understand the variables that affect consumer behavior in the marketplace and the implications of this knowledge for marketing decisions and strategies.

MAR 245 SALES MANAGEMENT   3 CREDITS
Explores management of the selling function. It includes forecasting, organization of sales force, recruiting, selection, training, compensation, retention and territory management.

MAR 249 STRATEGIC MARKETING   3 CREDITS
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.

MAR 275 SPECIAL TOPICS   1–6 VARIABLE CREDITS
Provides students with a vehicle to pursue special topics of interest in business. The content of this course is designed on an as-needed basis to provide current, up-to-date information.

Mathematics

MAT 030 FUNDAMENTALS OF MATHEMATICS   2 CREDITS
Includes the vocabulary, operations and applications of whole numbers, decimals and basic fractions and mixed numbers. PREREQUISITES: Math assessment, arithmetic score 24-56

MAT 060 PRE-ALGEBRA   3 CREDITS
Furthers the study of fractions and mixed numbers. Also included are vocabulary, operations and applications of ratio, proportion, percent, area, perimeter, U.S. and metric measures, integers and an introduction to algebraic expressions and the solution of basic first-degree equations. PREREQUISITES: MAT 030 or Math Assessment, arithmetic score of 57-120; elementary algebra score of < 45

MAT 090 INTRODUCTORY ALGEBRA   4 CREDITS
Includes first-degree equations, inequalities, formulas, polynomials, algebraic fractions, factoring polynomials, solving quadratic equations by factoring and applications. Coordinate geometry, graphing linear equations and inequalities and systems of linear equations may be included. PREREQUISITES: MAT 060 or Math Assessment, arithmetic score of 45-60

MAT 101 ENHANCED MATHEMATICS SUPPORT   1 CREDIT
Supplements math classroom instruction through the Mathematics Support Center, a student-centered learning environment. Students will be able to utilize the following resources: professional and peer tutoring, mathematics and tutorial software, on-line tutorial resources, videotapes and training guides for these resources. Students will also be able to obtain help with calculators and mathematical software required in their math courses.

MAT 106 SURVEY OF ALGEBRA   4 CREDITS
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. PREREQUISITES: MAT 090 or Math Assessment score of 61-84; COREQUISITE: MAT 111 required

MAT 108 TECHNICAL MATHEMATICS   4 CREDITS
Covers material designed for career technical or general studies students who need to study particular mathematical topics. Topics may include measurement, algebra, geometry, trigonometry, graphs, and/or finance. These are presented on an introductory level and the emphasis is on applications. PREREQUISITES: MAT 060 or equivalent

MAT 111 TECHNOLOGY LAB FOR ALGEBRA   1 CREDIT
Explores and applies algebraic topics in a laboratory course using graphing calculators. PREREQUISITES: MAT 090 or Math Assessment score of 61-84; COREQUISITES: MAT 106 required

MAT 120 MATHEMATICS FOR LIBERAL ARTS 4 CREDITS
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. PREREQUISITES: MAT 106 and 111 or Math Assessment score of 85-120
This course is one of the Statewide Guaranteed Transfer courses.

MAT 121 COLLEGE ALGEBRA 4 CREDITS

Includes a brief review of intermediate algebra, equations and inequalities, functions and their graphs, exponential and logarithmic functions, linear and nonlinear systems, selection of topics from among: graphing of the conic sections, introduction to sequences and series, permutations and combinations, the binomial theorem and theory of equations. PREREQUISITES: MAT 106 and 111 or Math Assessment score of 85-120

This course is one of the Statewide Guaranteed Transfer courses.

MAT 122 COLLEGE TRIGONOMETRY 3 CREDITS

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. PREREQUISITE/COREQUISITE: MAT 121 or instructor's permission

This course is one of the Statewide Guaranteed Transfer courses.

MAT 123 FINITE MATHEMATICS 4 CREDITS

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. PREREQUISITES: MAT 106 or math assessment

This course is one of the Statewide Guaranteed Transfer courses.

MAT 125 SURVEY OF CALCULUS 4 CREDITS

Includes derivatives, integrals and their applications, with attention restricted to algebraic, exponential and logarithmic functions for business, life science and/or social science majors. PREREQUISITES: MAT 121 or 123

This course is one of the Statewide Guaranteed Transfer courses.

MAT 135 INTRODUCTION TO STATISTICS 3 CREDITS

Includes data presentation and summarization, introduction to probability concepts and distributions, statistical inference – estimation, hypothesis testing, comparison of populations, correlation and regression. PREREQUISITE: MAT 106; COREQUISITE: MAT 179 required

This course is one of the Statewide Guaranteed Transfer courses.

MAT 155 INTEGRATED MATH I 3 CREDITS

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. PREREQUISITES: Accuplacer score of 85, ACT score of 19, or successful completion of MAT 106 with a grade of "C" or better

MAT 156 INTEGRATED MATH II 3 CREDITS

Furthers 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. PREREQUISITE: MAT 155

MAT 179 COMPUTER APPLICATIONS FOR STATISTICAL PROCEDURES 1 CREDIT

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. PREREQUISITE: MAT 106 or equivalent; COREQUISITE: MAT 135 required

MAT 201 CALCULUS I 5 CREDITS

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. PREREQUISITES: MAT 121 and 122 or equivalent

This course is one of the Statewide Guaranteed Transfer courses.

MAT 202 CALCULUS II 5 CREDITS

Continuation of single variable calculus and includes techniques of integration, polar coordinates, analytic geometry, improper integrals and infinite series. PREREQUISITES: MAT 201 or instructor's permission

This course is one of the Statewide Guaranteed Transfer courses.

MAT 203 CALCULUS III 4 CREDITS

Completes the traditional subject matter of Calculus. Topics include vectors, vector-valued functions and multi-variable calculus including partial derivatives, multiple integrals, line integrals and application. PREREQUISITE: MAT 202

MAT 255 LINEAR ALGEBRA 3 CREDITS

Includes vector spaces, matrices, linear transformations, matrix representations, eigenvalues and eigenvectors. PREREQUISITES: MAT 202 or instructor's permission

MAT 265 DIFFERENTIAL EQUATIONS 3 CREDITS

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. PREREQUISITES: MAT 203 or instructor's permission

MAT 275 SPECIAL TOPICS 1–6 VARIABLE CREDITS

Special Topics courses may be offered to provide students with an opportunity to study special areas in the discipline. Course content will be determined by the instructor with a complete syllabus each time the course is offered.

MAT 285 INDEPENDENT STUDY 1–6 VARIABLE CREDITS

Course designed to meet the individual needs of students. PREREQUISITE: Instructor's permission

Medical Laboratory Technology

HPR 112 PHLEBOTOMY 4 CREDITS

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. COREQUISITE: HPR 113

HPR 113 ADVANCED PHLEBOTOMY 4 CREDITS

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 theoretical content and clinical opportunity. Students successfully completing this course and HPR 112 may apply for a National Phlebotomy Registry Examination. COREQUISITE: HPR 112

MLT 100 INTRODUCTION TO MEDICAL LABORATORY TECHNOLOGY 2 CREDITS

Introduces the student to general and basic information on Clinical Laboratory Science. This course provides an overview of careers within the field, education requirements and professional organizations. Fundamental information about clinical labs including laboratory divisions, safety and quality control is

presented. The course examines the pathophysiology of disease and students are introduced through hands-on experiences to those tests that aid in the diagnosis of disease states.

MLT 120   CLINICAL ASSISTANT CORE MODULE   2 CREDITS
MLT 120 is the Core Module for the Clinical Assistant Certificate. Topics covered include laboratory safety and regulations, quality control, basic specimen collection, reagent preparation and laboratory medical terminology.
This course is not eligible for financial aid.

MLT 131   INTRODUCTION TO HEMATOLOGY   2 CREDITS
MLT 131 is designed as an introduction course to hematology for MLT students and a complete Hematology module for the Clinical Assistant. Basic manual hematology test and basic instrumentation theory are covered. OSHA safety and an introduction to phlebotomy are also included. COREQUISITE: BIO 201

MLT 132   HEMATOLOGY II   4 CREDITS
MLT 132 is the continued section of Hematology for the MLT students. Advanced Hematology theory and disease correlation are covered. OHSA safety, phlebotomy and instrumentation are continued, cell differentials, other manual Hematology testing and coagulation are also included. PREREQUISITES: MLT 131 or instructor's permission; COREQUISITE: BIO 201

MLT 141   IMMUNOLOGY/ IMMUNOHEMATOLOGY   4 CREDITS
Basic principles of immunology are discussed with serological techniques practiced and observed in the clinical labor atory also covered. In addition basic theories of Immunohematology (Blood Banking) such as ABO and Rh typing are taught and experienced in the student laboratory. PREREQUISITES: BIO 201, MLT 131, 132 or instructor's permission; COREQUISITES: BIO 202

MLT 142   URINALYSIS   2 CREDITS
MLT 142 is designed for both MLT and Clinical Assistant (CA) students. Introduction to kidney functions and basic principles of urinalysis with complete urinalysis procedures are discussed and performed. Basic description and recognition of Body Fluids is also included. COREQUISITES: BIO 201 or 202

MLT 180   INTERNSHIP I/BLOOD BANK   1 CREDIT
Presents the clinical internship rotation in one or two blood banking facilities or lab. Student attends for 40 hours per week . Additional practice of blood bank principles and procedures, experience with automated instrumentation and exposure to clinical environment provided. PREREQUISITE: MLT 141

MLT 182   INTERNSHIP II/HEMATOLOGY, COAGULATION &URINALYSIS   5 CREDITS
Presents the clinical internship rotation in a hematology laboratory. Student attends for 40 hours per week for 5 weeks. Additional practice of hematology principles and procedures, experience with automated instrumentation and exposure to clinical environment provided. PREREQUISITES: MLT 131, 132, 142

MLT 231   CLINICAL MICROBIOLOGY   4 CREDITS
A brief introduction to the field of microbiology followed by the more technical aspects of clinical mircrobiology. Infectious diseases will also be discussed. Specimen types from different anatomical sites will be covered for the culture of bacteria in the clinical laboratory. Use of media for isolation and differential tests for identification of bacteria will be performed in the student laboratory. PREREQUISITES: BIO 201, 202 or instructor's permission

MLT 232   PARASITOLOGY/MYCOLOGY   2 CREDITS
An introduction to protozoa, Helminths and blood tissue parasites with special emphasis on microscopic morphology in the detection and correct identification of parasites. This combined course also includes an introduction to fungi with emphasis on microscopic and culture methods. PREREQUISITES: BIO 201 or instructor's permission

MLT 241   INTRODUCTION TO CLINICAL CHEMISTRY   2 CREDITS
MLT 241 is designed as an introduction course to clinical chemistry for MLT students and a complete chemistry module for Clinical Assistant students. Basic laboratory math, instrumentation, safety and quality control are discussed along with basic theory and result evaluation of electrolytes, kidney function and liver function test. PREREQUISITES: CHE 101 or instructor's permission

MLT 242   CLINICAL CHEMISTRY II   4 CREDITS
MLT 242 is the continued section of clinical chemistry for the MLT student. Advanced clinical chemistry theory, organ functions and disease correlations are covered. PREREQUISITES: CHE 101, MLT 241 or instructor's permission

MLT 243   CLINICAL PRACTICES   1 CREDIT
This course is designed for both MLT and CA students. Common health care practices such as point of care testing, vital signs, capillary blood collection and specimen processing are covered. Additionally, information on health care regulatory agencies, medical ethics and patient services are discussed.

MLT 253   MLT SEMINAR   1 CREDIT
Current laboratory technology topics and employability skills are presented in an online format. Grade determination also includes successful completion of three MLT program Comprehensive Exams and 15 hours of community service. PREREQUISITES: ALL MLT courses

MLT 275   SPECIAL TOPICS   1–6 VARIABLE CREDITS
Provides students with a vehicle to pursue in-depth exploration of special topics of interest.

MLT 280   INTERNSHIP III/CLINICAL CHEMISTRY   5 CREDITS
Provides a clinical internship rotation in a chemistry laboratory. Student attends for 40 hours per week for 5 weeks. Additional practice of clinical chemistry principles and procedures, experience with automated instrumentation and exposure to clinical environment provided. PREREQUISITES: MLT 241, 242

MLT 282   INTERNSHIP IV/MICROBIOLOGY   5 CREDITS
Provides a clinical internship rotation in a microbiology laboratory. Student attends for 40 hours per week for 5 weeks. Additional practice of clinical chemistry principles and procedures, experience with automated instrumentation and exposure to clinical environment provided. PREREQUISITES: MLT 231, 232

MLT 285   INDEPENDENT STUDY 1–6 VARIABLE CREDITS
Meets the individual needs of students. Students engage in intensive study or research under the direction of a qualified instructor. PREREQUISITE: Instructor's permission

Medical Office Technology

MOT 110 MEDICAL OFFICE ADMINISTRATION 4 CREDITS
Introduces the administrative duties specifically used in medical offices.

MOT 125 BASIC MEDICAL SCIENCES I 3 CREDITS
This course introduces the allied health professional to basic anatomy and physiology and pathophysiology. Introductory concepts of chemistry and biology as they apply to health care will be discussed as well as an overview of disease and an introduction to pharmacology. The student will learn anatomy and physiology, pathophysiology and related pharmacology of the immune, musculoskeletal and digestive systems. Pediatric and geriatric considerations will be integrated throughout the course. This course is a prerequisite for MOT 133 and MOT 135. PREREQUISITES: HPR 178

MOT 130 INSURANCE BILLING & CODING 3 CREDITS
Introduces outpatient coding with an ultimate goal to present a clear picture of medical procedures and services performed (CPT codes), correlating the diagnosis, symptoms complaint or condition (ICD-9 codes), thus establishing the medical necessity required for third-party reimbursement.

MOT 133 BASIC MEDICAL SCIENCES II 3 CREDITS
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 125. Students may take MOT 133 and MOT 135 in any order after successfully completing MOT 125. PREREQUISITES: MOT 125

MOT 135 BASIC MEDICAL SCIENCES III 3 CREDITS
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 MOT 125. Students may take MOT 133 and MOT 135 in any order after successfully completing MOT 125. PREREQUISITES: MOT 125

**MOT 136 INTRODUCTION TO
CLINICAL SKILLS 2 CREDITS**
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 vital signs measurement.

MOT 138 LABORATORY SKILLS 4 CREDITS
Introduces the student to basic routine laboratory skills and technique for collection, handling and examination of laboratory specimens often encountered in the ambulatory care setting. Emphasizes hands-on experience with lab procedures.

**MOT 140 MEDICAL ASSISTING
CLINICAL SKILLS 4 CREDITS**
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. PREREQUISITE: MOT 136; COREQUISITES: Determined by individual program guides.

MOT 181 ADMINISTRATIVE INTERNSHIP 2 CREDITS
Provides supervised placement in a contracted facility for guided experience and application of knowledge and skill acquired in the classroom. The student assists with a variety of business and billing procedures. Positions are non-paid.

Student must have permission by program coordinator to begin internship. PREREQUISITES: All required coursework for the MOT Medical Assistant Certificate

MOT 182 CLINICAL INTERNSHIP 3 CREDITS
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 CAA-HEP requirement. Student must have permission by program coordinator to begin internship. PREREQUISITES: All required coursework for the MOT Medical Assistant Certificate

MOT 183 MEDICAL ASSISTANT INTERNSHIP 5 CREDITS
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 CAA-HEP requirement. Student must have permission by program coordinator to begin internship. PREREQUISITES: All required coursework for the MOT Medical Assistant Certificate

**MOT 225 MEDICAL PRACTICE
MANAGEMENT ISSUES 4 CREDITS**
This course will be a culmination of the knowledge the student has learned in the Medical Practice Manager program. Students will focus their attention on bringing acquired knowledge to issues faced specifically by medical practice managers. Content will include management priorities; principles of practice management; financial, clinical, personal and service; financial management control; information management systems; marketing; managed care contracting and negotiations; basic business policies of medical office compliance, coding and documentation. PREREQUISITE: Academic Coordinator permission

Mortuary Science

MOR 100 INTRO TO FUNERAL SERVICE 3 CREDITS
This course is designed to provide students with an overview of funeral customs and practices which have lead to our current industry. The course will begin by examining ancient practices of the Egyptians and will conclude with the practices of post World War II. The course will concentrate on the American History of "undertaking". This course will help students to determine more clearly their level of interest in and aptitude toward this profession.

MOR 210 EMBALMING THEORY I AND LAB 4 CREDITS
Embalming Theory I is an intensive study of the basic fundamentals of the embalming process including the purpose of embalming, history of embalming, modes of death, signs of death, tests for death, postmortem physical and chemical changes, ethics of embalming and laws of decomposition. Included are the physical and chemical changes in the dying process and moral and ethical considerations in preparation of human remains. The academic lab portion of this course includes active participation by the student in 5 embalmings. 45 hours lecture, 30 hours lab. PREREQUISITES: Program Admission, BIO 201, 202, MOR 224 and 243 for Track II students; COREQUISITES: MOR 224 for Track I students

**MOR 215 FUNERAL SERVICE
MERCHANDISING 3 CREDITS**
This course presents a study of marketing and merchandising techniques analogous to small business and the funeral profession in particular. The student will have the opportunity to study casket and burial vault construction, pricing methods, merchandising and sales techniques. The counselor presents goods and services to client families. The course will utilize theory and role playing to convey knowledge and self-

confidence. The course will include: basic terminology; financing and pricing; organization and management; personnel management; and specific theories inherent to the funeral service profession. PREREQUISITES: Program admission and BUS 216; COREQUISITES: MOR 220

MOR 220 MORTUARY LAW AND COMPLIANCE 3 CREDITS
This course is designed to provide students with an overview of laws, regulations and ethics in the profession. Major emphasis of this course will deal with government compliance issues such as OSHA, FTC, ADA and EPA; the definition of legal next-of-kin, the dead human body as "quasi-property", obtaining legal authorizations and confidentiality. PREREQUISITES: Program admission and BUS 216; COREQUISITES: MOR 215

MOR 224 THANATO-MICROBIOLOGY/ PATHOLOGY 4 CREDITS
Designed to present the basic principles of microbiology, nature and cause of disease and the pathogenicity associated with specific diseases. PREREQUISITES: Program admission and BIO 201

MOR 225 EMBALMING THEORY II AND LAB 4 CREDITS
Embalming Theory II is an intensive study beyond the basic skills involved in the embalming process. Topics covered include case analysis, formulating chemical solutions, a complete analysis of the circulatory system, an explanation of the equipment used in the embalming process and methods of injection and drainage. This course will introduce the student to theoretical practice in the art of embalming by means of case analysis. The academic lab portion of this course includes active participation by the student in 5 embalmings. 45 hours lecture, 30 hours lab. PREREQUISITE: MOR 210; COREQUISITE: MOR 230

MOR 230 RESTORATIVE ART AND LAB 4 CREDITS
Restorative art is defined as "the care of the deceased to recreate natural form and color". This course is an in-depth study of anatomical modeling, forming of expression and familiarization with instruments, materials and techniques of restoring human features. These principles and practices will be used in the everyday embalming operations in our industry. 45 hours lecture, 30 hours lab. COREQUISITE: MOR 225

MOR 235 FUNERAL DIRECTING AND COUNSELING 3 CREDITS
The total funeral service education environment and counseling aspects will be examined. This will include duties, responsibilities, skills and ethical obligations. There will be an introduction to various religious, fraternal and military types of funeralization. An appreciation of care-giving roles in relation to grieving persons will be considered. PREREQUISITE: Program admission

MOR 243 THANATOCHEMISTRY 3 CREDITS
To provide the student with the knowledge necessary to safely and effectively utilize potentially harmful chemicals necessary for the sanitation, disinfection, restoration and preservation of dead human remains currently in practice in the funeral service industry. PREREQUISITES: Program admission

MOR 275 SPECIAL TOPICS 1–6 VARIABLE CREDITS
Special Topics courses may be offered to provide students with an opportunity to study special areas in the discipline. Course content will be determined by the instructor with a complete syllabus each time the course is offered.

MOR 280 INTERNSHIP 4 CREDITS
Practical experience in an off-campus funeral service firm as assigned by the Mortuary Science Department. The student will take part in removals, dressing, casketing, arrangements, visitations, funeral directing, internment procedures, merchandising, office procedures and general funeral management. PREREQUISITES: Must have completed all MOR courses.

MOR 285 INDEPENDENT STUDY 1–6 VARIABLE CREDITS
Course designed to meet the individual needs of students. PREREQUISITE: Instructor's permission

Multimedia/Graphic Design & Illustration

MGD 101 INTRODUCTION TO COMPUTER GRAPHICS 3 CREDITS
Introduces the student to the computer system developed for graphics. The student will learn the hardware and software components for multimedia production. Each student will explore basic computer operations, ergonomics, file management, scanning techniques, archiving capabilities and utilization of the multimedia department server and Internet connection.

MGD 102 INTRODUCTION TO MULTIMEDIA 3 CREDITS
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 CREDITS
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. PREREQUISITES: MGD 101, MGD 133 or ART 131; COREQUISITES: MGD 112, MGD 113

MGD 105 TYPOGRAPHY & LAYOUT 3 CREDITS
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. COREQUISITE: MGD 101

MGD 111 ADOBE PHOTOSHOP I 3 CREDITS
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. PREREQUISITES: MGD 101 or instructor's permission

MGD 112 ADOBE ILLUSTRATOR I 3 CREDITS
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. PREREQUISITES: MGD 101 or instructor's permission

MGD 113 QUARKXPRESS 3 CREDITS
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. PREREQUISITES: MGD 101 or instructor's permission

MGD 114 ADOBE INDESIGN   3 CREDITS
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. PREREQUISITES: MGD 101 or instructor's permission

MGD 117 INTRODUCTION TO VISUAL COMMUNICATIONS   3 CREDITS
Surveys visual communications, its history and impact on society. A foundation course for graphic design and illustration majors and a survey for non-majors who are interested in the field. Assignments require minimal artistic talent.

MGD 128 MULTIMEDIA HARDWARE   3 CREDITS
Teaches the principles and techniques of maintaining, upgrading and customizing personal computer systems. Emphasis will also be placed on various emerging and established technologies related to graphic computing. PREREQUISITES: MGD 102 or instructor's permission

MGD 133 GRAPHIC DESIGN I   3 CREDITS
Focuses upon the study of design layout and conceptual elements concerning graphic design projects such as posters, advertisements, logos and brochures.

MGD 141 WEB DESIGN I   3 CREDITS
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. PREREQUISITES: MGD 101 or instructor's permission

MGD 143 MOTION GRAPHIC DESIGN I: FLASH   3 CREDITS
Stresses the creation of animation and dynamic, interactive media for Web and multimedia applications. Students will learn how to animate objects, create symbols and assemble motion tweens. PREREQUISITES: MGD 111, MGD 141

MGD 155 LIGHTWAVE I   3 CREDITS
Introduces students to LightWave's Modeler program with an emphasis on modeling techniques. It also touches on LightWave's Layout program for setting up scenes with texture maps and lighting. There will also be instruction on how to import models from other programs. PREREQUISITES: MGD 101 or instructor's permission

MGD 161 DIRECTOR I   3 CREDITS
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 is emphasized. Hands-on projects include lingo scripts, behaviors, adding sound and digital video to student's movies. PREREQUISITES: MGD 101 or instructor's permission

MGD 164 DIGITAL VIDEO EDITING I   3 CREDITS
Introduces students to digital non-linear video editing. Students will capture, compress, edit and manipulate video images using a personal computer. Assembly techniques including media management, editing tools, titles and motion control; transitions and filters and special effects are explored. PREREQUISITES: MGD 102 or instructor's permission

MGD 207 ILLUSTRATION I   3 CREDITS
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. PREREQUISITE: ART 121

MGD 208 ILLUSTRATION II   3 CREDITS
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. PREREQUISITE: MGD 207

MGD 209 ILLUSTRATION III   3 CREDITS
Continues Illustration II with added emphasis on conceptual development and proficiency in technique. PREREQUISITE: MGD 208

MGD 210 ILLUSTRATION IV   3 CREDITS
Covers advanced illustration techniques including manual, computer and mixed media techniques. PREREQUISITE: MGD 209

MGD 211 ADOBE PHOTOSHOP II   3 CREDITS
Develops and reinforces image composition techniques learned in Adobe Photoshop I, MGD 111. Fundamentals are continuously reinforced as new design techniques are introduced. PREREQUISITE: MGD 111

MGD 212 ADOBE ILLUSTRATOR II   3 CREDITS
Enables the student to continue development of electronic drawing skills through practice and use of state of the art illustration software. PREREQUISITE: MGD 112

MGD 213 ELECTRONIC PREPRESS   3 CREDITS
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. PREREQUISITE: MGD 113

MGD 214 MACINTOSH TROUBLESHOOTING FOR DESIGNERS   3 CREDITS
Addresses terminology, hardware, graphics software applications, peripherals and troubleshooting needs of designers who use the Macintosh computer as a production tool. PREREQUISITES: MGD 101 or instructor's permission

MGD 250 EMERGING MULTIMEDIA TECHNOLOGIES   3 CREDITS
Provides a broad-based overview of current trends and issues in multimedia development and related industries. The class format will include lectures, readings, demos, discussion, research, projects and a final student presentation. Course content changes each semester. May include topics such as voice/data/video integration, virtual environments, broadband, streaming media architectures, telco/CATV/satellite technologies, network-based applications, using technology for building community, wireless technology, current thinking in human factors and usability, XML and the semantic web, groupware and collaborative tools, pervasive computing and others. PREREQUISITES: MGD 128, MGD 161

MGD 256 GRAPHIC DESIGN PRODUCTION   3 CREDITS
Provides an opportunity to combine several draw and paint
applications into one design and layout class. Students will
explore advanced techniques in creating and designing com-
puter art. PREREQUISITES: MGD 101, MGD 105, MGD
133 or ART 131; COREQUISITES: MGD 103, MGD 112,
MGD 113

MGD 260 GRAPHIC DESIGN PRODUCTION II 3 CREDITS
Continues design and production techniques with further in-
struction in computer file set-up and creation of camera-ready
art. Use of black and white and spot color for a variety of
design projects. PREREQUISITES: MGD 256; COREQUI-
SITES: MGD 111

MGD 262 GRAPHIC DESIGN PRODUCTION III 3 CREDITS
Covers advanced study in design and production techniques
and processes, including use of full color for publication de-
sign and book formats, advertising campaigns, business reply
mail, promotional items and editorial design. PREREQUI-
SITE: MGD 260

MGD 264 DIGITAL VIDEO EDITING II   3 CREDITS
Looks at the more complex and advanced techniques of digi-
tal 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.
PREREQUISITES: MGD 111, MGD 164

MGD 275 SPECIAL TOPICS   1-6 CREDITS
Provides students with a vehicle to pursue in-depth explora-
tion of special topics of interest. PREREQUISITES: To be
determined by the instructor

MGD 280 INTERNSHIP   3 CREDITS
Provides students with the opportunity to supplement course-
work with practical work experience related to their educa-
tional program. Students work under the immediate supervi-
sion of experienced personnel at the business location and
with the direct guidance of the instructor. PREREQUISITES:
MGD 112, MGD 113 and MGD 256 with grades of B or bet-
ter for each class.

MGD 285 INDEPENDENT STUDY   1–6 CREDITS
Meets the individual needs of students. Students engage in
intensive study or research under the direction of a quali-
fied instructor. PREREQUISITES: To be determined by the
instructor

MGD 287 COOPERATIVE EDUCATION   3 CREDITS
Provides students an opportunity to gain practical experience
in applying their occupational skills and/or develop specific
skills in a practical work setting. The instructor will work
with the student to select an appropriate work site, establish
learning objectives and to coordinate learning activities with
the employer or work site supervisor. PREREQUISITES: To
be determined by the instructor. Student must also have a re-
sume and portfolio to present.

MGD 289 CAPSTONE   3 CREDITS
A demonstrated culmination of learning within a given
program of study. PREREQUISITES: MGD 103, 256; MGD
260 strongly suggested as a prerequisite, or may be taken as a
corequisite. Must be taken the final semester before graduation.

Music

**MUS 100 FUNDAMENTALS OF
                    MUSIC THEORY   3 CREDITS**
This course is designed to help the beginning music student,
or those students with a limited background in music theory.
The course focuses upon the basic elements of music, includ-
ing notation, rhythm, scales, key signatures, intervals and
chords.

MUS 110 MUSIC THEORY I   3 CREDITS
Presents music fundamentals, diatonic four-part harmony,
analysis, ear training and keyboard harmony. For music ma-
jors transferring to a four-year program. PREREQUISITES:
MUS 100 or instructor's permission; COREQUISITES: MUS
112

MUS 111 MUSIC THEORY II   3 CREDITS
Presents chromatic four-part harmony, analysis, ear training
and keyboard harmony. For music majors transferring to a
four-year program. PREREQUISITES: MUS 110 and MUS
112; COREQUISITES: MUS 113

MUS 112 EAR TRAINING-SINGING LAB I   1 CREDIT
Presents exercise in sight-singing with melodic and rhythmic
dictation. COREQUISITE: MUS 110

MUS 113 EAR TRAINING-SINGING LAB II   1 CREDIT
Presents exercise in sight-singing with melodic and rhythmic
dictation. COREQUISITE: MUS 111

MUS 120 MUSIC APPRECIATION   3 CREDITS
Course covers the basic materials of music, musical forms,
media genres and musical periods. Emphasizes the develop-
ment of tools for intelligent listening and appreciation.
   This course is one of the Statewide Guaranteed Transfer courses.

MUS 121 MUSIC HISTORY I   3 CREDITS
Studies the various periods of music history with regard to
the composers, aesthetics, forms and genres of each period.
Considers music from the Middle Ages through the Classical
period.
   This course is one of the Statewide Guaranteed Transfer courses.

MUS 122 MUSIC HISTORY II   3 CREDITS
Continues Music History I with a study of music from the
early Romantic period to the present.
   This course is one of the Statewide Guaranteed Transfer courses.

MUS 125 HISTORY OF JAZZ   3 CREDITS
Provides an overview of the history of jazz in America and
provides basic listening skills for the understanding and ap-
preciation of jazz music.

MUS 131 MUSIC CLASS   2 CREDITS
Applies the fundamentals of music to the voice or specific
musical instruments. This course also introduces basic tech-
niques, repertoire and sight-reading. First year, first term.

MUS 132 MUSIC CLASS II   2 CREDITS
Applies the fundamentals of music to the voice or specific
musical instruments. The course also introduces basic tech-
niques, repertoire and sight-reading. First year, second term.

MUS 133 MUSIC CLASS III   2 CREDITS
Applies the fundamentals of music to the voice or specific
musical instruments. The course also introduces basic tech-
niques, repertoire and sight-reading. First year, third term.

MUS 141 PRIVATE INSTRUCTION 1–2 CREDITS
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. An additional fee is required.

MUS 142 PRIVATE INSTRUCTION II 1–2 CREDITS
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. PREREQUISITE: Instructor's permission. An additional fee is required.

MUS 151 ENSEMBLE 1 CREDIT
First year, first term. Rehearses and performs various types of musical literature. PREREQUISITE: Instructor's permission

MUS 152 ENSEMBLE II 1 CREDIT
Rehearses and performs various types of musical literature. First year, second term. PREREQUISITE: Instructor's permission

MUS 167 MUSIC BUSINESS I 3 CREDITS
This course is designed to give music students, or those students with a strong interest in business and music, a complete overview and in-depth examination of the current, historic and projected business practices in the music industry.

MUS 175 SPECIAL TOPICS 1–6 VARIABLE CREDITS
Provides students with a vehicle to pursue in-depth exploration of special topics of interest.

MUS 241 PRIVATE INSTRUCTION 2 CREDITS
Offers private instruction consisting of a sixty-minute lesson per week. Participation in a student performance is required at least once each term. Second year, first term. PREREQUISITE: Instructor's permission. *An additional fee is required.*

MUS 242 PRIVATE INSTRUCTION 2 CREDITS
Offers private instruction consisting of a sixty-minute lesson per week. Participation in a student performance is required at least once each term. Second year, second term. PREREQUISITE: Instructor's permission. *An additional fee is required.*

MUS 243 PRIVATE INSTRUCTION 2 CREDITS
2 credits for music majors planning to transfer to 4-year school. Offers private instruction consisting of a sixty-minute lesson per week. Regular attendance at and participation in student performances is required for 2 credits. Second year, third term. PREREQUISITE: Instructor's permission. *An additional fee is required.*

MUS 244 PRIVATE INSTRUCTION 2 CREDITS
2 credits for music majors planning to transfer to 4-year school. Offers private instruction consisting of a sixty-minute lesson per week. Regular attendance at and participation in student performances is required for 2 credits. Second year, fourth term. PREREQUISITE: Instructor's permission. *An additional fee is required.*

MUS 251 ENSEMBLE I 1 CREDIT
Rehearses and performs various types of musical literature. Second year, first term. PREREQUISITE: Instructor's permission

MUS 252 ENSEMBLE II 1 CREDIT
Rehearses and performs various types of musical literature. Second year, second term. PREREQUISITE: Instructor's permission

MUS 275 SPECIAL TOPICS 1–6 VARIABLE CREDITS
Courses on special topics that relate to music. Topics may be of interest to the general population and/or of interest to special populations such as music majors, educators, etc.

MUS 285 INDEPENDENT STUDY 1–6 VARIABLE CREDITS
Course designed to meet the individual needs of students. PREREQUISITE: Instructor's permission

Nurse Aide

**NUA 101 CERTIFIED NURSE AIDE
HEALTH CARE SKILLS 4 CREDITS**
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 and cultural needs as well as patient/resident/client rights.
   This course is not eligible for financial aid.

NUA 170 NURSE AIDE CLINICAL 1 CREDIT
Applies knowledge gained from NUA 101 in a clinical setting. PREREQUISITES: Current CPR card. Negative TB test or chest X-ray and immunizations current, clear background check. COREQUISITE: NUA 101

NUA 171 ADVANCED NURSE AIDE CLINICAL 1 CREDIT
NUA 171 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, end-of-life care and organizational skills. COREQUISITES: NUA 101, 170
   This course is not eligible for financial aid.

Nursing

NUR 101 PHARMACOLOGY CALCULATIONS 1 CREDIT
Introduces the nursing student to the concepts and techniques of dosage calculations and medication administration by a variety of routes. Learners will apply basic math concepts to complex conversion of dosages between and among various systems of weights and volumes. Learners will apply critical thinking skills to the calculation and administration of medications by oral and parenteral (including intravenous) routes of administration. PREREQUISITES: Basic Skills Assessment, admission to the program and BIO 201 or 202 with a grade of "C" or better (must be completed within 7 years of application and entry into NUR courses) or instructor's permission
   NUR 101 may not be completed more than one year prior to starting the nursing program

**NUR 106 MEDICAL AND SURGICAL
NURSING CONCEPTS 7 CREDITS**
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. PREREQUISITES: NUR 101, 107, 108, 112, 170, BIO 201, 202, HWE 100, HPR 205, PSY 101, 235, ENG 121 or instructor's permission

**NUR 107 NURSING CONCEPTS
AND SKILLS I 4 CREDITS**
Introduces the nursing student to applications of critical thinking and the nursing process to provide care to clients in

a variety of community and acute care settings. Emphasis is on holistic health care across the health-illness continuum. Introduces learners to the clinical skills essential for the nursing role of care provider including safe and effective clinical environment, skill preparation, implementation and evaluation. Emphasizes use of caring, critical thinking and communication while completing nursing skills. PREREQUISITES: Basic Skills Assessment. Admission to the program and BIO 201 or 202 with a grade of "C" or better (must be completed within 7 years of entry into NUR courses) or instructor's permission

NUR 108 NURSING CONCEPTS AND SKILLS II   3 CREDITS
Introduces more complex concepts and behaviors of nursing roles within the context of the nursing process, holistic care and health care. Emphasizes the theoretical and practical aspects of more complex nursing skills required to meet the needs of clients in a variety of settings. PREREQUISITES: NUR 101, 107 or instructor's permission

NUR 111 SOCIALIZATION INTO PRACTICAL NURSING   1 CREDIT
Introduces roles and responsibilities of the graduate Practical Nurse as defined by established standards, including the Colorado Nurse Practice Act. Emphasis is placed on accountability, delegation and perspectives in health care. Career and job readiness skills are developed. PREREQUISITES: BIO 201, 202, HPR 205, HWE 100, PSY 101, 235, ENG 121, NUR 101, 107, 108, 112, 170 or instructor's permission

NUR 112 BASIC CONCEPTS OF PHARMACOLOGY   2 CREDITS
Introduces the basic concepts of pharmacology related to the actions, therapeutic and adverse effects, interactions of drugs, drug classifications and the basic pharmacology of commonly used medications. Emphasis is placed in nursing considerations and client education. Learners will apply knowledge gained in selected clinical settings in caring for clients across the lifespan. PREREQUISITES: NUR 101, 107 or instructor's permission

NUR 117 NURSING CARE OF THE CHILDBEARING FAMILY   3 CREDITS
Provides a foundational course in the nursing care of the childbearing family. The focus is on normal pregnancy, physiologic and psychological changes experienced and care of the normal newborn. The nursing process is used in identifying and meeting the needs of the childbearing family to facilitate optimal functioning. The impact of psychosocial and cultural values and practices of the childbearing family are explored. Legal and ethical issues are addressed. PREREQUISITES: HWE 100, HPR 205, ENG 121, PSY 101, 235, BIO 201, 202, NUR 107, 108, 101, 112, 170 or instructor's permission

NUR 118 NURSING CARE OF CHILDREN   3 CREDITS
Introduces the role of the nurse in meeting the individual needs of the child from infancy through adolescence in health and illness. Beginning assessment and use of the nursing process, basic growth and development, pathophysiology, nutrition and relevant emotional, cultural and family concepts are integrated throughout. PREREQUISITES: BIO 201, 202, HPR 205, HWE 100, PSY 101, 235, ENG 121, NUR 101, 107, 108, 112, 170 or instructor's permission

NUR 170 CLINICAL I   2 CREDITS
Offers the clinical practicum to apply the related nursing theory. PREREQUISITES: NUR 101, 107, 108, 112 or instructor's permission

NUR 171 CLINICAL II   1 CREDIT
Offers the clinical practicum to apply the related nursing theory. PREREQUISITES: NUR 101, 107, 108, 112, 170, BIO 201, 202, HWE 100, HPR 205, PSY 101, 235, ENG 121 or instructor's permission; COREQUISITE: NUR 106

NUR 175 SPECIAL TOPICS   1–6 CREDITS
This course provides students with a vehicle to pursue in-depth exploration of special topics of interest.

NUR 178 SEMINAR: TRANSITION PN TO RN   1 CREDIT
Introduction to selected concepts related to the role of the AD more as a provider of care, teacher, manager, client advocate and member of the profession. Emphasis is placed on application of critical thinking in providing and managing comprehensive care in a variety of health care settings with clients across the lifespan. This course is designed to assist the Licensed Practical Nurse with the transition into the practice of professional nursing. PREREQUISITES: Admissions to the PN-RN advanced placement option, BIO 201, 202, HPR 205, PSY 101, 235, ENG 121 or instructor's permission

NUR 185 INDEPENDENT STUDY 1–3 VARIABLE CREDITS
Structured and guided, individualized study that is organized and tailored around the interest and needs of the individual student. PREREQUISITE: Instructor's permission

NUR 206 ADVANCED CONCEPTS OF MEDICAL-SURGICAL NURSING I   5 CREDITS
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. PREREQUISITES: NUR 106, 111, 117, 118, 171 or instructor's permission; COREQUISITES: NUR 272

NUR 210 NURSING CARE OF COMPLEX OBSTETRICAL AND PEDIATRIC CLIENTS   5 CREDITS
Prepares the professional nurse to comprehend and apply advanced concepts in care of the high-risk child bearing family and for children with complex health problems from birth through adolescence. Emphasizes special needs and complications during the perinatal experience and altered functioning, special needs and disease processes manifested in children. The nursing process is used as a framework to attain optimal levels of maternal-newborn and pediatric health and wellness. Legal and ethical accountability are integrated throughout the course. Critical thinking skills are utilized throughout. PREREQUISITES: NUR 206, 211, 272, 288 or instructor's permission

NUR 211 NURSING CARE OF PSYCHIATRIC CLIENTS   5 CREDITS
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. PREREQUISITES: NUR 106, 111, 117, 118, 171 or instructor's permission

NUR 216 ADVANCED CONCEPTS OF MEDICAL SURGICAL NURSING II   4 CREDITS
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. PREREQUISITES: NUR 206, 211, 272, 288 or instructor's permission

NUR 217 LEADERSHIP FOR PROFESSIONAL NURSING PRACTICE   2 CREDITS
Socializes the student into the graduate registered nurse role. The focus is on the exploration and analysis of contemporary nursing practice, current trends and issues impacting nursing care delivery. Advanced leadership and management concepts are discussed as part of the nursing role. PREREQUISITES: NUR 210, 216 or instructor's permission; COREQUISITE: NUR 289

NUR 272 EXPANDED CLINICAL III   2 CREDITS
Offers practical experience and continues to build upon the principles that are expected to be understood by students in the nursing discipline. PREREQUISITES: NUR 106, 111, 117, 118, 171 or instructor's permission; COREQUISITE: NUR 206

NUR 275 SPECIAL TOPICS   1–6 VARIABLE CREDITS
Courses on Special Topics that relate to Nursing. Topics may be of interest to nursing students or graduates. Useful in meeting license renewal (LPN/RN) requirements. 22 lecture and 15 lab hours. PREREQUISITE: NUR 205

NUR 285 INDEPENDENT STUDY: ADVANCED NURSING CONCEPTS I   1–3 VARIABLE CREDITS
Structured and guided, individualized study that is organized and tailored around the interest and needs of the individual student. PREREQUISITE: Instructor's permission

NUR 288 PRACTICUM: HEALTH AND PHYSICAL ASSESSMENT FOR NURSING PRACTICE   1 CREDIT
Develops skills of nursing assessment across the life span using effective communication, interview techniques and beginning physical assessment. The course develops critical thinking skills in assessment, data analysis and derivation of actual/potential health needs. PREREQUISITES: NUR 106, 111, 117, 118, 171 or instructor's permission

NUR 289 CAPSTONE: COMPREHENSIVE NURSING INTERNSHIP   2–3 VARIABLE CREDITS
Facilitates transition from student to graduate nurse through application of nursing principles and skills in an area of health care delivery. Critical thinking, life long learning, nursing process, caring, collaboration and health teaching and promotion are emphasized. PREREQUISITES: NUR 210, 216 or instructor's permission; COREQUISITE: NUR 217

Paralegal

PAR 114 COMPUTERS AND THE LAW   3 CREDITS
Provides students with an opportunity to develop computer skills needed in a legal environment, including software applications, spreadsheets, databases and Internet research.

PAR 115 INTRODUCTION TO LAW   3 CREDITS
Provides an understanding of the role of paralegals, issues facing paralegals, the legal system and ethical questions. Legal terminology and an overview of the substantive areas of law will be discussed.

PAR 116 TORTS   3 CREDITS
Focuses on tort law, including negligence, intentional torts and strict liability with an emphasis on personal injury litigation.

PAR 117 FAMILY LAW   3 CREDITS
This course covers domestic law, common property, dissolutions, adoptions, legal separation and other family law issues.

PAR 118 CONTRACTS   3 CREDITS
This course examines the basic principles of contract law.

PAR 125 PROPERTY LAW   3 CREDITS
This course covers real estate law, ownership, sale, leasing, financing and government regulation of land.

PAR 201 CIVIL LITIGATION   3 CREDITS
Focuses on an intensive study of the legal process including the Federal and Colorado Rules of Civil Procedure. PREREQUISITES: PAR 115 and PAR 116 or instructor's permission

PAR 202 EVIDENCE   3 CREDITS
Course is designed to introduce students to State and Federal Rules of Evidence and application to the trial process. PREREQUISITES: PAR 115 or instructor's permission

PAR 205 CRIMINAL LAW   3 CREDITS
Introduces basic concepts of criminal law and criminal procedure, including Colorado statutes and Rules of Procedure. PREREQUISITE: PAR 115

PAR 206 BUSINESS ORGANIZATIONS   3 CREDITS
Study of the major types of business organizations. PREREQUISITES: PAR 115 and PAR 118 or instructor's permission

PAR 208 PROBATE AND ESTATES   3 CREDITS
The course provides an understanding of the creation and administration of an estate, including wills and trusts and the probate process. PREREQUISITES: PAR 115 or instructor's permission

PAR 213 LEGAL RESEARCH AND WRITING I 3 CREDITS
Provides an introduction to legal research and writing.

PAR 214 LEGAL RESEARCH AND WRITING II 3 CREDITS
Serves as an advanced course in legal research and writing. PREREQUISITES: PAR 115, PAR 116, PAR 118 and PAR 213 or instructor's permission

PAR 215 ALTERNATIVE DISPUTE RESOLUTION   3 CREDITS
This course will introduce the students to negotiation, mediation, arbitration and other forms of dispute resolution. PREREQUISITE: PAR 115 or instructor's permission

PAR 216 EMPLOYMENT LAW   3 CREDITS
Provides an understanding of current legal issues in the area of employer/employee relationships. PREREQUISITES: PAR 115 or instructor's permission

PAR 217 ENVIRONMENTAL LAW   3 CREDITS
This course covers state and federal laws concerning the environment, including chemical safety laws, workplace safety and hazardous waste. PREREQUISITES: PAR 115 or instructor's permission

PAR 218 BANKRUPTCY LAW   3 CREDITS
This course covers the federal and state laws and procedures involving bankruptcy. PREREQUISITES: PAR 115 or instructor's permission

PAR 228   INTELLECTUAL PROPERTY   3 CREDITS
This course covers the federal and state laws regarding intellectual property. PREREQUISITES: PAR 115 and PAR 118 or instructor's permission

PAR 275   SPECIAL TOPICS   1–6 VARIABLE CREDITS
Special Topics courses may be offered to provide students with an opportunity to study special areas in the discipline. Course content will be determined by the instructor with a complete syllabus each time the course is offered.

PAR 285   INDEPENDENT STUDY 1–6 VARIABLE CREDITS
This course meets the individual needs of students. Students engage in intensive study or research under the direction of a qualified instructor. PREREQUISITE: Instructor's permission

**PAR 287   COOPERATIVE EDUCATION
                      1–6 VARIABLE CREDITS**
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 the student to select an appropriate work site, establish learning objectives and to coordinate learning activities with the employer or work site supervisor. PREREQUISITES: PAR 115 or instructor's permission

Pharmacy Technician

PHT 111   ORIENTATION TO PHARMACY   2 CREDITS
This course introduces students to the work of pharmacy technicians and the context in which the work is performed. Students will learn the concept of pharmaceutical care and technician's general role in its delivery. The development of drug products is discussed as well as a variety of legal, ethical and organizational issues. Students gain an appreciation for the value of national pharmacy technician certification and the benefits of technicians' active involvement in local, state and national pharmacy organizations.

PHT 112   PHARMACY LAW   2 CREDITS
The course introduces students to federal and state laws and regulations that govern the preparation and dispensing of pharmaceuticals. Issues of quality control and assurance are discussed along with the importance of the proper handling of controlled substances.

**PHT 113   PHARMACY CALCULATIONS
                      AND TERMINOLOGY   1 CREDIT**
This course will provide the pharmacy technician with analytical skills to read, decode and process a variety of prescriptions requiring mathematical computation.

**PHT 115   PHARMACOLOGY OF THE GI, RENAL,
                      REPRODUCTIVE, IMMUNE, DERMATOLOGIC
                      AND HEMATOLOGIC SYSTEMS   3 CREDITS**
This course will present the basic concepts of drug action and pathophysiology of disease and disorder. Focus will be on the pharmacology of the gastrointestinal, renal, immune, dermatologic and hematologic systems. The student will learn basic concepts of pharmacology, the diseases and disorder affecting body function and the drugs used in treatment.

PHT 116   INSTITUTIONAL PHARMACY   3 CREDITS
This course will give students exposure to the unique aspects of hospital/home care or pharmacy practice. Students learn the proper method of receiving a prescription order, screening it for completeness and obtaining any missing information. Current methods for distributing medications are covered. Students learn appropriate techniques for compounding

sterile products, chemotherapeutic drugs and other potentially hazardous medications. Students will learn procedures for maintaining pharmaceutical equipment, handling hazardous waste and adhering to infection control procedures. The course will prepare the student for the institutional/clinical externship. PREREQUISITES: PHT 111 and PHT 113

**PHT 117   COMMUNICATION FOR
                      PHARMACY TECHNICIANS   1 CREDIT**
Students learn to communicate in a clear, logical manner at the appropriate level when performing the job responsibilities of a pharmacy technician. Communication skills in interviewing, preparing resumes and employer interviews, as related to pharmacy, will be covered.

**PHT 118   PHARMACOLOGY OF THE NERVOUS,
                      ENDOCRINE, MUSCULOSKELETAL 3 CREDITS**
This course will present the basic concepts of normal body function and the changes caused by disease. Focus will be on the nervous, endocrine, musculosketetal, cardiovascular and respiratory systems. The student will learn the basic concepts of pharmacology, the diseases affecting the systems listed above and the drugs used in treating diseases of these systems.

PHT 119   COMMUNITY PHARMACY   3 CREDITS
Students will experience a hands-on approach to learning the technical aspects of community pharmacy practice. This course teaches the students to receive and screen written medication prescriptions. The skills of drug preparation are taught. Students learn to compound non-sterile products using the correct compounding techniques. Students also learn various methods of inventory control of pharmaceuticals, devices and supplies including handling their receipt, storage, removal and documenting of these activities. This course will prepare the student for a community clinical internship. PREREQUISITES: PHT 111 and PHT 113

**PHT 170   PHARMACY PRACTICE II
                      (HOSPITAL CLINICAL)   4 CREDITS**
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 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 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. PREREQUISITE: Satisfactory completion of all course work

PHT 171   PHARMACY PRACTICE III
(COMMUNITY CLINICAL)   4 CREDITS
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. PREREQUISITE: Satisfactory completion of all course work

PHT 275   SPECIAL TOPICS   VARIABLE CREDIT
Special Topics courses may be offered to provide students with an opportunity to study special areas in the discipline. Course content will be determined by the instructor with a complete syllabus each time the course is offered.

PHT 285   INDEPENDENT STUDY   VARIABLE CREDIT
Course designed to meet the individual needs of students. PREREQUISITE: Instructor's permission

Philosophy

PHI 111   INTRO TO PHILOSOPHY   3 CREDITS
Introduces significant human questions and emphasizes understanding the meaning and methods of philosophy. Includes human condition knowledge, freedom, history, ethics, the future and religion.
This course is one of the Statewide Guaranteed Transfer courses.

PHI 112   ETHICS   3 CREDITS
Examines human life, experience and thought in order to discover and develop the principles and values for pursuing a more fulfilled existence. Theories designed to justify ethical judgments are applied to a selection of contemporary personal and social issues.
This course is one of the Statewide Guaranteed Transfer courses.

PHI 113   LOGIC   3 CREDITS
Studies effective thinking using language-oriented logic. Provides tools and develops skills for creative and critical thinking. Emphasizes the development of decision-making and problem solving.
This course is one of the Statewide Guaranteed Transfer courses.

PHI 114   COMPARATIVE RELIGIONS   3 CREDITS
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 124   INTRODUCTION TO ISLAM   3 CREDITS
Introduces the Islamic religious tradition and considers its significance in the modern world. The course investigates the history of Islam, Islamic beliefs and practices, Islamic sects, Sufism and contemporary issues of Islamic extremism, women in Islam and Islam in the West.

PHI 214   PHILOSOPHY OF RELIGION   3 CREDITS
Focuses on the critical examination of the fundamental concepts, ideas and implications of religion. Includes the nature of God; the varieties of religious experience; arguments concerning God`s existence; the Problem of Evil; faith and reason; religion and human destiny; and the connection between religion and ethics.

PHI 275   SPECIAL TOPICS   1–6 VARIABLE CREDITS
Provides students with a vehicle to pursue in-depth exploration of special topics of interest. PREREQUISITES: Prior philosophy class, sophomore standing or instructor's permission

PHI 285   INDEPENDENT STUDY 1–6 VARIABLE CREDITS
Focuses on directed readings and independent study on specific philosophical topics. PREREQUISITE: Instructor's permission

Photography

See Art

For photography courses taken the Spring Semester of 2006, under the PHO prefix, please refer to the 2005-2006 course catalog.

Physical Education–Activity Classes

PED 100   GOLF   1 CREDIT
A basic course in golf designed for those who have had little or no formal instruction or for those with some experience who are interested in improving some aspect of their game. Instruction will be by certified golf professionals. Driving range, putting green and on course play will be included.

PED 106   TENNIS   1 CREDIT
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, groundstrokes, serving, the various shots and singles and doubles play and strategies.

PED 108   BEGINNING SWIMMING   1 CREDIT
This course is designed to teach the fundamentals of swimming, including the front crawl, elementary backstroke, back crawl and the fundamentals of treading water. Students may also be introduced to the breaststroke and sidestroke and the basics of turning at a wall. This course is for the non-swimmer or novice swimmer looking to improve aquatic skills.

PED 109   ADVANCED SWIMMING   1 CREDIT
This course is designed to coordinate and refine the major swimming strokes. Students are introduced to the butterfly stroke, open turns and surface dives. Students develop endurance swimming using the primary swimming strokes. PREREQUISITE: PED 108 Beginning Swimming or equivalent.

PED 110   FITNESS CENTER ACTIVITY I   1 CREDIT
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
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. PREREQUISITE: PED 110

PED 113   FITNESS CONCEPTS (ONLINE)   1 CREDIT
This online course is designed for individuals who are seeking information and guidelines for moving toward a more healthy lifestyle. The course will include online instruction, fitness evaluation, analysis of results and development of an exercise program that meets the five components of health-related fitness.

PED 115   BODY SCULPTING AND TONING   1 CREDIT
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
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 118   INDOOR STATIONARY
                    GROUP CYCLING   1 CREDIT**
An indoor stationary group cycling course designed to improve cardiovascular fitness, burn calories and enhance muscular endurance. Designed specifically to enhance aerobic work capacity and improve pedaling skills. Each exercise session is choreographed to music and includes a complete workout with a warm-up, endurance and cool-down component.

PED 120   SWIM FITNESS   1 CREDIT
Enables the student to perfect stroke mechanics to swim with more ease, efficiency, power and smoothness over greater distances.

PED 126   WATER AEROBICS   1 CREDIT
This course offers water exercise to develop physical fitness. In addition, this course offers instruction in a variety of water exercises and vigorous activities to develop cardiovascular and muscular endurance, flexibility and the promotion of body composition management.

PED 129   SCUBA DIVING   1 CREDIT
This course provides basic instruction in scuba diving. This course provides the knowledge and skills related to swimming and snorkeling, diving equipment, communications, the environment, safety, dive tables and other pertinent information a student needs for safe scuba diving. This course prepares the student for open-water (PADI) certification. PREREQUISITE: Basic Swimming Skills

PED 133   BEGINNING SNOWBOARDING   1 CREDIT
A basic Snowboarding course designed for those who have had little or no prior snowboarding experience. The course will consist of a combination of on-the-snow classes at an established ski area and classroom instruction at the College. For purposes of instruction, students will be assigned to small groups based on their present snowboarding ability. All on-snow instruction will be by certified ski instructors employed by the ski area.

PED 134   ADVANCED SNOWBOARDING   1 CREDIT
An advanced Snowboarding course designed for those who have had prior snowboarding experience and can link skidded turn with good speed and control on green and blue terrain. The course will consist of a combination of on-the-snow classes at an established ski area and classroom instruction at the College. For purposes of instruction, students will be assigned to small groups based on their present snowboarding ability. All on-snow instruction will be by certified ski instructors employed by the ski area. PREREQUISITE: PED 133

PED 135   INTERMEDIATE TENNIS   1 CREDIT
An advanced course in tennis for students who already have playing experience and skill in the basic strokes. Emphasis will be placed on learning the lob, smash, half-volley, serve variations and tennis strategy for singles and doubles. PREREQUISITE: PED 106

PED 136   ADVANCED WEIGHT TRAINING   2 CREDITS
Offers guided instruction and independent practice in weight training for men and women. Students practice various weight training techniques in accordance with their abilities. Emphasizes physiological consideration, equipment orientation, correct lifting techniques, program design and nutrition. PREREQUISITE: PED 116

PED 141   BEGINNING ALPINE SKIING   1 CREDIT
Designed for students who have little or no prior experience in downhill skiing. The course will consist of a combination of on-the-snow classes at one of the mountain ski areas and classroom sessions at ACC. For purposes of instruction, students will be assigned to small groups based on their present skiing ability. Students must furnish or rent all skiing equipment.

PED 142   ADVANCED ALPINE SKIING   1 CREDIT
An advanced skiing course designed for students who are ready for advanced instruction in parallel skiing. The course will consist of a combination of on-the-snow classes at an established ski area and classroom instruction at the College. Students will be divided into small groups and assigned to instructors based on the demonstrated skiing ability. All on-snow instruction will be by certified ski instructors employed by the ski area. Students must furnish or rent all skiing equipment. PREREQUISITES: Alpine skiing (PED 141) or intermediate skiing ability

PED 143   TAI CHI I   1 CREDIT
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.

COURSE DESCRIPTIONS

PED 144   TAI CHI II   **1 CREDIT**
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   **1 CREDIT**
Focuses on Pilates matwork to increase core strength, overall muscle 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**
Introduces basic martial arts techniques and forms designed to improve the physical and mental capacity of an individual. Enables the student to gain an understanding of the basic philosophies and concepts around the martial arts and the approach to ethics. Provides a clear-cut guide for developing a powerful sense of character and will.

PED 147   YOGA   **1 CREDIT**
This course offers a 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, relaxation techniques and exercises.

PED 148   YOGA II   **1 CREDIT**
Concepts of basic yoga are carried into additional areas. Increases awareness of yoga and its physical and mental benefits. PREREQUISITE: Yoga I instructor's permission

**PED 149   SELF DEFENSE–
               ADVANCED KARATE**   **1 CREDIT**
Advanced Karate is an empty-hand form of self defense using all parts of the body in various blocking, kicking, punching and striking techniques against one or more assailants. The style of Karate taught will be Tae Kwon Do. Based on the results of an initial skills test, each student will be assigned two additional kicks, one additional jump kick and one pattern. Intermediate sparring and self-defense techniques will be taught. Each student will be assigned a goal that they will strive to achieve by the end of the course. PREREQUISITE: PED 146

PED 200   ADVANCED GOLF   **1 CREDIT**
Advanced golf is designed for individuals with an advanced level of golfing skills who are interested in improving their game. Driving range, putting green and on-course instruction and play will be included. Use of woods, irons, wedges and putting will be stressed. PREREQUISITE: PED 100

PED 210   FITNESS CENTER ACTIVITY III   **1 CREDIT**
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. PREREQUISITES: PED 110, 111

PED 211   FITNESS CENTER ACTIVITY IV   **1 CREDIT**
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 available in the Fitness Center. PREREQUISITES: PED 110, 111 and 210

Physical Education–Other Classes

Health, Physical Education and Recreation

**PER 113   INTRO TO PHYSICAL
               EDUCATION AND SPORTS**   **2 CREDITS**
Focuses on the field of physical education and sports. Includes trends, precedents and their effects in the health and total wellness of those involved. Career exploration is included.

PER 151   LIFEGUARD TRAINING   **2 CREDITS**
This course is designed to provide the necessary minimum knowledge and skills training for a person to qualify as a non-surf lifeguard. The course content and activities prepare lifeguard candidates to recognize emergencies, respond quickly and effectively to emergencies and prevent drowning and other incidents. The course also teaches other skills an individual needs to be a professional lifeguard. PREREQUISITE: Advanced swimming or equivalent.

Physical Therapist Assistant

**PTA 110   BASIC CARE IN
               PHYSICAL THERAPY**   **5 CREDITS**
This course examines the basic patient care skills for the health care practitioner. Students will gain an understanding and demonstrate these skills that include: positioning, body mechanics, transfers, range of motion, palpation, vital signs, aseptic techniques, bandaging, intermittent venous compression, medical terminology, activities of daily living, wheelchair management, architectural barriers and gait training. PREREQUISITES: Admission to PTA program or instructor's permission

**PTA 115   PRINCIPLES AND PRACTICES
               IN PHYSICAL THERAPY**   **2 CREDITS**
This course explores the history of the profession of Physical Therapy including its definition, development and areas of practice. The role of the PTA, the physical therapist assistant and the relationships between the physical therapist, PTA and other health care professionals are investigated. Current issues and trends in Physical Therapy including professionalism, ethics, quality assurance, communications and reimbursement issues such as Medicare, Medicaid, Worker's Compensation and commercial insurance are discussed as they relate to the delivery of health care.

**PTA 120   MODALITIES IN
               PHYSICAL THERAPY**   **5 CREDITS**
The theory and principles of physical therapy modalities will be examined. Course includes therapeutic heat and cold, traction, massage and hydrotherapy. PREREQUISITE: PTA 110

PTA 131 PROFESSIONAL COMMUNICATION I 1 CREDIT

Introduces Physical Therapist Assistant (PTA) program students to professional communication in their field. The course develops skills in research, medical documentation and oral presentation of information to others.

PTA 135 PRINCIPLES OF ELECTRICAL STIMULATION 2 CREDITS

This course will investigate the principles and application of electrical stimulation (ES) modalities currently used in physical therapy practice. This course will help the student understand the electrochemical and physiological effects of electrical stimulation and identify the various forms and applications of ES. PREREQUISITE: Admission to the PTA program.

PTA 140 CLINICAL KINESIOLOGY 5 CREDITS

This course will focus upon the science of human motion, theories of biomechanics and muscle/ joint structure and function. Also emphasized are basic principles of therapeutic exercise and their application to specific body regions. A laboratory experience that includes the application of kinesiology and exercise principles is integrated in the learning experience.

PTA 141 PROFESSIONAL COMMUNICATION II 1 CREDIT

To introduce Physical Therapist Assistant (PTA) program students to professional communication in their field. The course develops skills in conveying instructions to patients and/or subordinates, participating effectively in meetings, abstracts and conducting self-critiques and peer reviews of on-the-job performance. In addition, the course continues to emphasize research and documentation skills begun in Professional Communication I. PREREQUISITE: PTA 131

PTA 175 SPECIAL TOPICS: CLINICAL PATHOPHYSIOLOGY I 2 CREDITS

This course investigates the pathophysiological changes resulting from disease processes. Course includes the etiology of disease such as trauma, genetic, immunological, inflammatory and degenerative processes. Pathology and pharmacology of musculoskeletal and neurological system diagnoses as they relate to physical therapy is emphasized.

PTA 176 SPECIAL TOPICS: ANATOMICAL KINESIOLOGY 4 CREDITS

This course focuses on an understanding of anatomical structures of the human body. Includes the composition and adaptability of tissues and the identification and function of the skeletal, muscular and nervous systems as they relate to physical therapy. PREREQUISITES: Admission to the PTA program or instructor's permission

PTA 177 SPECIAL TOPICS: CLINICAL PATHOPHYSIOLOGY II 2 CREDITS

This course investigates the pathophysiological changes resulting from disease processes. Course includes the etiology of disease such as trauma, genetic, immunological, inflammatory and degenerative processes. Pathology and pharmacology of cardiovascular, respiratory, endocrine and chronic pain diagnoses as they relate to physical therapy are emphasized.

PTA 205 PSYCHOSOCIAL ISSUES IN HEALTH CARE 2 CREDITS

This course explores the psychosocial aspects of the patient/ client and health care practitioner. Recognition of and adjustment for psychological, sociological, educational, cultural, economic and political concerns on the delivery of health care services are investigated. Communication skills and social and advocacy responsibilities of the health care practitioner will be discussed in order to assist the development of a health care practitioner committed to meeting the expectations and needs of the members of society receiving health care services.

PTA 230 ORTHOPEDIC ASSESSMENT AND MANAGEMENT 5 CREDITS

The principles and practices of physical therapy will be examined and understanding of the following procedures will be developed: Goniometry, therapeutic exercise, manual muscle testing, gait analysis, orthotics and prosthetics. PREREQUISITE: PTA 120

PTA 240 NEUROLOGICAL ASSESSMENT AND MANAGEMENT 5 CREDITS

The theory and principles of physical therapy will be expanded with an introduction to assessment and management techniques and advanced physical therapy procedures as they relate to neurologic, cardiac and pulmonary conditions. PREREQUISITE: PTA 230

PTA 251 PROFESSIONAL COMMUNICATIONS III 1 CREDIT

The course promotes the concepts from Professional Communications II and further develops written and oral communication skills in the professional arena through correct documentation of patient progress based on observations, dictating progress notes, development of resume, job interview skills, portfolios and an awareness of the national PTA exam. PREREQUISITE: PTA 141

PTA 278 PTA SEMINAR 2 CREDITS

This course provides a summary of all coursework, internships and prepares the student for transition into the workforce as an entry-level PTA. It includes a comprehensive review and mock exam in preparation for the national PTA exam, employment benefits, licensing, state practice act review, professional development, employment opportunities and community service. PREREQUISITES: PTA 230, PTA 280

PTA 280 PTA INTERNSHIP I 4 CREDITS

Initial clinical exposure providing hands on of various types of patient practicum skills and techniques. Includes application of basic patient care skills including transfers, range of motion, modalities, bandaging, aseptic techniques and gait training. Students will demonstrate professional behavior and communication principles appropriate in the physical therapy setting. A designated clinical instructor in an acute care, geriatric or outpatient setting will provide supervision. PREREQUISITE: PTA 120

PTA 281 PTA INTERNSHIP II 5 CREDITS

The intermediate clinical experience providing hands on of various types of patient practicum skills and techniques learned. Includes continued application of physical therapy procedures of Internship I with the addition of therapeutic exercise, goniometry, manual muscle testing and motor learning techniques. Students will demonstrate professional behavior and communication principles appropriate in the physical therapy setting. A designated clinical instructor in an acute care, rehabilitation, outpatient, geriatric or home health setting will provide supervision. During the internship, the student will present an inservice on a physical therapy-related topic. PREREQUISITES: Successful completion of all PTA curriculum or instructor's permission

PTA 282   PTA INTERNSHIP III   VARIABLE CREDIT
Advanced clinical experience providing hands on of various types of patient practicum skills and techniques learned. Students will refine all physical therapy skills in preparation to enter the field as an entry-level physical therapist assistant. This final experience in any physical therapy setting will include independent practice with an assigned caseload under the on-site supervision of a clinical instructor. The student will research and present an in-depth physical therapy case study. PREREQUISITES: Successful completion of all PTA curriculum or instructor's permission.

PTA 285   INDEPENDENT STUDY   VARIABLE CREDIT
This course meets the individual needs of students. Students engage in intensive study or research under the direction of a qualified instructor.

Physics

PHY 101   BASIC PHYSICS   4 CREDITS
Focuses on the basic understanding of the laws of physics. Emphasizes critical thinking skills allowing the student to apply the laws to a wide variety of fields. Applications are illustrated by demonstrations and simple hands-on exercises involving 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 105   CONCEPTUAL PHYSICS   4 CREDITS
Focuses on mechanics, heat, properties of matter, electricity and magnetism, light and modern physics. Incorporates laboratory experience.
  This course is one of the Statewide Guaranteed Transfer courses.

PHY 111   PHYSICS: ALGEBRA-BASED I   5 CREDITS
Enables the student to explore the truth about physical reality through reasoning, mathematics and experimentation. Examines kinematics, force, circular motion, energy, momentum, torque, rotational dynamics, simple harmonic motion, temperature, heat and thermodynamics. The concepts and theories presented are explored through demonstrations and hands-on experiments. It is a general physics course that is recommended for all of the health sciences and all other interested students. Students entering engineering or one of the advanced sciences should register for PHY 211. PREREQUISITE: MAT 121
  This course is one of the Statewide Guaranteed Transfer courses.

PHY 112   PHYSICS: ALGEBRA-BASED II   5 CREDITS
  Expands upon PHY 111 and covers sound waves, electric fields, electric circuits, magnetic fields, optics and modern physics. Explores the concepts and theories presented in class through demonstrations and hands-on experiments. PREREQUISITE: PHY 111
  This course is one of the Statewide Guaranteed Transfer courses.

PHY 211   PHYSICS: CALCULUS-BASED I   5 CREDITS
Enables the student to examine the truth about physical reality through reasoning, mathematics and experimentation. Covers kinematics, force, gravity, energy, momentum, torque, rotational dynamics, fluids and waves. The concepts and theories presented in class are explored through demonstrations and hands-on experiments. This first semester calculus-based physics course is recommended for students entering engineering or one of the advanced sciences. PREREQUISITE: MAT 201
  This course is one of the Statewide Guaranteed Transfer courses.

PHY 212   PHYSICS: CALCULUS-BASED II   5 CREDITS
Expands upon PHY 211 and examines thermodynamics, electric fields, electric circuits, magnetic fields, light and optics and modern physics. The concepts and theories presented in class are explored through demonstrations and hands-on experiments. PREREQUISITE: PHY 211
  This course is one of the Statewide Guaranteed Transfer courses.

PHY 275   SPECIAL TOPICS   1–6 VARIABLE CREDITS
To be determined by individual instructor. A specific course description, list of competencies and topical outline will be developed for each special topics course.

PHY 285   INDEPENDENT STUDY   1–6 VARIABLE CREDITS
Meets the individual needs of students. Students engage in intensive study or research under the direction of a qualified instructor. PREREQUISITE: Instructor's permission

Political Science

**POS 105   INTRODUCTION TO
         POLITICAL SCIENCE   3 CREDITS**
Focuses on a survey of the discipline of political science, including political philosophy and ideology, democratic and non-democratic governments and processes and international relations.
  This course is one of the Statewide Guaranteed Transfer courses.

POS 111   AMERICAN GOVERNMENT   3 CREDITS
Includes the background of the U. S. Constitution, the philosophy of American government, general principles of the Constitution, federalism and civil liberties. Examines public opinion and citizen participation, political parties, interest groups and the electoral process and the structure and functions of the national government.
  This course is one of the Statewide Guaranteed Transfer courses.

**POS 125   AMERICAN STATE AND
         LOCAL GOVERNMENT   3 CREDITS**
Emphasizes the structure and function of state, county and municipal governments including their relations with each other and with national government. Includes a study of Colorado government and politics.

POS 205   INTERNATIONAL RELATIONS   3 CREDITS
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   VARIABLE CREDIT**
Incorporates an in-depth analysis of critical issues in political science. Examines current topics and issues.

POS 225   COMPARATIVE GOVERNMENT   3 CREDITS
Focuses on a comparison of the basic features of selected developed and developing countries. Topics include ideologies, political parties, interest groups and governmental institutions.

POS 275   SPECIAL TOPICS   1–6 VARIABLE CREDITS
This course provides students with a vehicle to pursue in-depth exploration of special topics of interest.

POS 285   INDEPENDENT STUDY   VARIABLE CREDITS
Course designed to meet the individual needs of students. PREREQUISITE: Instructor's permission

Psychology

PSY 101   GENERAL PSYCHOLOGY I   3 CREDITS
Focuses on the scientific study of behavior including motivation, emotion, sexuality, physiological psychology, stress and coping, research methods, consciousness, sensation, perception, learning and memory. PREREQUISITES: ENG 090, REA 090 or CPT test scores that are equivalent
This course is one of the Statewide Guaranteed Transfer courses.

PSY 102   GENERAL PSYCHOLOGY II   3 CREDITS
Focuses on the scientific study of behavior including cognition, language, intelligence, psychological assessment, personality, abnormal psychology, therapy, life span development and social psychology. PREREQUISITES: ENG 090, REA 090 or CPT test scores that are equivalent
This course is one of the Statewide Guaranteed Transfer courses.

PSY 110   CAREER DEVELOPMENT   3 CREDITS
This course assists students in recognizing their career potential and provides tools for making realistic decisions concerning educational and occupational objectives. This course also helps students develop skills needed for job search, employer search and resume development.

PSY 116   STRESS MANAGEMENT   3 CREDITS
This course identifies the physiological, emotional and behavioral aspects of stress. Techniques of stress reduction and management are explored and applied, including nutrition, exercise, assertiveness, time management and financial management. This course is not designed to transfer.

PSY 200   RESEARCH METHODOLOGY   3 CREDITS
Introduces research methods and designs including correlational studies, experimental designs and quasi-experimental designs. Additional topics include evaluations of scientific research, data analysis, report writing and research ethics. PREREQUISITES: PSY 101 or 102

PSY 205   PSYCHOLOGY OF GENDER   3 CREDITS
Examines gender differences in work, courtship, family life and sexual behavior throughout the life span. PREREQUISITES: ENG 090, REA 090 or equivalent CPT test scores

PSY 226   SOCIAL PSYCHOLOGY   3 CREDITS
Focuses on the behavior of humans in social settings including attitudes, aggression, conformity, cooperation and competition, prejudice and interpersonal attraction. PREREQUISITES: 3 hours of general PSY; 3 hours of introductory SOC or instructor's permission

**PSY 235   HUMAN GROWTH AND
          DEVELOPMENT   3 CREDITS**
Examines human development from conception through death, emphasizing physical, cognitive, emotional and psychosocial factors. PREREQUISITES: 3 hours of general PSY or instructor's permission
This course is one of the Statewide Guaranteed Transfer courses.

PSY 238   CHILD DEVELOPMENT   3 CREDITS
Focuses on the growth and development of the individual, from conception through childhood, emphasizing physical, cognitive, emotional and psychosocial factors. PREREQUISITES: 3 hrs. general PSY or instructor's permission

PSY 247   CHILD ABUSE AND NEGLECT   3 CREDITS
This course examines the causes and effects of physical, sexual and psychological abuse and neglect. Intervention and prevention strategies are emphasized.

PSY 275   SPECIAL TOPICS   1–6 VARIABLE CREDITS
Provides students with a vehicle to pursue in-depth exploration of special topics of interest.

PSY 285   INDEPENDENT STUDY 1–6 VARIABLE CREDITS
Meets the individual needs of students. Students engage in intensive study or research under the direction of a qualified instructor. PREREQUISITE: Instructor's permission

Reading

All courses at ACC require students to read materials at college level. The CPT placement test, given when a student enrolls, helps to determine the level at which the student is currently reading. The test results identify the reading class appropriate to the student's present reading level. (The CPT test may be reinforced by a specialized reading test given in the reading class.) Students succeed more consistently in all their courses when they develop college-level reading skills. Therefore, following the advice of the CPT recommendation is strongly suggested.

REA 060   FOUNDATIONS OF READING   3 CREDITS
The student will learn strategies for vocabulary development, improved reading comprehension and enrichment. PREREQUISITE: CPT reading score 40-61; COREQUISITES: ENG 060/090 is recommended

REA 090   COLLEGE PREPARATORY READING   3 CREDITS
The student will apply strategies for improving comprehension, developing vocabulary and increasing rate for reading college textbooks. PREREQUISITE: CPT reading score 62-79; COREQUISITES: ENG 060/090 is recommended

REA 112   SPEED READING   2 CREDITS
Designed for the those whose reading test score is 80 or above and who are interested in increasing reading rate of comprehension through computer pacing, reading flexibility, skimming and scanning techniques and general reading theory. Concurrent enrollment in REA 090 or REA 060 is not recommended. PREREQUISITE: CPT reading score 80-120

REA 275   SPECIAL TOPICS   VARIABLE CREDIT
Provides students with a vehicle to pursue in-depth exploration of special topics.

REA 285   INDEPENDENT STUDY   3 CREDITS
Meets individual needs of students. Students engage in intensive study or research under direction of a qualified instructor.

Real Estate

REE 115   INTRO TO REAL ESTATE   3 CREDITS
The function of the real estate broker, sales techniques, real estate ethics. Course is for those who intend to enter the profession, for salespeople who need a review and for those desiring a basic knowledge of the real estate business.

REE 118   REAL ESTATE APPRAISAL   4 CREDITS
Focuses on the technique and theory of appraisal as it relates to single family residences with emphasis on market data and correlation. Includes standards and ethics section. Course qualifies for application to State Registered License.

**REE 119   UNIFORM STANDARDS/
          APPRAISAL (USPAP)   1 CREDIT**
Satisfies the 16-hour continuing education requirement (standard) for licensed real estate appraisers including one hour of state appraisal rules and regulations.

REE 201   REAL ESTATE BROKER I   6 CREDITS
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 BROKER II   6 CREDITS
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.

Science

SCI 155   INTEGRATED SCIENCE I   4 CREDITS
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   4 CREDITS
Examines earth and biological systems, living and non-living environments, through the application and refinement of fundamental energy and matter concepts.

Sociology

SOC 101   INTRO TO SOCIOLOGY I   3 CREDITS
Examines the basic concepts, theories and principles of sociology, as well as human cultures, social groups and the social issues of age, gender, class and race.
This course is one of the Statewide Guaranteed Transfer courses.

SOC 102   INTRO TO SOCIOLOGY II   3 CREDITS
Examines social institutions and organizations from the macro perspective. Emphasizes issues of social change, demography, social movements and conflicts and trends within education, religion, family, political and economic structures.
This course is one of the Statewide Guaranteed Transfer courses.

**SOC 205   SOCIOLOGY AND
               FAMILY DYNAMICS   3 CREDITS**
This course will help develop an understanding of marriage, family and kinship. It examines the family as an institution and how social, cultural and personal factors influence family relations. The stability and diversity of the family will be explored, along with current trends and some alternative lifestyles.

**SOC 215   CONTEMPORARY SOCIAL
               PROBLEMS   3 CREDITS**
This course explores current social issues that result in societal problems. It focuses on such issues as: civil liberties, gender discrimination, substance abuse, crime, poverty and social change.

SOC 218   SOCIOLOGY OF DIVERSITY   3 CREDITS
This course explores the variety of inter-group relations: race, nationality, ethnicity, income and other minority classifications. Patterns of prejudice, discrimination and possible solutions to these issues will be examined.

SOC 275   SPECIAL TOPICS   1–3 CREDITS
This course enables students who have a strong interest in a specific sociological topic i.e, Suicide Prevention, sociology of Nursing, Death & Dying, Gerontology, Juvenile Delinquency, Sociology of Music, etc., to pursue the topic through research, field trips, classroom or laboratory setting.

SOC 285   INDEPENDENT STUDY   VARIABLE CREDIT
Meets the individual needs of students. Students engage in intensive study research under the direction of a qualified instructor.

Spanish

Independent Studies are also available.

SPA 101   CONVERSATIONAL SPANISH I   3 CREDITS
This is the first course in a sequence for beginning students who wish to understand and speak Spanish. The material will include basic vocabulary, grammar and expressions that are used in daily situations and in travel.

SPA 102   CONVERSATIONAL SPANISH II   3 CREDITS
This is the second course in a sequence for beginning students who wish to understand and speak Spanish. The material will continue to cover basic conversational patterns, expressions and grammar. PREREQUISITES: SPA 101 or instructor's permission

SPA 111   SPANISH I   5 CREDITS
Begins a sequence dealing with the development of functional proficiency in listening, speaking, reading and writing the language. NOTE: The order of the topics and the methodology will vary according to the individual texts and instructors.

SPA 112   SPANISH II   5 CREDITS
Continues Spanish I in the development of functional proficiency in listening, speaking, reading and writing the language. NOTE: The order of the topics and the methodology will vary according to the individual texts and instructors. PREREQUISITES: SPA 111 or instructor's permission

SPA 114   FAST-TRACK SPANISH I & II   5 CREDITS
This is an intensive high-beginner course designed to bridge beginning Spanish courses with an intermediate Spanish course. It is designed for students who have studied two years of Spanish in high school and possess linguistic and cultural knowledge that true beginners do not, but are not ready yet to move to the intermediate level because they need an in-depth review of essential structures. PREREQUISITES: Two years of Spanish in high school or placement test

**SPA 115   SPANISH FOR THE
               PROFESSIONAL I   3 CREDITS**
Designed as an introduction to a working knowledge of the target language, cultural behaviors and values useful in various professional fields such as health care, law enforcement, bilingual education, business and others. PREREQUISITE: College level reading

SPA 201   CONVERSATIONAL SPANISH III   3 CREDITS
This is the third course in a sequence for students who wish to continue their study of understanding and speaking Spanish. The material will cover intermediate level vocabulary, grammar and expressions. PREREQUISITES: SPA 102 or instructor's permission

SPA 202   CONVERSATIONAL SPANISH IV   3 CREDITS
This is the fourth course in a sequence for students who wish to continue their study of understanding and speaking Spanish. The material will continue to cover intermediate level vocabulary, grammar and expressions. PREREQUISITES: SPA 201 or instructor's permission

COURSE DESCRIPTIONS

134   Please visit **www.arapahoe.edu** for the most current, updated catalog information.

SPA 211   SPANISH III   3 CREDITS
Continues Spanish I and II in the development of increased functional proficiency in listening, speaking, reading and writing the language. PREREQUISITES: SPA 112 or instructor's permission

NOTE: The order of the topics and the methodology will vary according to individual texts and instructors.

This course is one of the Statewide Guaranteed Transfer courses.

SPA 212   SPANISH IV   3 CREDITS
Continues Spanish I, II and III in the development of increased functional proficiency in listening, speaking, reading and writing the language and an introduction to literature. PREREQUISITES: SPA 211 or instructor's permission

NOTE: The order of the topics and the methodology will vary according to individual texts and instructors.

This course is one of the Statewide Guaranteed Transfer courses.

**SPA 261   GRAMMAR FOR THE
          HERITAGE SPEAKER   3 CREDITS**
This course provides grammatical instruction to Spanish students whether native or bilingual speakers who want to develop their existing proficiency in the target language. PREREQUISITES: SPA 212 or instructor's permission. Oral, aural proficiency at the 4th semester level.

**SPA 215   SPANISH FOR THE
          PROFESSIONAL II   3 CREDITS**
Continues SPA 115 in the development of a working knowledge of the target language, cultural behaviors and values useful in various professional fields such as health care, law enforcement, bilingual education, business and others.

SPA 275   SPECIAL TOPICS   1–6 CREDITS
Provides students with a vehicle to pursue in-depth exploration of special topics of interest.

SPA 285   INDEPENDENT STUDY   1–6 CREDITS
Meets the individual needs of students. Students engage in intensive study or research under the direction of a qualified instructor. PREREQUISITE: Instructor's permission

Speech

SPE 115   PUBLIC SPEAKING   3 CREDITS
This course combines basic theories of speech communication with public speech performance skills. Emphasizes speech delivery, preparation, organization, support and audience analysis.

**SPE 125   INTERPERSONAL
          COMMUNICATION   3 CREDITS**
This course is an examination of communication involved in interpersonal relationships occurring in family, social and career situations. Relevant concepts include self-concept, perception, listening, nonverbal behaviors and conflict negotiation.

SPE 216   ADVANCED PUBLIC SPEAKING   3 CREDITS
This course is a continuation of SPE 115 with special emphasis on informative and persuasive public speaking skills and techniques using longer, in-depth speeches. Work in other speech formats may include extemporaneous, impromptu, manuscript, special occasion speeches and group decision making. PREREQUISITE: SPE 115

**SPE 225   ORGANIZATIONAL
          COMMUNICATION   3 CREDITS**
This course is a study of human communication systems and patterns in business and organizational settings. Topics include exploration of leadership strategies; effective managerial communication skills with peers, superiors and subordinates; and organizational communication environments, networks and goals. PREREQUISITE: SPE 115

SPE 226   ORAL INTERPRETATION   3 CREDITS
This course excites and exposes the student to the potential offered in the reading and performing of great literature such as is found in prose, poetry and drama.

SPE 275   SPECIAL TOPICS   VARIABLE CREDIT
This course provides students with a vehicle to pursue in-depth exploration of special topics of interest.

SPE 285   INDEPENDENT STUDY   VARIABLE CREDIT
This course meets the individual needs of students. Students engage in intensive study or research under the direction of a qualified instructor. PREREQUISITE: Instructor's permission

Study Skills

See Academic Achievement

STS has been changed to AAA, Academic Achievement.

Technical Engineering

TEC 201   ENGINEERING MATERIALS   3 CREDITS
Investigates the types, properties and behavior of state-of-the-art and advanced materials. Lectures include an introduction to the classifications, properties and behavior of ferrous and nonferrous metals, polymers (plastics), woods, ceramics and advanced materials.

**TEC 205   GEOMETRIC DIMENSIONING
          AND TOLERANCING   3 CREDITS**
This course enables students to interpret and apply geometric dimensioning and tolerancing (GD&T) 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 the generation of a working drawing is a team effort among design, drafting, manufacturing and quality control.

Theatre

THE 105   INTRO TO THEATRE ARTS   3 CREDITS
This course includes discussions, workshops and lectures designed to discover, analyze and evaluate all aspects of the theatre experience: scripts, acting, directing, staging, criticism and theory.

This course is one of the Statewide Guaranteed Transfer courses.

THE 110   THEATRE IN DENVER   3 CREDITS
The purpose of this course is to acquaint students with the range of theatre companies and productions in the Denver area. The itinerary is designed to provide the greatest variety of theatrical experiences within the logistical circumstances of a given semester's offerings. Accordingly, students will confront a broad spectrum of dramatic literature performed by various companies in distinct milieux.

THE 111   ACTING I   3 CREDITS
This course covers basic acting techniques and approaches including scene study, improvisation and script analysis. It includes practical application through classroom performance.

THE 112   ACTING II   **3 CREDITS**
This course continues to explore basic acting techniques and approaches, including scene study, improvisation and script analysis. It includes practical application through classroom performance. PREREQUISITE: THE 111

THE 116   TECHNICAL THEATRE   **3 CREDITS**
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 141   IMPROVISATION I   **1 CREDIT**
Helps students learn improvisation skills for performance and character development.

THE 143   BASIC ACTING TECHNIQUE
**   (STANISLAVSKY SYSTEM)**   **3 CREDITS**
This course offers scene work and acting exercises for people with little or no training or experience in the theatre. The Stanislavsky System of character analysis and development is stressed.

THE 181: AUDITION TECHNIQUES   **1 CREDIT**
This course 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   PRACTICUM: THEATRE
**   PRODUCTION I**   **1-3 VARIABLE CREDITS**
This course allows students to put into practice theories of theatre production. Participation in set construction, scenic artistry, costuming, lighting, sound, acting, stage-managing and administration is available.

THE 183   PRACTICUM: THEATRE
**   PRODUCTION II**   **1-3 VARIABLE CREDITS**
This course 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 211   DEVELOPMENT OF
**   THEATRE I**   **3 CREDITS**
This course surveys the history and evolution of drama from Ancient Greece to the Renaissance, emphasizing all aspects of the art form from period values to the analysis of dramatic literature and performance.
  This course is one of the Statewide Guaranteed Transfer courses.

THE 212   DEVELOPMENT OF
**   THEATRE II**   **3 CREDITS**
This course surveys the history and evolution of drama from the Renaissance to the present, emphasizing all aspects of the art form from period values to the analysis of dramatic literature and performance.
  This course is one of the Statewide Guaranteed Transfer courses.

THE 275   SPECIAL TOPICS   1-3 VARIABLE CREDITS
Explores current topics, issues and activities related to one or more aspects of the named discipline.

THE 285   INDEPENDENT STUDY   **1–3 CREDITS**
Emphasizes structured and guided individualized study that is organized and tailored around the interests and needs of the individual student.

Travel and Tourism

TRA 120   TRAVEL RESERVATIONS   **3 CREDITS**
Prepares the travel and tourism student to research and plan itineraries. By providing complete product information, codes, printed resources and sample CRS displays, reservation procedures and sales and service techniques, the student will have the necessary information to book air travel, car rentals, hotel accommodations, rail travel and cruises.

TRA 125   AIRLINE RESERVATIONS   **2 CREDITS**
Prepares the travel and tourism student to research and plan itineraries. By providing complete product information, codes, printed resources and sample CRS displays, reservation procedures and sales and service techniques, the student will have the necessary information to book air travel, car rentals, hotel accommodations, rail travel and cruises.

TRA 128   TRAVEL DESTINATIONS–
**   DOMESTIC**   **3 CREDITS**
Acquaints student with domestic travel destinations. Requires student to plan a travel itinerary to a domestic destination.

TRA 141   LEISURE TRAVEL   **3 CREDITS**
Presents a comprehensive look at the introduction to tourism. Tours, modes of travel, tourism planning and tourism development are some of the subjects covered. Also covered are economic and political impacts of tourism along with the environment and social/cultural impacts.

TRA 230   HOME-BASED TRAVEL AGENT   **3 CREDITS**
Provides a complete overview for becoming a home-based travel agent, the opportunities that exist to get involved in organizing and selling travel on a part-time or full-time basis and the resources you need for professional organizations, magazines, books and other resources.

TRA 275   SPECIAL TOPICS   **1–6 CREDITS**
Provides students with a vehicle to pursue in-depth exploration of special topics of interest.

CORPORATE LEARNING DIVISION

The Corporate Learning Division is the workforce training and development division of Arapahoe Community College. This division specializes in customized corporate training, computer training and technical training needed to upgrade skills, improve performance and increase efficiency. Serving individuals and companies throughout Denver and Colorado, the Corporate Learning Division has courses to meet anyone's needs. The Corporate Learning Division is located at ACC's DTC Campus at 5660 Greenwood Plaza Blvd., Suite 111, Greenwood Village, CO 80111. For more information about the Corporate Learning Division, call 303-734-3701 or visit www.arapahoe.edu.

Areas of specialty include:
Business Development–Courses designed to improve a company's performance and basic business understanding. Topics include strategic planning, budgeting, performance measurement, human resources and communication skills.

Computer Center–Courses designed to build or enhance computer skills in order to improve job performance. Topics include Microsoft® Office, QuarkXPress®, Adobe® graphics, Visual Basic® and web technologies.

Construction and Manufacturing Technology–Courses designed to increase efficiency and improve performance. Topics include Lean Manufacturing, AutoCAD, Geometric Dimensioning and Tolerancing, welding, ISO 9000 and Six Sigma.

Event Management–Courses designed to give students comprehensive training in all aspects of event management. Topics include operations and logistics, event design and administration, marketing, staff management and funding.

Health Care–Courses designed to train students in areas of health care careers and improve health care performance. Topics include Medical Transcription, Nurse Refresher and leadership and customer service in health care.

Leadership Development–Courses designed to improve company leadership and create future company leaders. Topics include supervisory skills, strategic leadership and business strategies.

Room Rentals–The Corporate Learning Division offers classroom and computer lab rentals for training and meetings. Classrooms have LCD projectors, white boards and T-1 line connections.

Training Grants–Grant money is available for companies that are hiring new employees and/or re-training existing staff in new technologies or procedures. Companies must meet the State of Colorado's requirements and competitively apply for the funding.

COMMUNITY EDUCATION (NON-CREDIT COURSES)

The Community Education Program at Arapahoe Community College is a self-supporting program. Each year, approximately 8,000 students enroll in ACC Community Education courses and programs. Hundreds of non-credit classes are advertised and offered each season (4 terms per year). Many new courses are offered each term to meet the changing needs of the community.

Visit our web site at www.arapahoe.edu. Click on Community Ed. You can register for classes online with a credit card or call 303-797-5722. The Community Education office is located in A1215 on the first floor of the Annex building near the tennis courts. Office hours are from 8 a.m.–5 p.m. Monday through Friday.

Broad topic areas include:
Arts and Crafts–Courses focusing on drawing, painting, photography and general crafts
Adult Basic Education–Courses for GED preparation and English as a Second Language
Business–Courses designed for the small business entrepreneur
Career–Workshops, seminars and certificated programs designed to assist those in finding, changing or training for a career
Computer–Courses for the home computer user, in three and six-hour formats using the latest software
Cuisine–Featuring healthy cooking, desserts and cuisine from around the world
Language and Culture–Courses for travelers, business interests or for pleasure
Home and Garden–Workshops for inside and outside the home for the do-it-yourselfer
Health and Fitness–Courses promoting a healthy life using traditional and alternative methods

Leisure–Courses include sports and recreational activities, day excursions, genealogy, bridge, etc.
Money Matters–Courses to improve financial security
Music–Courses to develop musical interests and talents
Online–Courses in a variety of interest areas that can be completed online at home or work
Self-Development–A mixture of courses including writing, spirituality and other topics
Seniors–Courses specifically for people over 55, including Elderhostel
Youth College–Courses for children in grades K-12 and the Evening High School Program
Course Formats: Formats vary from 1-10 sessions per term depending on the course topic.
Course Locations: Courses are held at the ACC Main Campus, Art and Design Center, DTC Campus, Hudson Gardens and Events Center, Euclid Middle School, Highlands Ranch High School, University Center at Chaparral in Parker and numerous other locations including art studios and private businesses.
Course Instructors: Over two hundred part-time instructors teach in the program each term. Some have degress in their respective subject areas. All are experts in their fields.
GED: General Education Development
If you are planning to take the GED High School Equivalency exam, we will help you prepare. Classes are available to help acquire the knowledge you will need to have a sufficient score to pass the exam. You can register for non-credit classes that are held during the day and in the evening. You must be 17 years of age to take the GED test. For information about the GED test, contact the Testing Center at 303-797-5993. For more information about GED classes, call the Community Education Program at 303-797-5722.

COLLEGE ADMINISTRATORS

Amis, Doug	Manager, Technical Support Service	Larson-Cooney, Kim	Director of Community Education
Barrentine, Laurett	Financial Reporting Accountant	Lawler, Heather	Director of Disability Services & Student Affairs
Becker-Lutz, Jill	Budget Analyst	Lechuga, Debra	Records Manager
Brantz, Malcolm	Director of Weber Center for Learning Resources	Leuthauser, Martin	Technical Services Librarian
Briggs-Jackson, Darcy	Graduation Coordinator	Lorenzo, Joseph	Controller
Castro, David	Chief Operating Officer	Ludwig, Janet	International Student Advisor
Chelland, Carol	Manager, Facilities Rental	McFarren, Cheryl	Dean of Arts, Humanities & Social Sciences
Chrislip, Donna	Grant Writer	McLees, Jan	Coordinator of Career Education Center
Christopher, Lee	e-Learning Manager		
Clark, Terry	Manager, Human Resources	Moore, Robert	NCA Accreditation Project Manager
Comeaux, Linda	Dean of Health, Math, Science & Engineering	Mueller, Linda	Coordinator, Learning Support Services
Cunningham, Perri	Physical Education Coordinator & Fitness Center Director	Myrant, Glee	Disability Services Operations Specialist
DeHerrera, Teresa	Academic Advisor	Newman, Buz	Network Manager
Deseau, Pascal	Manager, Facilities	Ngo, Tram	Staff Accountant/Operations
Do, Janet	Financial Aid Counselor	Nowak, Cindy	Business Education Consultant
Duffus, Maryann	Financial Aid Counselor/ Loan Processor	Oakes, Janna	Dean of Instructional Support
		O'Brien, Carol	Director of ACTS
Fukaye, Howard	Manager of High School Relations	Olsen, Rhonda	Telecommunications Manager
Glandon, Bert	President	Oristanio, Ralph	Manager, Grounds
Goldberg, Debra	Coordinator of Tutorial Services	Peoples, Mary	Paralegal Program Coordinator/ Instructor
Goodwin, Dennis	Chief of Police		
Grabowski, Lisa	Circulation Manager	Provancal, James	Project Supervisor, Facilities
Green, Connie	Director of Child Development Center	Rafferty, Maureen	Disability Services Specialist
		Rexroth, Susan	Disability Services Specialist
Greening, Juan	Lead, Graphic Operations	Shallcross, Dorothy	Director of Student Financial Services
Groff, Theresa	Workforce Development Coordinator	Shellberg, David	Vice-President
Hemenway, Jeanene	Payroll & Accounts Payable Administrator	Shettleworth, James	Advisor/Counselor
		Shores, Linda	Transcript Evaluator Specialist
Herrera, Ernest	Manager, Custodial Services	Shorman, Della	Web Manager
Hultgren, Brian	Financial Aid Counselor	Simpson, Connie	Dean of Student Services
Iwen, Gene	Institutional Research Coordinator	Sliter, Louis	Director of Purchasing/Graphics
Jones, Yvonne	Instructional/CPT Testing Specialist	Snead, Bob	Director of Institutional Research
		Spaulding, Thad	Associate Director of Financial Aid
Jamison, Matthew	Registrar/Director of Admissions, Records & Assessments	Stroup, Linda	Director of Nursing
Johnson, Sharon	Community Education Program Manager	Thorland, Kristi	Campus Police & Criminal Justice Coordinator
Kenyatta, Nicole	Human Resources Specialist	Treitz, Sue	Certified Nursing Assist./Director
Kinney, Dorado	Director of Advising & Retention	Unell, Murry	Director of Marketing & Public Information
Kuster, Kimberly	Dean of College Advancement	Weeks, Heather	Admissions/Records Specialist
LaGrow, Stacie	Interim Talent Search Project Director	Whitehouse, Linda	Director of UCC
		Young, Gwen	UCC Facility Coordinator

Please visit **www.arapahoe.edu** for the most current, updated catalog information.

COLLEGE FACULTY

*Distinguished Faculty

Amorese, Amy–Faculty, Business Administration
& Management
> B.A., University of Montevallo
> M.B.A., University of Colorado at Denver

Anderssen, Joan–Faculty, Economics/Finance
> B.A., Carleton College
> M.B.A., University of Denver Graduate
> School of Banking, University of Colorado

Bamford, Cheyne–Faculty, Psychology,
> B.A., Grinnell College, IA
> M.A., Ph.D., Arizona State University

Bettmann, Rudy–Faculty, Mortuary Science
> B.A., Regis University
> M.A., Colorado Christian University
> Dallas Institute of Mortuary Science

*Berg, Jeffrey–Distinguished Faculty, Mathematics
> B.S., Arizona State University
> M.S., University of Colorado at Denver

Bigalk, Annette M.–Faculty, Health Information Technology
> B.A., University of Colorado, Boulder
> B.S., Regis College

Blaske, Karin L.–Faculty, Developmental Studies
> B.S., Illinois State University
> M.S., Northern Illinois University

*Borow-Stephens, Barbara–Distinguished Faculty, Paralegal
> B.S., Ithaca College, N.Y.
> M.S., Columbia University Teachers College, N.Y.
> J.D., University of Denver

Broome, Jeff–Faculty, Philosophy
> B.S., University of Southern Colorado
> M.A., Baylor University
> M.A., Ph.D., University of Colorado

Brown, Mary Lou–Faculty, Health Occupations, ACTS
> B.S., Arizona State University

Burns, Randy–Faculty, Jewelry/Metalwork
> B.F.A., Colorado State University
> M.F.A., University of Oregon

Calkins, Peter–Faculty, Automotive Technology
> A.A.S., Arapahoe Community College

Cannata, Jim–Faculty, Photography
> B.A., Metropolitan State College of Denver
> M.F.A., Florida State University

Chapman, Eugene–Faculty, Biology
> B.S., Bowling Green State University
> M.A., Columbia University
> Ed.D., Pennsylvania State University

Christner, Lisa–Faculty, Interior Design
> B.S., Univ. of Texas

DeMoulin, Tom–Faculty, Multimedia/Graphic Design
> B.A., Macalester College

Diede, Leo–Faculty, Computer Information Systems
> B.S., Black Hill State University
> Graduate Certificate, University of California, Riverside

Dragoo, Alvin–Faculty, Automotive
> A.A., Southeast Community College

Fons, Sharon–Faculty, ACTS, Early Child Professional
> B.S., University of Wisconsin, Madison

Franklin, Sandra J.–Faculty, Nursing
> Diploma, Crouse-Irving Memorial Hospital
> School of Nursing
> B.S., Metropolitan State College
> M.S., University of Hawaii

*Gaudinski, Christine–Distinguished Faculty, Chemistry
> B.A., LaSalle University
> M.A., University of Northern Colorado

Gedde, IdaLynn–Faculty, Computer Information Systems
> B.A., North Park College
> M.Ed., Lesley College

Giveans, Fred–Faculty, Computer Information Systems
> B.S., Parks College

Goggin, Susan–Faculty, Art
> B.F.A., M.H., University of Colorado

Graca, Lucy L.–Faculty, English
> B.A., M.A., University of Massachusetts

Greenwald, Jonathan I.–Faculty, Emergency Medical Technology
> B.A., Hofstra University
> EMT-Paramedic, Swedish Medical Center

Hagood, Allison–Faculty, Psychology
> B.A., Harvard University
> M.A., University of Colorado

Hall, Dianne–Faculty, Computer Information Systems
> M.B.A., Regis University

Hall, John–Faculty, Multimedia/Graphic Design
> B.F.A., Colorado State University

*Harris, Sara–Distinguished Faculty, Accounting
> B.S., Colorado State University

Harrison, Terrence–Faculty, Biology
> B.S., Baylor University
> M.B.S. University of Colorado, Denver

Hawkins, Emmy Lou (Emma)–Faculty, History
    B.A., University of Idaho
    M.A., University of Idaho

Hecomvich, Karen–Faculty, Nursing
    M.S., University of Colorado
    B.S.N., Metropolitan State College

Heddens, David–Faculty, Mathematics
    B.S., M.S., Northern Illinois University
    M.A., University of Arizona

Henningsen, Erica–Faculty, Psychology
    B.A., University of Northern Iowa
    M.A., University of Northern Iowa

Hidalgo, Ruth–Faculty, Language
    A.A., Palm Beach Community College
    B.A., Florida State University
    M.A., Florida State University
    Ph.D., Florida State University

Holt, Kathryn–Faculty, Art
    B.A., University of Denver
    M.F.A., University of Denver

Johnson, Erica–Faculty, Mathematics
    B.A., University of Colorado, Denver
    M.S., University of Denver
    Ph.D., University of Denver

Johnson, Jody–Faculty, Biology
    Teacher Certificate, Metro State College
    B.F.A., Florida State University
    M.A., (Secondary Science Education),
    M.S., (Biology), University of Colorado

Johnson, Mary–Faculty, ACTS, Culinary Arts
    B.S., Colorado State University
    M.A., University of Colorado at Colorado Springs

Jones, Cullen–Faculty, Chemistry
    B.S., Colorado State University
    M.S., University of Colorado

Johnston, Daniel–Faculty, ACTS, Culinary Arts

Kendall, Susan–Faculty, Business
    B.A., Miami of Ohio University
    M.B.A., University of Phoenix

Khorsand, Christine M.–Faculty, Language
    B.A., Universite de Provence, France
    B.F.A., Boise State University
    M.A., University of Colorado at Boulder

Kindsfather, Steve–Faculty, ACTS, Carpentry
    A.A., Red Rocks Community College

*Lawrence, Tracy–Distinguished Faculty, Mathematics
    A.A., Chipolata Jr. College
    B.A., University of West Florida
    M.A., University of West Florida

LeMay, Norman–Faculty, Mathematics
    B.S., M.S., University of Colorado, Denver

Lewan, Lindsay–Faculty, English
    B.A., M.A., Colorado State University
    Ph.D., University of New Mexico

Loptien, Marilyn–Faculty, ACTS, Medical Prep
    B.S., Metropolitan State College

Mabry, Sophie–Faculty, Human Performance
    B.A., Metropolitan State College of Denver
    M.A., University of Northern Colorado

McNamara, Nancy–Faculty, Nursing
    B.S.N., University of Delaware
    M.S.N., University of Arizona

Matsushita, Hidemi–Faculty, Music
    B.M., University of Colorado oat Boulder
    M.M., University of Utah
    Ph.D., Brigham Young University

McGurran, Robbie–Faculty, Computer Information Systems
    B.S., University of North Dakota
    M.S., University of North Dakota

Melton, Don–Faculty, Political Science
    B.A., Bowling Green State University
    M.A., Kent State University

Miller, William–Faculty, Architecture
    B.A., Northern Illinois University
    Master of Architecture, University of Colorado

Milleur, Evelyn–Faculty, Nursing
    B.S.N., University of St. Thomas
    M.S.N., University of Colorado, Denver

Moultney, Kimberly–Faculty, Medical Laboratory Technology
    B.S., University of Colorado Health Science Center
    M.A., University of Colorado, Denver

Mugge, Douglas–Faculty, Architecture
    A.A.S., Arapahoe Community College

Nelsen, Connie–Faculty, Medical Office Technology
    A.G.S., Arapahoe Community College
    B.S., Metropolitan State College of Denver
    M.S., Regis University

Parker, Rebecca–Faculty, Paralegal
    B.A., Phillips University
    M.S., University of Denver
    J.D., University of Oklahoma

Parmley, Robert–Faculty, Automotive
    A.A.S., Front Range Community College
    B.S., University of Southern Colorado

Pasterkamp, Janet–Faculty, Accounting
    B.S., Syracuse University
    M.B.A., Babson College

Phillips, Barb–Faculty, Multimedia/Graphic Design
    B.A., Western Illinois

*Poltrone, Rosann–Distinguished Faculty, Geography
    B.A., State University of New York at Buffalo
    M.A., University of Wyoming

Provence, Paula–Faculty, Physical Therapy
    B.S., University of New Mexico
    M.A., University of Phoenix

Ransick, Christopher–Faculty, English
    B.A., San Francisco State University
    M.A., University of Montana
    M.A., University of California

Ratliff, John–Faculty, Sociology
    B.A., Reed College
    M.A, University of California, SanDiego
    M.A., University of California, SanDiego
    Ph.D., University of California, SanDiego

Rubin, Lance–Faculty, English
    B.S., University of Illinois, Urbana
    M.A., Northwestern University
    Ph.D., University of Denver

Rush, Gerilyn–Faculty, Nursing
    B.S.N., University of Nebraska
    M.A., Webster University

Sloan, Mary–Faculty, Mathematics
    B.A., Pomona College
    M.A., University of Northern Colorado

Sorensen, Thomas L.–Faculty, Psychology
    B.A., University of Denver
    M.A., University of Denver

Stieneker, Deborah A.–Faculty, Speech
    B.A., M.A., Southern Illinois University

Stoner, Barbara–Faculty, Nursing
    A.D., Arapahoe Community College
    B.S., University of Colorado
    M.S., University of Northern Colorado

Strain, Connie–Faculty, Business
    B.S., M.S., University of Colorado

Thayer, Martha–Faculty, Mortuary Science
    Diploma, Dallas Institute of Funeral Service
    A.S., Arapahoe Community College
    B.S., Colorado Christian College
    M.A., Colorado Christian College

Tigner, Lori–Faculty, Anthropology, Sociology
    B.A. (2), University of Wyoming
    M.A., University of Wyoming

Trott, David–Faculty, Astronomy
    B.A., Physics, University of Colorado
    M.A., Equivalent by portfolio

Troutman, Gary–Faculty, Computer Information Systems
    A.S.E.E., Colorado Technical Institute
    B.S.E.E., University of Nebraska
    M.A., Regis University
    M.B.A., University of Denver

Walters, Karen–Faculty, Mathematics
    B.A., Dartmouth College
    M.S., University of Hartford
    M.Ed., Harvard University
    M.A., University of Kentucky
    Ph.D., University of Kentucky

Winograd, Kathryn–Faculty, English, Writers Studio
    B.A., Ohio University
    M.F.A., University of Iowa
    Ph.D., University of Denver

Weigel, Henry–Faculty, Physics
    B.S., Texas A&M University
    M.S., Texas A&M University

Wolf, Sallie P.–Faculty, English
    B.A., University of Illinois
    M.A., University of Kansas

Wolff, Jennifer–Faculty, Medical Laboratory Technology
    B.S., University of North Dakota
    M.S., University of North Dakota

Wooley, Marsha–Faculty, Art
    B.A., Metropolitan State College of Denver
    M.F.A., University of Pennsylvania

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